



Draft Columbia River System Operations Environmental Impact Statement

Appendix P Tribal Perspectives

Note: The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities. The Agency has made every effort to ensure that the information in Appendix P: Tribal Perspectives is accessible. However, if readers have any issues accessing the information in this appendix, please contact the U.S. Army Corps of Engineers at (800) 290-5033 or info@crso.info so additional accommodations may be provided.



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April 30, 2019

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RE: Supplement Information on Tribal Perspective for the CRSO EIS

Dear Administrator Mainzer, Brigadier General Helmlinger, Regional Director Gray:

This letter is sent on behalf of the Coeur d'Alene Tribe ("Tribe") as supplemental information to the Tribe's December 10, 2018 letter regarding the Tribe's perspective on the impacts of the Columbia River Systems Operations ("CRSO") to tribal resources. We appreciate the opportunity to provide additional detail on the impacts of the CRSO to the Coeur d'Alene Tribal community.

First, the Tribe must express its disappointment in the approach taken by your agencies in collecting this information. In previous NEPA processes, the action agencies have hired experts agreed upon by affected tribes to assess and document the impacts in a detailed manner. The attached report titled *Tribal Circumstances & Impacts from the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs, and Shoshone Bannock Tribes* ("Tribal Circumstances Report") was prepared by Meyer Resources, Inc. on behalf of the Columbia River Inter-Tribal Fish Commission with funding from the Army Corps of Engineers ("Corps") for the NEPA process for the Lower Snake River dams.

This report involved a significant amount of tribal coordination, was funded by the Corps, and was then utilized by the agencies as part of the NEPA process, including the environmental justice section. To date there have been no overtures by the action agencies to fund a tribal impact assessment within the CRSO NEPA process. As the tribes have been left to provide their own internal resources for an impact assessment, any information gathered will not meet acceptable milestones due to a lack of funding. We urge the action agencies to consider building an internal process that encompasses the tribes concerns regarding a thorough and well-funded impact assessment to properly assess impacts of CRSO to tribal communities.

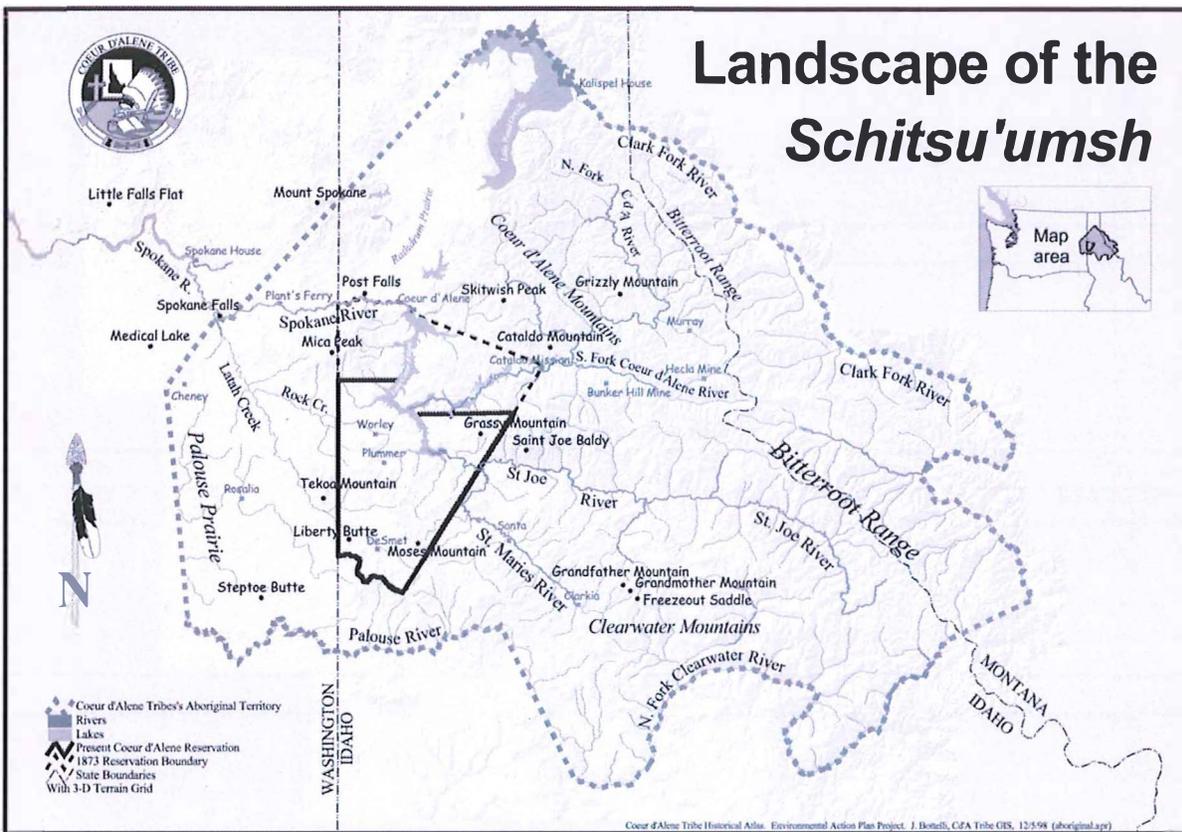
The Tribal Circumstances Report identifies impacts to tribal income/health, life-support resources, and economic base from the status quo operations of the Snake River dams (see summary in chart below).

Summary of Environmental Justice Effects for the Tribes from Lower Snake River Project Alternatives	
EJ Factors	Relative Effects on the Tribes
Alternative A1 (Status Quo)/ Alternative A2 (Status Quo + Transportation):	
Income Level/ Health.	<ul style="list-style-type: none"> • Tribal families are impoverished and unemployed at 3-4 times levels of Washington/Oregon/Idaho residents as a whole (Table 41). Winter-time tribal unemployment reaches as high as 80 percent. • Tribal members are dying at from 20 percent to 130 percent higher rates than non-Indian residents. • Recent analyses describe tribal health and health care access as "poor". • Implementation of A1 or A2 would have no discernible effect in remedying these cumulative adverse conditions.
Life-support Resources.	<ul style="list-style-type: none"> • Extensive information in this report places salmon at the center of the study tribes' cultural, spiritual and material world. Table 43 identifies that salmon guaranteed to the tribes by Treaty has almost entirely been lost. Tribal spokespersons and health experts cited throughout this report have identified the devastating effect these losses have had on tribal culture, health and material wellbeing. • Beaty, et.al (1999) identify lower Snake River dams have contributed substantially to destruction of these life-support resources • Selection of A1 or A2 would not significantly change these cumulative conditions- and the pain, suffering and premature deaths of tribal peoples would continue for decades.
Economic base.	<ul style="list-style-type: none"> • The cumulative effects of dam construction have transferred potential wealth produced in the river basin from the salmon on which the tribes depend to electricity production, irrigation of agriculture, water transport services and waste disposal, these latter primarily benefiting non-Indians. These transfers have been a significant contributor to gross poverty, income and health disparities between the tribes and non-Indian neighbors. • Selection of A1 or A2 would continue these conditions and disparities.
Inconsistent Standards.	<ul style="list-style-type: none"> • Historically, agencies asserted confidence that they could manage uncertainty concerning adverse impacts on salmon during construction of the dams that facilitated wealth transfers from the tribes to non-Indians. Some of the same agencies now claim to be risk adverse, when considering more substantial remedial action which would recover salmon and result in some measure of rebalancing of wealth to improve the circumstances of tribal peoples.

Many of these issues, including disproportionate impacts to the economic base, community health and loss of culture, are relevant to the Coeur d'Alene Tribe. These are impacts that must be considered in the NEPA process. To the extent possible, given all the constraints that are embedded in the CRSO NEPA process, we discuss the importance of salmon and impacts to Tribal health and resources below:

1. Landscape of the Schitsu'umsh.

The traditional aboriginal territory of the Schitsu'umsh, (Coeur d'Alene) depicted below, spans more than 5 million acres encompassing much of what is today known as the "Idaho Panhandle" as well as portions of eastern Washington and western Montana. Their overall territory extended north to Lake Pend Oreille and the Clark Fork River. On the south the territory extended into the drainages of the Palouse and North Fork of the Clearwater Rivers and the Clearwater Mountains. The eastern boundary extended across the Bitterroot Range into Montana. To the west, the territory was marked by a place called "Plante's Ferry" on the Spokane River, and then ran south from Spokane Falls to encompass the entire Hangman Creek drainage (also known as Latah Creek) and Steptoe Butte, near the present Rosalia, Washington. Importantly, the aboriginal landscape of the Tribe included many important rivers that reinforced the cultural connections of Tribal members to the anadromous fishery and fostered a considerable reliance on those resources.



Over time, changes to the Coeur d'Alene Reservation boundaries has influenced the patterns of land use affecting the Tribe. The area within each negotiated Reservation boundary was reserved for the Tribe's use and exclusive management. Prior to the changes brought about by allotment, the Tribe's land use had developed into a combination of agricultural and traditional subsistence activities on the Reservation. Large farms of 1,000 acres and more were successfully managed and notions of property ownership were handled within the Tribe's own organizational entities. In the year 1906, the Federal Government unilaterally violated the Coeur d'Alene Treaty of 1887, forcing Tribal members onto individual land allotments and opening the rest of the Reservation to settlement. This "subdivision" created a market for land parcels on the Reservation. Many allotments passed into non-Indian use and ownership within a short period of time. By 1934 when the Allotment era ended with passage of the Indian Reorganization Act, Tribal land ownership had declined to less than one fifth of their 334,471-acre Reservation.

2. Traditional Harvest and Fishing.

For the Schitsu'umsh people, traditional culture is seasonally-based. For generations, food-gathering activities and physical activity aligned with the seasons. In the spring, tribal families would travel to the outskirts of their territory to gather camas and bitterroot. In the summer, families traveled to higher elevation to gather berries, such as huckleberry and service berry. Fall was generally the time for hunting game such as deer and elk. Winter saw families return to the lowlands around Coeur d'Alene Lake to take advantage of milder weather. Fishing for trout, salmon, and whitefish took place throughout the year.

The Coeur d'Alene Tribe fishing territory extended from the North Fork of the Clearwater River on the southern margin to Lake Pend Oreille and the Clark Fork River on the north, the upper portion of the Spokane River to Spokane Falls, Hangman Creek and the headwaters of the Palouse River. The Coeur d'Alene routinely visited Kettle Falls during the fishing season and occasionally fished for salmon on the Snake and Lower Columbia at sites such as Celilo Falls. This practice continued until Celilo Falls was inundated by The Dalles Dam in 1957. The Celilo Falls site became especially important to the Coeur d'Alene after the Spokane River dams and Grand Coulee Dam blocked the runs into the upper basin, because it was one of few places left where they were able to obtain salmon for religious rituals. The construction of Dworshak Dam on the North Fork of the Clearwater River during the late 1960s – early 1970s signaled the complete extirpation of anadromous salmon and steelhead from the cultural territories of the Coeur d'Alene Tribe. Hence, the history of 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.

3. Loss of Fishing Areas Due to Dams.

All drainages relied upon by the Tribe for anadromous fish harvest have been adversely impacted by dam construction and operation. Chief Joseph and Grand Coulee dams block access for anadromous salmon and steelhead to significant amounts of habitat, totaling 711 miles for spring Chinook and 1,610 miles for summer steelhead for spawning, rearing and migration. Much of these habitats fall within the Coeur d'Alene Tribe's usual and accustomed fishing areas. In addition, construction of Dworshak Dam eliminated 54 miles of riverine habitat and blocked access to a much greater, but unquantified amount of habitat on the North Fork of the Clearwater

River, which accounted for sixty percent of the average annual count of steelhead which passed into Idaho via the Snake River.¹ The loss of these habitats to anadromous fisheries has had a significant and continuing impact on the Coeur d'Alene Tribe's cultural, economic and social well-being.

4. Historic Harvest and Consumption Rates.

Tribal members are estimated to have consumed about 124,000 salmon and steelhead annually (1.3 million to 2.3 million pounds). This included the shared fishery on the Spokane River where Indians caught about 1000 salmon a day at five weirs for a period of 30 days each year for a total harvest of 150,000 salmon. Estimates of fish consumption, including anadromous and resident fish, puts historic Tribal consumption per capita at between 300-1000 lbs per year.² Current fish consumption rates are a tiny fraction of historic levels due largely to the loss of fisheries from dam construction.

5. Loss of Salmon and Tribal Health.

As addressed above, the Tribal Circumstance Report documented impacts to tribal health that corresponds to impacts to salmon harvest.

Recent public health research has demonstrated that dominant culture-based approaches to community health that focus primarily on biophysical and socioeconomic indicators, such as disease incidence and poverty rates, ignore the broader determinants of Indigenous health. Impacts of historic trauma, including loss of language, land base and culture, contribute to what psychologist Dr. Eduardo Duran has termed a "soul wound." This wound exists at the community level, where generations of loss require an attention to collective grief that requires collective solutions to heal. The chronic psychological stresses associated with this collective trauma have been recognized as an established risk factor for cardiovascular disease. The failure of western public health interventions to change the trajectory of health disparities in Indigenous communities "reflects a non-engagement with the social/cultural drivers of health and the subsequent application of inappropriate intervention models."

Nationwide, disparities of American Indian/Alaska Native (AIAN) populations are well-documented, such as disproportional amounts of death attributed to cerebrovascular disease and diabetes when compared with the general population. AIAN mortality rates for these two diseases are 2.7 times that of the general population. High poverty rates contribute to these disparities. Though the AIAN population makes up approximately 1% of the U.S. population, it represents approximately 2% of recipients of the Supplemental Nutrition Assessment Program

¹ See UCUT. 2019. Fish passage and reintroduction Phase 1 Report: Investigation upstream of Chief Joseph and Grand Coulee dams. Upper Columbia United Tribes, Spokane, WA and U.S. Army Corps of Engineers. 1974. Dworshak Dam and Reservoir, North Fork Clearwater River, Idaho, Draft Environmental Impact Statement. U.S. Army Engineer District, Walla Walla, WA (available at <https://babel.hathitrust.org/cgi/pt?id=ien.35556030997696;view=1up;seq=181>).

² See Scholz, A. (and 9 others). 1985. 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. Upper Columbia United Tribes, Fisheries Technical Report No 2. Eastern Washington University, Cheney, WA and Ridolfi, Inc. 2016. Heritage fish consumption rates of the Coeur d'Alene Tribe. Prepared for the U.S. EPA, Contract EP-W-14-020. Both of these reports are attached to these comments.

(SNAP). In addition to poverty, cultural challenges are barriers to health. Less than 0.2% of health providers in the U.S. are AIAN (National Stakeholder Strategy for Achieving Healthy Equity, 2011). Lack of familiarity with the historical and societal issues that may impact AIAN communities' participation in prevention programs is a barrier for providers working in Indian Country. Additionally, community-level health assessments have typically neglected many of the aspects of well-being considered critical to Indigenous communities, particularly the interconnectedness of physiological health with cultural, environmental, and community connections. As a result, physical health indicators alone are insufficient in providing a full assessment of Indigenous community health.

Recent community-level health assessments on the Coeur d'Alene Reservation have attempted to broaden their approach by taking a multi-dimensional approach that includes physical environmental and community design. A 2013 Community Health Assessment completed by the Coeur d'Alene Tribe's Marimn Health (formerly Benewah Medical and Wellness Center) included attention to environmental safety and water quality, as well as access to healthy foods and physical activity. The assessment found significant disparities in rates of obesity, diabetes, and hypertension between the Native and non-Native population. According to the 2013 Uniform Data Service Data, Marimn's Native population included 2,325 Native Americans, or approximately 55% of its service population, yet this population accounted for 61.8% of clients with diabetes.³

At the regional level, University of Idaho researchers reported in a Body Mass Index study conducted in 2009 that AIAN children had the highest levels of being overweight and obesity in the state. Overall, 50% of all AIAN children evaluated in grades 1,3,5,7,9 and 11 were overweight or obese, compared to 30% of all Idaho children. The highest rates of obesity are among older males and children receiving free and reduced lunch (an estimate of Social Economic Status) and residing in northern Idaho regions. Access to health supports exacerbates health and wellness issues; at the state level, Idaho ranks 48th out of the 50 states in access to physicians.⁴ In the 2018 Panhandle Health District Community Health Assessment, 22.6% of the Benewah County population was reported as having low food access.

Within the Marimn Health service area, a high proportion of Native clientele are burdened with chronic diseases issues, with obesity rates much greater than Benewah County (reported at 30% in 2018⁵), as well as higher rates of diabetes (11% for the Native Marimn population v. 9% for Benewah County).

Disease incidence in Marimn Health Native Population (source: Marimn Health)						
	2015	% of Native patients	2016	% of Native patients	2017	% of Native patients
Native Client Population	2986		3207		3328	
Heart Disease	299	10%	303	9%	284	8%

³ Benewah Medical and Wellness Center, Community Health Assessment, 2013.

⁴ "Get Healthy Idaho 2018," Idaho Health and Welfare.

⁵ Panhandle Health, Community Health Assessment, 2018.

Disease incidence in Marimn Health Native Population (source: Marimn Health)						
	2015	% of Native patients	2016	% of Native patients	2017	% of Native patients
Stroke	27	1%	27	1%	26	1%
Cancer	49	2%	46	1%	49	1%
Obesity	1189	40%	1242	39%	1258	38%
Diabetes	339	11%	365	11%	360	11%
Suicidal ideation*	3		16		31	

*improvements in coding practice may be related to the significant increase in diagnosis.

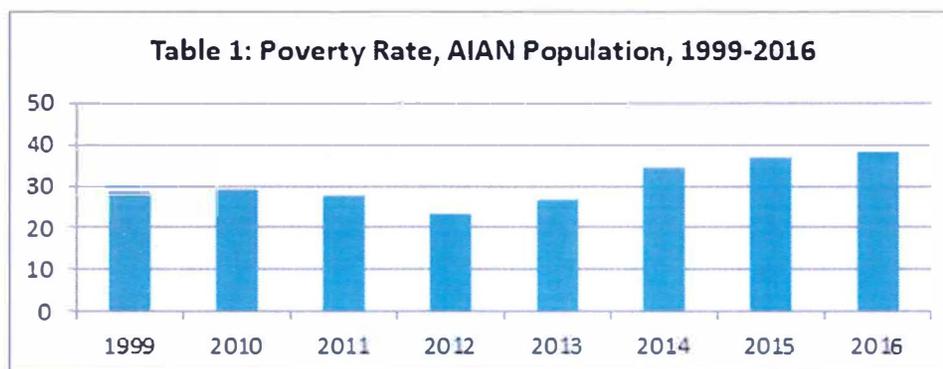
6. Loss of Salmon and Tribal Poverty Rates.

A major contributing factor to these health disparities are issues of poverty and joblessness. The Tribal Circumstances Report describes the intersection of dam construction and poverty:

“The cumulative effects of dam construction have transferred potential wealth produced in the river basin from the salmon on which the tribes depend to electricity production, irrigation of agriculture, water transport services and waste disposal, these latter primarily benefiting non-Indians. These transfers have been a significant contributor to gross poverty, income and health disparities between the tribes and non-Indian neighbors.”

Tribal Circumstances Report at 21.

As of April 2018, the Benewah County unemployment rate was 5.8%, while state unemployment rate was 2.9% (Idaho Department of Labor, July 2018). Based on data from the American Community Survey, the 2016 poverty rate for the Coeur d’Alene Reservation was 18.7%, while the poverty rate for the American Indian population was a staggering 38% (Table 1).⁶



⁶ See www.indicatorsidaho.org.

Furthermore, thirty-six percent of Native youth live in poverty, compared to 21 percent of their non-Native counterparts on the Reservation.⁷ Mental health issues are persistent. Since 2015, four Tribal members died as a result of suicide, all under the age of 30 and two under the age of 17.

7. Wildlife Habitat Impacts

Currently there are more than sixty dams that were constructed in the Columbia River watershed system that inundated millions of acres of critical habitat important to the Tribal cultures that subsisted in these traditional areas. Subsequent to the inundation of wildlife habitat, operational impacts in the form of water level manipulation and wave action further diminished any available habitat left through magnified erosional processes.

Other impacts that grew from the construction of dams were habitat conversions to agricultural farms, namely center pivot irrigation as well as mining, logging, and increased open water habitat in favor of riverine systems and wetlands.

Secondary impacts while not easily quantified are no less important than quantifiable resource impacts. Without a dependent and once abundant resource (salmon) the shift to a commensurate wildlife resource for subsistence placed undue stresses on resident fish and wildlife populations causing cyclic population fluctuations to a marked degree. Historic migration routes of ungulate wildlife species were disrupted and subsequently affected population structures whether by seasonal starvation (blocked wintering areas) or increased disease vectors.

We appreciate this opportunity to provide additional information regarding the impacts of the CRSO to the Coeur d'Alene Tribe. We reiterate our request that the action agencies will provide resources necessary to better quantify these impacts in the NEPA process, including environmental justice and tribal impacts.

If you have any questions about this letter, please contact me at (208)686-1800.

Sincerely,



Caj Matheson
Director, Natural Resources

⁷ Benewah Medical and Wellness Center Community Health Assessment, 2013.

**Columbia River System Operations EIS
Tribal Cultural Resource Perspective Assessment**

**Tribal Perspectives, Traditional Places,
and the Federal Columbia River System**



**CTCR Elder, Agatha Bart, at Harry Jim's inundated home site and fishing station,
north bank of Snake River, 2007**

**Jon Meyer and Guy Moura, 2015
Revised Guy Moura and Crystal Miller 2018
History/Archaeology Program
Confederated Tribes of the Colville Reservation
February 28, 2019**

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Introduction

Prior to presenting detailed information on tribal perspectives related to the effects of the Federal Columbia River Power System (FCRPS) on tribal culture and cultural resources, it is important to convey the totality of the impacts on tribal members. The focus of this assessment is on Grand Coulee Dam, but also applies to Chief Joseph Dam and all other dams in the Basin. Detrimental effects of dams may be the single most devastating factor in the loss of traditional lifeways among the affected tribes. Settlement patterns centered on the rivers' shores were disrupted as Indian towns (like Inchelium), individual homes, archaeological villages, and ancestral cemeteries were inundated. Salmon, the staple food and trade item for Columbia River tribes, were abruptly blocked from many areas, while in other areas, the annual runs were decimated. Gathering areas for traditional cultural plants have been compromised by the effects of irrigation, inundation, and agriculture. Traditional transportation routes across the Columbia and Snake Rivers became impassable without seasonal low water conducive to fording the rivers. Productive riparian habitat was drowned. Tribal members who successfully transitioned to a commercial agricultural-based economy lost their fields beneath the rising waters of reservoirs, as well as the family gardens used to augment the yearly food supply and supplement traditional hunting, gathering, and fishing. Religious, ceremonial, ritual, sacred, and burial sites were lost. Indian cemeteries were flooded.

Population displacement was compounded when many tribal members moved to dam construction sites and associated boom towns. Almost everything about life in boom towns was detrimental to traditional ways (Ortolano and Cushing 2000; Ray 1977). Native language was lost, a cash economy upset traditional social roles, and alcoholism and prostitution were prevalent in these non-native communities. Gone were many of the traditional familial and leadership roles. Increasing civil authority and abandonment of Indian villages undermined the influence of tribal elders and leadership families. Key cultural roles, like that of the Salmon Chief, which was once a powerful and prestigious position, were no longer needed where the salmon no longer ran.

On June 12, 2018, at the Environmental Impact Statement (EIS) Deputy-Level Regional Meeting in Spokane, Dr. Michael Marchand, Chairman of the Colville Business Council at the time, summarized the enormity of the dams' impacts. He stated that a once powerful and independent people, rich in heritage, culture, and the natural resources to sustain themselves, became a Fourth World Nation as the resources upon which they relied were destroyed.

Cultural Resources: Definition

For the purposes of the Columbia River System Operations (CRSO) EIS, the Confederated Tribes of the Colville Reservation (Tribes or CTCR) take a broad view of cultural resources.¹

¹ CTCR's Cultural Resource Management Plan explains that "Cultural resources can be generally defined as sites, structures, landforms, objects and locations of importance to a culture or community for historic, educational, traditional, religious, ceremonial, scientific or other reasons. Given this broad definition, the number and kinds of cultural resources is indeed vast. Cultural resources extend from whole rivers and mountain ranges down to individual items. Overall, cultural resources reflect, nourish, and reinforce our communities." Confederated Tribes of the Colville Reservation, Cultural Resource Management Plan (March 6, 2006) at 5. Available at <https://static1.squarespace.com/static/56a24f7f841aba12ab7ecfa9/t/57bf56cdb3db2bdb891e63d1/1472157400402/Cultural+Resource+Management+Plan.pdf>.

These include, but are not limited to, cultural resources defined in applicable laws directed toward tangible resources. They also include cultural heritage that is not necessarily site-specific such as ritual, ceremony, language, traditional teachings, etc., and they include resources such as the land, water, air, and animals. These resources consist of individual artifacts, sites, natural resources, and ecosystems. A vast literature on effects to cultural resources exists.

Laws, Regulations, and Guidelines

What follows is a summary of definitions of ‘cultural resources’ as provided in various federal and state laws. Much of the language is taken directly from the laws or their implementing regulations.

National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4231 et seq.)

NEPA expands the definition of cultural resources beyond objects and bounded properties. NEPA states the need to preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice. Under the Scoping clause (1508.25), project components cannot be reviewed independently as unconnected actions. This means irrigation projects, recreation, hydroelectric power generation, power transmission, off-channel storage, etc., are ancillary components of the primary undertaking that is the power system itself.

Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. 470aa-mm)

The term "archaeological resource" means any material remains of past human life or activities which are of archaeological interest, as determined under uniform regulations promulgated pursuant to this chapter. Such regulations containing such determination shall include, but not be limited to: pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal materials, or any portion or piece of any of the foregoing items. No item shall be treated as an archaeological resource under these regulations unless such item is at least 100 years of age.

National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. 300101 et seq.)

"Historic property" or "historic resource" means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register, including artifacts, records, and material remains related to such a property or resource.

Protection of Historic Properties (36 CFR 800.16)

Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 U.S.C. 3001-3013)

These regulations apply to human remains, funerary objects, sacred objects, or objects of cultural patrimony.

Guidelines for Evaluating and Documenting Traditional Cultural Properties (National Register Bulletin 38)

A traditional cultural property (TCP) is a property eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that are rooted in that community's history, and are important in maintaining the continuing cultural identity of the community. In practice, CTCR TCPs include, but are not limited to: religious areas, resource gathering areas (plant, animal, fish, and mineral), places associated with stories and legends, archaeological and ethnographic sites, habitation sites, campsites, rock images, special use sites, trails, tribal allotments and homesteads, and locations named in Native languages.

American Indian Religious Freedom Act (AIRFA) of 1978 (42 U.S.C. 1996)

Religious practices of the American Indian are an integral part of their culture, tradition, and heritage – such practices form the basis of Indian identity and value systems. Traditional American Indian religions, as an integral part of Indian life, are indispensable and irreplaceable. It shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

Indian Graves and Records (RCW 27.44)

Includes any glyptic or painted records, cairns, graves, and any associated archaeological material from any such cairn or grave.

Archaeological Sites and Resources (RCW 27.53)

All sites, objects, structures, artifacts, implements, and locations of prehistorical or archaeological interest, whether previously recorded or still unrecognized, including, but not limited to, those pertaining to prehistoric and historic American Indian or aboriginal burials, campsites, dwellings, and habitation sites, including rock shelters and caves, their artifacts and implements of culture such as projectile points, arrowheads, skeletal remains, grave goods, basketry, pestles, mauls and grinding stones, knives, scrapers, rock carvings and paintings, and other implements and artifacts of any material that are located in, on, or under the surface of any lands or waters owned by or under the possession, custody, or control of the state of Washington or any county, city, or political subdivision of the state are hereby declared to be archaeological resources. Any object that comprises the physical evidence of an indigenous and subsequent culture including material remains of past human life including monuments, symbols, tools, facilities, and technological by-products or any geographic locality, including but not limited to, submerged and submersible lands and the bed of the sea within the state's jurisdiction, that contains archaeological objects.

When added together, tangible cultural resources span the wide range from an isolated fire-cracked rock to entire ecosystems, such as those supporting anadromous fish runs.

Cultural Traditions

Language, ceremonies, rituals, traditional teachings, religion, legends, settlement and subsistence patterns, and many other intangible things are a product, and shape the beliefs, of a living community and the history of that community. They are essential to maintaining the continuing cultural identity of the tribes. The impacts of the loss or diminution of these cultural ways are identifiable and can be documented historically, quantitatively, and qualitatively. For example, in 1956, the Canadian government issued an extinction declaration for the Lakes (Sinixt) people that led to the erroneous and damaging concept that the Sinixt people no longer exist. This notion of Sinixt extinction has no basis in fact, as they moved to the southern reach of their territory (including the Colville Reservation) after the establishment of the Colville Reservation, bringing their traditions with them. The untiring efforts of Sinixt tribal members and the CTCR to assert, exercise, and uphold the traditional subsistence rights and rights to territory of the Sinixt people are clear evidence of the centrality of these practices to the maintenance of cultural continuity.

It is critical to keep in mind, however, that the cause of an impact can rarely be ascribed to a single action, event, entity, or moment, and also that impacts are cumulative. We understand there is difficulty documenting the causal relationship between the loss of language, ceremonies, legends, and other non-property-based aspects of culture to specific undertakings. We offer the following statement in support of the connection.

Sylvia Peasley (personal communication, 2012), a former member of the Colville Business Council, stated that “culture” is lost when the Indian language is lost and when spiritual ceremonies are no longer conducted. Sylvia grew up on Keller Butte, above the Sanpoil River, a tributary of the Columbia that passes through the Colville Reservation. Sylvia’s grandfather and great grandparents lived along the Sanpoil River by the town of Keller. She learned her traditional ways from her grandfather. Her family ritually practiced daily sweat baths. During the ceremonies, they spoke in their language, discussed family history, and told legends. Elders relayed details of the sweat bath ceremony through teaching and practice. As an adult, Sylvia moved to Keller. Knowing smelter contamination from industrial activities in Trail, B.C. pollutes the Columbia River; she is hesitant to continue the ways taught to her. She still sweats intermittently, but fears that by heating the rocks, vaporizing the water, and burning fir boughs, toxins will be released and she or her family will inhale or ingest them.

Many of her traditions are compromised. Indian people are aware of the contamination and they fear it. Salmon are not present on most of the Colville Reservation, including Keller, above Chief Joseph Dam and there are health alerts limiting the intake of resident fish in the Grand Coulee Dam reservoir. [Similar fears are connected with most dams; for example, tribal members fear the radioactivity in the water and sediment related to the operation of the Hanford Nuclear Facility.] Sylvia sees youth, elders, and other community members overcome with various health issues tied to the transformation of the river and all that the Columbia River encompasses in Indian culture and subsistence. The dams’ effect on tribal culture is far-reaching. Youth in Keller are losing their traditional ways, the tainted river and loss of salmon damaged the CTCR way of life. Parents do not have the same opportunities to pass down their customs and

traditions. Few know all the words to the different ceremonies anymore. No one person still remembers the names of all the fish. No one person remembers all the different names used for some species of fish, as they are called by different names as they move through the stages of their life. Sylvia contends that when sweats are not conducted, the language is not spoken as often, legends are not told, family history is forgotten, ritual practices are lost, and the status and role of the elders are diminished.

However, more than just polluted waters caused such loss. Examples of comparable Columbia River losses relate to preventing the migration of salmon and lamprey runs, the destruction of the sturgeon fishery, inundation of the Indian towns, the move to a cash economy in the construction boomtowns, and the breaking up of families who moved to earn money. The examples provided by Sylvia Peasley are the experiences of one tribal member. Many more among the over nine thousand CTCR members have had (and continue to have) similar experiences.

Reservoirs of Concern

The Confederated Tribes of the Colville Reservation are comprised of twelve constituent tribes (Okanogan, Lakes, Colville, Sanpoil, Nespelam, Moses-Columbia, Methow, Chelan, Entiat, Wenatchi, Palus, and Chief Joseph Band of Nez Perce). Altogether, CTCR's traditional territory spans more than 37 million acres across Washington, Oregon, Idaho, and British Columbia (Figure 1).

No less than nineteen dams and their corresponding reservoirs affect traditional use areas of the CTCR constituent tribes:

McNary Dam – Lake Wallula (Palus)
Ice Harbor Dam – Lake Sacajawea (Palus)
Lower Monumental Dam – Lake Herbert G. West (Palus)
Little Goose Dam – Lake Bryan (Palus and Chief Joseph Band of Nez Perce)
Lower Granite Dam – Lower Granite Lake (Palus and Chief Joseph Band of Nez Perce)
Priest Rapids Dam – Priest Rapids Lake (Moses-Columbia)
Wanapum Dam – Lake Wanapum (Moses-Columbia)
Rock Island Dam – Rock Island Pool (Moses-Columbia and Wenatchi)
Rocky Reach Dam – Lake Entiat (Wenatchi, Entiat, Chelan, and Moses-Columbia)
Wells Dam – Lake Pateros (Chelan, Methow, Okanogan, and Moses-Columbia)
Chief Joseph Dam – Rufus Woods Lake (Okanogan, Moses-Columbia, Nespelam, and Sanpoil)
Grand Coulee Dam – Lake Roosevelt (Nespelam, Moses-Columbia, Sanpoil, Colville, and Lakes)
Keenleyside Dam – Arrow Lakes (Lakes)
Revelstoke Dam – Lake Revelstoke (Lakes)
Mica Dam – Kinbasket Lake (Lakes)
Waneta Dam - Waneta Reservoir (Lakes)
Seven Mile Dam – Seven Mile Reservoir (Lakes)
Boundary Dam – Boundary Reservoir (Lakes)
Hells Canyon Dam – Hells Canyon Reservoir (Chief Joseph Band of Nez Perce)
Enloe Dam – Similkameen River (Okanogan)

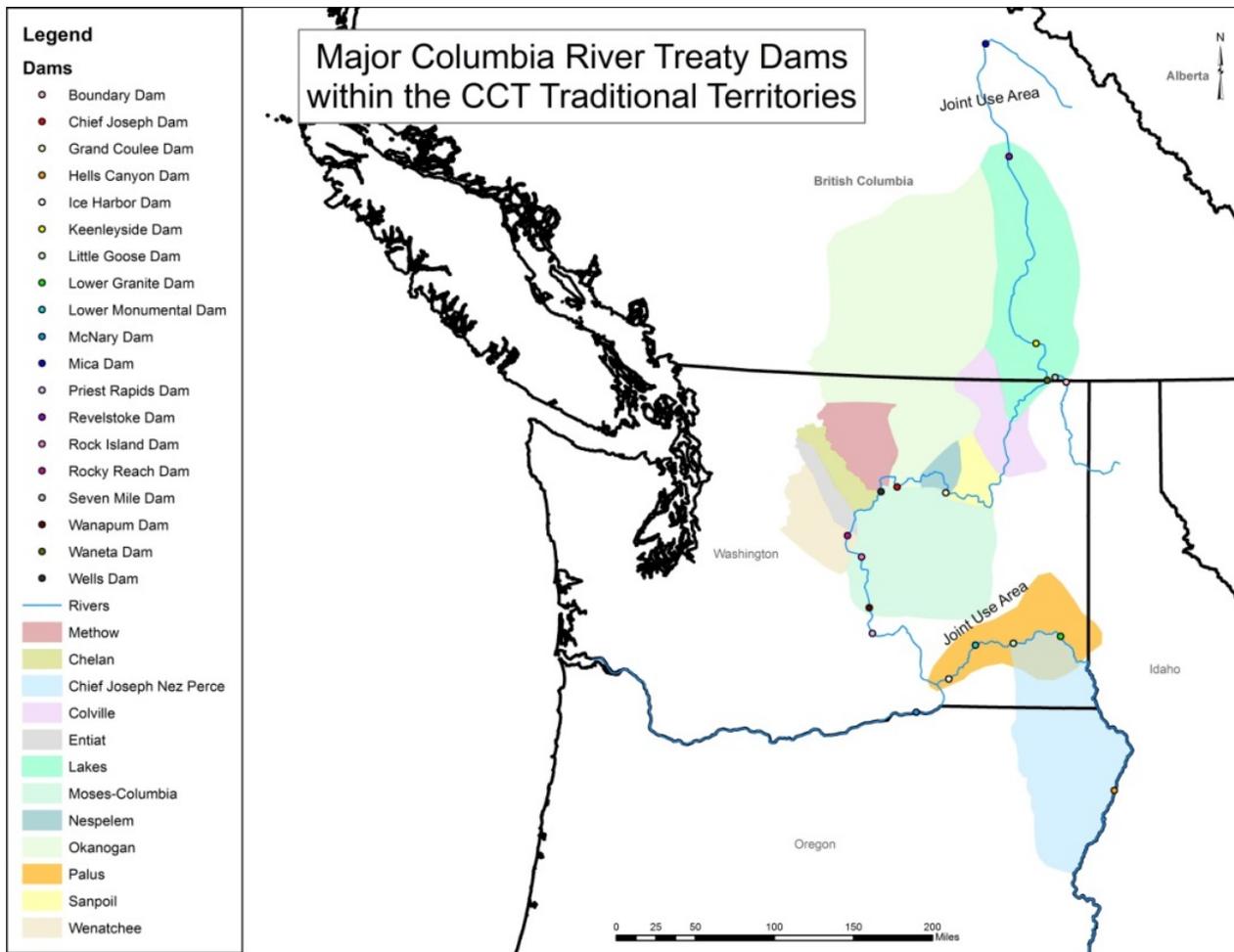


Figure 1: Major Columbia River Dams and Traditional Territories of the Confederated Tribes of the Colville Reservation

The existence, operation and management of these dams and their associated reservoirs have played a major role in some of the CTCR’s most pressing contemporary cultural resource concerns, including:

- The destruction of the salmon fishery at Kettle Falls and traditional fishing locations on much of the Colville Reservation was directly caused by the construction of Grand Coulee Dam and Chief Joseph Dam and the continuing failure to include fish passage in the management of these dams. 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. This devastation of the Tribes’ ancestral fisheries caused (and continues to cause) irreparable harm to the culture, subsistence, religion, and economy of the 12 constituent tribes. While salmon are a focal point of any impacts discussion from the Tribes’ perspective, the dams have also severely limited tribal access to lamprey, sturgeon, and other native fish species while creating an environment where non-native predator species are increasing in abundance and posing grave risks to these native fauna.

- Current CTCR fisheries, such as the summer/fall Chinook fishery on the Reservation at the tailrace of Chief Joseph Dam, are affected by CRS operations. The ability of tribal members to harvest salmon directly from the Columbia River in one of the few places it is still available to them is severely impacted by power, flood risk and other operations that result in high levels of spill from Chief Joseph Dam.
- The exposure of the ancestral remains of the Ancient One, also known as Kennewick Man, in 1996, caused by the operations of the McNary Dam and the fluctuating waters of Lake Wallula Reservoir. The exposure and recovery of his remains led to decades of legal battles pertaining to their repatriation to his descendants. CTCR considers the monitoring of known and likely ancestral cemetery locations impacted by reservoir operations to be of paramount importance;
- The crack in Wanapum Dam discovered in 2014 necessitated a substantial drawdown of the Wanapum Reservoir. Staff members of CTCR's History/Archaeology Program were tasked with monitoring ancestral cemeteries and gravesites that were either exposed or impacted by erosion due to the drawdown. A number of the Columbia River Treaty dams are aging structures that are not without flaws, and we expect that similar emergent situations will arise; and
- The excessive flow rates on the Columbia, Snake, and Palouse Rivers in May 2018 caused a marked increase in the inundation of, and erosive activity at, previously documented archaeological sites including villages, camps, rock image locations, rock feature sites, and other places of cultural and archaeological significance.

Resources Impacted

The Columbia River and its tributaries are central to the cultural traditions of the Confederated Tribes of the Colville Reservation. Each of the twelve constituent tribes of the Colville Reservation utilized the Columbia River, and their traditional territories had boundaries encompassing and lying adjacent to portions of the Columbia and Snake Rivers. To this day, only two federally recognized tribes retain reservation lands on the Columbia and Snake Rivers – the CTCR is one of those tribes. Tribes utilized riverine resources continually throughout the year (Ray 1933). Beyond subsistence, the Columbia River occupies a central role in CTCR culture, spirituality, and history. The Columbia River, or some aspect of the river, is central to the identity of each of the tribes of the Colville Reservation.

The Columbia and Okanogan Rivers border the current Colville Reservation for approximately 150 miles starting from a point around Malott on the Okanogan, past Chief Joseph Dam, and extending to an arbitrary line at the division of cadastral markers Township 34 North and Township 35 North. The boundaries of the Colville Reservation recognized the importance of fishing to tribes and were originally defined with the intent to include fisheries important to the tribes assigned to the Reservation (Hart 2002). The completion of the Grand Coulee Dam, and later the Chief Joseph Dam, inundated these fisheries and prevented salmon and other anadromous species from reaching much of the Colville Reservation lands, and the lands and waters of the former North Half of the reservation, rendered as public domain in 1898, to which CTCR members retain federally protected reserved hunting, fishing and gathering rights. The

effects have been devastating. The subsistence fishing economy has been destroyed and many of the cultural traditions associated with it are now diminished. The subsistence harvesting economy – particularly the gathering of traditional cultural plant foods, medicines, and materials – has been dramatically impacted by the Columbia Basin-wide effects of irrigation projects, and the agricultural industry they sustain, which have dramatically altered entire ecological systems. Furthermore, the waters behind the dams inundated hundreds of culturally important sites such as villages, hunting and gathering areas, and ceremonial grounds. Today, the erosional effects of dam operations continue to damage cultural sites. Impacts to cultural resources also result from recreation and the federal taking of lands. Decisions regarding the management of the Columbia River System affect CTCR tribal members directly and constantly.

Legends pertaining to the Columbia River highlight the importance of the river to tribes. KWELKWEI'ta'XEN, a Nespelem tribal member, told the story of the Origin of the Columbia River to James Teit (1917:65-66).

Coyote was travelling, and heard water dropping. He said, "I will go and beat it." He sat down near it, and cried, "Hox-hox-hox-hox!" in imitation of water dripping. He tried four times, but the noise never ceased. He became angry, arose, and kicked the place where the water dropped. The noise ceased. He thought he had beaten it, and laughed, saying, "I beat you. No more shall water drip thus and make a noise." Shortly after he had gone, the water began to drip as before. He became angry, and said, "Did I not say water shall not run and make a noise?" The water was coming after him, and increased in volume as it flowed. He kept on running; but still he heard the noise of water, and was much annoyed. Now he travelled along the edge of a plateau. There was no water there, nor trees. He looked down into the coulee, but everywhere it was dry. It was warm, and he became very thirsty. He heard the noise of water, but saw none. Then he looked again down into the coulee, and saw a small creek flowing along the bottom. It seemed a long distance away. He went down, and drank his fill. And ascended again, but had not reached the top when he was thirsty, as before. He thought, "Where can I drink?" The water was following him. He went to the edge of a bench and looked down. A small river was now running below. He descended and drank. He wondered that much water was running where there had been none before. The more he drank, the sooner he became thirsty again. The fourth time he became thirsty he was only a little way from the water. He was angry, and turned back to drink. The water had now risen to a good-sized river, so that he had not far to go. He said, "What may be the matter? I am always thirsty now. There is no use of my going away. I will walk along the edge of the water." He did so; but as he was still thirsty, he said, "I will walk in the water." The water reached up to his knee. This did not satisfy him; and every time after drinking, he walked deeper, first up to the waist, then up to the arms. Then he said, "I will swim, so that my mouth will be close to the water, and I can drink all the time." Finally he had drunk so much that he lost consciousness. Thus the water got even with Coyote for kicking it; and thus from a few drops of water originated the Columbia River.

Among other messages, this story reminds the listener to respect the Columbia River, suggesting that it is foolish to think that nature can be controlled.

The second story details the creation of Kettle Falls as told by Lakes Indian Eneas Seymour to Mrs. Goldie Putnam (Lakin 1976:V-VI):

I am Coyote, the Transformer, and have been sent by Great Mystery, the creator and arranger of the world. Great Mystery has said that all people should have an equal right in everything and that all should share alike. As long as the sun sets in the west this will be a land of peace. This is the commandment I gave to my people, and they have obeyed me.

My people are the Skoyelpi and Snaitceskt Indians, who lived near the Kettle Falls on the Columbia River. I gave them that Falls to provide them with fish all their days. It was called Ilthkoyape, which means "falls of boiling baskets," but the name was shortened to Skoyelpi. The Falls was surrounded by potholes which resembled the boiling baskets in which my people cooked their food...

Many generations ago my people were hungry and starving. They did not have a good place to catch their fish. One day while I was out walking I came upon a poor man and his three daughters. They were thin from hunger because they could not get salmon. I promised the old man I would make him a dam across the river to enable him to catch fish, if he would give me his youngest daughter as my wife. The old man agreed to this and I built him a fine falls where he could fish at low water. But when I went to claim the daughter the old man explained that it was customary to give away the eldest daughter first. So I took the oldest daughter and once again promised the man I would build him a medium dam so he could fish at medium water if I could have the youngest daughter. The old man explained again that the middle daughter must be married before the youngest, so I claimed his middle daughter and built him a fine falls where he could fish at medium water.

Shortly after the father came to me and said he was in need of a high dam where he could fish at high water. He promised me his youngest daughter if I would build this. So I built him a third and highest dam where he could fish at high water. And then I claimed the long-awaited youngest daughter as my wife.

And now, because I had built the Falls in three levels, my people could fish at low, medium and high water. I had become responsible for my people, and I saw that the fish must jump up the falls in one certain area where the water flowed over a deep depression. I appointed the old man as Salmon Chief, and he and his descendants were to rule over the Falls and see that all people shared in the fish caught there. All people must live there in peace, and no one should leave there unprovided. Indians and white men from hundreds of miles away have gathered during the salmon runs at my falls, and they have all lived in peace sharing together.

The construction of the Grand Coulee Dam destroyed the Kettle Falls Fishery. The falls were submerged beneath the waters of Lake Roosevelt and the salmon were stopped at the base of the Grand Coulee Dam and, later, the Chief Joseph Dam. Now those who visit Kettle Falls will not

be able to catch salmon and will leave “unprovided.” Not only has the Kettle Falls economy been ruined, but the moral lessons embedded in the site have been debased.

The two legends above are among many told over the centuries by members of CTCR. They demonstrate that the Columbia River is not simply a tool for subsistence and travel, but an integral part of the cosmology of Columbia Plateau tribes.



Figure 2: Kettle Falls before inundation.



Figure 3: Kettle Falls today.

Within the Grand Coulee Project Area, from the Grand Coulee Dam upriver to the Canadian border, 408 traditional cultural properties had been identified up through 2017 (George 2008), and another 54 are being added in 2018. Hundreds of other TCPs have been recorded along the Columbia River system within the traditional territories of the Confederated Tribes of the Colville Reservation (e.g. Finley 2006, 2008; Finley, Wazaney and Moura 2008; Kennedy and Bouchard 1998; Mattina 1987; Ray 1932, 1933, and 1936; Shannon 2007; Shannon and Moura 2007a, 2007b, and 2010; Spier 1938; Turner, et al. 1979; Wazaney and Moura 2008).

Given the immense number of cultural sites that are affected under the current Columbia River System Operations (and which are being analyzed in the CRSO EIS), we will limit our discussion to traditional non-archaeological cultural resources under ten categories. These are vision quest sites, ceremonial locations, traditional sites, named places, legendary locations, fishing stations, mineral procurement areas, plant gathering areas, hunting areas, and burials. Descriptions of each of these categories are provided below. These descriptions should not be considered hard definitions, as many of these categories have overlapping elements, and an individual site can often be described under several categories. Additionally, these categories should not be considered all-inclusive. Some cultural sites important to CTCR may not fit any of the categories provided here.

Vision Quest Sites

Vision quests are used by tribal members to obtain a guardian spirit, power, or medicine. These sites are often marked by cairns (Figure 4), although many times they are also left unmarked (Cline 1938, Ray 1942). Integrity of setting is very important for vision quest

sites. While vision quest sites usually sit great distances from the Columbia River or other rivers, these rivers often lie in the viewsheds of these sites. The appearance of the river or sounds coming from the river can affect the setting of a vision quest site. For example, the setting during the drawdown behind Grand Coulee Dam differs greatly from that during full pool. This affects the experience for the individual on a vision quest.

Ceremonial Locations

Ceremonial locations include, but are not limited to, prayer sites, sweathouses, traditional dance locations, vision questing sites and prehistoric sites identified as containing features such as rock rings, cairns, and certain types of talus pits are associated with ritual activity. Many of these places are located alongside rivers. In the case of the cairn formation representing a prayer site in Figure 55, access to the site is dependent on the reservoir level behind Grand Coulee Dam. During full pool, the site is mostly inundated and cannot be reached without traversing the water. Other ceremonial locations have been found to be completely inundated during full pool. Significant drafting of the reservoirs pursuant to Columbia River System Operations may also adversely affect such locations through erosion and other impacts.



Figure 4: Rock cairn on the Colville Reservation, looking south over the Columbia River



Figure 5: Cairn formation located adjacent to Columbia River.

Named Places



Figure 6: Location of *nsʔátqʷəlp*.

Named places are locations that have been given a Native language name. Usually, these are locations found in the ethnographic record with names provided in the native language.

Named places are often important for identifying geographic or environmental features, resources, or stories associated with the place.

Reservoir effects have damaged many of these sites, either through erosion or inundation. In some cases, the dams have caused irreparable harm to named places by preventing a resource from being present at the site. For example, the site called *snc'am'tústn*, translated as “sturgeon place,” was an important fishing location for sturgeon (George 2008). Since the construction of the Grand Coulee Dam, however, sturgeon have been unable to return to this location. The ponderosa pines at another site, *nsʔátq'əlp*, translated as “in pine groves,” were traditionally used for canoe construction. During the drawdown period, this site can be revisited, but pine trees can no longer grow here. Examples such as these also demonstrate the negative indirect impacts that may occur when a site is damaged. Since sturgeon and ponderosa pine are no longer present at these sites, there is no incentive to return to these areas. Consequently, the transmission of teachings by older generations to younger ones does not occur here. Moreover, the native words to describe these places are not passed on to the younger generation. Both language and culture are lost.

Legendary Locations

Legendary locations are places associated with traditional legends or stories. Many of these places, such as the Owl Sisters' Site (Figure 7), sit along the Columbia River or one of its tributaries. While the legends persist, if associated places are eroded or inundated, the re-telling of the legend dwindles over time. Some of these sites, such as Kettle Falls, lie in or adjacent to these rivers and can be directly impacted by river management activities.

Fishing Stations

Fishing stations are places that were repeatedly revisited for fishing. Often fishing stations included rock and stick weirs, net locations, traps, and places with platforms for the use of hoop nets or spears. Many of the fishing stations used prior to the arrival of Europeans are now inundated. Contemporary fishing requires that desired fish are actually present in the rivers and streams. Obviously, the Chief Joseph and Grand Coulee dams prevent some of these fish from reaching traditional fishing areas and being harvested by CTCR members. Additionally, flow rates, spill (and associated turbidity, flow and dissolved gas), temperature, and fluctuating reservoir pool levels may have negative impacts on traditional fishing conducted today.

Mineral Procurement Areas

Mineral procurement areas include those areas where naturally occurring inorganic materials are obtained. Most commonly, these areas refer to locations where rocks or minerals used for stone tool production are found. However, these places also include sites that produce minerals, such as ochre, that may be used for ceremonial purposes or as pigments in paints.



Figure 7. Owl Sisters' Site along the Columbia River



Figure 8: Petrified wood found at Ginkgo Petrified Forest State Park (USGS 2013).

Mineral procurement areas are often found in quarries where the desired stone is extracted. At some sites, such as the Ginkgo Petrified Forest, the resource is easily accessible. Here, petrified wood is found on the ground surface next to the Columbia River (Figure 8). Some minerals, such as agate, chalcedony, jasper and other cryptocrystallines, are collected in nodules found among the gravels in the Columbia River and its tributaries (Beste 1996). Where the natural river channels are inundated, retrieval of these cobbles becomes infeasible.

Alternatives Analysis and Tribal Impacts

The Confederated Tribes of the Colville Reservation are in the unique position of representing tribes that have an interest in cultural resources in both the United States and Canada, and in several states on both the Columbia River and Snake River drainages. Under any proposed alternative for the Columbia River System Operations EIS, the management of these rivers will result in negative impacts to CTCR cultural resources. In all of the alternatives to be evaluated by the Columbia River System Operations EIS, especially the No Action Alternative, there is room for vast improvements to System operations, resource management, traditional non-archaeological cultural resource treatments, and the application of creative mitigation. Therefore, with regard to potential Columbia River System Operations effects, CTCR has no preferred alternative for the protection of cultural resources. Selection of any of the alternatives put forth within Iteration 2 of the Columbia River System Operations EIS will not lessen the continued diminishment and destruction of cultural resources of the Colville Reservation and other areas in the Tribes' traditional territory that are vitally important to the CTCR.

The tribal and family histories obtained from informants suggest that throughout the project area, tribal members continue to practice subsistence and ceremonial activities related to hunting, gathering, and fishing. Such places have traditional cultural value. Places, practices, stories and legends also serve as a means of perpetuating tribal tradition. As the ethnographic interviews emphasize, these activities cease only when access is prohibited, or in areas permanently altered by environmental change caused by farming, ranching, recreation, land tenure policies, inundation, or impoundment. CTCR considers all of the preceding impacts as direct or indirect effects of dams, especially those projects including in the CRS.

Parker and King, in ***Guidelines for Evaluating and Documenting Traditional Cultural Properties***: (1998:1), state that: "A traditional cultural property [...] can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community." Even within the restricted guidance under the National Historic Preservation Act, such places are considered to be significant. Parker and King (1998:3) further explain that these guidelines are "meant to supplement, not substitute for, more specific guidelines, such as those used by...Indian tribes with respect to their own lands and programs." Additionally, the effects of ethnocentrism must be avoided: "It is vital to evaluate properties thought to have traditional cultural significance from the standpoint of those who may ascribe such significance to them, whatever one's own perception of them, based on one's own cultural values, may be" (Parker and King 1998:4). This is because, "The existence and significance of such locations often can be ascertained only through interviews with knowledgeable users of the area" (Parker and King 1998:2).

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DRAFT CRSO STATEMENT OF THE CSKT

This Statement is DRAFT - and is submitted for internal review and essentially as a placeholder. The CSKT reserve the right to edit or withdraw the Statement in part or whole (photos and text boxes anticipated as placeholders for cultural/elder content).



From time immemorial the aboriginal homeland of the Confederated Salish and Kootenai Tribes of the Flathead Reservation (CSKT) reached from what is now British Columbia, down through parts of what are now the states of Idaho, Montana and Wyoming, including the Greater Yellowstone Area (GYA). Like most tribal nations in Montana the Séliš, Ksanka and Qlispé, people hunted, fished and gathered in their traditional homelands.

No natural resource is more vital to the people than water – the importance of water is woven into all aspects of tribal lives. For thousands of years, the Bitterroot Salish, Kootenai and Upper Pend d’Oreille, thrived in the aboriginal homeland situated in what is now Montana, Idaho, British Columbia and Wyoming, subsisting off of healthy native fisheries, plants, and wildlife. The Confederated Salish and Kootenai Tribes still honor, depend on, and manage these waters and the natural resources that depend on it.



The CSKT have recognized Treaty rights and interests within and to waters and lands that coincide with hydropower facilities and reservoirs of the Federal Columbia River Power System (“FCRPS”). Specifically, the Kootenai River and the Flathead River systems include Libby Dam and Hungry Horse Dam, respectively, and associated reservoirs - Lake Koocanusa and Hungry Horse Reservoir - all of which are part of the CSKT’s aboriginal lands and waters and subject to Treaty protections. All changes or mandates in hydropower operations, such as flow augmentation, will call for water that is stored behind, and that will flow through or over, Libby Dam or Hungry Horse Dam.

Both of these Montana river systems and associated reservoirs are home to sensitive fish and listed species including the Kootenai River white sturgeon (*Acipenser transmontanus*), bull trout (*Salvelinus confluentus*), burbot (*Lota lota*) and resident populations of the native westslope cutthroat trout. The Kootenai River white sturgeon is listed under the Endangered Species Act (ESA) as endangered. The bull trout, which inhabits both systems, is listed as threatened. Critical habitat designated by the U.S. Fish and Wildlife Service (“FWS”) for the Columbia River population of bull trout is also potentially implicated by developments in the instant litigation. More broadly, the life-cycles and biological demands of the CSKT’s resident fish are not in all respects the same as the salmon populations that are the focus of this litigation.



These differences in fish life-cycles are an important component of the CSKT’s claims.

Until 1871, the United States conducted its official relations with the sovereign tribal nations compromising the “domestic dependent nations” within its territories by treaty negotiated by the

executive branch and ratified by Congress. CSKT Tribal chiefs signed the Hellgate Treaty on July 16, 1855 near present day Missoula, Montana. The Hellgate Treaty is a "Stevens Treaty", negotiated by Governor and Superintendent for Indian Affairs for the Washington Territory, Isaac I. Stevens. Governor Stevens was tasked with making peace with the tribal nations along the Oregon Trail. He negotiated a majority of the treaties with Indian Nations throughout the northwest, and those treaties contain similar language regarding hunting, fishing and gathering.



Under the Hellgate Treaty, the Tribes retained certain rights on ceded aboriginal territory, including, among other things, the right of taking fish at all usual and accustomed places, in common with the citizens of the Territory. This includes the fishery and all natural resources in and appurtenant to significant reaches of the Upper Columbia watershed located within the present-day boundaries of the State of Montana, including the reservoirs operated as part of the FCRPS. The CSKT are a sovereign trustee for natural resources in, appurtenant to, and arising from waters included in the CRSO NEPA process. The CSKT seek to enforce their Treaty rights and protect their natural resource interests through their participation in the CRSO NEPA processes (and indeed, as defendant intervenors in the BiOp litigation).

By the terms of the Hellgate Treaty, the CSKT agreed to cede vast areas of their aboriginal territory to the United States, including certain waters that are included in this litigation. In return the United States promised to provide specified goods and services and guaranteed that the CSKT could continue their traditional way of life. To effectuate this guarantee, the CSKT retained exclusive possession of a delineated homeland (i.e. the Flathead Indian Reservation) and expressly reserved in perpetuity hunting, fishing, gathering and grazing rights in the ceded lands. *See* Treaty of Hellgate, Arts. II and III. The fishing rights were reserved by Article III language that provides in relevant part:

The exclusive right of taking fish in all the streams 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

Water management is central to all life, and has had profound impacts on the culture, resources, and peoples of the Flathead Reservation. Under the Treaty of Hellgate the Tribes ceded over 20 million acres of land in return for a permanent homeland on the 1.3 million-acre Flathead Reservation.

In the century after the promises made in the Hellgate Treaty, the United States broke its word and diminished the tribal land holdings to less than one-fifth of the 1.3 million-acre Reservation that had been reserved under the Treaty. In 1904, over the Tribes' strenuous objection, Congress enacted a statute that opened much of the Reservation to non-Indian settlement and promised to use the proceeds from the sale of reservation lands to develop an irrigation project "for the benefit of said Indians." But, in fact, the United States constructed the Flathead Indian Irrigation Project to provide water to, almost exclusively, the non-Indian homesteaders. The operation of the Project (over 100 years, now) created what can only be described as an environmental catastrophe on the Reservation. Irrigation diversions of mountain streams dewater streams and destroys native fisheries and fish habitat. The irrigation project's inefficiencies and polluted return flows have created severe water quality issues that threaten endangered species.

berries, and pasturing their horses and cattle upon open and unclaimed land.

Thus, for all Columbia River tributary streams located in the State of Montana the CSKT retain either an exclusive or shared right to manage and utilize the fishery. The CSKT have effectuated this right directly by Tribal members individually and continuously performing their traditional fishing activities since time immemorial throughout the CSKT aboriginal territory and by having developed significant CSKT governmental natural resource programs to manage and protect the sensitive fish species within the Flathead Reservation. The CSKT have effectuated this right indirectly by consulting and coordinating with state and federal fish management agencies about fish management and protection issues throughout the CSKT aboriginal territory. The Hellgate Treaty provides independent grounds for jurisdiction. The Treaty is the supreme law of the land which memorializes the CSKT’s sovereign and Treaty interests in the fish species that inhabit the rivers, tributaries and reservoirs of the CSKT’s reservation and aboriginal territories.

Placeholder culture/resources impacts

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Much of the CRSO NEPA process, and indeed BiOp litigation, focuses on salmon populations with needs that are not the same as the needs of resident fish in CSKT aboriginal territory. As a result, the life-cycles and biological demands for downriver salmon populations are not necessarily consistent with the life-cycles and biological demands of the Columbia River’s headwater’s/CSKT’s resident fish. These differences are an important component of the CSKT’s interests and rights and have guided the CSKT’s participation in the BiOp litigation, the CRSO NEPA process, and other private and public actions.

The CSKT have developed federally-approved water quality standards for the Flathead Indian Reservation. The CSKT are continuously working to protect and improve the water quality in Reservation waters, including Flathead Lake, by various means, including: membership in the Flathead Basin Commission; negotiating with trans-boundary interests regarding coal development in the North Fork Flathead River; participating in FERC-relicensing workgroups; implementing Séliš Ksanka Qlispè Hydroelectric Project (SKQ Dam, formerly Kerr Dam) environmental mitigation requirements; and operating of a certified Tribal water quality laboratory. The federal action agencies must consider the significant effects FCRPS operations will have on Tribal waters when proposing Hungry Horse Reservoir drawdowns to support flow augmentation for anadromous fish, because these flows will pass through the Flathead Indian Reservation and accordingly, by timing and volume, affect Tribal water quality.



Libby Dam, Hungry Horse Dam, and their associated reservoirs inflicted many other serious impacts on the culture, resources and economy of the CSKT. They caused the inundation of traditional use sites, cultural sites, and archaeological sites. Bank erosion continues to threaten and destroy these sites. The inundation also eliminated riparian ecosystems that produced traditional plant foods and medicines for CSKT tribal people. The U.S. Army Corps of Engineers and Bureau of Reclamation are aware of these impacts and have made progress in mitigating them, but there is much left to do and reservoir drawdowns will significantly impact the federal government’s ability to protect and preserve these resources.

Placeholder culture/resources impacts

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The CSKT also have significant interests in energy resources impacted by hydropower generation. First, the CSKT own the SKQ Dam, a 180 megawatt hydroelectric facility located on the Flathead River that is operated pursuant to a license issued by the Federal Energy Regulatory Commission. Second, the CSKT operate Mission Valley Power (“MVP”), a federal electrical distribution utility, pursuant to a contract with the United States. The utility acquires most of its power from the

Bonneville Power Administration (“BPA”). As a result, the CSKT and its members have an economic stake in hydropower decisions that may precipitate major rate increases for MVP’s share of BPA power.

The CSKT maintains historic, present, and future interests in the resources included in the CRSO NEPA process. The CSKT work closely with other tribes in the Columbia River Basin to work towards shared, collective tribal needs and goals.

Placeholder culture/resources impacts

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Guided by historic and present-day cultural, natural resources, governmental, and economic interests, the CSKT continues to work on natural Columbia River Basin resources management and solutions that serve the CSKT’s tribal members and all the basin’s inhabitants. It is not possible to turn back the pasts management decisions that have degraded tribal and other resources. But thru improved decision-making and management the Columbia River Basin’s waters can support lost uses that are important to many CSKT interests and uses.

**DRAFT Blueprint for Characterizing Tribal Cultural Landscapes (TCLs)
In the Area of Potential Effect (APE)
Of the Columbia River System Operations Environmental Impact Statement (CRSO-EIS)**

Draft v. 4.26.2019

I. Background and Issue Statement

In 2016, the U.S. Army Corps of Engineers (USACE), Bonneville Power Administration (BPA), and U.S. Bureau of Reclamation (USBR) (collectively, the Coleads) announced the initiation of a 5-year process under NEPA for developing the CRSO-EIS, a document that would analyze the impacts of continued and modified operations of 14 federal dams in the Columbia River system, pursuant to federal judicial order.

Within a year, several scoping meetings with leaders of the 19 federally recognized tribes of the Columbia Basin had been hosted by the Coleads in Spokane, Boise, The Dalles, and Portland. In the same timeframe, several interagency working groups were formed to focus on the various affected resources and began meeting regularly. As expected, the degree of tribal involvement in the CRSO-EIS has varied between individual tribes. However, certain themes began to be expressed among the tribes who were members of the working groups, particularly the Cultural Resources group. One such theme centered around a concern regarding the narrowness of the “Traditional Cultural Properties (TCPs)” and “Sacred Sites” policies making it difficult to fully capture, describe, and analyze tribally important resources that would potentially be affected by CRSO-EIS alternatives, if limited only to those two policies.

Soon after this, in Fall 2018, a Presidential Memorandum was released providing for a revised understanding of NEPA process regarding the CRSO-EIS, with a Record of Decision (ROD) being signed in September 2020, one year sooner than originally scheduled. The Coleads announced they would be seeking tribal input and proposals on a “Tribal Perspectives” section to be authored by tribes, around the same time they announced the revised EIS schedule.

In light of (1) the accelerated schedule and (2) the need to identify and analyze impacts to tribally important resources beyond “TCPs” and “Sacred Sites”, the issue is that a stepwise and documentable (but also protectable) system is needed to describe protocols for resource identification, prioritization and analysis in the CRSO-EIS APE. In this way, the protocols themselves may be followed both before and after the issuance of the ROD, and their outcomes and products may inform CRSO operations even if not written into the EIS.

II. Proposal Statement—the Blueprint

Project staff from the Confederated Tribes of Grand Ronde propose, as part of the Tribal Perspectives section of the CRSO-EIS, a blueprint for developing the protocols for resource identification and analysis of tribally important resources (“Blueprint”), as described above. Tribes would develop and write the protocols, Coleads and tribes would follow them, and

the outcomes and products would be used only as determined/allowed by the contributing tribes.

The Blueprint is based heavily upon the Bureau of Ocean Energy Management (BOEM) documents *A Guidance Document for Characterizing Tribal Cultural Landscapes*,¹ and *Characterizing Tribal Cultural Landscapes, Volumes I and II*.² All of the above documents were prepared under BOEM-NOAA Interagency Agreement M12PG00035 by the National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries, the Makah Tribe, the Confederated Tribes of the Grand Ronde Community of Oregon, the Yurok Tribe, the National Marine Sanctuary Foundation, and the BOEM Pacific OCS Region, and were first published in 2015-2017.

III. Description of Blueprint Methodologies and Parameters

A. Concepts

1. Tribal Cultural Landscape (TCL): Any place in which a relationship, past or present, exists between a spatial area, resource, and an associated group of indigenous people whose cultural practices, beliefs, or identity connects them to that place. A tribal cultural landscape is determined by and known to a culturally related group of indigenous people with relationships to that place.³
2. TCLs are defined as significant by tribes and indigenous communities, rather than by exterior criteria. This is a fundamental difference between TCLs and Section 106 TCPs.⁴
3. Each tribe or indigenous group has a unique set of traditional knowledge and lifeways which are inextricably connected to places on the landscape. A group of tribes may all have connections to the same geographic area or overlapping geographic areas, and their connections may differ widely. Therefore, the same geography may carry a vast, wide array of associated tribal resources and knowledge.
4. Tribal cultures tend not to separate natural, cultural, historical, ethnographic, archaeological, ecological, spiritual, and subsistence resources from each other in terms of labels or categories. The same location or species may have multiple levels of TCL importance to a single tribe.
5. While TCL identification by a tribe does not by itself mandate any special action or consideration from government agencies or others, a government agency acting in good faith should at least attempt to adaptively incorporate such values into its relevant management practices and policies.
6. The tribe(s) identifying a TCL should determine the level of sensitivity of tribal information associated with the TCL or resource, and this determination should be

¹ Ball, David, R. Clayburn, R. Cordero, B. Edwards, V. Grussing, J. Ledford, R. McConnell, R. Monette, R. Steelquist, E. Thorsgard, and J. Townsend. OCS Study BOEM 2015-047, November 30, 2015. Online at <http://www.boem.gov/Pacific-Completed-Studies>.

² Same authors as above. OCS Study BOEM 2017-001, December 31, 2017. Online at <http://www.boem.gov/Pacific-Completed-Studies>.

³ Ball *et al.* (2015).

⁴ *Id.*

respected by all partners. Often such information is not meant to be shared outside of the tribal group or subgroup. Where multiple tribes identify the same identical TCL or resource information, the most restrictive tribe's policies and practices should govern.

7. As much as possible, information about a tribe should come from that tribe.⁵
8. TCL and tribally important resource identification and/or analysis (a "TCL study") should be utilized as part of ongoing conversations and adaptive decision-making processes in the course of project planning, design, implementation, monitoring, and evaluation. They should not be treated as "check the box" steps to be completed and then forgotten.

B. Protocols⁶

The protocols listed here are intended only to enhance the government-to-government consultation process, not to replace it. Each tribe as a sovereign has the right to engage in consultation with the Coleads within or outside of this process.

1. Conceptualization
 - Tribe(s) identify appropriate geographic scope of study, with CRSO-EIS alternatives in mind
 - Tribe(s) determines types of information to be collected and analyzed
 - Tribe(s) determines formats for recording and processing
 - Tribe(s) may identify format for presentation, if applicable
 - Tribe(s) may identify desired use of information in CRSO processes
 - Conversation between Coleads and tribe(s) regarding capacity needs, organizational needs, and other needs as applicable, given the above
2. Data Acquisition—this can be an ongoing process
 - Tribe(s) determines data standards and attributes
 - Tribe(s) gathers and stores information according to tribal access policy
3. Geo-reference
 - Locating of boundaries, if applicable
 - Data layer development, including metadata
 - Data linkage and cleaning
 - Document verification
4. Synthesis
 - Analyze information on, and illuminate linkages between, the following:
 - Places
 - Activities
 - Traditional knowledge (TK)
 - Context
 - Cultural understanding
5. Presentation—this step is at sole discretion of each tribe, and may include:
 - Public presentations, in person or written, of non-sensitive data
 - Maps (redacted if necessary)

⁵ *Id.*

⁶ *See id.* for a thorough description of this process and the associated "Figure 1" attachment.

- GIS data layers (redacted if necessary)
- Field visits
- Written (redacted if necessary) and oral reports.

C. Participants and mode of participation

For purposes of this Blueprint, each of the 19 federally recognized tribes of the U.S. portion of the Columbia Basin is a potential participant. Participation is completely voluntary. Each tribe will determine whether, and to what extent, it will participate in a TCL study. A tribe may complete all of the protocols as described above, or it may wish only to participate in one or some of the protocols. A number of tribes may wish to group together for the purposes of the TCL study, but this would not have the effect of “outweighing” or excluding an individually participating tribe’s TCL study.

IV. Outcomes and Products

While outcomes and products would differ from tribe to tribe, the Coleads would have the ability to consolidate and synthesize the non-sensitive information shared by all participating tribes. Such products may take the form of maps, GIS data layers, reports, presentations, or other information to be utilized adaptively in CRSO management.

While it is understood that final products would likely not be complete until after the issuance of the ROD for the CRSO-EIS, the reasoning is that the information gathered and shared through the TCL study process would be used to inform best practices and adaptive strategies for avoidance, minimization, and mitigation of impacts moving forward.

V. Treatment of Sensitive TCL Information

Any and all sensitive information a tribe chooses to share with the Coleads, and describes as sensitive, should be treated respectfully and as Confidential. This holds true whether or not the same information is publicly available elsewhere. Where possible, and when acceptable to the contributing tribe(s), the sensitive information should be redacted and/or made more general for the development of public products. Examples of this include large-scale circles on maps rather than points, and GIS data layers with sensitive fields removed from the attribute tables.

VI. Conclusion and Attachments

This Blueprint is offered as an alternative means for tribes to identify, gather, and use (and share with others as determined appropriate by the tribe) meaningful information on tribally important places and resources potentially impacted by CRSO-EIS alternatives.

Attachments: “Figure 1” Template for Indigenous Data Collection and Retention⁷
 “Figure 2” Process for Application of TCL Approach⁸

⁷ *Id.*

⁸ *Id.*

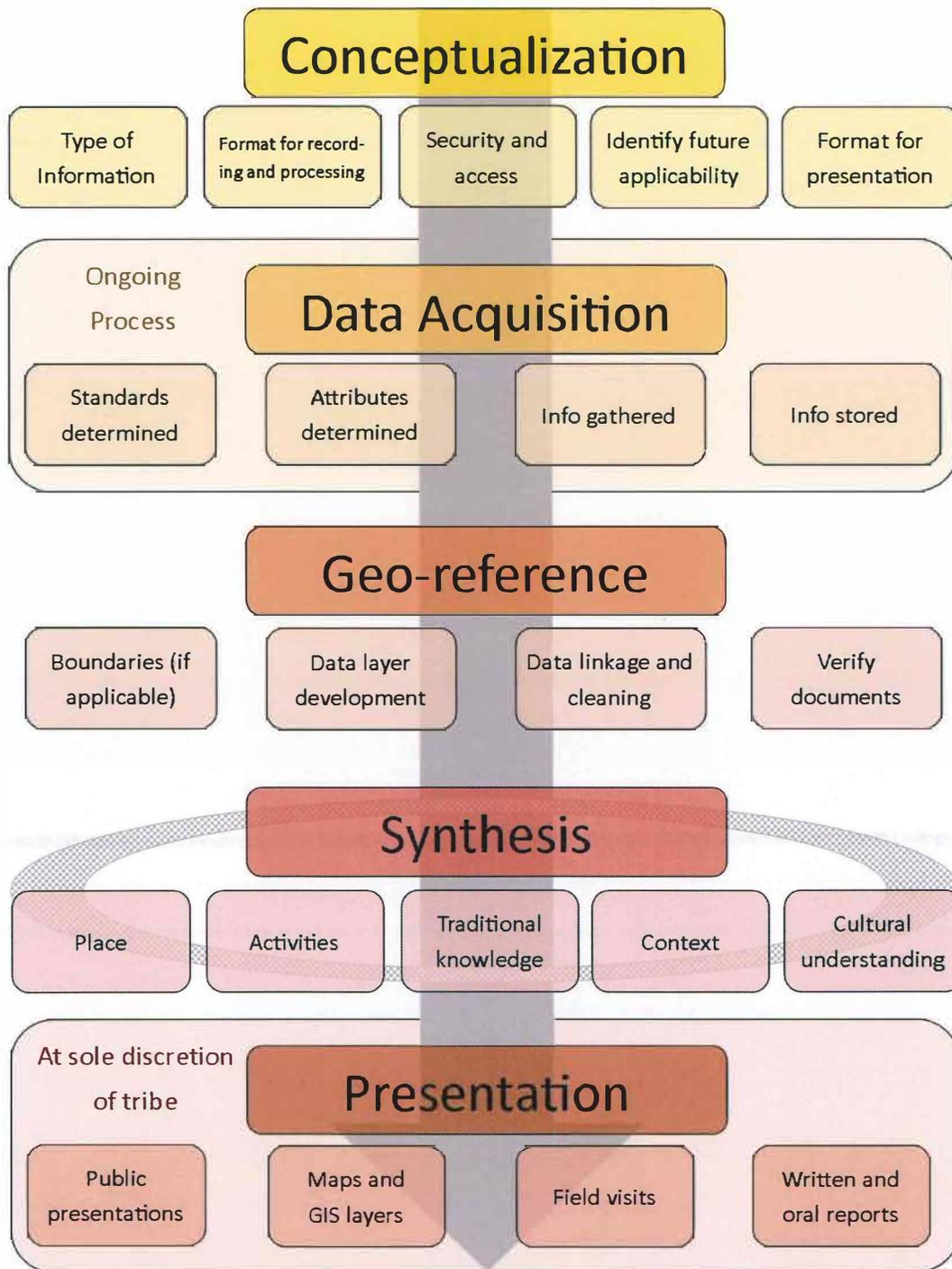


Figure 1. Template for Indigenous Data Collection and Retention. This process provides a method for tribes to collect and hold information that can be queried internally, with the ability to provide summary results to external parties.

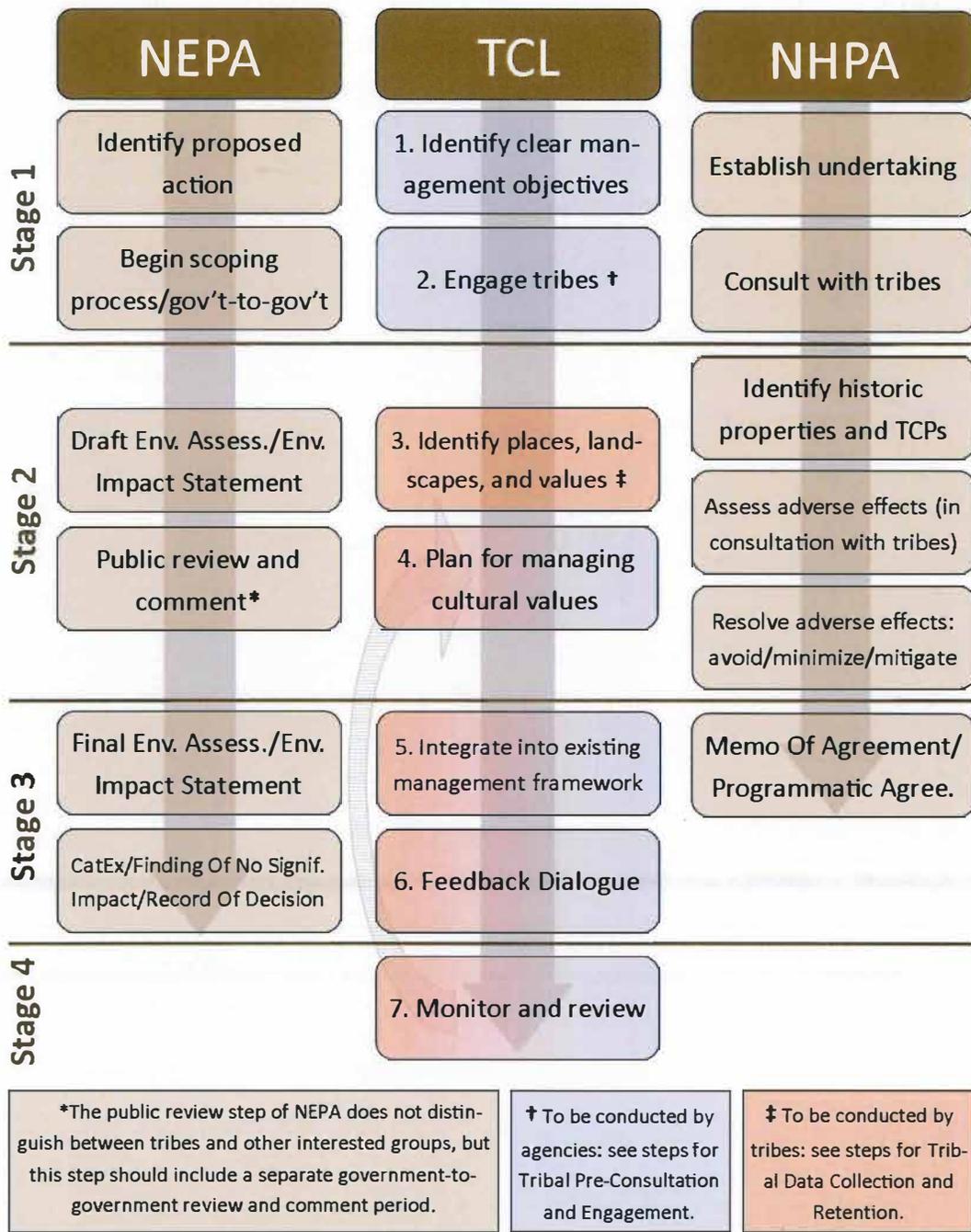


Figure 2. Process for application of TCL approach, showing how it can be feasibly implemented under existing federal policy and regulatory framework. The steps for conducting NEPA and NHPA Section 106 analyses are also included for comparison, to illustrate how the steps in the TCL approach align, and at what points they could be implemented.

KOOTENAI TRIBE OF IDAHO

PERSPECTIVES ON THE COLUMBIA RIVER SYSTEM OPERATIONS

Kootenai Elders and oral Historians say that much of their very early history, including Creation and the beginning of time, is so uniquely Kootenai and so sacred that it cannot be shared with outsiders. They have consented to provide the following information:

“It’s just like in your Bible. There is a Creator who made the world. You call the Creator God; He told us to call Him Nupika.

The Creator-Spirit was in everything, and there were no people. Then He decided to make human beings. He made different people for different places. He made the Kootenai People for this place.

When He was ready to put us on the earth, He told all the spirit-creatures they would have to move above, because the people were coming. Only their forms and their songs could stay behind, to help the people.

And then, the same as with Moses in your Bible, He told us Kootenais our rules, our Commandments. Here is part of what He said:

‘I am your Quilxka Nupika, your supreme being. I have no beginning and no end. I have made my Creation in my image – a circle – and you Kootenai people are within that circle along with everything else in my Creation.

Remember that everything in my Creation is sacred, and is there for a purpose. Treat it well.

Take only what you need, and waste nothing.

Don’t commit murder.

Respect and help one another.

Cherish your children and your old ones – They are your future and your past.

Your word must always be good. Never lie, never break a promise.

At all times, pull together – act with one heart, one mind.

Then He told us the ceremonies and prayers we could use to get help when we need it. You have your angels and your saints, who help you. We Kootenai People have our Nupikas, who help us.

Finally, Quilxka Nupika told us His most important commandment. He said:

‘I have created you Kootenai People to look after this beautiful land, to honor and guard and celebrate my Creation here, in this place. As long as you do that, this land will meet all your needs. Everything necessary for you and your children to

live and be happy forever is here, as long as you keep this Covenant with me. Will you do that?’

And those first Kootenai People promised to keep the Covenant with the Creator, just the way the Jews did in the Old Testament. So He put us here, in our Kootenai Aboriginal Territory.

And that’s how time began.”

Century of Survival, A Brief History of the Kootenai Tribe of Idaho, By the Elders of the Kootenai Nation and the Members of the Tribe (2nd Ed. 2010).

The Ktunaxa (Kootenai) Nation consists of several modern communities in the United States and Canada. The Kootenai Tribe of Idaho (ʔaʔanqmi) (KTOI) is located near Bonners Ferry, Idaho. The other bands are:

- yaʔan nuʔkiy (Lower Kootenay Band), located near Creston, B.C.
- ʔaʔam (St. Mary’s Band) located near Cranbrook, B.C.
- ʔakinkumʔasnuqʔit (Tobacco Plains Band) located near Tobacco Plains, B.C.
- ʔakisq̄nuk (Columbia Lake Band) located near Windermere, B.C.
- k̄upawiçq̄nuk (Ksanka Band) located in Elmo, Montana

The KTOI is governed by the Kootenai Tribal Council. The Ksanka Band is part of the Confederated Salish and Kootenai Tribes of the Flathead Reservation (CSKT) and is governed by CSKT Tribal Council. The four communities in British Columbia are governed by their individual Band Councils and the Ktunaxa Nation Council. The Ktunaxa Nation comes together as one to discuss and address issues affecting the Nation and the Territory under a Protocol signed in 2009.

Ktunaxa Territory consists of portions of Idaho, Montana, Washington, British Columbia and Alberta. The KTOI inhabited the area along the Kootenai River from above Kootenai Falls, Montana in the east, Priest Lake, Idaho in the west, Lake Pend Oreille, Idaho in the south and Kootenay Lake, British Columbia in the north.

The heart of Ktunaxa Territory is the Kootenai/y River and its tributaries. The Kootenai Subbasin Plan provides a useful overview (found at https://www.nwcouncil.org/sites/default/files/Assessment_01IntroOverview.pdf):

The Kootenai River Subbasin is situated between 48° and 51° north latitude and 115° and 118° west longitude and includes within its boundaries parts of southeastern British Columbia, northern Idaho, and northwestern Montana. It measures 238 miles by 153 miles and has an area 16,180 sq miles. Nearly two-thirds of the Kootenai River’s 485-mile-long channel and almost 70 percent of its watershed area, is located within the province of British Columbia. The Montana part of the subbasin makes up about 23 percent of the watershed, while the Idaho portion is about 6.5 percent (Knudson 1994). The primary focus of this assessment

is on that part of the subbasin that falls within the U.S.; those parts of the subbasin upstream and downstream in British Columbia are covered in less detail. ***

The headwaters of the Kootenai River, which is spelled Kootenay in Canada, originate in Kootenay National Park, B.C. The river flows south into the Rocky Mountain Trench, and then enters Koocanusa Reservoir (also known as Lake Koocanusa) created by Libby Dam and located near Libby, Montana. After leaving the reservoir, the Kootenai River flows west, passes through a gap between the Purcell and Cabinet Mountains and enters Idaho. From Bonners Ferry, it enters the Purcell Trench and flows northward through flat agricultural land (formerly a floodplain/wetland complex) toward the Idaho-Canada border. North of the border, it runs past the city of Creston, B.C. and into the south arm of Kootenay Lake. Kootenay Lake's west arm is the outlet, and from there, the Kootenai River flows south again to join the Columbia River at Castlegar, B.C. At its mouth, the Kootenai has an average annual discharge of 30,650 cfs (KRN 2003). The Continental Divide forms much of the eastern boundary of the subbasin, the Selkirk Mountains the western boundary, and the Cabinet Range the southern. The Purcell Mountains fill the center of the river's J-shaped course to where it joins Kootenay Lake.

In its first 70 miles (from the source to Canal Flats), five rivers—the Vermillion, Simpson, Cross, Palliser and White—empty into the Kootenai. Together those streams drain an area of approximately 2,080 square miles. At Canal Flats, the Kootenai enters the Rocky Mountain Trench, and from there to where it crosses the border into Montana, a distance of some 83 miles, it is joined by several more tributaries (Skookumchuck, Lussier, St. Mary, Elk, and Bull Rivers and Gold Creek). Collectively, they drain another 4,280 square miles. After entering Montana, the Tobacco River and numerous small tributaries flow into Koocanusa Reservoir. Between Libby Dam and the Montana-Idaho border, the major tributaries are the Fisher and Yaak Rivers. In Idaho, the major tributary is the Moyie River, which joins the Kootenai from the north between the Montana-Idaho border and Bonners Ferry, Idaho. The Goat River enters the river in Canada, near Creston, B.C.

Almost all of the major tributaries to the river—including the Elk, Bull, White, Lussier, and Vermillion Rivers—have a very high channel gradient, particularly in their headwaters. The highest headwater areas lie almost 10,000 vertical feet above the point at which the Kootenai River enters Kootenay Lake. Much of the mainstem, however, has a low gradient; from near Canal Flats to where the river enters Kootenay Lake, a distance of 300 miles, the river drops less than 1000 feet. Still, even there valley-bottom widths are generally under two miles and are characterized by tree-covered rolling hills with few grassland openings. Only in the Bonners Ferry-to-Creston area and the Tobacco Plains are there slightly wider floodplains.

In terms of runoff volume, the Kootenai River is the second largest Columbia River tributary. In terms of watershed area (10.4 million acres), the subbasin ranks third in the Columbia (Knudson 1994).

Libby Dam became operational in 1974 and is part of the Columbia River System Operations. The Kootenay River is also impounded by Corra Linn Dam where the west arm of Kootenay Lake flows into the Kootenay River where it meets the Columbia River. Duncan Dam, also authorized by the Columbia River Treaty and spanning the Duncan River, also controls flows into Kootenay Lake.

Ktunaxa people also inhabited and used the Arrow Lakes, Priest Lake and Lake Pend Oreille for subsistence gathering and cultural activities. Ktunaxa participated in the Kettle Falls fishery, traveling from Ktunaxa Territory to the location annually to obtain salmon.

The construction, inundation and operation of the hydroelectric facilities had a profound impact on Ktunaxa resources and continues to do so. Nearly all the species Ktunaxa relied on for subsistence and cultural purposes are threatened, endangered or extirpated.



Thus, the ability of Ktunaxa people to practice their religion and culture is impeded by the Columbia River System Operations. Especially for the KTOI and Yaqa Nukiy, the main source of subsistence was fishing rather than hunting due to the location. The Kootenai/y River itself became part of KTOI identity and historically there were a number of camp locations along the River such as at Jennings, Montana.

The construction, inundation and continued operation of Libby Dam interrupted the lifeways of the River and its ecosystems, which had a cascading effect from the fish, to the riparian areas,

and to the mountaintop ridges, including berries. This in turn had a cascading effect on KTOI culture.

For example, the Kootenai Sturgeon Nose Canoe was an integral part of KTOI identity and was unique to the Kootenai. The Kootenai would travel throughout the Kootenai Valley during the spring floods to different areas for different purposes, as well as between villages to visit other Ktunaxa. The CRSO eliminated the ability to do so and the Kootenai Sturgeon Nose Canoe was nearly lost.

One significant site along the River for the KTOI specifically and Ktunaxa generally is the Kootenai Falls located in present-day Montana. There have been attempts to dam the Falls, but Ktunaxa people from all communities gathered together to fight the attempts and won. CRSO operations have changed the Falls somewhat, but thankfully Ktunaxa People are still able to utilize Kootenai Falls as their modern church. Every June, the Ktunaxa Nation gather at Kootenai Falls for ceremony and social interaction.

Ktunaxa Territory generally and the Kootenai River Subbasin specifically is transboundary and impacted by Columbia River System Operations. The KTOI works diligently to mitigate the impacts of the CRSO operations through ecosystem restoration. The Tribe works in close coordination with its sister communities in the Ktunaxa Nation as well as the United States, Canada, British Columbia, Idaho and Montana governments, along with local governments, individuals and organizations to address those impacts and restore Ktunaxa resources.

Unfortunately, the CRSO EIS analysis focuses solely on resources in the United States. It is impossible to fully analyze impacts to Ktunaxa resources with this artificial limitation. Libby Dam operations affect both upstream resources in British Columbia, as well as downstream resources in Montana, Idaho and British Columbia. Columbia River System Operations are also closely coordinated with Columbia River Treaty operations, which have an impact on Ktunaxa resources on both sides of the international boundary. The alternatives analysis will not show those impacts unless the EIS is expanded to address all impacts to Ktunaxa resources.

Shoshone-Bannock Tribes CRSO Tribal Perspectives Document

Summary/Abstract: *The Shoshone-Bannock Tribes (Tribes) of the Fort Hall Indian Reservation, located in Southeast Idaho, appreciate the co-lead agencies providing this opportunity to hear our perspective on the Columbia River System Operations (CRSO) and the Environmental Impact Statement (EIS) currently being developed for the Columbia River System (System). As a cooperating agency, federally recognized Tribe, and Fish Accord partner, the Tribes have a unique view of the issues surrounding anadromous fish management in the context of the operations of the System. Given the limiting factors affecting the recovery of anadromous fish throughout the System, the Tribes believe it is time to select an alternative that restores the systems and affected unoccupied lands to a natural condition. This includes the restoration of component resources to conditions which most closely represents the ecological features associated with a natural riverine ecosystem. Based on the range of feasible alternatives, the nearest alternative to this perspective would be for the co-lead agencies to select and implement Multiple Objective - 3 (MO3).*

The Tribes perspectives are based upon our reliance on the natural riverine ecosystem of the Columbia River Basin (Basin) for subsistence since time immemorial. This reliance was recognized and guaranteed through the Treaty reserved right to hunt on unoccupied lands of the United States. Our rights and interests are directly impacted by the operation, maintenance, and configuration of the System. To protect our rights and interests we are participating in the development of the EIS as a cooperating agency. Since our perspective can be broader than the boxes of National Environmental Policy Act (NEPA) allows for and our expanded definitions of Indian Trust Assets and Cultural Resources cannot be heard we feel that the Tribal Perspective section is a welcomed opportunity to express our values, concerns, and risks to the Tribes culture and Treaty reserved rights.

As is the fate of the Salmon, the continued existence of our culture is at risk of extinction because of the environmental inequities that have been forced upon our people. Over the last 200 years we have endured brutal atrocities against our people, the taking of our lands, the depletion of our food and medicinal resources, the political interests of the majority, and the legal conclusions that now govern how our culture can exist. The equitable distribution of environmental risk and benefits has not been afforded to the Shoshone and Bannock peoples, and as it has been done throughout history, we are forced to shoulder the burdens of conservation. Because what is at stake now is our Treaty reserved subsistence lifestyle.

Populations of salmon, including those in the Snake River subbasin, decreased substantially coincident with the construction of hydroelectric dams on the Lower Snake and Columbia rivers and other anthropogenic impacts across the landscape. Currently, salmon occupy 40% of their historic habitat in the Basin. Salmon in the Snake River subbasin have been completely eliminated above the Hells Canyon Complex and abundance in the Salmon River is estimated at 0.5% of its historical runs size. Snake River chinook and steelhead smolt to adult returns (SARs) are generally less than 1% — far below the necessary standard for population replacement or to meet the Northwest Power and Conservation Council goals of 2-6%. Reducing current annual Tribal member consumption to 1.2 pounds of salmon compared to historical use of about 700

pounds per person. The loss of salmon threatens traditional cultural practices that are a vital part of our Tribal identity.

I. Shoshone and Bannock Peoples' Culture of Stewardship

The Tribes' desired future condition for the System is that Tribal members will have the opportunity to harvest salmon using both traditional and contemporary methods on populations that are sustainable, resilient, and abundant. The lands and resources within the Basin are an important part of the Tribes' history, contemporary subsistence, and traditional cultural practices. The management direction taken by this environmental evaluation will have a significant impact on our people and our cultural resources. The resulting decisions must ensure future generations of Tribal members will have the same unique opportunities to enjoy the landscape, gather resources and continue traditional cultural practices.

Knowledge and stewardship of traditional fisheries is a privilege and a responsibility of the present generation to continue the unique heritage of the Shoshone and Bannock people. Continuation of traditional cultural practices in modern day requires the use of technical innovation combined with essentials of tradition. Persistent today is an instinct to return to the fisheries, resource patches, and lands to continue the heritage of the Shoshone and Bannock peoples. Tribal identity continues to be defined by practicing traditional cultural lifeways. Hunting and gathering in the same location as our ancestors and continuing to practice the same traditions is a powerful realization that these lifeways have been unchanged for millennia. Tribal identification is found by practicing traditional principles that mirror the images of our ancestors hunting anadromous fish and gathering and giving thanks for the blessings.

During the nineteenth century, increasing numbers of emigrant fur trappers, miners, ranchers, and non-Indian settlers occupied the lands within the Columbia River basin. These early contacts with the Shoshone and Bannock peoples identified settlements with large concentrations of our people noted throughout the Snake River drainages. "By the time Euro-Americans began to write about the Upper Snake Region in 1811, most of the Shoshone-Bannock populations in the area were fully equestrian peoples who traveled a wide territorial range." (Albers, 1998) Although the *Agai Deka* (Shoshone Salmon Eaters) were fully equestrian, the *Tuku Deka* (Sheepeater Shoshone) never adopted the horse and had permanent residence in Central Idaho until the late 1800's when conflict forced this last band to the reservation lifestyle. The fierce competition for resources by a growing population required the Shoshone and Bannock peoples to travel further for wildlife resources now absent from the Snake River subbasin; increasing the importance of anadromous fisheries for basic survival.

The Shoshone and Bannock peoples endured decades of conflict with encroaching settlers onto traditional gathering areas and witnessed the once sustainable resources disappearing from the landscape. At the height of the Civil War, troops led by General Connor massacred over 300 Shoshone people at the Bear River and a new era of forced removal began for our people. The federal government and territorial officials negotiated numerous treaties with Shoshone and Bannock peoples but never ratified. During the summer of 1863 treaties were proposed to Shoshone and Bannock peoples at Fort Bridger, Box Elder, and Soda Springs; all three were unratified. In 1864 a treaty was offered to Shoshone and Bannock peoples in the Boise Valley to force them to make way for settlement, the treaty was signed but, never ratified and our people

were removed. In 1866, 1867 and 1868, the Bruneau, the Long Tom Creek, and Virginia City treaties were offered to Shoshone, Paiute and Bannock peoples and then the Virginia City; but none were ratified. Finally, on July 3, 1868 the Fort Bridger Treaty was negotiated and ratified by Congress in 1869, which reaffirmed the permanent home and reserved off-reservation rights.

In June 1867, an Executive Order established the Fort Hall Indian Reservation in Southeastern Idaho, as a collective place to consolidate the various bands of Shoshones and Bannocks, from their aboriginal lands, clearing the way for European-American settlements, such as ranchers and miners who desired rich resources present on aboriginal lands. Following the ratification of the Fort Bridger Treaty of 1868, an Executive Order in 1869 confirmed Fort Hall as the permanent home of the Tribes. The Tribes acted in good faith to protect our subsistence rights to harvest foods, medicine, and materials from our homelands, while promoting a safe, secure permanent homeland on the Fort Hall Reservation. Article IV of the Fort Bridger Treaty secured the off-reservation right to procure subsistence resources:

The Indians herein named agree, when the agency-house and other buildings shall be constructed on their reservations named, they will make said reservations their permanent home, and they will make no permanent settlement elsewhere; but they shall have the right to hunt on the unoccupied land 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.

In the Lemhi River Valley, the *Agai Deka* (Salmon Eater) Shoshone, Bannock and mixed *Tuku Deka* (Sheep eater) bands occupied a small reservation reserved near present day Salmon, Idaho through the Virginia City Treaty of 1868. By 1900, the Lemhi Bands of Shoshone, mixed bands of Bannock, and Sheep eater Shoshone were forcibly removed from the Lemhi Reservation to Fort Hall to join the Shoshone-Bannock Tribes. With the termination of the Lemhi Reservation our people were forced to travel long distances to procure anadromous fish resources from our homelands.

Cultural resources, as narrowly defined by most federal and state agencies, are “historic and archeological sites, historic structures and buildings”. The Tribes expand this definition of cultural resources and include all elements of mind, spirit, and physical being; all are inextricably tied to the physical landscape. Examples include archaeological sites, historic sites, traditional cultural practices, spiritual beliefs, sacred landscapes, intellectual property, subsistence resources, language and oral tradition, place names and tribal cultural geography. The Tribes’ definition of cultural resources is based in a holistic perspective that encompasses plants, water, animals and humans, as well as the relationships existing among them. Cultural resources located in the Basin and associated drainages are highly significant because they directly contribute to the Shoshone and Bannock peoples’ unique cultural heritage. Simply stated, a cultural resource is any resource of cultural character. The Tribes policy for Cultural Resource states:

The Tribes retain, assert, and exercise our inherent and ongoing rights as a sovereign government, pertaining to cultural resources and cultural properties. Where federal laws are non-existent or inconsistent, the Tribes will continue to exercise our inherent

rights and unwritten traditional practices, in regards to the management of cultural properties and natural resources.

It is the Tribes' right and responsibility to interpret and perpetuate cultural and heritage resources for future generations of Tribal members and the Tribal community. The Tribes continue to practice our unique subsistence lifestyle that maintains Tribal traditions and ceremonies, improves health, and utilizes ancestral territories. In addition, the Tribes will continue to work diligently to ensure the protection, preservation, and enhancement of our rights for future generations.

Archeological records indicate that the Shoshone and Bannock cultures are at least 10,000 years old in their aboriginal range, while our oral histories are centered around creation in our homelands. Research shows salmon is a significant primary resource along with terrestrial wildlife, resident fish, roots, berries and other botanical resources. A renowned ethnographer and linguist for the Tribes described our connection to anadromous fish in the mid-1900's by noting, "A culture existence is dependent on the continuity of interconnected knowledge, beliefs, conventional behavior and technical practices" (Lilljebled 1972:79). The traditional cultural practices, including the use of riverine resources, are the foundation on which the Shoshone and Bannock peoples built sustainable communities across our homelands for millennia.

It is well established that the United States has a solemn trust obligation to the Tribes. Under this obligation, the United States has a trust responsibility to consider the best interests of the Tribes pursuant to federal law, including the Native American Graves Protection and Repatriation Act (NAGPRA) and other federal heritage laws. The Tribes policy for NAGPRA states:

The Shoshone and Bannock people continue to advocate for protection of the human remains of our ancestral people because we consider that to be a basic human right. Although we were forcibly removed to the Fort Hall Reservation, our innate connections with the off-reservation lands are strong and viable. It is not our wish to see the forcible removal of our people who have already left this world, and move them to the Fort Hall Reservation, but it is the Tribes desire to retain the ancestral links to the lands in which they lived. These Newenne people demonstrate the proof of our existence on our aboriginal lands, therefore we do not want them removed from these lands. It is the policy of the Tribes to repatriate the human remains of our people as close as reasonably possible to the original burial location or with the original discovery site. Recognizing the timely need to collaborate with federal land owners, museums and other curation facilities, it is the policy of the Shoshone-Bannock Tribes to develop agreements on repatriation, to ensure confidential protection of burial locations and original discovery location. It is the policy of the Shoshone-Bannock Tribes that any commercialization of any aspect of the NAGPRA process is expressly prohibited. It is the policy of the Shoshone-Bannock Tribes that all of our past people's human remains, and funerary items, associated and unassociated items, shall not be subject to destructive testing, handling or scientific research inquires by academia. Any photography, use of social media or video of such items by reporters, academics, federal agencies, and private individuals is expressly prohibited, unless a Tribally-designated representative is present with written approval from the Tribes.

It is the intent of this perspectives section to include more than the basic archeological issues identified in the DEIS and discuss all aspects of the cultural resources present in the Basin. From the Tribes' perspective, the empirical data in ethnographic and archaeological records documenting Tribal occupancy, oral history regarding the importance of the riverine ecosystem, and the cultural aspects of procuring subsistence foods cannot be effectively separated. In essence the entire Basin is a connected cultural resource for our people, as well as many other tribes residing in the Basin. It is only when you view this complex system as a whole that you realize the cascading effect of management actions for every living being that relies on it. The construction, inundation, operations, and current configuration of the System have impacted cultural resources by contributing to the decline in anadromous fish abundance.

II. Tribal Subsistence in an Era of Depletion

Shoshone and Bannock peoples consumed approximately 700 pounds of salmon per person annually, prior to the development of the System. At present, only 1.2 pounds of salmon are consumed per tribal member annually. Using simple subtraction results in a deficit of ~699 pounds of salmon consumed per Tribal member annually when comparing traditional and current harvest estimates by the Tribes. As a people, we have gone from relying on anadromous fish runs that provided year-long subsistence resources for our communities to ingesting merely ceremonial amounts of salmon during a short window each fishing season. While abundantly cheap hydropower has benefitted the Basin, it has come at the expense of our community's health and well-being. While every reasonable person recognizes that we cannot return to pristine, pre-contact conditions, the Tribes will continue to advocate for our members because we are currently shouldering the burden of conservation in our homelands, and losing an important part of our culture along the way.

Throughout the 20th Century, anadromous fish runs began to diminish in both total abundance and in their range. Although commercial over-harvest was one of the earliest issues, the development of the contemporary System from 1927-1978 severely limited the ability of salmon, steelhead, and Pacific lamprey to access their historic range; in some instances this development completely blocked entire watersheds. The challenges associated with managing ever limited anadromous fish resources inevitably led to structural conflict across the Basin.

The Tribes were not immune to the challenges surrounding off-reservation treaty rights and the often limited access to anadromous fish resources in the Basin. Gerald Cleo Tinno, an enrolled member of the Tribes and permanent resident of the Fort Hall Indian Reservation, was charged by the State of Idaho for spearing a Chinook salmon on the Yankee Fork Salmon River on July 16, 1968. Both spear fishing and taking salmon at that particular time and location were violations of state fishing regulations. The runs of anadromous fish were low and the state had curtailed all fishing in an attempt to preserve the species.¹

The record specifically shows that historically Indians took salmon by spear at the spawning beds; likewise, there is evidence that after the treaty signing Fort Hall Reservation Indians customarily hunted and fished in the region encompassing the Yankee Fork locale. Salmon and steelhead have always been a key resource for the Shoshone and Bannock peoples throughout

¹ State v. Tinno, 94 Idaho 759 (Supreme Court of Idaho, June 8, 1972)

our homeland. The Supreme Court of Idaho concluded that this area was within the meaning of the Treaty for fishing by Tribal members.

The Supreme Court of Idaho stated that the “special consideration which is to be accorded the Fort Bridger Treaty fishing right must focus on the historical reason for the treaty fishing right. The gathering of food from open lands and streams constituted both the means of economic subsistence and the foundation of a native culture. Reservation of the right to gather food in this fashion protected the Indians' right to maintain essential elements of their way of life, as a complement to the life defined by the permanent homes, allotted farm lands, compulsory education, technical assistance and pecuniary rewards offered in the treaty. Settlement of the west and the rise of industrial America have significantly circumscribed the opportunities of contemporary Indians to hunt and fish for subsistence and to maintain tribal traditions. But the mere passage of time has not eroded the rights guaranteed by a solemn treaty that both sides pledged on their honor to uphold. As part of its conservation program, the State must extend full recognition to these rights, and the purposes which underlie them.”²

Article IV of the Fort Bridger Treaty extended the right to take salmon, although the reasonable and necessary conservation regulations enacted by the State of Idaho may apply in certain circumstances. It was becoming very clear that anadromous fish would no longer be found in the same abundance as were necessary to sustain our people with subsistence resources unless intensive management objectives were implemented by all parties. It became essential that the Tribes continue to actively support restoration, supplementation and cooperative efforts with interested parties so that those anadromous fish species continue to be ‘found thereon’ in harvestable abundance. While the Action Agencies utilize a generic definition of Indian Trust Resources, the Tribes view every salmon as a trust asset that should be collectively managed to sustain our Treaty reserved right to harvest those subsistence foods. The Tribes determined it was necessary to adopt reasonable regulations to protect the Treaty right to ‘hunt’ free of interference from outside entities. As such, the Tribes adopted ordinances to govern the conduct of hunting activities both on and off the reservation by our membership. The basic tenets of these ordinances are then refined into regulations and guidelines for the harvest of anadromous fish and are coordinated, as necessary, with appropriate co-managers to alleviate conflicts during annual management seasons.

The shift in focus by the Tribes to become an active co-manager of anadromous fish resources led to new policy that would guide future Tribal actions. The Tribes offered a policy statement that would stress the importance of initiating efforts to restore the Snake River and affected unoccupied lands to a natural condition. The Tribes Policy for Management of the Snake River Basin Resources states:

The Shoshone Bannock Tribes (Tribes) will pursue, promote, and where necessary, initiate efforts to restore the Snake River systems and affected unoccupied lands to a natural condition. This includes the restoration of component resources to conditions which most closely represents the ecological features associated with a natural riverine ecosystem. In addition, the Tribes will work to ensure the protection, preservation, and

² *Id.* See generally.

where appropriate-the enhancement of Rights reserved by the Tribes under the Fort Bridger Treaty of 1868 (Treaty) and any inherent aboriginal rights.

The Tribes then followed the policy statement by committing significant resources to developing a comprehensive Fish and Wildlife Department to manage resources across our homelands; one arm of that Department is solely focused on managing anadromous fish species. Consistent with the Tribes' Snake River policy, the Tribes' Fish and Wildlife Department are guided by the following mission statement:

The mission of the Shoshone-Bannock Tribes Fish & Wildlife Department is to protect, restore, and enhance, fish and wildlife related resources in accordance with the Tribes' unique interests and vested rights in such resources and their habitats, including the inherent, aboriginal and treaty protected rights of Tribes members to fair process and the priority rights to harvest pursuant to the Fort Bridger Treaty of July 3, 1868 (15 Stat . 673).

The Department uses the language from our Treaty, policy statements, and mission statement to implement a collective Tribal vision for management. The Tribes still have a significant interest in developing sustainable hunting and fishing opportunities in the Basin because without broad consensus on goals and mitigation measures, it is likely anadromous fisheries will remain below sustainable and harvestable quantities. A quintessential component of the Tribal perspective is blending our traditional ecological knowledge with the tenets of western science to develop projects that will holistically benefit numerous native species and provide sustainable opportunities for subsistence harvest of those resources.

Populations of salmon, including those in the Salmon River subbasin, decreased substantially coincident with the construction of hydroelectric dams on the Lower Snake and Columbia rivers and other anthropogenic impacts across the landscape. Anadromous fish populations have been reduced to the point that Chinook salmon are listed under the Endangered Species Act (ESA) as a threatened species; this listing occurred on April 22, 1992 (57 FR 14653). Prior to 1992, the Tribes implemented Chinook salmon fisheries throughout the Salmon River, but in 1992 the dynamics of these fisheries were drastically altered. The annual harvest guidelines changed on a yearly basis and were dependent upon escapement estimates. Once the ESA protections were established, the Tribes were forced to adapt their fishing practices to hatchery influenced areas, which resulted in a diminishment of fishing practices in traditional fishing areas. After the listing of Snake River Sockeye the Tribes were precluded from harvesting these fish in any meaningful manner. Our perspective at that time was that ESA listing would help these anadromous fish populations recover over the next few decades to sustainable, harvestable levels again. Unfortunately, populations remain roughly in the same condition as they were during the listing decisions almost thirty years ago.

Historically, the Shoshone and Bannock peoples harvested salmon and trout throughout the Basin for subsistence across an almost year-round timeline. Annual salmon and steelhead runs in what are now Oregon, Washington, Idaho and Nevada provided harvest opportunities throughout the year for our people. Anthropogenic impacts to the Basin severely constrained runs of anadromous fish over the next century, in particular System development and operations.

Current salmon abundance in the Upper Salmon River subbasin is estimated at about 0.5% of historical runs and the Hells Canyon Complex completely eliminated upstream migration into the Middle Snake Province in Idaho, Nevada, and Oregon. **Recent harvest opportunities for Tribal members have only provided 1.2 pounds of salmon per Tribal member compared to historical use of about 700 pounds per person annually.** The following excerpt demonstrates how this estimate is derived.

Shoshone-Bannock Reliance on Anadromous Fish Resources – taken from Walker 1993³.

Several methods have been employed by scholars and scientists to estimate both the amount of fish traditionally available and the amounts traditionally harvested by the tribes of Idaho including the Shoshone-Bannock Tribes. It has been estimated by Rostlund, Hewes and Walker, the Shoshone and Bannock people's average annual fish harvest for the Salmon River region was 233,555 fish (range 36,500-604,166). This is based on several methods of estimating historical catch information and assumes 15 pounds per fish.

One of the earliest and most enduring studies of fish populations and harvests in Native North America was completed by Erhard Rostlund in 1952 and published as "Freshwater Fish and Fishing in Native North America." Assuming Rostlund's method is correct, the home territory of the Tribes which includes 10 million square acres or about 15,625 square miles, the Tribal catch derived by Rostlund would be 9,062,500 pounds. At an average weight of 15 pounds per fish, this equates to 604,166 total fish.

A different method was used by Hewes in his 1947 "Aboriginal Use of Fishery Resources in Northwestern North America." By this method, a tribal population of 1,000 would consume 1,000 pounds per day or 365,000 pounds per year. The Shoshone and Bannock population of southern and central Idaho probably exceeded 5,000 which would produce an average annual catch of 1,825,000 pounds. By apportioning 1,500 of this 5,000 total Shoshone and Bannock peoples to central-Idaho (Salmon River region), the Hewes method would yield an average annual catch of 547,500 pounds, a figure close to the estimate made by Walker. At an average weight of 15 pounds per fish, this equates to 36,500 total fish.

Another method used for estimating Shoshone and Bannock subsistence harvest, typical of central Idaho during the mid-19th century is the direct comparison of harvest of fish and game in Alaska. The Alaskan research indicates that contemporary hunting and gathering ranged as high as 1,498 pounds of fish and game per person per year with an estimated annual average throughout Alaska of 250 pounds (dressed weight). About 65% of the harvest was found to be fish with such species as salmon, halibut, herring, whitefish, cod, and arctic char. Also resembling the Columbia system during the latter nineteenth century, ninety-five percent of the total fish harvest in Alaska is now taken by the commercial harvest.

³ Walker, D. E. 1993. Lemhi Shoshone-Bannock reliance on anadromous and other fish resources. Northwest Anthropological Research Notes Vol. 27, pp. 215–250.

Although we cannot compare specific Alaska communities with the Shoshone-Bannock, we can use the Alaskan survey data to help validate ranges of historic Shoshone-Bannock fish consumption. For example, 65% of the Alaskan high estimate is 973.7 pounds of fish per person per year, a figure within the range of estimates for tribal groups of the Columbia River system.

Walker (1993) further improved fish consumption estimates for the Shoshone-Bannock. Walker used more empirical methods as a first step in estimating Shoshone-Bannock reliance on fish resources in the Salmon River country. Walker (1993) grouped the Shoshone-Bannock fishing sites into three broad types: fishing sites at natural falls, cascades, or rapids; those constructed as weirs, traps, and fish walls, and the simple fishing site commonly utilized without any such distinguishing features. The first two types are by far the most productive sites and are capable of daily harvests in the hundreds and even thousands of fish during certain peak days of the fish runs. Walker (1993) located about 50 such sites. The third type is not usually employed during peak days of the anadromous fish runs and is used in an opportunistic manner for both anadromous and resident species. Walker estimates Shoshone-Bannock harvest in the Lemhi/Salmon River region to be 200 fish per day, per weir, averaging 15 pounds each. This yields a potential average annual harvest of 900,000 pounds, or about 60,000 fish

Several methods have been employed to estimate the amounts traditionally harvested by the Tribes in the Salmon River subbasin. Rostlund (1952), Hewes (1947), and Walker (1993) used different methods for estimating annual harvest, but the average annual salmon harvest for the Salmon River was 233,555 salmon (range 36,500 – 604,166). Assuming an average of 15 pounds per salmon, the annual average harvest in pounds of salmon was 3,503,325 (range 547,500 – 9,062,500). Hewes (1947) also apportioned 1,500 of the 5,000 total Shoshone and Bannock peoples to traditionally inhabit central Idaho (Salmon River subbasin) to hunt salmon. Using the annual average harvest in pounds of salmon (3,503,325) and dividing by the approximately 1,500 Tribal members traditionally in the Salmon River region, equates to 2,336 pounds of salmon consumed per tribal member annually. (Denny et al. 2010)

Current estimates (1981 – 2018) of average salmon harvested by the Tribes in the Salmon River are approximately 470 salmon annually (range 0 – 1,678). After applying an average of 15 pounds per salmon, the current annual average harvest in pounds of salmon is 7,050. Using the current annual harvest in pounds per salmon (7,050) and dividing by the current approximately 6,000 Tribal members, equates to an *average* of 1.2 pounds of salmon consumed per tribal member annually. On years of particularly low abundance, it is common for many Tribal members to consider themselves fortunate to procure enough fish for a single family meal or ceremony. To make up for some of this loss the Tribes conduct traditional trades for salmon with other Northwest tribes or receive surplus hatchery salmon from collection racks in Idaho, Oregon, and Washington. Without a doubt, the loss of this food source has had impacts on our community's health and well-being, with anadromous fish resources contributing healthy sources of protein for our people in an age of processed foods and rising rates of diabetes⁴.

⁴ Estimates for diabetes rates among Native American populations is generally twice as high as the national average (2018 CDC.gov Diabetes Quick Facts).

Regardless of the decision from this environmental evaluation, the Tribes remain focused on the sustainability of anadromous fish resources in the Basin. Over the past three years, abundance of Snake River Sockeye, Snake River Steelhead, and Snake River Chinook have all decreased to their lowest levels since they were listed under the ESA. This environmental evaluation is coming at a critical time for the Basin and could have long-reaching effects for these iconic anadromous fish species and the Tribal members who rely upon them. Our obligation as managers and stewards of these resources from time immemorial has shaped our perspective on the best manner to operate the System and ultimately, recover anadromous fish species to sustainable and harvestable levels.

III. Salmon and Ecosystems

The Tribes perspective on meaningful recovery includes the restoration of component resources to conditions that most closely represent the ecological characteristics and processes associated with a natural riverine ecosystem. We agree with Williams et al. (1999) who concluded “that management of the Columbia River and its salmonid populations has been based on the belief that natural ecological processes comprising a healthy salmonid ecosystem can, to a large degree, be replaced, circumvented, simplified, and controlled by humans while production is maintained or even enhanced.” If one conclusion can be effectively drawn, it is that with the current system configuration we will be unable to meet our collective goals of species conservation and sustaining Tribal treaty rights. The Tribes endorse a more holistic perspective where humans work to restore the natural processes that support healthy ecosystems, healthy economies, and healthy cultures.

Based on our unique Traditional Ecological Knowledge gathered over generations as stewards of the Snake River, is a desire to move toward more normative river conditions. In the Basin an estimated 5-9 million anadromous fishes returned annually (Alldredge et al., Northwest Power and Conservation Council ISAB Report 2015).⁵ Watersheds across the Basin were filled with an abundance we can scarcely comprehend in our current management paradigm. The anthropogenic impacts of industrialized development in the Basin have dramatically reduced anadromous fish abundance to near-extinction and as co-managers the Tribes are seeing a growing acceptance of the new levels of abundance.

Salmon and steelhead are crucial components of the landscape of the Basin. Abundant populations of anadromous salmonids (*Oncorhynchus* spp.) historically contributed large amounts of marine-derived nutrients (MDN) to aquatic and terrestrial ecosystems in the Pacific Northwest (PNW) of the United States of America (California, Oregon, Washington, and Idaho) (Kline et al. 1990; Larkin & Slaney 1997; Cederholm et al. 1999; Gresh et al. 2000; Bilby et al. 2003). Nitrogen, phosphorous, and carbon sequestered in the marine environment, where approximately 95% of the body mass of salmon accumulates, are subsequently delivered to inland watersheds via upstream migrations (Groot & Margolis 1991). These migrations represent a major nutrient and energy vector from the marine environment to freshwater and terrestrial ecosystems (Cederholm et al. 1999).

After returning to natal spawning habitat, salmon complete their life cycle and in turn deliver ecologically significant amounts of MDN to inland habitats (Gende et al. 2002; Thomas et al.

⁵ Alldredge et al., Northwest Power and Conservation Council ISAB Report, 2015.

2003). Anadromous fishes deliver MDN to freshwater ecosystems through excretion, gametes, and their own nutrient-rich carcasses. Primary nutrient pathways from salmon carcasses to stream biota include: 1) uptake of inorganic nutrients (provided by excretion during spawning events) by primary producers; 2) uptake of mineralized inorganic nutrients by primary producers and subsequent food web transfer; 3) uptake of dissolved organic matter by microfauna in the streambed and subsequent food web transfer; and 4) direct consumption of eggs and carcass materials by secondary consumers and fishes (Cederholm et al. 1999; Kiernan et al. 2010). Energy and nutrients delivered to freshwater ecosystems also benefit a myriad of aquatic and terrestrial wildlife species and acts to sustain the ecological integrity and proper functioning condition of whole ecosystems. In the PNW, Cederholm et al. (1989) documented 22 species of mammals and birds that were observed or known to directly consume salmon carcasses. And Bilby et al. (1996) estimated that 18% of nutrients in riparian area vegetation along a salmon bearing stream were derived from salmon themselves.

Spawning salmon contribute an estimated 5 to 95% of the P and N loading in salmon-bearing watersheds (Gresh et al. 2000), and even small input of nutrients and C may be important to the maintenance of trophic productivity (Larkin & Slaney 1997). This process has been described as a positive feedback loop functioning to enhance freshwater productivity for future generations of anadromous and resident stream biota (Wipfli et al. 1998; Hicks et al. 2005). The presence and availability of marine-derived nutrients has been shown to increase the growth rate, lipid level, and condition factor of juvenile fishes (Bilby et al. 1996; Wipfli et al. 2004); and higher growth rates appear to increase freshwater and marine survival (Beckman et al. 1999; Bilton et al. 1982; Ward and Slaney 1988). It is now clear that spawning salmon serve numerous ecological functions and should be an important component of ecosystem recovery plans (Cederholm et al. 1999).

Following periods of intense commercial harvest, hydrosystem development, hatchery production, and habitat loss, significant declines in Pacific salmon abundance have occurred throughout the region (Lichatowich 1999). Returning anadromous adults in the Basin, once estimated at 5-9 million fish annually, now return at an average of less than 2-3 million fish per year (Alldredge et al. (ISAB) 2015). Healthy populations of salmon that once provided annual nutrient subsidies to otherwise nutrient-impooverished environments largely remain depressed or have been extirpated (Levy 1997). Currently, salmon occupy approximately 40% of their historic range (Nehlsen et al. 1991) and contribute just 6-7% of the MDN historically delivered to PNW rivers and streams (Gresh et al. 2000). Consequently, many forested streams of the region are now characterized as ultra-oligotrophic (Welsh et al. 1998), a condition of low nutrient concentrations suggested to result from a combination of parent geology and low numbers of returning anadromous fishes (Ambrose et al. 2004).

The upper Salmon River subbasin of central Idaho is an example of this process, where we have seen evidence that the paucity of returning anadromous fishes, coupled with low watershed scale nutrient inputs, act synergistically to limit freshwater productivity and associated habitat carrying capacities. Effectively, the loss of ecological functions associated with abundant salmon returns will constrain efforts to recover salmon and steelhead populations. Thomas et al. (2003) estimated that 25-50% of Idaho streams are nutrient-limited and Alldredge et al. (ISAB 2015) and Achord et al. (2003) found evidence of density-dependent mortality at population sizes well

below historical levels, suggesting nutrient deficits as a limiting factor capable of reducing stream rearing carrying capacities. In a recent analysis, Scheuerell et al. (2005) examined phosphorous-transport dynamics by spring/summer Chinook salmon (*Oncorhynchus tshawytscha*) in the Snake River subbasin and estimated that over the past 40 years less than 2% of historical marine-derived phosphorous is currently delivered to natal spawning and rearing streams.

Interestingly enough, these same central Idaho streams and lakes found in wilderness or roadless areas are reported by Idaho Department of Environmental Quality as presumed to be fully supporting all beneficial uses (IDEQ 2016). However, the 'new normal' abundance levels do not adequately support harvest, species conservation, or the ecosystems these populations of anadromous fish influenced over thousands of years. The simple truth is that we need returning adults to feed the next generation of anadromous fish and to support the ecological functions necessary for their survival.

IV. Salmon in a Changing Climate

Climate change impacts have the potential to affect the entire Basin and resources the Tribes stewarded from time immemorial. The change has the potential to impact both aquatic systems across the Basin and the generation of electricity from the System. Planning for these changes will require a focused shift in attention towards building resilience, supporting ecosystem services and habitat health, decreasing non-climate stressors, and improving watershed retentive capabilities to help buffer these climate changes. Climate change presents a threat to critical cultural resources, thereby also threatening the lifeways and wellbeing of the Tribes. This creates an urgent need to build climate resilience to protect and preserve these resources for future generations. The Tribes policy on Climate Change states:

Global temperatures very likely exceed anything observed in the last 1,400 years and current levels of carbon dioxide are at concentrations unseen in the last three million years. Projected changes in temperature, precipitation, hydrology, and ocean chemistry threaten not only the lands, resources, and economies of the Shoshone-Bannock Tribes (Tribes), but also tribal homelands, ceremonial sites, burial sites, tribal traditions, and cultural practices that have relied on native plants, fish, and animal species since time immemorial. Therefore, the Tribes recognizes that action must be taken to reduce greenhouse gas emissions, positive radiative forces, and observed warming. The Tribes also recognizes a need for additional information to assess and convey uncertainties, identify actions to implement, develop decision support tools and climate projections, maintain and enhance healthy and resilient ecosystems, conserve water, and understand how climate change will impact the health and wellbeing of the Tribes. Therefore the Tribes will make efforts to mitigate the effects of human caused climate change through planning, consultation, education, and enforcement of Treaty Rights.

The Tribes, in cooperation with the Upper Snake River Tribes Foundation, received funding from the Bureau of Indian Affairs in 2016 to prepare a Climate Change Vulnerability Assessment and Adaptation Plan for the Snake River Basin. The Tribes used an interdisciplinary approach where technical staff worked collectively with outside consultants to assess climate vulnerability and identify adaptation actions for critical plant and animal species and their

habitats. While the primary focus of the adaptation plan was to determine impacts to the Fort Hall Reservation, one of the assessment areas included the Salmon River subbasin to the importance of anadromous fish to the Tribes. This report included downscaled future climate projections for the project area and a description of the vulnerability assessment process and outcomes for species evaluated (Snake River Spring/Summer Chinook salmon).

The impacts of climate change will likely be severe throughout the Basin and that some of those impacts are occurring right now. Anadromous fish require relatively cold water habitats and favorable ocean conditions to thrive; unfortunately, future conditions are unlikely to support the ecosystem services that anadromous fishes depend upon without planning to mitigate the effects of reduced snowpack, elevated summer air temperatures, extreme precipitation events, and the overall effects of greenhouse gases to the biosphere. While a specious argument could be made that hydropower does not generate carbon dioxide, the more immediate concerns lie with the impacts from the facilities that create slack-water reservoirs and a loss of riverine ecosystem structure and function.

Across the entire project area, average annual temperatures are projected to increase under both future climate scenarios and for all time periods. Warmer ambient air temperatures are expected to have important impacts on water availability and seasonal stream flows in the Snake River subbasin. Even with precipitation patterns staying relatively consistent (though still highly variable from year to year), the warmer temperatures are likely to increase evaporation and evapotranspiration. Mountainous regions, like the Salmon River subbasin, are projected to have less overall soil moisture available and receive less precipitation in the form of snowpack.

A change in ambient air temperatures and a shift from snowpack based systems to warmer, rain based systems may have cascading effects throughout the Salmon River subbasin. Reductions in snowpack due to a greater proportion of winter precipitation falling as rain instead of snow, will shift peak streamflow earlier in the year, increase winter streamflow, and decrease base summer stream flows. In basins where winter precipitation historically falls largely as snow, year-to-year variability in winter monthly flows is relatively small because the precipitation accumulates as snow instead of making its way to streams. This creates a winter flow regime that is relatively stable year-to-year. For aquatic species adapted to a relatively stable winter flow regime, changes in flow regimes will affect migration and refugia for anadromous and resident fish at all life stages.

More alarming than a change in flow regimes for anadromous fishes is the projection that stream temperatures are projected to rise as air temperatures rise. This will result in summer temperatures reaching thresholds above which the aquatic environment ceases to provide suitable habitat for some species. During the Tribes' planning process we viewed modelling results showing river segments throughout the Salmon River subbasin and Snake River migratory corridor in which the August mean water temperature is projected to exceed 63.5°F by the 2040s. This temperature threshold was chosen for illustrative purposes as temperatures exceeding 63.5°F extremely harmful for many salmonid species like Chinook salmon, Snake River sockeye salmon, Steelhead, and Bull Trout. For example, in 2015, greater than 98% of adult Snake River sockeye salmon perished attempting to migrate through the System during extreme July temperatures and low flow conditions. The compounding effect of warmer stream temperatures,

warmer reservoirs, and altered flow regimes would negatively affect many native salmonid populations beyond their innate adaptive capability.⁶

V. Managing for Sustainability

In a contemporary setting, the Tribes exercise their right to hunt for Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha*) under inherent rights and the Fort Bridger Treaty. Under the ESA Section 4(d) Rule (50 CFR 223) allows a tribal government to submit a Tribal Resource Management Plan (TRMP) with the intent of exempting the tribes' harvest of protected species from the ESA. The purpose and scope of the Tribes' TRMP is to provide the Tribes an exemption under the ESA to harvest listed Chinook salmon in the Salmon River and Grande Ronde/Imnaha subbasins, while the species is listed as threatened. This approach is a responsible way to manage listed stocks and provides opportunities to pursue anadromous fish across our cultural landscape. The severe limitation of these conservation frameworks often restricts a ceremonial take of several fish in wild watersheds due to the extremely low abundance of wild fish returning in the past three decades. From our perspective, we have done everything possible to preserve our presence through traditional fishing in our homelands; it is time to implement an action that will provide for meaningful harvest opportunities for our future generations.

The current management paradigm, now almost two decades old, is that minor modifications to hydropower facilities and improvements in natal habitat and hatchery management will provide a vehicle for populations to 'trend toward recovery'. The Tribes continue to believe that conservation work has resulted in significant benefits to ecological processes and that hatchery reform will pay dividends for any program in the Basin; however, those benefits are not significant enough to overcome impacts from highly modified mainstem river habitats. The Northwest Power and Conservation Council has set goals of 2-6% (4% average) smolt to adult returns (SAR) so populations are at replacement even in low-abundance years, while on higher productivity years we see population growth.

McElhany et al. (2000⁷) developed a science-based framework to better understand and recover salmon populations. Within that framework, viable salmonid populations (VSP's) are defined as having a negligible risk of extinction resulting from demographic variation, local environmental variation, and loss of genetic diversity for a period of 100 years. McElhany et al. (2000) identified four broad categories for VSP parameters: diversity, spatial structure, abundance, and productivity. These factors have been identified as a means to assess populations, establish delisting goals, and provide guidelines for relating viability at the population level to larger ecologically significant unit's (McElhany et al. 2000).

Currently (2012 to 2018), 84% of natural origin spring/summer Chinook salmon populations are below abundance levels needed to sustain themselves (viable population threshold abundance criteria) (SBT *unpublished data*). During the same period, 50% of these Chinook populations where Tribal members harvest salmon are at imminent risk of extinction (critical population threshold) (SBT *unpublished data*). The Snake River spring/summer Chinook ESU remains

⁶ See generally, https://eprints.gut.edu.au/103728/1/Isaak_et_al-2010-Ecological_Applications.pdf

⁷ McElhany, P., M.H. Ruckelshaus, M.J. Ford, T.C. Wainwright, and E.P. Bjorkstedt. 2000. Viable salmonid populations and the recovery of evolutionarily significant units. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-42, 156 p.

likely to become endangered (NWFSC 2015⁸). In more recent years, adverse ocean conditions and System management acted synergistically to yield some of the lowest adult Chinook salmon returns to the upper Salmon River subbasin since these populations were listed under the ESA.

Snake River Chinook salmon and steelhead smolt to adult return rates (SARs) from Lower Granite Dam to Lower Granite Dam are generally less than 1% — far below the necessary standard for population replacement. According to the Comparative Survival Study modeling conducted by the Fish Passage Center (FPC 2018), major population declines of Snake River wild spring/summer Chinook salmon were associated with SARs less than 1%. Only with SARs greater than 2% were populations at or above replacement. The Tribes support actions that will help achieve the Northwest Power and Conservation Council's Fish and Wildlife Program goal of SARs in the 2% to 6% range (average 4%) for federally ESA-listed Snake and Columbia River salmon and steelhead populations.

The Lower Snake River Compensation Plan (LSRCP) was authorized in 1976 explicitly to mitigate for lost commercial and recreational harvest opportunities associated with the construction and completion of the four dams on the Lower Snake River (Corps of Engineers 1975⁹). LSRCP included a significant hatchery program aimed at compensating for the estimated loss of 48% of juveniles migrating through the system and set production goals at 11 hatcheries to offset that loss (ISRP 2002¹⁰). Throughout the program's history up to present, LSRCP programs have not met their compensation goals in most years despite decades of hatchery reform and expensive changes to System infrastructure to increase the viability of hatchery reared juveniles and decrease System related losses, respectively (Marshall 2010¹¹, Marshall 2012¹²). For example, the LSRCP hatchery in the Upper Salmon River (i.e. Sawtooth Fish Hatchery), which produces Chinook salmon available for tribal members to harvest, are now not meeting the production goals to provide salmon for future generations (IDFG 2018¹³). The failure of the LSRCP to meet its congressionally authorized goals parallels continued declines in wild anadromous fishes above the four Lower Snake River dams and demonstrates that the losses associated with the current configuration of the System may be too great, and its effects too strong, to adequately mitigate.

⁸ Northwest Fisheries Science Center. 2015. Status review update for Pacific salmon and steelhead listed under the Endangered Species Act: Pacific Northwest.

⁹ Corps of Engineers. 2975. Special Report, Lower Snake River Fish and Wildlife Compensation Plan. Lower Snake river Washing and Idaho. U.S. Army Engineer District, Walla Walla, Washington. 96pp plus appendices.

¹⁰ ISRP. 2002. Lower Snake River Compensation Plan — Final Proposal Review for the Columbia Plateau, Blue Mountain, and Mountain Snake Provinces, April 23, 2002. ISRP 2002-6.

¹¹ Marshall, S. L. 2010. A brief history of the Lower Snake River Compensation Plan Hatchery Program for spring and summer Chinook salmon. In: Lower Snake River Compensation Plan spring/summer Chinook program review, November 30-December 02, 2010. Boise, ID.

¹² Marshall, S. L. 2012. A brief history of the Lower Snake River Compensation Plan Hatchery Program for summer steelhead. In: Lower Snake River Compensation Plan Summer Steelhead Program Review, June 20-21, 2012. Clarkston, WA.

¹³ IDFG. 2018. Sawtooth FH Operations and Maintenance 2018 Annual Report. <https://www.fws.gov/lsnakecomplan/Reports/IDFGreports.html>.

VI. Economics of Energy - Why Restoring the Snake River Makes Fiscal Sense

One of the most contentious issues to face our region has been the mitigation measures associated with the Snake River facilities for listed stocks and the continued use of the facilities for hydropower and transportation. In 2002, the US Army Corps of Engineers performed a feasibility report that concluded the presence of these facilities outweighed alternatives in favor of removing the earthen portions of the dams; a practice commonly referred to as breaching.¹⁴ Almost twenty years later it is time to revisit the issue in an objective manner and determine if the underlying assumptions associated with those facilities have shifted away from the status quo; the Tribes believe they have.

The following three perspectives from 2002 represent a spectrum of the discussion at that time, from how we value rivers and transport to the actual costs of maintaining them in place for the foreseeable future.

[Loomis, John. "Quantifying recreation use values from removing dams and restoring free-flowing rivers: A contingent behavior travel cost demand model for the Lower Snake River." *Water Resources Research* 38.6 \(2002\): 2-1.](#)

The river recreation use value estimates of \$192–310 million are 6–10 times larger than current reservoir recreation benefits (\$31.6 million). However, the annual hydro-power losses associated with dam removal are estimated to be \$271million annually [USACOE, 1999]. Including the dam removal cost and foregone barge transportation, the costs rise to \$360 million [USACOE, 1999]. River recreation would cover a large portion of these costs but not all of it. Owing to the need to recover the fish stocks, recreational, commercial, and tribal fishing benefits are limited as well. Thus in a traditional national economic development (NED) analysis that does not incorporate passive use values of recovering of threatened and endangered species, a strict benefit cost criterion would suggest it is economically efficient to allow the dams to remain.

[Whitelaw, E., & MacMullan, E. \(2002\). A Framework for Estimating the Costs and Benefits of Dam Removal: Sound cost–benefit analyses of removing dams account for subsidies and externalities, for both the short and long run, and place the estimated costs and benefits in the appropriate economic context. *BioScience*, 52\(8\), 724-730.](#)

In estimating the benefits from breaching the dams, the Corps excluded a number of relevant values, including tribe related benefits and the benefits that all of us gain from the existence of both the increased salmon runs and a free-flowing lower Snake River. First, the Corps' estimate of tribe related benefits included the number of acres of sacred and traditional sites that the tribes would regain access to, as well as the number of pounds of fish from treaty-protected subsistence and ceremonial fisheries, but it did not include the economic benefits that tribal members and other Northwesterners and

¹⁴ USACE Walla Walla District. 2002. Lower Snake Feasibility Report/Environmental Impact Statement Economic Appendix (I))

Americans would gain from these changes (USACE 1999b). In not doing so, it overlooked economic benefits to tribal members that constitute real increases in the value of national goods and services. As a result, the Corps underestimated how breaching the dams would benefit the tribes, and how that, in turn, would benefit all of us.

[Babbitt, B. \(2002\). What goes up, may come down: Learning from our experiences with dam construction in the past can guide and improve dam removal in the future. *BioScience*, 52\(8\), 656-658.](#)

And lest there be any misunderstanding, my own stand on consensus-based dam removal is on the record. It became increasingly pronounced over the past half-decade as I graduated from one level to the next, embracing sledgehammer, jackhammer, wrecking ball, sky crane, and even C-4 plastic explosives to help dismantle dozens of obsolete structures, structures that had either outlived their function or outweighed their benefits with costs that society was no longer willing to pay. The change has come. The heyday of dams has come and gone. From my perspective, there is no turning back.... Dam removal, like dam construction, is not an end unto itself, only a means to an end. It is a means by which humans can live more responsible lives in harmony with creation, a means that requires the illumination of science, ensuring that we look clearly back, and down, before we can truly move forward on solid ground together.

While these differing perspectives dominated the conversation at the time, the underlying assumptions should be critically evaluated. In 2016, a group, Earth Economics¹⁵, reviewed the 2002 Economic Appendix to the Lower Snake Feasibility report and concluded that circumstances have changed enough to warrant a new evaluation of these facilities.¹⁶ This particular evaluation concluded that the “benefits created by the four dams are outweighed by the costs of keeping them.” The basis for this conclusion included several aspects that were assumed to maintain a positive benefit over the 2002-2021 evaluation period, including: annual power production from the region, the cost and assumed benefit of mitigation programs aimed at recovering listed anadromous fishes, and, the maintenance of these facilities for transport programs.

The Tribes recognize the benefits that hydropower facilities have had in developing industries and providing electricity to customers in rural areas. However, these benefits were accrued at the expense of fisheries across the Basin, with impacts to Tribal communities who had relied on their presence for millennia. In 2019, the Basin is producing more electricity than we use and the growing renewable energy sector is changing the market at a rapid pace.¹⁷ In the 2017 Pacific Northwest Loads and Resources Study (commonly referred to as the 2017 BPA White Book) the analysis shows significant surplus electricity generation through 2028. As noted in the

¹⁵ Earth Economics is a non-partisan, non-profit, science based group that develops value estimates for ecological services. General information may be found at their website: <https://www.eartheconomics.org/>.

¹⁶ (Mojica, J., Cousins, K., Briceno, T., 2016. National Economic Analysis of the Four Lower Snake River Dams: A Review of the 2002 Lower Snake Feasibility Report/Environmental Impact Statement. Economic Appendix (I). Earth Economics, Tacoma, WA.)

¹⁷ See generally, *Power Shift*, Jim Norton, January 11, 2019. Available online at: <https://columbiarediviva.org/power-shift/>

BPA's evaluation of the issue, "This annual surplus has seasonal variability, spiking from April through June as Columbia River Basin flows increase through the spring, and dropping to net demand during low water from December to March. This variability has implications for specific hydro assets managed by BPA, which must curtail and/or sell surplus power some of the year while procuring power from regional markets other times of the year." It is critical to note that this projected surplus also coincides with the new contract period for large-scale customers of energy produced in the System.

While profits from the sale of electricity have remained static or declined over the past ten years, the regional appetite for renewable energy in the form of solar and wind has fundamentally changed the market. Carbon-free policies and decentralized sources of renewable energy have led to hundreds of new large and small scale sources of electricity in the Basin. Previously reliable customers of Columbia River power (e.g., California) may see an overall reduction in need for large-scale hydropower facilities as solar and wind generators assume space on the grid. During a 2018 NPCC meeting, BPA acknowledged that this changing market has led BPA to institute rates that are now significantly higher than the current market prices and that may have long term effects on overall profitability for the System; these sentiments are echoed in BPA's 2018 Strategic Plan.¹⁸

Bonneville is committed to remaining a cost-effective power supplier, but its cost advantage has eroded. A substantial challenge is low wholesale power prices caused by persistently low natural gas prices and ever-increasing renewable energy expansion during a time when electric loads remain flat. Supply is outpacing demand. Low wholesale power prices entice customers to consider other power suppliers while also reducing BPA's net secondary revenues, which BPA uses to help keep rates low.

Bonneville also faces cost pressure from maintaining aging generation infrastructure, increasing costs to meet fish and wildlife obligations, the cost of the Residential Exchange Program settlement, and flat-to-declining firm power sales.

In particular, the current mitigation program for fish and wildlife in the Basin is often described as one of the most expensive and rigorous conservation programs in the country. The Tribes remain proud of the countless hours each co-manager and action agency commits on an annual basis to ensure the survival of these species. The basis for these mitigation measures is to return to stasis on non-listed stocks and recover listed stocks to prevent extinction. The region has avoided extinction of listed stocks, but recovery has been an elusive goal for the fish and wildlife program. At the time of the current evaluation, the region is experiencing an annual return that puts virtually every wild stock in Idaho at critical levels and is inherently increasing the risk of near-term extinction for some of these stocks. A potentially dwindling pool of resources to mitigate impacts from the operations of the System has the Tribes concerned that future efforts may not include comprehensive, watershed level efforts to conserve and recover listed wild stocks in our homelands.¹⁹ Based on the current program priorities, the listed stocks in our

¹⁸ 2018 BPA Strategic Plan, Strategic Goal 3, page 34.

¹⁹ From the 2018 BPA Strategic Plan, Page 41. *Fish and wildlife costs account for a sizable portion, about 25 percent, of BPA's direct power costs; combined with the financial impacts of spill, these costs account for about one-third of BPA's power rates. BPA and its partners have made great strides in improving fish survival, fish*

homelands in most need of conservation generally receive a small portion of the overall allocation from the current Fish and Wildlife Program.

The 'Lower Four' Snake River dams comprise a massive 140-mile corridor along the Snake River with each facility in desperate need of significant capital investments for turbine generators, channel dredging, spillway modifications, adult and juvenile fish passage modifications, cold-water ladder modifications for late run anadromous fish like Sockeye, etc. Unlike the new wave of decentralized renewable power sources becoming available across the basin, this entire facility requires constant structural and operational maintenance. Even though barging has reached an effective rate of zero in Idaho for most products, and Portland has shifted away from container shipping up the Columbia to Idaho, the facility still needs to be maintained for navigation whether it is used or not. Ironically, one of the most expensive barged 'products' through this corridor are juvenile salmonids that are currently a component of mitigation programs.

The maintenance expense for these facilities has reached over a billion dollars, although estimates vary so widely it is difficult to define exactly how expensive this renovation would actually cost. While the Lower Snake River facilities have known impacts to listed stocks and are no longer being used for barging traffic at any economically significant level, the conversation should now focus on the actual benefit of effectively divesting this asset from the System. The restoration of the Snake River would replace an expensive mitigation program, an unused navigation channel, and alleviate the need to replace turbines generating surplus power that cannot be effectively sold at a profit on the open market. An objective evaluation of these economic conditions would speak strongly in favor of divesting the Snake River component of the System and allow free-flowing river conditions to drive recovery processes for wild anadromous fish stocks in our homelands. The alternative is a direct reflection of the past twenty years: spill regimes that cost exorbitant amounts of money, stocks at perilously low abundance, and significant capital investments in facilities that have a net zero, or lower, rate of return for BPA.

VII. Restoring the Snake River

The Tribes have actively participated in the development of the CRSO Draft EIS and recognize the difficult task of balancing project configuration between anadromous fish needs and the desire to generate hydroelectric power. The co-lead agencies have identified objectives that would improve salmonid passage and survival throughout the project, as well as objectives to maximize power production at each of the facilities in the Basin. Although these objectives are not necessarily diametrically opposed, it is difficult to reconcile both of these concepts without favoring one issue over another; the same is true with the Tribal perspective.

During the development of the Fish Accords, the Tribes advocated for an approach that would place an emphasis on efforts to build system resiliency and efficacy in lieu of participating in

abundance and providing habitat restoration, and have used BPA's funding to leverage additional resources from others. But going forward, we must continue to be deliberate about controlling Fish and Wildlife Program costs, consistent with sound business principles and in the context of BPA's competitive position, while assuring that fish and wildlife receives equitable treatment with the other purposes of the system, as required by the Northwest Power Act.

litigation. The outcome of this environmental review for operations also has objectives for integrating adaptive management techniques and measures to mitigate the effects of power generation on mainstem Columbia River habitat attributes. The effect of any management scheme will depend on the consensus of co-managers and action agencies on those measures with the most potential to re-build an ecosystem impacted by a century of over-development.

Mitigation measures will be critical to resolve long-standing issues with the operational aspects of the system (i.e., spill, juvenile survival, adult passage, etc.). As with previous comments and position statements, the Tribes continue to advocate for a more comprehensive approach to resolve issues with ESA-listed populations in Idaho. The populations most at risk are those populations occupying the furthest extent of anadromy in the Basin and should be the highest priority for mitigation measures. While the Tribes recognize that there are significant issues in the mainstem reaches and associated tributaries throughout Oregon and Washington, the fact remains that the majority of listed anadromous fish species in the Basin occur in Idaho. Thankfully, central Idaho has large areas of high quality spawning and rearing habitat available to anadromous fishes. These habitats, such as the Middle Fork Salmon River, are intact and functioning in a manner that best exemplifies the ecological integrity of natural riverine ecosystems; except for the absence of abundant runs of anadromous fishes and marine derived nutrients.

The Tribes endorse the selection and implementation of Multiple Objective Alternative 3, which includes the removal of earthen embankments and adjacent structures within the lower four Snake River dams. Selecting this alternative would require additional work within the project on the ground and by action agency policy makers through coordination with affected stakeholders, Congress, Tribes, and the States. While the undertaking is undoubtedly the largest single action for the conservation of listed species in the Basin, it is also appropriate given the challenges we face collectively and the needs of our Tribe noted in the preceding discussion.

Through this evaluation, each agency, tribe, and State agency is offered an opportunity to develop a measure that fundamentally re-prioritizes our current paradigm into one that balances sustainable utilization of water resources for power generation and anadromous fish resources. In the next century we will face an unprecedented shift in how water resources are allocated at each project and how species reliant on those resources adapt to changing thermal regimes. By selecting an alternative to remove obsolete and unnecessary projects today, we will have an opportunity to support conditions suitable for anadromous fish species throughout the mainstem migratory corridor. It is unrealistic to assume that hydroelectric features constructed for climatic conditions during the mid-twentieth century will remain effective in the next. In fact, we are already seeing the limitations of current conditions for species like Snake River sockeye salmon. In addition, the nature of decentralized renewable energy projects in the Basin will provide new opportunities for communities to access sustainable energy resources from the market. Anadromous fish populations in the Snake River subbasin are experiencing average annual smolt to adult returns of less than one-half of one-percent (e.g. Snake River sockeye salmon averages 0.1-0.3%). There simply is no easy way to improve anadromous fish productivity and ecological health, maintain harvest and hydroelectric production, and support tribal lifeways without a change in how we view the system. Confrontation, particularly in the context of Basin litigation, is typically a debate over deeply ingrained views on the best way to manage our special riverine

resource; those involved come to the table with a philosophy constructed over decades of litigious confrontation. There is no way to debate our way out of an inescapable truth facing the Basin, that the resources we all rely on are going to continue to change regardless of who prevails in a courtroom; it is up to each manager and action agency to adapt to that change.

Adaptation is the process of changing habits and perspectives to meet a new reality that challenges our ability to thrive in the environment we all call home. Adaptation is not an easy process; it is painfully slow and requires a fundamental shift in behavior. In a similar fashion, meeting the coming challenges will not be an easy task, but the Tribes remain optimistic that collectively we can make the necessary decisions about our environment. This begins with re-imagining how the System could operate more efficiently with new attributes, and by leaving antiquated solutions in the past. The current environmental evaluation is not going to be a 'silver bullet' solution for every issue facing anadromous fish, hydroelectric project operators, or stakeholders tied to the riverine ecosystem; but it is a start. Bold decisions are borne of necessity; wise decisions are made in context of both time and place, while the worst decisions are made by holding onto past solutions that did not deliver the promised results. The Tribes view the selection of an alternative to breach the lower four Snake River dams as a decision that meets the necessity of conserving wild fish and offers a new paradigm for our posterity.



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

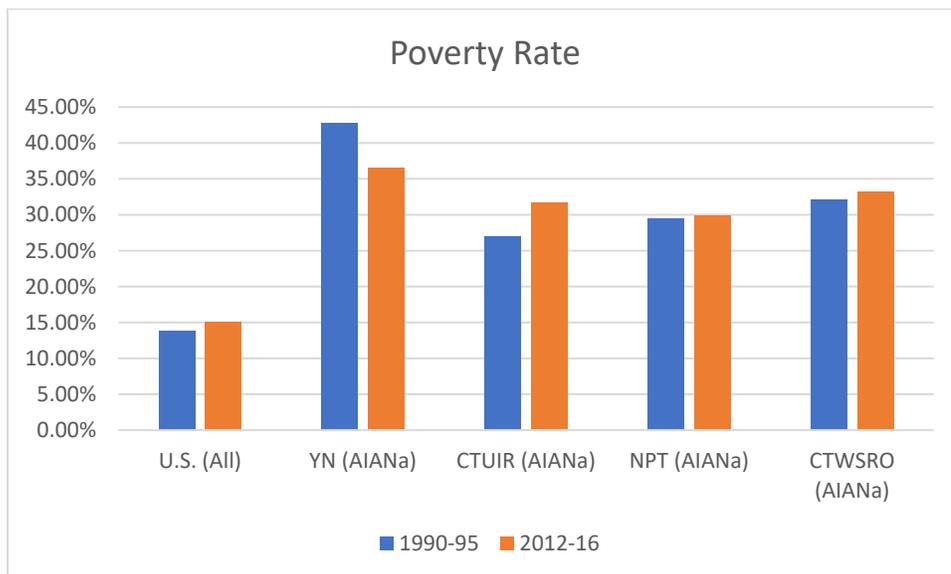
¹⁰ Statement of Delbert Frank, Meyer Report, *supra* note 1 at 34.

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.

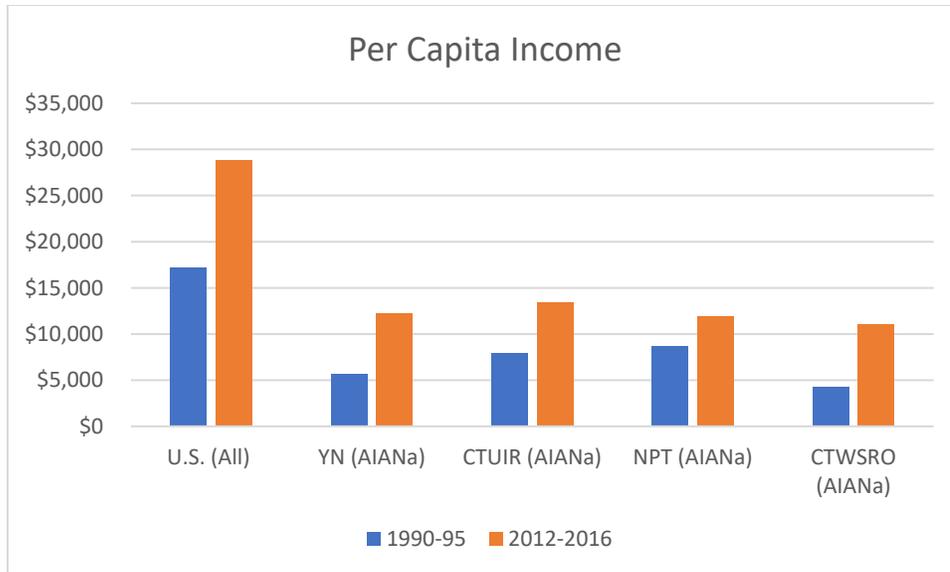
One of the ways this Tribal Perspectives Report updates the continuing relevance of those portions of the Meyer Report concerning tribal well-being is to compare the tribal poverty levels and income information from the Meyer Report with more current data. The data for this comparison were obtained from 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

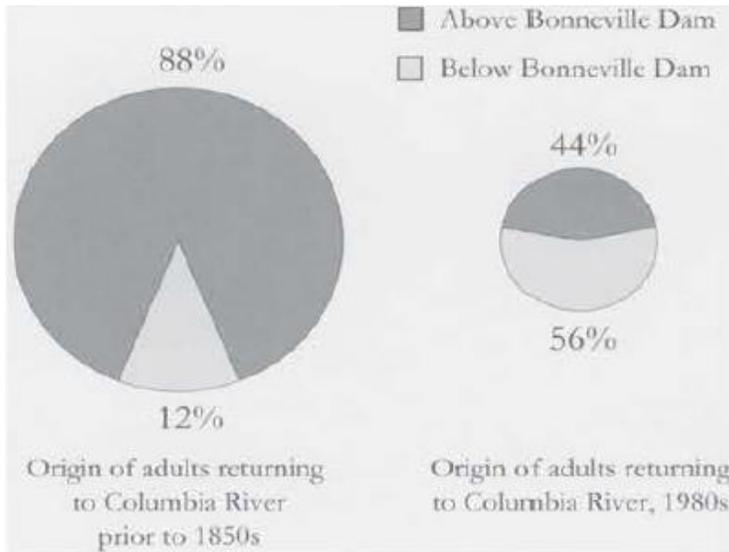


Figure 1: Changes in the distribution of salmon production in the Columbia River Basin (Northwest Power Planning Council, Columbia River Basin Fish and Wildlife Program, Portland, Ore., 1987, app. E, table 6)

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.

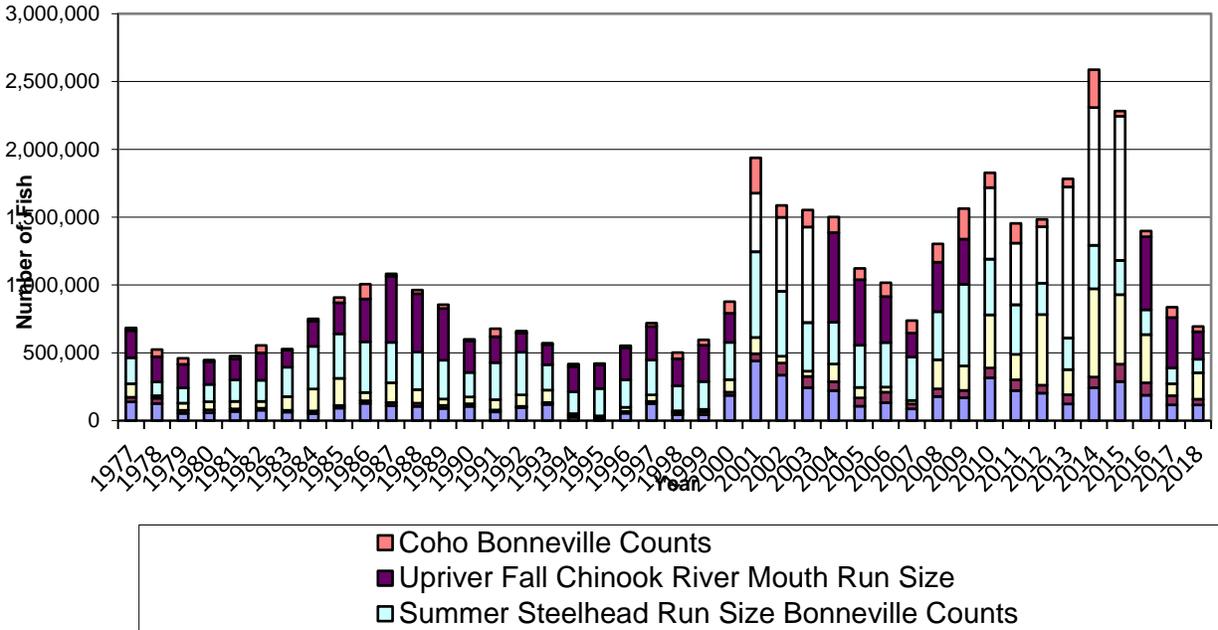
Tributary Abundance	Recent	Historical
Upper Columbia Sockeye	80,750	2,000,000
Upper Columbia Steelhead	1,480	1,121,400
Upper Columbia Spring Chinook	1,430	259,432
Upper Columbia Summer Chinook	16,290	694,000
Upper Columbia Fall Chinook	92,400	680,000
Snake River Sockeye	100	84,000
Snake River Steelhead	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.

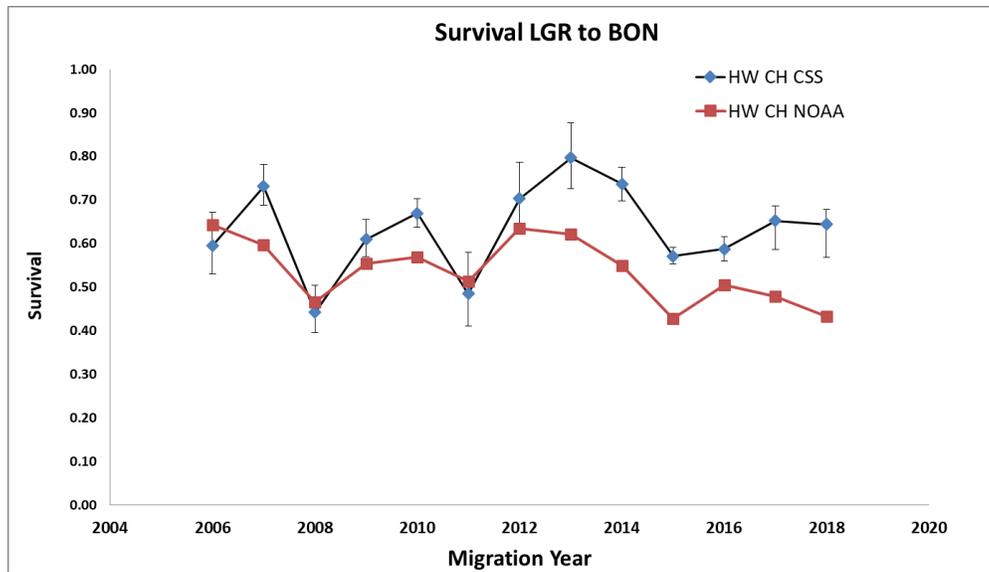
SARs for two of the Alternatives, MO3 and MO4, fell within the 2% to 6% range identified by the NPCC and multiple other authors.

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.earthconomics.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.



Spokane Tribe of Indians

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June 3, 2019

Subject: Columbia River System Operation: Tribal Perspective

Brigadier General D. Peter Helmlinger,

The Spokane Tribe of Indians traces a deep and rich history that is tied to inland northwest waterways, especially the Spokane River. The lower stretch of the river is known today as the Spokane Arm of Lake Roosevelt, which stretches 30 miles from Little Falls Dam to its confluence with the Columbia River. Often called "People of the River", the Spokane people have considered the river that bears their name a sacred place that provided food and a place to call home.

Throughout history, the Spokane River has been a center of Spokane ancestral culture with a documented time depth of at least 8000 years. The locale contains dozens of significant and irreplaceable ancestral cultural sites, both sacred and profane. The importance of these sites lies not only in the artifacts themselves, but in the history contained within the objects (singly and collectively), features, pictographs, and landscapes. Moreover, hundreds, if not thousands of Spokane ancestors were laid to rest along this waterway and many of them remain here. Many of these sites have been recommended as eligible for listing on the National Register of Historic Places (NRHP), and two archaeological/traditional cultural place (TCP) districts containing a combined 33 sites are in the process of being recommended as eligible for NRHP listing.

The Spokane Tribe is inextricably tied to the Spokane River, resulting in a close association with this place that began thousands of years ago and continues into the present day. As a result, the Spokane Tribe considers the entire Spokane Arm a traditional cultural place.

Sincerely,

Carol Evans, Chairwoman
Spokane Tribe Business Council