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1.0 Executive Summary of Tribal Circumstances and Impacts from the Lower Snake River Project

This report considers impacts on the Nez Perce Tribe, the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warms Springs Reservation of Oregon. Each of these tribes is a sovereign nation, and is unique in many ways. At the same time, these four tribes have retained close linkages over the years: through blood ties; in cooperative pursuit of salmon and other food; through religion; sharing of languages and similarity of treaties.

The Report also assesses impacts on the Shoshone-Bannock peoples, who live further upriver in the Snake River drainage, and who are more separated from the other four study tribes.

1.1 Present Circumstances of the Study Tribes

Viewed from the perspective of objective statistics, the peoples of the study tribes must today cope with overwhelming levels of poverty, unemployment that is between three and thirteen times higher than for the region's non-Indians, and age adjusted death rates from twenty percent higher to more than twice the death rate for residents of Washington, Oregon and Idaho as a whole. If located outside the United States, such conditions might fairly be described as "third world".

A Comparison of Present Wellbeing of the Study Tribes and their Non-Tribal Neighbors

						Non-Tribal Peoples		
Indicator of Wellbeing	Nez Perce	Shoshone/ Bannock	Yakama	Umatilla	Warm Springs	Idaho	Oregon	Wash.
Families in Poverty (%)	29.4	43.8	42.8	26.9	32.7	9.7	12.4	10.9
Unemployment (%)	19.8	26.5	23.4	20.4	19.3	6.1	6.2	5.7
:In winter	62.0	80.0	73.0	21.0	45.0			
Per Capita Income($'000)	8.7	4.6	5.7	7.9	4.3	11.5	14.9	13.4
Ratio of Tribal Death Rate to Non-Tribal Death Rate.	1.7	2.3	1.9	1.2	1.6	--	--	--

*These data are from the US Bureau of the Census (1990), the US Bureau of Indian Affairs (1995) and the Indian Health Service, various years. See the tribe by tribe sections in the main report for further detail.

A 1991 report by Central Washington University provides more graphic description.

> "The personal suffering and tragic lives of many (Indian) people are not revealed in the cold reports of tribal and federal governments. It can, however, be seen and felt in the towns and the countryside--in the eyes of men and the despair of mothers, with few options for change. When you can no longer do what your ancestors did; when your father or mother could not do these things either; when they or you found little meaning in and limited access to the ways of mainstream culture--the power of 70 percent winter time unemployment, and 46 percent of the population below the poverty level, is visible throughout the Nez Perce landscape."

Tribal spokespersons are uncomfortable with statistical treatment of their peoples – and the "blaming the victim" reaction such data sometimes elicits.

> I don't much like this talk of unemployment and poverty. Before the white man came, we had no such thing as poverty. We lived off the land. We fished, we hunted, we gathered roots and berries. We worked hard all year round. We had no time for unemployment.
>
> Poverty came with the Reservations. We were forced to live away from our salmon and our other resources. Our poverty is our lack of our Indian resources. These resources are being destroyed by the white man. That's what's causing our poverty.
>
> (Nathan Jim, Sr., Warms Springs Fish Commissioner)

Whether considered through tribal or non-Indian eyes, the present extreme difficulties these circumstances cause for the peoples of the study tribes is inescapable.

1.2 Principal Causes of the Present Impoverishment of Peoples of the Study Tribes

1.2.1 Losing Tribal Salmon

Today, the study tribes have lost the greatest part of the salmon they protected in their treaties with the United States. The further up-river one goes, the greater the losses that have occurred. Above the four lower Snake River dams, tribal salmon are presently harvested at less than one percent of pre-contact levels (late 1700's /early 1800's). These impacts are summarized on the following page.

Estimated Tribal Fish Harvests - Traditional Times to the Present

Benchmark	Nez Perce	Shoshone/ Bannock*	Yakama	Umatilla	Warm Springs
	----------harvest in thousands of pounds----------				
Est.Pre-Contact Harvest	2,800	2,500	5,600	3,500	3,400
Est. Harvest in mid-1800's	1,600	1,300	2,400	1,600	1,000
Current tribal harvest.	160	1	1,100	---77 for both tribes---	
Present vs Pre-Contact Harvests:					
Above lower Snake River Dams:	0.6%	0.04%	--	--	
Below lower Snake River Dams:	5.1%	--	--9.4% for three mid-Columbia tribes--		

* Shoshone Bannock estimates include harvests by Sho-Pai Duck Valley peoples.
** Refer to each subsequent tribal report section for derivation of these estimates.

Initially, these losses of salmon were principally caused by preemption by competing non-Indian harvesters, and obstruction or denial of access to usual and accustomed fishing places - sometimes fenced off by non-Indian property owners. Most of these actions were eventually challenged in court, and struck down as illegal. With each Court affirmation, the tribes looked forward to once again sustaining their people with the salmon.

But over time, when tribal people were once more able to return to the river, they have found the salmon were no longer there. For during the struggle to reaffirm the right to Treaty access to fishing, another tribally adverse process had been occurring - **the transformation of the rivers to produce electricity, irrigation for agriculture, navigation services, and waste disposal. Increasingly, this transformation left no place for the salmon - and hence, little place for the tribes.**

As each dam was constructed, the tribes objected, calling on the government to reconsider - pointing out that these actions were contrary to the Treaties the United States had signed with them, and predicting adverse consequences for the salmon – and for their tribal peoples. Each time, these tribal

objections were ignored, given little weight, or actively opposed by some non-Indian interests – and tribal salmon harvests continued to decline.

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1.2.2 Losing Tribal Lands

Today, the five study tribes control 2.6 million acres of their original Reservation lands - only 22 percent of the lands they reserved for themselves in their treaties with the United States. Nine million acres of original Treaty-protected tribal lands, together with the wealth those lands produce, are no longer in the hands of the tribes or their members. Primarily, these lands have been taken from the tribes by force; by "errors" in surveying reservation boundaries, made against Indian interest; by creation of "new" law, including post-facto legislation and pseudo-treaties to legalize prior illegal takings by non-Indians (i.e. the "steal treaty" with some Nez Perces in 1863); and by subsequent laws such as the Dawes Act of 1887, that facilitated the transfer of tribal assets and related wealth associated with Reservation lands into non-Indian hands.

Not only have the tribes lost substantial lands due to these actions, but non-Indians often hold the highest valued lands within Reservation boundaries. Further, Reservation lands held by Indians are often interspersed with lands held by non-Indians in a "checkerboard" - exacerbating difficulties for tribal resource protection and economic development.

Estimated Extent of Tribal "Own Lands" - Traditional Times to the Present

Benchmark	Nez Perce	Shoshone Bannock	Yakama	Umatilla	Warm Springs
	----------in thousands of acres----------				
Tribal lands ceded to the United States, by Treaty.	7,500	E-NQ	10,400	6,400	9,400
Retained Treaty lands (1855)	7,500		1,600	510	578
Umatilla land retained after boundary "survey error".				245	
Nez Perce land retained after "steal treaty" of 1863.	760				
Treaty of Fort Bridger (1868).		2,000			
Lands owned today - after Dawes Act "surplusing" and	93.5	544	1,126	158	658

sales/ right-of-way takings/ and other losses.					
Percent of Treaty Lands Owned today.	1.2	27.2	70.4	31.0	100+

*E-NQ = Extensive, but not quantified.

1.2.3 A Summary of the Principal Causes of Present Adverse Circumstances for the Study Tribes

From Treaty times to the present, non-Indians have taken most Treaty-protected assets of value from the tribes - particularly their lands, waters and salmon. The cumulative effects of these actions are evident throughout the tribal landscape.

> Some non-Indians say; "All these things happened before I got here." But it was their forefathers who displaced the Indians - raped our mothers and daughters - who killed the children - and then forced us to go to different areas because of the precious metals - because they wanted the water - because they wanted the forests. These are the ugly histories they say do not pertain to them. Unfortunately some of us still carry the hurt and pain in our hearts.
>
> (Hobby Hevewah, Shoshone-Bannock Councilor)

> My heart cries for my people, cuz we are no more Indians....All our horses are gone. No more cattle. All the pastures, the land, the hillsides, taken up by the farmers, by the white man.... Every inch of tillable ground is taken up. Where our houses used to be, they tear that down, and they put wheat in there or peas right on every inch of the ground. And they've taken down all the fences, and they've plowed through there. These big farmers, they've got everything in the world. The (Indian) owners have nothing. And they've taken everything.
> Like I say, they've taken our land, they've taken our rivers, they've taken our fish. I don't know what more they want.
>
> (Carrie Sampson, CTUIR Elder)

> When the United States began building power dams in the Pacific Northwest, construction crews ruined several burials in canyons along inland rivers, including the Snake River. Sometimes archaeologists working for the federal government raided Indian burials to preserve choice specimens for university collections before water from a new dam inundated the locations. ...The Yakama and their neighbors have faced a continued onslaught of ghouls, construction crews, and government agencies that disregard and discredit the spiritual beliefs of the Northwest Indians in reference to their dead. ...

The reservation system of the United States destroyed the native standard of living and introduced a host of viruses and bacilli to the Indians living on the Yakama Reservation. The result was poverty, ill health and death among the Yakama people.

(Clifford Trafzer, in "Death Stalks the Yakama")

1.3 The Continued Importance of Salmon for the Tribes

Despite the deprivations summarized previously, today, salmon remain connected to the core of tribal material and spiritual life. Faced with bleak present circumstances, and severely limited prospects for remedy, the tribal peoples still look first to the salmon with hope of a better future.

Traditional activities such as fishing, hunting and gathering roots, berries and medicinal plants build self-esteem for Nez Perce peoples - and this has the capacity to reduce the level of death by accident, violence and suicide affecting our people. When you engage in cultural activities you build pride. You are helped to understand "what it is to be a Nez Perce" - as opposed to trying to be someone who is not a Nez Perce. In this way, the salmon, the game, the roots, the berries and the plants are the pillars of our world.

(Leroy Seth, Nez Perce Elder)

The loss of the food and the salmon is monumental - and its all tied together. Food is a really big part of the Yakama culture - as it is elsewhere. Anywhere you look in the world, food carries culture. So if you lose your foods, you lose part of your culture - and it has a devastating effect on the psyche. You also lose the social interaction. When you fish, you spend time together - you share all the things that impact your life - and you plan together for the next year. Salmon is more important than just food.

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

(Chris Walsh, Yakama Psycho-Social Nursing Specialist)

Salmon are the centerpiece of our culture, religion, spirit, and indeed, our very existence. As Indians, we speak solely for the salmon. We have no hidden agenda. We do not make decisions to appease special interest groups. We do not bow to the will of powerful economic interests. Our people's desire is simple--to preserve the fish, to preserve our way of life, now and for future generations.

(Donald Sampson, CTUIR)

1.4 Reservation of the Tribal Right to Harvest Salmon in the Treaties between the Study Tribes and the United States

The rights and responsibilities of the United States and the five study tribes are spelled out in the treaties made between them. The major treaties are:

Treaty	Signing Date	Present Tribal Organization
Treaty with the Yakima Tribe	June 8, 1855	Yakama Indian Nation
Treaty with the Umatilla Tribe	June 9, 1855	Confederated Tribes of the Umatilla Indian Reservation
Treaty with the Nez Perce Tribe	June 11, 1855	Nez Perce Tribe
Treaty with the Tribes of Middle Oregon	June 25, 1855	Confederated Tribes of the Warm Springs Reservation of Oregon
Fort Bridger Treaty	July 3, 1868	Shoshone-Bannock Tribes

Historically, virtually all the original Indian bands now represented in the five study tribes moved through their respective territories, taking each traditional food at its right time and place. For ancestors of the Nez Perce, Yakamas, Umatillas and Warm Springs, **salmon was the most important food.** For the Shoshone Bannock, salmon took an important place alongside buffalo.

God created this country... He put the Indian on it. They were created here in this country, truly and honestly, and that was the time this river started to run. Then God created fish in this river and put deer in these mountains and made laws through which has come the increase in fish and game....

When we were created, we were given our ground to live on, and from that time these were our rights.

My strength is from the fish; my blood is from the fish, from the roots and the berries. The fish and game are the essence of my life. I was not brought from a foreign country and did not come here. I was put here by the Creator.

(Yakama Chief Meninock)

It's just that salmon are part of the country, they're part of the environment. They belong here as much as the Indians belong here. And in that way they complement each other. They've become a part of us because it's what we depend on to live.

(Antone Minthorn)

At certain times of the year, certain ceremonies would be held, like the first foods feast of the season.... And in these ceremonies water would be drunk first, and that would be recognizing the importance of water, you know, for sustaining life. And these other foods came in order after water - salmon, and deer meat, and the roots and the berries. And we say that the water was the same as the blood in our body. In relation to the Mother Earth, the water flows like blood in our veins along the various rivers and, you know, inside the earth. So that's how we related the water to our Earth and to our bodies.

(Alan Pinkham)

Our religious leaders told us that if we don't take care of the land, the water, the fish, the game, the roots and the berries we will not be around here long. We must have our salmon forever!

(Delbert Frank, Sr.)

The five tribes ceded more than 40 million acres of land to the United States and agreed to move on to 12.2 million acres of Reservation lands. But tribal negotiators were careful to protect their rights to harvest salmon and the other key resources they depended on for survival in their treaties. The following explicit protection can be found in each of the treaties of the Nez Perce, Yakama, Umatilla and Warm Springs.

Article 3: The exclusive right of taking fish in all streams, where running through or bordering said reservations, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at usual and accustomed places in common with the citizens of the Territory, and of erecting temporary buildings for curing them; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed lands.

The Fort Bridger Treaty between the United States and the Shoshone-Bannock states:

> **Article 4: The Indians herein named...shall have the right to hunt on the unoccupied lands of the United States so long as the game may be found thereon, and as long as peace subsists among the whites and the Indians on the borders of the hunting districts.**

And the Court in State of Idaho v Tinno stated that, in Article 4, "to hunt" also meant "to fish".

Court cases have affirmed that the Treaties between the five tribes and the United States cannot be overturned or contradicted by ordinary federal laws, by state laws, or by interagency agreements. The U.S. Supreme Court has further affirmed that:

> In construing any treaty between the United States and an Indian tribe...the treaty must...be construed, not according to the technical meaning of its words to learned lawyers, but in the sense they would be naturally understood by the Indians.

These Supreme Court mandated Canons of Construction are of particular importance in establishing tribal entitlements, against which alternative actions affecting salmon on the Columbia and Snake River systems can be evaluated. It is clear that, while ceding immense expanses of land to the United States, the tribal treaty negotiators took care to protect their salmon and other "life-support" resources.

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.

Federal tribal trust responsibility includes, but is not limited to, treaty obligations. Its central thrust recognizes a federal duty to protect tribal lands, resources and the native way of life from the intrusions of the majority society. Each federal agency is bound by this trust responsibility.

1.5 Impacts of the Lower Snake River Dams on the Study Tribes

The four lower Snake River dams evaluated in this report have significant, but not sole responsibility for the desperate present circumstances of study tribes. Construction of these dams has transformed the production function of the lower Snake River. The dams destroyed substantial Treaty-protected salmon producing capability depended on by the tribes, preempted at least 8 million pounds of annual tribal harvest, and have left the tribes with miniscule present-day residual harvests – particularly above the dams.

At the same time, the lower Snake River dams have increased the wealth of non-Indians through enhanced production of electricity, agricultural products, transportation services, and other associated benefits. Tribal peoples have not shared in this increased wealth on a comensurate basis.

Construction of the four lower Snake River dams and reservoirs also inundated approximately 140 river miles of tribal usual and accustomed areas – flooding lands previously frequented by three of the study tribes – the Nez Perce Tribe, the Yakama Indian Nation and the Confederated Tribes of the Umatilla Indian Reservation.

The Relationship Between Present Tribal Groups and Pre-Treaty Tribal Groups - Flooding of Lower Snake River Reservoir Areas

Present Tribal Group	Original Tribal Groups in Lower Snake Territory	Associated Flooding by Lower Snake Reservoirs
Nez Perce Tribe	Nez Perce Indians living along the Clearwater River, and downstream along the lower Snake River to the Palouse River (north bank) and the Tucannon River (south bank).	Lower Granite reservoir. Little Goose reservoir. Lower Monumental reservoir.
Yakama Indian Nation	Palouse peoples living at the confluence of the Snake and Palouse rivers, and downstream along the north bank. Possibly	Lower Monumental reservoir. Ice Harbor reservoir.

	other bands near the mouth of the Snake.	
Confederated Tribes of the Umatilla Indian Reservation.	Palouse peoples living at the confluence of the Snake and Palouse rivers, and downstream along the north bank. Walla Walla peoples living from the mouth of the Tucannon River downstream along the south bank of the Snake.	Lower Monumental reservoir. Ice Harbor reservoir.

1.6 Present Lower Snake River Project Alternatives

The Lower Snake River Project considers selected future alternatives with respect to the four dams and their reservoirs, affecting about 140 miles along the lower Snake River and approximately four miles along the lower Clearwater River:

* Ice Harbor Dam, near the confluence of the Snake River with the Columbia River;
* Lower Monumental Dam, near Matthews, Washington;
* Little Goose Dam, upstream of the Tucannon River;
* Lower Granite Dam, whose reservoir effects extend about 4 miles upstream of the confluence of the Snake River and the Clearwater River.

The Lower Snake Project is considering three broad actions, and a variety of modifications to those actions. The three main alternative actions are evaluated here. They are:

* **Alternative A1 (Base Case):** Continue present operation of the four lower Snake River dams, with supplemental flows for salmon per the 1995 National Marine Fisheries Service (NMFS) Biological Opinion.

* **Alternative A2 (Transportation):** Actions under this alternative would be the same as A1, except for added measures to pass salmon by the dams and through the reservoirs. The dams would stay in place.

* **Alternative A3 (Drawdown):** This alternative would breach the four dams, and eliminate their reservoirs, so that the lower Snake River flowed at near natural conditions.

1.7 Impacts from Project Alternatives

Summary of Impacts on Threatened Stocks and Treaty Harvests of Wild Salmon from The Snake River - Alternative Actions Affecting the Lower Snake River

Project Alternative	Probability of Delisting Spring/Summer Chinook -in percent after 48 yrs-	Tribal Harvest of Wild Salmonids		Tribal Harvest of Wild + Hatchery Salmonids	
		At 30 yrs	At 50 yrs	At 30 yrs	At 50 yrs
		----------'000 pounds----------			
A1: Status Quo	35-42	170	179	794	836
A2: Status Quo + Transportation	30-40	159	161	747	770
A3: Dam Breaching	80	396	426	1,906	2,013

Summary of Tribal Flood-Related Impacts Associated with Lower Snake River Reservoirs

Impact	**A1** Dams Remain+Biop.	**A2** Dams+Added Fish Passage	**A3** Reservoirs Gone/Breach Dams
Fishing places.	Access to many salmon fishing sites preempted. Some alternative sites available (principally, non-salmon).	Same as A1.	Would reestablish usual and accustomed fishing locations along 140+ miles of river.
Hunting/ gathering areas.	34,000 acres flooded.	34,000 acres flooded.	Up to 34,000 acres restored for tribal Treaty-based hunting and gathering of roots, berries and plants.
Tribal land base.	Eliminated 34,000 acres from tribal use.	Same as A1.	Provide added land based opportunities up to one-third the size of all present lands owned by the Nez , and up to one-fifth the size of all lands presently owned by CTUIR.

Cultural activities.	Floods more than 600-700 locations where cultural activities occurred.	Same as A1.	Would enable tribal peoples to reestablish contact and use of over 600-700 usual and accustomed locations.
Religious/ Spiritual.	Floods numerous tribal graves. Involved violation and stealing of bodies of ancestors. Separates tribal peoples from their land, their rivers, and their sacred and ceremonial places.	Same as A1.	Would reunite tribal peoples with the land, the river and the creatures of the lower Snake. Would allow tribes to care for the graves of loved ones. Would restore access to sacred and ceremonial places.

1.7.1 The Preferred Alternative – A3.

From the perspective of both salmon recovery and the tribes, A3 is the preferred action alternative.

1.7.1.1 Impacts of A3 on Salmon and Steelhead

PATH and its Scientific Review Panel estimate an approximate 80 percent probability that spring and summer chinook would be removed from the Endangered Species List within 48 years under Alternative A3.

Tribal wild salmon and steelhead harvests from Snake River stocks would be substantially higher than under A1 or A2 – at 396,000 pounds after 30 years, and 426,000 pounds after 50 years. Tribal catches of both wild and hatchery Snake River salmon and steelhead could reach 1,906,000 pounds after 30 years, and 2,013,000 pounds after 50 years.

After 30 years, A3 could increase tribal ceremonial, subsistence and commercial harvests of wild and hatchery salmon and steelhead by 2.2 times, compared to low present-day total tribal catches of about 1.3 million pounds in the Columbia/Snake system. These estimated improvements in tribal catch are 3.3 times greater than for A1, and 3.7 times greater than for A2.

Due to deterioration in associated salmon survival conditions, recovery estimates for A3 are equivalent to only about 20 percent of estimated losses associated with initial construction and operation of the four lower Snake River dams at the 30 year benchmark. Nor would selection of A3 alone fully ameliorate the difficult economic conditions, ill health and suffering of the tribal peoples.

However, A3 represents the most significant action considered to date to reverse the cumulative trend toward destruction of tribal resources, the taking of tribal Treaty-protected assets by non-Indians, and the consequent damaging of tribal peoples. To paraphrase a statement from a nurse on the Yakama Reservation concernimg tribal health and overall wellbeing, "**if the salmon begin to come back, positive changes will start**".

1.7.1.2 Impacts of A3 on Reservoir Flooding of Lands

Alternative A3 (Drawdown) would permanently drain the four lower Snake River reservoirs, and create substantial benefits for affected tribes. It would allow tribal peoples to renew their close religious/spiritual connection with these innundated lands where their ancestors lived and are buried – and allow them to properly care for their grave sites. They could return to more than 600-700 locations where they were accustomed to live; fish; hunt; harvest plants, roots and berries; conduct cultural and religious ceremonies; and pursue other aspects of their normal traditional lives. These impacts are summarized in the preceding table. Their magnitude would depend on the level of following potential actions.

1. Restore Treaty-based tribal access rights to usual and accustomed fishing places along the restored river sides.

2. Restore Treaty-based tribal access rights to hunt and gather on ceded public lands alongside the restored river sides.

3. Return tribal individual allotment lands in the reservoir area, taken by the federal government when the reservoirs were built, to tribal hands.

4. Deed uncovered reservoir lands to appropriate tribes as partial compensation for prior damages caused by lower Snake River dams, or for other system damages.

1.7.2 Alternative A1 – Status Quo

PATH (1998) and its Scientific Review Panel indicate a probability of only 35 to 42 percent that these salmon would recover sufficiently to be removed from the Endangered Species List within 48 years under Alternative A1.

It has been estimated that this alternative could increase tribal harvests of Snake River wild

salmon and steelhead to an estimated 170,000 pounds after 30 years, and 179,000 pounds after 50 years. Tribal harvests of both wild and hatchery Snake River stocks under this alternative are estimated at 794,000 pounds after 30 years, and 836,000 pounds after 50 years – a meager supplementation of present low levels of tribal catch.

However, the relatively low probabilities that Alternatives A1 and A2 will remove Snake River salmonids from the Endangered Species List within 48 years, PATH's failure to explicitly deal with adverse stock trends in their analysis, the estimates of harvest under A1 referenced in this report are contingent upon these Snake River stocks not going extinct.

In sum, Alternative A1 does not offer the probability of substantial renewal of Snake River salmon and steelhead stocks. Rather, A1 continues to risk Snake River stocks and the tribal peoples who depend on them, and is likely to perpetuate substantial adverse impacts upon tribal culture, economy and health, as described in this report.

Alternative A1 would also continue to flood the river sections and stream side lands under the reservoirs along the lower Snake River - inundating most substantial aspects of tribal cultural, spiritual and material life there – separating the peoples of the Nez Perce, CTUIR and Yakama from the grounds in which their ancestors are buried. The dams and their reservoirs prevent the subject tribes from holding religious and cultural ceremonies at these places - and "filter" the spiritual relationship between the tribes, their ancestors and their spiritual places through many feet of reservoir waters.

The four reservoirs preempt 140+ miles of Treaty-protected tribal fishing, hunting, and harvesting of roots, plants and berries at usual and accustomed stream side locations. The surface areas of the four reservoirs measure almost 34,000 acres - an area approximately one-third the size of all remaining lands owned by the Nez Perce, and one-fifth the size of remaining lands owned by the Confederated Tribes of the Umatilla Indian Reservation.

Present tribal suffering stems, in large part, from the cumulative stripping away of tribal Treaty-protected resources to create wealth for non-Indians of the region. Selection of A1 will likely perpetuate and protect such prior actions and wealth transfers.

In earlier decades, bureaucrats working to convert the river to produce electricity, irrigate agriculture, carry commodities by river barge, and accommodate deposit of waste, asserted that "uncertainty regarding impacts on salmon could be managed" as the conversion of the river moved forward. Today, with transformation of the river system complete, some maintain that "no major action should be taken to restore salmon until results are certain" – and favor A1 on that account. This new "uncertainty adverse" attitude surrounding actions to save/restore salmon is contrary to that of earlier decades – and serves to perpetuate the redistribution of the rivers' wealth away from the tribes – and in favor of non-Indian residents of the region.

A coincident strategy which commits to "further study" and delay in enacting more substantial recovery measures also commits to continued suffering, ill health and premature death for the peoples of the study tribes – all at unconscionable levels.

The study tribes are unwilling to contemplate the continued levels of pain, suffering and death that waiting as long as 100 years into the future for salmon recovery would bring – and such distant benchmarks for salmon recovery are not discussed in this report.

For the tribes, evaluation of Alternative A1 is clear cut. **Selection of A1 would continue the Treaty-breaking actions that have been a feature of the last 144 years in the Columbia/ Snake River system.**

1.7.3 Alternative A2 – Status Quo with Enhanced Transportation

PATH and its Scientific Review Panel estimate that selection of Alternative A2 would be the worst choice for spring and summer chinook salmon, and for steelhead, of all the alternatives considered - with only a 30 percent to 40 percent chance of removing the salmon from the Endangered Species List over 48 years. It is consequently also the worst choice for the tribes.

Projected tribal harvests of Snake River wild salmon and steelhead under A2 would be less than under A1, the status quo – 159,000 pounds after 30 years, and 161,000 pounds after 50 years. Counting both wild and hatchery Snake River stocks, tribal harvests of salmon and steelhead could be 747,000 pounds after 30 years, and 770,000 pounds after 50 years.

As with A1, risk of extinction cannot be discounted for some stocks – and the four lower Snake reservoirs would continue their inundation of tribal areas, culture and spiritual places.

1.8 Cumulative Tribal Impacts of Lower Snake River Project Alternatives

Selection of Alternative A1 (Status Quo) or A2 (Status Quo + Transportation), by continuing the inundation of river side lands along the lower Snake River, and by failing to offer reasonable prospects for substantial restoration of tribal salmon fisheries for 48 years or more, **will perpetuate prior transformations of the production function of the lower Snake river that have destroyed valuable Treaty-protected tribal assets. The tribes will continue to lose treaty-protected wealth - and benefits will continue to flow, disproportionately, into non-tribal hands**.

Selection of Alternative A3 (Dam Breaching and Reservoir Drawdown to Natural River) would remove flood waters presently covering some 140+ miles of important usual and accustomed locations along the lower Snake river. A3 also offers an 80 percent chance that salmon would recover and be delisted within 48 years - with the attendant prospect of renewed tribal fisheries.

From a cumulative policy perspective, **selection of A3 would reverse an almost century and one-half trend to cumulatively strip the tribes of their valued and treaty-protected assets - and would move toward "rebalancing" distributions of the wealth that the lower Snake River can produce, between the tribes and non-tribal peoples of the study area**.

Such actions may not result in immediate improvements to tribal material wellbeing and health - but over future years, as the salmon stocks become stronger, so would the health and economic wellbeing of tribal members.

Our study conclusions with respect to the cumulative impact of lower Snake River Project alternatives on **distribution of wealth**, **tribal health and material wellbeing**, **tribal spiritual and religious wellbeing** and **tribal self-sufficiency and self-empowerment** follow.

Summary of Cumulative Tribal Impacts from Lower Snake River A1, A2, and A3 Alternatives

Tribal Impact	**A1** Dams Remain+Biop.	**A2** Dams +Added Fish Passage	**A3** Reservoirs Gone/Breach Dams
Wealth distribution	Non-tribal interests continue to accumulate wealth. Tribal loss of valuable assets continues.	- Same as A1, but slightly more adverse. -	Begins rebalancing of the river's production function. Some wealth transfers from non-Indian interests back to the tribes begin, as stream sides are unflooded and salmon is restored.
Health and material	Will continue to preempt tribal		Will begin reversal of adverse cumulative nutrition

wellbeing.	subsistence and economic activity. Will continue adverse effects on tribal nutrition and general health.	- Same as A1, but slightly more adverse. -	and health circumstances. Will reduce tribal poverty over time. Will broaden the base for tribal subsistence, and where appropriate, tribal economies.
Spiritual/ religious wellbeing.	Continues to endanger the salmon, one of the key elements that provide religious, spiritual and cultural definition for the study tribes.	- Same as A1, but slightly more adverse. -	Will remove salmon from endangerment. This will generate major benefits for key elements of tribal religion and spirituality - which will be removed from endangerment as well.
Tribal empower-ment.	Continues to discount the knowledge and recommendations of tribal peoples concerning survival of Snake River salmon - disempowering the tribes.	- Same as A1 -	Credits the knowledge and advice of tribal peoples on what is required for the Snake River salmon to survive. and recover. This would increase feelings of empowerment and self-worth among tribal peoples.

1.9 Mitigation to Protect Tribal Sites and Resources

Prehistoric and historic village areas, gravesites, usual and accustomed fishing, hunting and gathering areas and other areas/resources important to the culture of the tribes must receive adequate protection to ensure their wellbeing under all alternatives. These sites and resources provide tangible evidence of "who a people are". Adequately protected and managed, they provide ongoing opportunity for present-day tribal members to continue to practice their culture, now and in the future. These protection and management measures should be led and controlled by the affected tribes. They should include tribally controlled restoration of these areas and sites – and measures to assess and evaluate, protect and secure, and mitigate for any unavoidable impacts to such sites and resources. Past and current efforts have been inadequate – and future efforts need to be more extensive, and follow explicit tribally-approved plans.

1.10 A Summary Tribal Assessment of Lower Snake River Project Alternatives

This summary comparison of project alternatives utilizes two overriding benchmarks.

- Impact on federal tribal Treaty obligations and tribal trust responsibilities;
- Impact on Environmental Justice, as defined by the Environmental Protection Agency.

The four lower Snake River dams do not have sole responsibility for devastation of **tribal Treaty harvests,** but they have played a significant role. This role continues through innundation of spawning areas and via passage losses in each present year. Beaty, Yuen, Meyer and Matylewich (1999) estimate contribution to losses of potential tribal harvests of salmon and steelhead by the four lower Snake River dams at between 8.4 and 14.3 million pounds annually.

PATH, and its Scientific Review Panel of independent experts, estimate that only Alternative A3 offers significant hope for delisting endangered Snake River salmonid species, and substantial restoration of depleted tribal harvests, within any reasonable time period.

The historic record identifies that biologists have often been too optimistic concerning their ability to protect and recover Columbia/Snake system salmon. Considering that historic tendency, the small harvest improvements forecast by PATH under either A1 or A2, and PATH's failure to explicitly consider downward historic trends for modelled stocks, there also appears to be a significant risk that, over time, tribal Treaty-protected salmon stocks could become extinct under selection of either A1 or A2.

Only selection of A3 – breaching the lower Snake dams – offers the Treaty tribes a significant probability of reversal of the cumulative trend of losses to Treaty-protected salmonid harvests, and the hope of substantial relief from the risk of extinction of Treaty-protected stocks.

It is concluded that **selection of either Alternative A1 or A2 does not meet federal Treaty or tribal trust obligations. Selection of A3 represents a significant step toward meeting these obligations.**

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.

EPA's Environmental Justice criteria address two key issues:

- Does the affected community include minority or low-income populations?
- Are the environmental impacts likely to fall disproportionately on minority and/or low income members of the community and/or on tribal resources?

Tribal information from this report that is relevant to Environmental Justice issues is summarized on the two following pages, using assessment factors identified in EPA's EJ guidance.

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.	**:** Tribal families are impoverished and unemployed at 3-4 times levels of Washington/Oregon/Idaho residents as a whole. Winter-time tribal unemployment reaches as high as 80 percent.
	: Tribal members are dying at age adjusted rates that are 20 percent to 130 percent higher than non-Indian residents of the study area.

	: 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.	**:** Extensive information in this report places salmon at the center of the study tribes' cultural, spiritual and material world. A prior table in this summary identifies that salmon guaranteed to the tribes by Treaty have been almost entirely 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 that 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.	**:** The cumulative effects of dam construction have transferred potential wealth produced in the river basin from salmon assets on which the tribes depend to electricity production, irrigation of agriculture, water transport services and waste deposition – these latter primarily benefiting non-Indians. Such wealth transfers have been a significant contributor to gross poverty, income and health disparities between tribes and non-Indian neighbors. **:** Selection of A1 or A2 would continue these conditions and disparities.
Inconsistent Standards.	**:** During construction of the dams, agencies confidently asserted that they could manage uncertainty concerning adverse impacts on salmon – and related adverse impacts to the tribes. Today, when considering more substantial remedial action to recover salmon, and improve the wellbeing of tribal peoples, some of the same agencies claim to be risk averse – and opt for further "study" and iterative "testing" of salmon recovery initiatives.

Table Cont'd. on p. xxx…

Summary of Environmental Justice Effects for the Tribes
From Lower Snake River Project Alternatives – Cont'd.

EJ Factors	Relative Effects on the Tribes
Alternative A3 (Dam Breaching):	
Income Level/ Health	**:** The estimated 13-fold increase in harvest of Snake River wild salmon under A3 will not be sufficient to fully restore tribal harvests to potential levels

before the Lower Snake River dams were built. But A3 is the only action being examined that will **substantially** improve opportunities for tribal fishing and for tribal consumption of salmon. Tribal spokespersons and experts cited in this report inform us that as salmon recovery occurs, tribal health would improve, tribal incomes would increase, and the cultures of the five tribes would be strengthened.

: Cumulatively, as salmon recovery progressed, A3 could be expected to significantly reduce the differences between tribal and non-Indian material wellbeing that have been cited in this report.

Life-support resources. **:** Despite severe damage to most stocks, salmon and water remain the central elements of tribal culture, spiritual and material survival. Today, beset by a narrow on-Reservation resource base, and still coping with racial prejudice and limited opportunity off-Reservation, the tribes continue to look first to the salmon as they seek to build a more secure future.

: Selection of A3 would significantly reverse a 144 year post-Treaty cumulative trend that, to date, has taken and destroyed tribal assets, has resulted in endangerment of the salmon, and has endangered tribal peoples – while peoples as a whole in the region have prospered.

Economic base. **:** Selection of A3 would provide significant restoration for salmon. The tribes have harvested and processed salmon from pre-contact times, and possess an economic comparative advantage respecting such activities. A3 would allow significantly more tribal harvesting and processing; would facilitate extended distribution of salmon as food through extended families and to elders; and would expand the fundamental economic base for tribal wellbeing.

: The positive economic effects discussed here would be expected, over time, to significantly reduce the differentials in poverty and unemployment levels between tribal members and their non-Indian neighbors.

Inconsistent Standards. **:** Selection of A3 would reduce more than a century of cumulative regional taking of the Treaty-protected assets of the tribes – and provide a step toward more equitable sharing of potential wealth from the Columbia/Snake river basin between tribal and non-tribal peoples.

It is clear from this report that the lower Snake River dams have benefited many regional citizens, while damaging the tribes severely – and represent a clear case of unjust action, as defined by EPA. **Selection of either Alternative A1 or A2 would perpetuate this environmental injustice. Selection of A3 would represent a significant step toward redressing such Environmental Injustice to the tribes.**

Comparison of Lower Snake River Project Alternatives with Respect to Tribal Treaty Obligations, and Environmental Justice

Evaluative Criteria	**A1** Dams Retained + Biological Opinion	**A2** A1 + Added Fish Passage	**A3** Dams Breached/ Reservoirs Gone
Meets tribal treaty & trust responsibilities.	No	No	Yes
Meets Environmental Justice criteria.	No	No	Yes

Bill Yallup, Chairperson of the Yakama Indian Nation, points out that this assessment process offers a clear choice with respect to how the salmon, and affected tribal peoples, will be treated in the Columbia and Snake River Basins.

> Some of the people that have gone before made some big mistakes on this river. We tried to tell them, but they wouldn't listen. We now have an opportunity to fix those mistakes. Each generation of officials, bureaucrats, scientists and so on has a choice. We can become part of the problem – or part of the solution.
>
> (Bill Yallup, Sr. - An Address to the Drawdown Regional Economic Workgroup, July 18, 1997)

Tribal Circumstances and Impacts of the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs and Shoshone Bannock Tribes

Developed for the:

Columbia River Intertribal Fish Commission

Developed by:

Meyer Resources, Inc.

October, 1999

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2.0 Procedural Overview for Assessment of Tribal Impacts and Circumstances

2.1 Study Methodology

2.1.1 Federal Guidelines

This report is developed so as to be generally compatible with the following federal guidelines.

2.1.1.1 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies - 1983.

The 1983 US Water Resources Council (WRC) Guidelines are the last in a guideline series developed to assist evaluation of federal water-related projects in the United States[1]. While the Department of the Interior-based WRC no longer exists, evaluation manuals developed subsequently by individual federal agencies still treat this document as a basic source for guidance - as has the Drawdown Regional Economic Workgroup (DREW) responsible for the current overall Lower Snake Drawdown evaluation task[2].

The WRC Guidelines recommend evaluation of water-related projects by organizing assessment data in a series of accounts[3]. These are:

The National Economic Development (NED) Account; which "displays changes in the economic value of the national output of goods and services".

Assessment under this account has been a significant focus for DREW, and to the extent Tribal circumstances and information indicate it to be appropriate, Tribal NED information is included in this report.

The Environmental Quality (EQ) Account; which "displays nonmonetary effects on significant natural and cultural resources".

(1) The EQ account is a means of displaying and integrating into water resources planning that information on the effects of alternative plans on significant EQ resources and attributes of

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[1]US Water Resource Council, 1983. **Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies.** Washington, D.C.: Superintendent of Documents.

[2]DREW consists of group of economists and other professionals representing the US Army Corps of Engineers, Bonneville Power Administration, Northwest Power Planning Council, National Marine Fisheries Service, U.S. Environmental Protection Agency, Columbia River Intertribal Fish Commission, Shoshone-Bannock Tribes and other potentially affected agencies/interests.

[3]US Water Resources Council, 1983. **Supra** at v.

> the NEPA human environment, as defined in 40 CFR 1507.14, that is essential to a reasoned choice among alternative plans. *Significant* means likely to have a material bearing on the decision making process.
>
> (2) Beneficial effects in the EQ account are favorable changes in the ecological, aesthetic, and cultural attributes of natural and cultural resources.
>
> (3) Adverse effects in the EQ account are unfavorable changes in the ecological, aesthetic, and cultural attributes of natural and cultural resources. ...
>
> Cultural attributes are evidence of past and present habitation that can be used to reconstruct or preserve human lifeways... .[4]

WRC (1983) goes on to identify that:

> Cultural attributes are found in the archaeological remains of prehistoric and historic aboriginal occupations; historic European and American areas of occupation and activities; and objects and places related to the beliefs, practices and products of existing folk or traditional communities and native American groups. Examples are campsites of prehistoric mammoth hunters, a 19th century farmstead, and a stream crossing in long- standing use by an Appalachian community for baptizing church members.[5]

Initial Tribal assessment processes conducted by federal agencies since WRC (1983) usually focused on that element of WRC (1983)'s EQ Guidelines concerning **"prehistoric and historic...objects and places"**, primarily through historic and archaeological analysis, and has often described such "objects and places" as **cultural resources**. Such assessment is important, but in confining itself to "historic objects and places", it too often failed to fully assess impacts on **existing Tribal communities and groups**, also identified under the WRC guidance. This issue was recognized in the 1995 Columbia River System Operation Review (SOR) Final EIS.

> There is...more than one view of what constitutes cultural resources. The academic and legal definitions tend to focus on tangible evidence such as sites and artifacts. Native Americans find these definitions too narrow. They view their entire heritage, including beliefs, traditions, customs, and spiritual relationship to the earth and natural resources, as sacred cultural resources. The SOR agencies have attempted to incorporate the tribes' views in the impact analysis and will continue to consider them while developing mitigation plans.[6]

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[4]Supra at 10-11.

[5]Supra at 103-104.

[6]US Army Corps of Engineers, Bonneville Power Administration and US Bureau of Reclamation, 1995. **Columbia River System Operation Review: Final Environmental Impact Statement**. Main Report. Portland, p. 2-21.

This present report section, written under Tribal supervision, continues the effort by SOR agencies to understand and properly incorporate Tribal circumstances and effects into the Lower Snake Drawdown assessment process.

The **Regional Economic Development (RED) Account**; "registers changes in the distribution of regional economic activity that result from each alternative plan. Two measures of the effects of the plan on regional economies are used in the account: Regional income and regional employment."[7]

The boundaries of Tribal Reservations and Tribal Ceded Areas do not conform to those county-based or state-based analyses that are usually utilized in the RED account. This analysis will develop information with respect to Tribal income and unemployment. Some of this may prove useful to RED assessors. However, the basic referent groups for this Tribal Effects assessment will be bounded by the Reservations and Ceded Areas of the Nez Perce Tribe, the Confederated Tribes of the Umatilla Reservation, The Yakama Indian Nation, The Confederated Tribes of the Warm Springs Reservation, and The Shoshone-Bannock Tribes.

The **Other Social Effects (OSE) Account**; "is a means of displaying and integrating into water resource planning information on alternative plan effects from perspectives that are not reflected in the other three accounts. The categories of effects in the OSE account include the following: Urban and community impacts; life, health and safety factors; displacement (of people, businesses and farms); long-term productivity; and energy requirements and energy conservation."[8]

This Tribal Effects section will contain some information identified in WRC (1983)'s OSE Account framework - particularly with respect to **Tribal health**, and the **displacement of Tribal peoples**.

2.1.1.2 Presidential and Executive Department Direction, Guidance and Policy

In 1994 the following Presidential directive was issued.

Each executive department and agency shall assess the impact of federal government plans, projects, programs and activities on tribal trust resources and assure that tribal government rights and concerns are considered during the development of such plans, projects, programs and activities.[9]

In 1993, a directive from The Secretary of the Interior stated:

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[7] US Water Resources Council, 1983. **Supra** at 11.

[8] Supra at 12.

[9] President Clinton,1994. **Memorandum to Heads of Departments and Agencies**. April 29.

> The heads of bureaus and offices are responsible for being aware of the impact of their plans, projects, programs or activities on Indian trust resources. Bureaus and offices when engaged in the planning of any proposed project or action will ensure that any anticipated effects on Indian trust resources are explicitly addressed in the planning, decision and operational documents. These documents should clearly state the rationale for the recommended decision and explain how the decision will be consistent with the Department's trust responsibilities.[10]

2.1.1.3 US Army Corps of Engineers Guidance Respecting Tribes

US Army Corps of Engineers guidance respecting Tribes is contained in Lieutenant General Ballard's memorandum of February 18, 1998.

> 1. Our Nation has long recognized the sovereign status of Indian tribes. The United States Constitution specifically addresses Indian sovereignty by classing Indian treaties among the "supreme Law of the land," and established Indian affairs as a unique focus of federal concern. Principles outlined in the treaties, as well as those established by Federal laws, regulations and Executive Orders, continue to guide our national policy towards Indian Nations.
>
> 2. On 29 April 1994, President Clinton reaffirmed the United States' "unique legal relationship with Native American tribal governments." In recognition of the special considerations due to tribal interests, the President directed Federal agencies to operate within a government-to-government relationship with federally recognized Indian tribes; consult, to the greatest extent practicable and permitted by law, with Indian tribal governments; assess the impact of agency activities on tribal trust resources and assure that tribal interests are considered before the activities are undertaken; and remove procedural impediments to working directly with tribal governments on activities that effect trust property or governmental rights of the tribes....
>
> 3. ...I want to ensure that all Corps Commands adhere to principles of respect for Indian tribal governments and honor our Nation's trust responsibility. To this end I have enclosed US Army Corps of Engineers Tribal Policy Principles, for use as interim guidance until more detailed statements are developed. These Principles have been developed with the Office of the Assistant Secretary of the Army (Civil Works) and are consistent with the President's goals and objectives.
>
> > **TRIBAL SOVEREIGNTY** - The US Army Corps of Engineers recognizes that Tribal governments are sovereign entities, with rights to set their own priorities, develop and manage Tribal and trust resources, and be involved in Federal decisions or activities which have the potential to affect these rights.
> >
> > **TRUST RESPONSIBILITY** - The US Army Corps of Engineers will work to meet trust obligations, protect trust resources, and obtain Tribal views of trust and treaty responsibilities or

[10] The Secretary of the Interior, 1993. **Order No. 3175**. November 8.

actions related to the Corps, in accordance with provisions of treaties, laws and Executive Orders as well as principles lodged in the Constitution of the United States.

GOVERNMENT-TO-GOVERNMENT RELATIONS - The US Army Corps of Engineers will ensure that Tribal Chairs/Leaders meet with Corps Commanders/Leaders and recognize that, as governments, Tribes have the right to be treated with appropriate respect and dignity, in accordance with principles of self-determination.

PRE-DECISIONAL AND HONEST CONSULTATION - The US Army Corps of Engineers will reach out…to involve tribes in collaborative processes designed to ensure information exchange, consideration of disparate viewpoints before and during decision making, and utilize fair and impartial dispute resolution mechanisms.

SELF RELIANCE, CAPACITY BUILDING AND GROWTH - The US Army Corps of Engineers will search for ways to involve Tribes in programs, projects and other activities that build economic capacity and foster abilities to manage Tribal resources while preserving cultural identities.

NATURAL AND CULTURAL RESOURCES - The US Army Corps of Engineers will act to fulfill obligations to preserve and protect trust resources, comply with the Native American Graves Protection and Repatriation Act, and ensure reasonable access to sacred sites in accordance with published and easily accessible guidance.[11]

2.1.1.4 The Responsibility of the U.S. Department of Commerce

The U.S. Department of Commerce's Office of the Assistant Secretary for Oceans and Atmosphere has recently asserted the following responsibility to Columbia River Treaty Tribes.

> It is our policy that the recovery of salmonid populations must achieve two goals; 1) the recovery and delisting of salmonids listed under the provisions of ESA; 2) the restoration of salmonid populations, over time, to a level to provide a sustainable harvest sufficient to allow for the meaningful exercise of fishing rights....
>
> Our statement of the twin goals for salmonid populations listed under the ESA recognizes that the United States, and all federal agencies, stand in a trust relationship with all federally recognized Indian tribes and of the responsibilities that flow from that relationship. The federal trust obligation to Indian tribes is independent of the statutory duties of the federal agencies and informs the way such statutory duties are to be implemented. The United States Supreme Court

[11] Ballard, Joe N., Lieutenant General, USA Commanding. US Army Corps of Engineers (Civil Works). **Memorandum for Commanders, Major Subordinate Commands and District Commands: Policy Guidance Letter No. 57, Indian Sovereignty and Government-to-Government Relations with Indian Tribes**. CECW-AG. February 18, 1998.

> has described certain characteristics of the trust relationship and the lower courts have implemented the trust in specific situations. Hence, we understand the importance of the federal government's efforts to allocate the conservation burden for salmonids listed under the ESA in a way that, among other things, it does not discriminate against tribal fishing rights and is implemented in
> the least restrictive manner. Accordingly, **the tribes may reasonably expect, as a matter of policy, that tribal fishing rights will be given priority over the interests of other entities, federal and nonfederal, that do not stand in a trust relationship with the United States** (our bolding).[12]

2.1.1.5 EPA Guidelines With Respect to Environmental Justice

In 1997, the US Environmental Protection Agency (EPA) issued its **Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis**.[13] The Environmental Justice guidance results from President Clinton's 1994 Executive Order 12989[14]. The document defines environmental justice as follows.

> 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 that 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.[15]

The EPA Guidance states it applies, as appropriate, to Native Americans, and directs analysts to identify and evaluate "disproportionately high and adverse human health or environmental effects in minority communities and low-income communities".[16]

Cumulative impacts are a critical element in assessing impacts on tribes, and are defined as "**the incremental impact(s) of the action when added to other past, present, and reasonably foreseeable future actions**".[17]

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[12] Garcia, Terry D., 1998. U.S. Department of Commerce, Office of The Assistant Secretary for Oceans and Atmosphere. **Letter**, to Ted Strong, Executive Director, Columbia River Inter-Tribal Fish Commission, July 21.

[13]US Environmental Protection Agency, 1997. **Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis**. Washington, D.C.: Office of Federal Activities, September 30.

[14]Supra at 4.

[15]Supra at 5.

[16]Supra.

[17]Supra at 15.

US Environmental Protection Agency (1998) provides more specific guidance on treatment of environmental justice issues where tribal treaties and tribal trust responsibilities may be at issue.

> Federal duties under the Environmental Justice E.O. ("Executive Order"), the Presidential directive on government-to-government relations, and the trust responsibility to Indian tribes may merge when the action proposed by a federal agency or EPA potentially affects the natural or physical environment of a tribe. The natural or physical environment of a tribe may include resources reserved by treaty or lands held in trust; sites of special cultural, religious or archaeological importance, such as sites protected under the National Historic Preservation Act or the Native American Graves Protection and Repatriation Act; or areas reserved for hunting, fishing, and gathering (usual & accustomed), which may include "ceded" lands that are not within reservation boundaries. Potential effects of concern...may include ecological, cultural, human health, economic, or social impacts when those impacts are interrelated to impacts on the natural or physical environment.[18]

This Tribal Effects report is developed in a manner that is consistent with this recent Environmental Justice guidance from EPA.

2.1.1.6 Court Findings with Respect to "Perspective" in Assessing Impacts on Treaty Trust Resources

Discussion of key understandings with respect to **Tribal Treaties** and **Treaty Trust Resources** is provided in following Sections 2.1.2.1 and 2.1.2.2. It has already been identified in the prior citation from US Army Corps of Engineers, Bonneville Power Administration and US Bureau of Reclamation (1995) on page 2 of this report that Tribes and some non-tribal experts tend to view cultural impacts differently. It is therefore important in this initial federal guidance discussion to identify that US Courts have ruled on which interpretation should be employed, where Tribal Treaties and Tribal Treaty Trust Resources are at issue. These rulings were summarized by the US District Court in United States v. Washington.

> In 1899 the United States Supreme Court in considering a similar situation said:
>
> > In construing any treaty between the United States and an Indian tribe...the treaty must...be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians....
>
> Each of the basic fact and law issues in this case must be considered and decided in accordance with the treaty language reserving fishing rights to the plaintiff tribes, interpreted in the spirit and manner directed in the above quoted language of the United States Supreme Court.[19] [20]

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[18]US Environmental Protection Agency, 1998. **Reviewing for Environmental Justice: EIS & Permitting Resources Guide**. EPA Region 10 - Environmental Justice Office, p. 2.

[19]United States v. Washington. 1974. United States District Court, Western District of Washington. Reprint from 384 F.Supp. 312; 459 F.Supp. 1020; 476 F.Supp. 1405; and 626

More broadly;

> In construing Indian treaties, the courts have required that treaties be liberally construed to favor Indians, that ambiguous expressions in treaties must be resolved in favor of the Indians, and that treaties should be construed as the Indians would have understood them.[21]

The present analysis retains the Tribal perspective directed by the Courts where analytical perspective concerning Tribal Treaties and Tribal Treaty Trust Resources might otherwise potentially differ.

2.1.2 Understanding Tribal Treaties

Federal guidelines identified in previous Section 2.1.1 make several references to **Tribal Treaties**. An understanding of relevant Tribal Treaties is essential to assessment of Tribal circumstances and impacts, and to compliance with cited Federal guidance.

2.1.2.1 Treaties Related to this Analysis

Each of the five Tribes considered in this analysis signed treaties with the United States. Principal among these treaties are:

- **Treaty with the Yakama Tribe, June 8, 1855;**
- **Treaty with the Umatilla Tribe (June 9, 1855);**
- **Treaty with the Nez Perce Tribe, June 11, 1855;**
- **Treaty with the Tribes of Middle Oregon, June 25, 1855;**
- **Fort Bridger Treaty, July 3, 1868**.

The United States government representative at negotiations associated with the first four treaties listed was Washington Territorial Governor Isaac I. Stevens - and these treaties, together with similar ones of Washington coastal tribes, have become known colloquially as "the Stevens Treaties". The particular circumstances and provisions associated with each Treaty will be related to the Lower Snake River Drawdown assessment task in individual tribe-by-tribe sections that follow. Understanding of key features common across these treaties - and important to our analysis - is discussed here.

F.Supp. 1405. St. Paul, Minn. West Publishing Co., pp. 330-331.

[20]This perspective was sustained by the Court as early as 1905, when they stated: "This court will construe a treaty with Indians as they understood it and as justice and reason demand." (United States v. Winans, 198 US 371, 1905).

[21]Cohen, Felix S., **Handbook of Federal Indian Law**. 1982 Edition, p. 222.

2.1.2.2 Treaties as Negotiated Settlements

Webster defines an (Indian) treaty as:

> "...a formal meeting between representatives of the US government and one or more Indian tribes designed to produce a settlement (as of issues in dispute).[22]

In fact, the Treaties under consideration represent just such negotiated settlement of disputes. Historian Richard White provides a flavor of the "disputes" to be settled.

> The (early 1800's) architects of removal (of Indians to west of the Mississippi) had imagined an Indian country where whites entered only with federal permission and under federal supervision and where the federal government mediated and kept the peace between Indian nations, each of which had its own clearly bounded territory. This Indian country fell victim to American expansionism. The assumption of federal policy makers that most of the land west of the Missouri River, not just Indian Territory proper in what is now Oklahoma, would remain Indian country began to collapse when Americans acquired Texas, California and Oregon....
>
> The weakness of the policy of permanent Indian country was everywhere apparent in the 1840s and 1850s. Migrants encroached on Indian lands along the Missouri and crisscrossed them on their way to Oregon and California. The Trade and Intercourse Act proved incapable of maintaining the boundaries between Indians and whites or of controlling white access into Indian country. Whites crossing the plains inevitably caused resentment among the Indians. Travelers killed and drove away game, particularly along the Oregon and Mormon trails. ... The Indians, for their part, raided the trains for livestock and demanded payment for passage across their hunting lands....
>
> In 1853, Congress sought to remedy its hastiness in promising the Indians possession of Kansas and Nebraska in perpetuity. Anglo American settlers were already encroaching on these Missouri borderlands, but the government had a second motive in seeking new treaties: it sought a route for a transcontinental railroad. When many Indians proved reluctant to cede lands that only a few years before the Americans had promised were theirs forever, the United States allowed its citizens to persuade the Indians to change their minds. A horde of speculators, settlers, and timber thieves flocked onto the Indians' lands with little federal interference. When Indians tried to protect their property themselves, intruding whites murdered them. Most Indians in eastern Kansas and Nebraska reluctantly decided that they had no choice but once again to cede their lands. ...
>
> The chaos east of the Rocky Mountains also erupted elsewhere in the West. In California, Americans who flocked into the region with the Gold Rush ignored Indian land titles. And through the Oregon Donation Act of 1850 the United States, in violation of its own laws, allowed its citizens to claim lands in Washington and Oregon territories before the government had acquired title to them from the Indian owners. In Utah, too, the Mormons established residence on Indian lands

[22] **Webster's Third New International Dictionary**, 1971. G. & C. Merriam Co., 2435.

> without any federal acquisition of title. By 1850 the idea of a permanent Indian country with the separation of Indians and whites along an east-west axis was in shambles.[23]

This was the situation faced by Indians in the Columbia-Snake region in the 1850s. Opposed by a superior military force; engaged with a nation which negotiated treaties, permitted its citizens to breach them, then consolidated such breaches via renegotiation; with little area to the west to flee, and no inclination to do so - some Tribal members believed that a final "last treaty" with the United States was the only way to survive. Others believed that the United States was asking too high a price in land - and could not agree. White again characterizes this period.

> These treaties (in Washington and Oregon territories) established an extensive system of reservations in both territories, but they eliminated the objections of Oregonians by placing the new reservations farther away from the areas settled by whites. The Senate approved these treaties, but they did so in ignorance of real Indian discontent created by the tactics of the white negotiators.
>
> The treaties were troublesome documents. In many cases both the "tribes" and the "chiefs" who had signed the treaties were the creations of the American negotiators.... Washington Governor Isaac Stevens proved particularly eager to rush through the treaties; he was more interested in getting land cessions than in obtaining real Indian consent. His treaties brought war in their wake while the reservations remained virtually uninhabited for years as Indians attempted to remain in their old villages.[24]

Thus, treaty negotiators on both sides sought what they could get. United States negotiators sought Indian land, and the resources that went with it. They evidently believed that negotiating treaties would be more cost-effective than taking Indian land and resources by force - although as White has identified, lines between these alternatives were usually blurred through condonance of illegal acts by miners and settlers.

Allowing for difficulties in translation, the quandary in which this left Columbia- Snake area Indian Treaty negotiators is clearly evident in their own cited words. For example:

> From what you have said I think you intend to win our country, or how is it to be? In one day the Americans become as numerous as the grass; this I have learned in California; I know that is not right. You have spoken in a round about way; speak straight. I have ears to hear you and here is my heart. … Goods and Earth are not equal; goods are for using on the Earth. I do not know where they have given lands for goods.[25]

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[23]White, Richard, 1991. **"Its Your Misfortune and None of My Own"; A New History of the American West**. Norman, Okla.: University of Oklahoma Press, pp. 89-91.

[24]Supra at 93.

[25]Pee-o-pee-mox-a-mox, Proceedings at the Council held at Camp Stevens, Walla Walla Valley, June 2, 1855, in, Edward G. Swindell, 1942. **Report on the Source, Nature and Extent of the Fishing, Hunting and Miscellaneous Related Rights of Certain Indian Tribes in**

> God named this land to us that is the reason I am afraid to say anything about this land. I am afraid of the laws of the Almighty, this is the reason I am afraid to speak of the land. I am afraid of the laws of the Almighty that is the reason of my hearts being sad: this is the reason I cannot give you an answer. I am afraid of the Almighty. Shall I steal this land and sell it? or what shall I do? this is the reason that my heart is sad.
>
> My friends, God made our bodies from the earth as if they were different from the whites. What shall I do? Shall I give the lands that are part of my body and leave myself poor and destitute? Shall I say I will give you my lands? I cannot say. I am afraid of the Almighty.[26]
>
> A long time ago a Great Spirit spoke to my children. I am from the body of my parents and I set on a good place. The Great Spirit spoke to his children the Laws, will track on the ground straight and after that there have been tracks on my ground and after that the big Chief, the President, his ground was stepped on in the same way and for that reason I am not going there to trouble on his grounds and I do not expect anyone to tramp on mine.[27]

Despite such concerns, threatened by superior force, and under pressure from Governor Stevens, some Indians joined in Treaty settlement negotiations. Where this occurred, Indian speakers **sought to retain enough land and associated resources to survive on into the future**. They particularly sought to retain enough land to live on, and the areas important for fishing, hunting and gathering during their seasonal rounds. For example:

> The reason why we could not understand you was that you selected this country for us to live in without our having any voice in the matter. We will think slowly over the different streams that run through the country, we will expose the country and think over it slowly. I cannot take the whole country and throw it to you. If we can agree this country will furnish food for the whites and for us.... I will show you lands that I will give you, we will then take good care of each other.... I think the land where my forefathers are buried should be mine; that is the place that I am speaking for. We will talk about it, we shall then know, my brothers, that is what I have to show to you, that is what I love the place we get our roots to live upon (meaning the Grand Ronde). The Salmon comes up the stream--that is all.[28]

Washington and Oregon, Together with Affidavits Showing Locations of a Number of Usual and Accustomed Fishing Grounds and Stations. US Department of the Interior, Office of Indian Affairs, Los Angeles, p. 410.

[26]Owhi, Proceedings at the Council held at Camp Stevens, Walla Walla Valley, June 7, 1855, in, Edward G. Swindell, 1942. **Supra** at 431-432.

[27]Looking Glass, Proceedings at the Council held at Camp Stevens, Walla Walla Valley, June 9, 1855, in, Edward R. Swindell, 1942. **Supra** at 445-446.

[28]Young Chief, Proceedings at the Council Held at Camp Stevens, Walla Walla Valley, June 7, 1855, in, Edward G. Swindell, 1942. **Supra** at 438-439.

Indian negotiators were partially successful in their efforts. In fact, Stevens recognized the desirability of protecting Indian access to fisheries in the Territories prior to negotiation of the "Stevens treaties".

> The subject of the right of fisheries is one upon which legislation is demanded. It never could have been the intention of Congress that Indians should be excluded from their ancient fisheries.[29]

Stevens provided reassurance to the Indians on these issues during Treaty negotiations.

> We think they (the reservations) are large enough to furnish each man and each family with a farm, and grazing for all your animals. There is especially in winter grazing on each Reservation. There is plenty of Salmon on these Reservations, there are roots and berries. There is also some game. ...
>
> We can better protect you from bad white men there. We can better prevent the trader and the preacher all in one man going there. We can better prevent bad men from telling you to dance, and cheating you with lies. We can better prevent the thief who comes to steal your horses. Your horses will be saved to you and there will be no thieves to throw into hell-fire.[30]
>
> This is a large Reservation. The best fisheries on the Snake river are on it; there are fisheries on the Grande Ronde river. There are fisheries on the Os-ker-wa-wee, and the other streams. There are cumesh grounds there at this place.[31]
>
> You will be allowed to pasture your animals on land not claimed or occupied by settlers, white men. You will be allowed to go on the roads to take your things to market, your horses and cattle. You will be allowed to go to the usual fishing places and fish in common with the whites, and to get roots and berries and to kill game on land not occupied by the whites; all this outside the Reservation.[32]

Swindell has summarized selected Articles of each of the "Stevens Treaties". With particular reference to the present analysis, these include:

> <u>Article 1</u>
>
> Cedes to the United States certain described lands occupied by said tribes in the Territory...
>
> <u>Article 2</u>
>
> Describes boundaries of tract of land within ceded territory to be reserved to the exclusive use of the said Indians,

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[29]Stevens, Isaac, 1854. **Report of the Commissioner of Indian Affairs, 1854**. p. 246.

[30]Stevens, Isaac. Proceedings at the Council held at Camp Stevens, Walla Walla Valley, June 4, 1855, in, Edward G. Swindell, 1942. **Supra** at 417.

[31]Stevens, Isaac. Proceedings at the Council held at Camp Stevens, Walla Walla Valley, June 5, 1855, in, Edward G. Swindell, 1942. **Supra** at 419.

[32]Supra at 420.

> Provides no whites, excepting those employed in the Indian Department, shall be permitted to reside upon reserved area without permission of tribes and superintendent. ...
>
> Article 3
>
> The exclusive right of taking fish in all the streams, where running through or bordering said reservations, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.[33]

In the Treaty with the Nez Perces of 1863, the Nez Perce Tribe also reserved associated water rights to "springs and fountains".

> The United States also agrees to reserve all springs and fountains not adjacent to, or directly connected with, the streams or rivers within the lands hereby relinquished, and to keep back from settlement or entry so much of the surrounding land as may be necessary to prevent the said springs or fountains being enclosed; and further, to preserve a perpetual right of way to and from the same, as watering places, for the use in common of both whites and Indians.[34]

The Fort Bridger Treaty of 1868 defined a reservation for the Shoshone and Bannock Tribes, and confirmed "hunting" rights as follows.

> ARTICLE 4: 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 as long as peace subsists among the whites and Indians on the borders of the hunting districts.[35]

In 1972, in State of Idaho v. Tinno, the Idaho Supreme Court stated that the Shoshone word for "hunt" also included "to fish".[36]

2.1.2.3 Relevance of Treaties for the Present Analysis

[33]Swindell, Edward G., 1942. **Supra** at 471-472.
[34]Treaty of the Nez Perces, 1863. In Article 8.
[35]Fort Bridger Treaty, July 3, 1868. Article 4.
[36]State of Idaho v Tinno, 94 Idaho (1972).

There are three important ways in which Treaties between the United States and referent Tribes affect the analysis to be conducted here.

1. **Treaty-keeping sets a high standard for evaluation of federal project actions.**

The Courts have confirmed and reaffirmed that Treaties between the United States and the Tribes cannot be set aside or ignored.[37] Contemporary Tribal leaders have reaffirmed the importance of the Tribal Treaties.

> The length of time a fishery's planned is mentioned in the negotiations of the treaties. They ask our people, 'How long?' when we said 'we are going to cede certain lands to you, but we are going to reserve which is ours already. Nothing you're giving me, but we're going to reserve what's there already, which is the salmon.' They named all the foods areas and the water. "That we will reserve.' And they ask them, 'How long?' They said, 'Forever,' which is a very long, long time. 'And you're going to protect that for me as one of the treaty responsibilities. As a treaty responsibility you're going to protect that.' Its like, 'I'm the majority now and you the minor population at the time--the minor voice and minor power. But you're going to grow in time, and I'll be the minor group and you'll be the majority. But nevertheless, the law of the treaty's never going to change. You're going to still be responsible for protecting what I reserved as a part of the treaty agreement.' So that's a long time, and planning for 10, 15, 20, 30 years is not the question they had to answer. They said, 'You're going to be responsible forever, because that's my reserved right--something that I reserved.' Which was salmon; its the most important one. So there's no question there 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 us go another direction. To heck with the good rivers, clean rivers and salmon. Let's go another way.' And that is not the case. We're going to be there to say you're going to keep your promise. Forever![38]

In this analysis, an important criterion used to evaluate Lower Snake project alternatives will consequently be the "treaty keeping" capability of each alternative considered. More generally, if a

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[37]For discussion of such decisions, see, for example: Columbia River Inter-Tribal Fish Commission, 1985. **A Compilation of Indian Treaty Fishing Rights Cases**. Portland./ and, Cohen, Fay G., 1986. **Treaties on Trial: The Continuing Controversy over Northwest Indian Fishing Rights**. Seattle: University of Washington Press.

[38]Delbert Frank, Sr., at Warm Springs, October 6, 1982, in, Meyer Resources, 1983. **The Importance of Salmon and Steelhead of the Columbia River to the Confederated Tribes of the Colville, Nez Perce, Umatilla, Warm Springs and Yakima Indian Reservations - with Particular Reference to Dams of the Mid-Columbia Area**. A Report to the US Bureau of Indian Affairs. Davis, CA., p. 30.

proposed federal action will, or is likely to, have an effect on Treaty-secured tribal trust assets, analysis of that action must not solely involve an examination of relevant Congressionally-enacted statutes, such as the National Environmental Policy Act, the Clean Water Act, the Fish and Wildlife Coordination Act, etc.. Compliance with Treaties and fulfillment of federal Trust Responsibility must be paramount factors in the analysis.

2. **Historic fact or circumstances related to Treaties must be considered as Tribal peoples would have perceived them**.

   This issue has been previously discussed in Section 2.1.1.6. In the event that perceptions differ with respect to Treaty-related historic circumstances or fact, this report will rely on Tribal perception.

3. **From an economic perspective, the Treaties enabled a trade of valuable Tribal assets, ceded <u>from</u> Tribes to the United States at Treaty times, in exchange for the guarantee by the United States <u>to</u> the Tribes of certain assets reserved by the Tribes, over future years in perpetuity**.

   The Treaties enabled transfer of Tribal assets and associated wealth to the United States (in the form of land and associated resources), and provide a baseline from which to identify any cumulative trends with respect to asset transfer between the parties over subsequent years.

   In fact, for the "Stevens Treaties", Governor Stevens' principal objective was the transfer of wealth from the Tribes to the United States. Valuable assets **retained** by the Treaty Tribes included reservation lands and the right to fish, hunt and gather at usual and accustomed places throughout the lands they ceded to the United States.

   In the Fort Bridger Treaty, the Shoshone-Bannock peoples also transferred valuable lands and other resources to the United States, in return for on-Reservation guarantees, retaining the right "to hunt" on unoccupied lands in their traditional areas.

   Such consideration of transfers of **assets** and **wealth** fits well into both Tribal and non-Tribal perspective, and will be a major element of our subsequent analysis.

2.1.2.4 Tribal Trust Resources

The referent Tribes, through their various Treaties, reserved resources they considered sufficient to maintain their way of living. These represent the perpetual guarantees offered by the United States at Treaty times. Resources to be held in trust for the Tribes are described as **tribal trust resources**. The federal government is said to have a "trust responsibility" with respect to both Treaty and non-Treaty Tribes. Tribal trust resolurces are further defined in the following quotations.

> The "trust responsibility" is one of the "primary cornerstones" of federal Indian law. Its central thrust recognizes a federal duty to protect tribal lands, resources, and the native way of life from the

> intrusions of the majority society. As a doctrine that evolved judicially, the trust responsibility stands independent of treaties and inures to the benefit of all tribes, treaty and non-treaty alike.
>
> The origin of the trust responsibility is best understood as a duty arising from the transfer of native lands to the federal government - whether by conquest, treaty, executive order, or congressional fiat. ...
>
> Each federal agency is bound by this trust responsibility. Federal agencies must respond to the independent obligations the trust duty forms in carrying out statutory programs that affect tribes. Courts have often emphasized that federal agencies must deal with tribes according to the "most exacting fiduciary standards". [39]

Further;

> While the trust responsibility is relatively straightforward in the context of managing tribal lands and resources - a function largely performed by the Bureau of Indian Affairs (BIA) - the duty of protection is admittedly complex in the context of agency implementation of general environmental or land and resource management programs that have an impact on tribal property rights. Full adherence to the trust responsibility is vitally important in this context, however, as a tribe's way of life can be wholly destroyed by agency actions that impair the full use and enjoyment of tribal property or treaty rights. It is well settled that the trust responsibility applies to actions taken off the reservation that impact tribal lands. Moreover, many tribes retained in treaties the right to use certain resources in ceded areas off the reservation; such as water rights, fishing and hunting rights, and gathering rights are all tribal property rights to which the federal government owes a duty of protection.[40]

These conclusions respecting trust responsibility are confirmed by testimony of tribal spokespersons.

> The United States trust responsibility toward American Indians is the unique legal and moral duty of the United States to assist Indians in the **protection** of their **property** and **rights**. Too often, the federal government has construed protection to mean control. ... In the spirit of the law, we seek federal assistance to **defend** against injury to our trust resources.[41]
>
> As the record indicates, the federal courts have usually addressed trust resources in the context of water, money, land, timber, mineral or gas resources, and fish and wildlife. The CTUIR considers all

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[39]Wood, Mary C., 1995. "Fulfilling the Executive's Trust Responsibility Toward the Native Nations on Environmental Issues: A Partial Critique of the Clinton Administration's Promises and Performance", in, **Environmental Law**. Vol. 25, No. 3, pp. 742-743.

[40]Supra at 744.

[41]Strong, Ted, 1992. Executive Director, Columbia River Inter-Tribal Fish Commission. **Hearings before the Columbia River Fisheries Task Force**. Portland, October 28.

aspects of the natural environment to have some purpose in preserving and sustaining life and subject to the protection of the Treaty. The CTUIR has stated:

> ...The rights we reserved were the basis of our economy and the core of our culture and religion. These rights include the right to fish at our usual and accustomed fishing stations throughout the Columbia Basin, and the right to a sufficient quantity and quality of water to maintain these fish runs. The Treaty also reserved the right of continued Tribal access to certain lands for hunting, for gathering of traditional foods and medicinal herbs, and for religious purposes. Without the promise that these rights and resources would be protected, our ancestors would not have signed the Treaty... . [42]

In the context of our present analysis, federal trust responsibilities to the Tribes provide the legal and analytical pathways linking Tribal Treaties to specific project impacts. These linkages include, but may not be limited to:

1. Potential project effects on salmon/ salmon fishing and on other Treaty fisheries.

2. Potential project effects on game/ game hunting.

3. Potential project effects on plants used for food and/or medicines.

4. Potential project effects on usual and accustomed places for fishing, hunting or gathering.

5. Potential project effects on the overall assets and wellbeing of the referent tribes.

2.1.2.5 A Summary of Other Selected Laws Relevant to Tribal Protection

Several other laws are important with respect to protection of tribal cultures, sites and resources. Among these are:

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[42]Confederated Tribes of the Umatilla Indian Reservation, 1995. **Identification of Trust Resources: System Operation Review**. Department of Natural Resources, April 27, pp. 7-8.

1. **Native American Graves Protection and Repatriation Act, as amended (NAGPRA) P.L. 100-601**.

   NAGPRA provides for the protection of Native American graves and for the return and repatriation of human remains, burial artifacts, unassociated burial artifacts and sacred objects of cultural patrimony.

2. **Archaeological Resources Protection Act (ARPA) 16 U.S.C. 470aa- 47011: 43 CFR 7.**

   ARPA prohibits the willful or knowing destruction and unauthorized collection of archaeological resources on federal lands - and establishes a permitting system for archaeological investigations taken thereon.

3. **American Indian Religious Freedom Act (AIRFA) P.L. 95-41**.

   AIRFA protects and preserves for American Indians of their 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 freedom to worship through ceremonial and traditional rights.

4. **National Historic Preservation Act (NHPA) of 1966**.

   NHPA created the National Register of Historic Places (NRHP), and identifies that state and local interest, as well as national interest, may be considered in identifying historic places. NHPA also authorized creation of State Historic Preservation Offices (SHPOs). These are particularly important under Section 106 of NHPA – which requires the SHPO to review all projects involving federal money or licensing which may impact cultural resources.

2.1.3 Analytical Issues Affecting Assessment of Impacts on Tribes

Assessment of tribal impacts within the context of this largely non-Tribal federal process requires attention to several key issues that arise when carrying out analysis between cultures. Sue and Sue (1990) point out that failure to sensitize and validate analysis from the subject culture's perspective can lead to misinformation, and may actually damage the subject (i.e. tribal) culture. They term such failure **cultural encapsulation**.

> ...cultural encapsulation...refers specifically to (a) the substitution of model stereotypes for the real world, (b) the disregarding of cultural variations in a dogmatic adherence to some universal notion of truth, and (c) the use of a technique-oriented definition of...process.[43]

Cultural encapsulation, the authors point out, is an ongoing problem for researchers.

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[43]Sue, Derald Wing and David Sue, 1990. **Counseling the Culturally Different: Theory and Practice**. New York: John Wiley & Sons, pp. 8-9.

> As...professionals, we have a personal and professional responsibility to (a) confront, become aware of, and take actions in dealing with our biases, stereotypes, values, and assumptions about human behavior, (b) become aware of the culturally different client's world view, values, biases, and assumptions about human behavior, and (c) develop appropriate... structures that take into account the historical, cultural and environmental experiences/ influences of the culturally different client.[44]

The problem of cultural encapsulation is particularly acute for economists and other social scientists who have traditionally been trained to apply rigorous non-Tribal analytical procedures, and to play a role of "assessor" from "outside" the subject culture. It is also a problem for bureaucrats following procedural "rule books". Cultural encapsulation can be oppressive, and lead to discrimination[45], blaming[46] and exploitation[47] against minorities. For example:

> That exploitation occurs in...ethnic communities is exemplified in the Colville Indian reservation (Williams, 1974). An anthropologist, after gaining the trust and confidence of the Colville Indians in Washington, conducted a study of factionalism among the tribe. A subsequent study by another group of White researchers recommended that the best course of action for the Colville reservation was to liquidate its assets, including land, rather than consider economic development. Part of the justification for liquidation was based on the factionalism results of the first study, and termination of the reservation was recommended. There were several primary issues about the action that merit attention. First, the reservation was composed of 1.4 million acres of land that was rich in timber and minerals. There was strong pressure on the part of whites to obtain the land. Second, the problems of factionalism were actually created by a society that attempted to "civilize" the Indians via Christianity and by White businesses that offered promises of riches. Third, many of the Indians confided in the White researcher and were led to believe that the information obtained would not be released.
>
> It is this type of study, as well as the continued portrayal of ethnic communities and groups as deviants, that makes minorities extremely distrustful about the motives of the White researcher. Whereas social scientists in the past have been able to enter ethnic communities and conduct their studies with only minimal justification to those studied, researchers are now being received with suspicion and overt hostility. Minorities are actively raising questions and issues regarding the values system of researchers and the outcome of their research.[48]

Avoidance of cultural encapsulation is consistent with contemporary Corps of Engineers guidance (Note 11). Conversely, if analysis is unable to avoid cultural encapsulation, the concerns over environmental injustice, recently codified by EPA, will intensify.

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[44]Supra at 6.
[45]Supra at 7.
[46]Supra at 11.
[47]Supra at 22.
[48]Supra at 22-23.

Discussion of other key issues for inter-cultural analysis follows. Integration of these dual approaches will allow us to reach credible conclusions concerning the impact of Lower Snake River project alternatives on the referent Tribes.

2.1.3.1 Crediting What Tribes Say

Given the impossibility of one culture completely understanding the perspectives, values and life views of another, the least the non-tribal analyst can do is **listen carefully to Tribal statements and conclusions - and begin from the premise that <u>such statements are valid</u>,** extant strong evidence to the contrary. In fact, this provides the kind of **groundtruthing** that careful science demands, and protects the analyst from becoming "lost in his or her model", to the detriment of accuracy and even-handed judgment. For example, Ridington notes:

> The thoughtworld of anthropology is different from that of the Dunne-za. For the Dunne-za, knowledge and power comes to a person through direct experience of the world. They come through dreaming and through the instructions of a mythic reality that becomes biographical in the searing transformative experience of the vision quest. For anthropologists, knowledge and power come from books, from institutions, and perhaps only finally from the experience of fieldwork. Anthropological discourse assumes that its own written texts, and their institutionally situated authors, have a privileged authority. As a producer of such texts from within an institutional setting, I have been concerned and even apprehensive about their possible impact on a readership with whom I have no direct contact.
>
> A relief from this apprehension, I believe, lies in the feedback between my texts and those of the Dunne-za.[49]

The present analysis will incorporate direct commentary from Tribal members in order to present tribal perspective in tribal words, and to groundtruth our findings against Tribal perception and reality. In the event conclusions from non-Tribal analysis and Tribal direct statements differ, we will explore why these differences have occurred. Too often in the past, such differences have been left unexamined, with researchers ignoring Tribal perspective, where it is contrary to their (non-tribal) analytical findings.

2.1.3.2 Tribal Culture is Modern and Evolutionary

Tribal culture grows from a rich heritage of the past, but also lives in the present, and will evolve into the future. The National Park Service defines **culture** to mean:

> ...the traditions, beliefs, practices, lifeways, arts, crafts and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole.[50]

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[49]Ridington, Robin, 1990. **Little Bit Know Something**. Vancouver: Douglas & McIntyre, pp. xv-xvi.

[50]Parker, Patricia L. and Thomas E. King. **Guidelines for Evaluating and Documenting**

From tribal perspective, culture and tradition are inextricably linked and inseparable. Chambers (1985) describes culture as:

> ...a group of people who share standards of behavior and have common ways of interpreting the circumstances of their lives.[51]

Fourlines (1991) notes:

> Culture is what you do every day of your life--its constantly in change. Tradition is to always remember the knowledge of the first cup. You don't throw away your history. You don't throw away your experience.[52]

A member of the Quinault Indian Nation illustrated the manner in which tradition and culture come together for Tribal peoples.

> When you're down at the beach, you remind yourself of how your ancestors lived. When you're digging clams by moonlight I feel close to my great grandparents. I'm reminded of my grandmother. It reminds us that **we are just doing what our people have always done**. It reminds me that my ancestors live on through me, and it makes me more responsible.[53]

Finally, it is important to distinguish between **culture** as defined here, and **cultural resources** as defined in many federal analyses. Federal "cultural resource analysis" often confines itself to "non-living" elements of Tribal culture - graves, historic artifacts, historic structures and so on - but often does not assess the circumstances of contemporary Tribal populations. Tribes think in a more integrated manner - and view **culture** and **cultural resources** as inseparable. These issues are discussed more extensively in Appendices 1 and 2.

This analysis employs the broader Tribal perspective of culture incorporating past traditions, present living circumstances and expectations for the future. We will incorporate narrower definitions of "tribal cultural resources" in our mitigative analysis where appropriate.

2.1.3.3 Tribes View Themselves and Their Resources Holistically

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Traditional Cultural Properties. U.S. National Park Service. National Register Bulletin 38, pp. 1.

[51]Chambers, Erve, 1985. **Applied Anthropology**. Inglewood Cliffs, N.J.: Prentice Hall, p. 4.

[52]Forlines, David. Personal communication, in, Central Washington University, 1991. **Potential Effects of OCS Oil and Gas Exploration and Development on Pacific Northwest Indian Tribes: Final Technical Report**. US Department of the Interior, Minerals Management Service OCS Study MMS 91-0056, p. 20.

[53]Harp, Karen. Personal communication, in, Central Washington University, 1991. **Supra** at 116.

Non-Tribal analysis, particularly economic analysis, tends to narrowly delineate and separate out elements of lifestyle. Such analysis assists "numeric results" and better serves statistical manipulation of data. It is often enabled by two major simplifying assumptions - "**ceritus paribus**" (all other elements of lifeways remain unaffected), and "**marginal analysis**" (the basic character of the single element under analysis remains unchanged, save for a discrete and measurable increment or decrement). Tribal peoples are usually more holistic in their thinking,

viewing all elements of their lifeways in an integrated fashion. For example, Feinup-Riordan, talking about assessing impacts on Alaska natives, notes:

> ...it is critical in sociocultural systems description and analysis that categories true to the Native point of view be sought. Also, as categories of persons, objects and activities begin to emerge, it is the relations of these categories over time and at any one point in time that must be seen to characterize the sociocultural system. In other words, the exchange of goods and services that characterizes the spring distribution of seal meat on the one hand and the gift of seal meat to a close relative on the other cannot be seen as representative of two distinct domains of activity, e.g.. economic and social. Rather, the consideration of social, economic,
> and political activities at any one point in time as well as the consideration of any particular kind of human activity through time will be seen as expressions of a common ideological structure which simultaneously connects and to some extent explains them. Thus, the analysis of sociocultural systems involves a relational world view.[54]

Ridington affirms this view.

> In the reality of Indian experience, each story contains every other. They circle one another like the seasons. They circle like the hunter and his game. They circle like the dreams that connect a child's visionary experience in the bush with those of the old person.[55]

2.1.4 Selecting Indicators of Tribal Circumstances and Potential Effects

It is beyond the capabilities of contemporary non-Tribal analysis to build a fully explanatory model of the whole of Tribal circumstance, perspective and potential impacts from Lower Snake project alternatives. Rather, we will examine specific elements of Tribal circumstance that may fairly be considered as "indicators" for Tribal circumstance and wellbeing. An indicator approach to assessment of impacts on Tribes has been recently validated in federal court.[56]

2.1.4.1 Salmon and Access to Salmon Fishing

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[54]Fienup-Riordan, A. **Navarin Basin Sociological Systems Analysis**. US Minerals Management Service. Alaska OCS Socioeconomic Program Technical Report No. 70, pp. 23-24.

[55]Ridington, Robin, 1990. **Supra** at xvii.

[56]United States of America et al. v State of Washington et al. (Dec. 20, 1994) Memorandum Opinion and Order. No. CV 9213, Sub-proceeding No. 89-3, pp. 50-52.

Salmon have been a central part of the lifeways of referent Tribes since time immemorial - and the right to continue to fish for salmon was specifically reserved by the Tribes in their Treaties with the United States.

> God created this Indian country... He put the Indian on it. They were created here in this country, truly and honestly, and that was the time this river started to run. Then God created fish in this river and put deer in these mountains and made laws through which has come the increase in fish and game... When we were created, we were given our ground to live on, and from that time these were our rights.
>
> My strength is from the fish; my blood is from the fish, from the roots and the berries. The fish and game are the essence of my life. I was not brought from a foreign country and did not come here. I was put here by the Creator.
>
> Whenever the seasons open, I raise my heart in thanks to the Creator for his bounty that this food has come.[57]
>
> It's just that salmon are part of the country, they're part of the environment. They belong here as much as Indians belong here. And in that way they complement each other. They've become a part of us because it's what we depend on to live... . You know, it becomes a part of the person's or people's culture. See, its the same way with these salmon. It's very important that the salmon survive or that they be brought back to this river. And Indians as I know them are always seeking salmon. ... That kind of a cultural relationship becomes a part of your world, your environment.[58]
>
> At certain times of the year, certain ceremonies would be held, like the first foods feast of the season.... And in these ceremonies water would be drunk first, and that would be recognizing the importance of water, you know, for sustaining life. And these other foods came in order after water. You know, in importance to the people--like salmon and deer meet and the roots and the berries. And we say that the water was the same as the blood in our body. In relation to the Mother Earth, the water flows like blood in our veins along the various rivers and, you know, inside the earth. So that's how we related the water to our Earth and to our bodies....
>
> A young person was recognized for being able to provide salmon. And he would be brought up before the elders, and they would eat the meat or the fish that he had provided, and he was recognized as a fisherman or a huntsman. And of course, you know, when you're recognized for something you become more able and more willing to provide for your family. You know, all people aren't able to be good hunters or good root diggers. You know, there's varying degrees of

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[57]Chief Meninock (a Yakama Tribal Chief), in, Columbia River Inter-Tribal Fish Commission, 1994. **A Fish Consumption Survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin**. Technical Report 94-3. Introduction.

[58]Antone Minthorn. Personal communication, in, Meyer Resources, 1983. **Supra** at 38.

> expertise in whatever you may be doing. And so these strong points of individuals were brought out in this way. Also it became socially acceptable behavior, you know, in your family group, or in your tribal group. So this way it was perpetuated by recognizing these abilities of an individual and pointing out his strong points and saying, 'You're a good hunter', or "You're a good fisherman'. So it perpetuated the social structure of the Nez Perce tribe.[59]
>
> Our religious leaders told us that if we don't take care of the land, the water, the fish, the game, the roots and the berries we will not be around here long. We must have our salmon forever! [60]

Salmon are also at the center of the assessment of alternatives considered by the Lower Snake project. It consequently makes sense to give salmon and salmon fishing a central role in our analysis - from both Tribal and non-Tribal perspective. Such assessment will consider spiritual, sustenance and, as appropriate, commercial uses of salmon by each referent Tribe.

2.1.4.2 Hunting and Gathering Activities

As identified in Section 2.1.2.4, protection of hunting and gathering activities for the referent Tribes are federal trust responsibilities - and the importance of these activities has been referenced by Tribal spokespersons in the preceding section of this report. Should impacts on these activities be identified along the Lower Snake, we will provide corresponding impact analysis as part of our Tribal assessment.

2.1.4.3 Historic Villages, Grave Sites and Usual and Accustomed Fishing, Hunting and Gathering Areas

These areas play at least two important cultural roles for Tribes. First, they provide tangible prehistoric and historic evidence of "who a people are" - reminding modern-day tribal persons of their history, of the experiences of their ancestors, and of lessons to be learned from their past.

Second, culture is also contemporary. Access to prehistoric and historic areas and resources provides important connections and opportunities to **maintain one's culture.** Such access allows tribal members to live and carry out present-day cultural activities in the places that ancestral experience taught the Tribes they needed to be carried out - and to learn, building human capital and strength from these experiences.

Dam breaching along the Lower Snake River will also expose some cultural areas. A careful assessment of potential beneficial and costly effects is consequently required.

2.1.4.4 Speaking Tribal Languages

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[59] Alan Pinkham. Personal communication, in, Meyer Resources, 1983. **Supra** at 41-42.
[60] Delbert Frank, Sr. Personal communication, in, Meyer Resources, 1983. **Supra** at 53.

Hunn identifies that Tribal language differs from English, not just in using different sounds to describe common concepts, objects and transactions - but in describing a unique tribal world.

> Learning a foreign language such as Sahaptin involves more than learning a strange set of sounds, getting used to unfamiliar grammatical patterns, and memorizing a new vocabulary. It also requires learning a new way of thinking and adopting a different perspective on reality. ... The hypothesis of linguistic relativity... was put strongly by Sapir when he asserted that people who grow up speaking different languages do not live in the same world with just the labels for things changed, but live in unique worlds.[61]

Further, because tribes place strong emphasis on experience, language not only illuminates culture, but also protects Tribal knowledge, and hence, Tribal power.

> Human survival hinges on the outcome of such ecological events as finding food, eating, killing, escaping, meeting, mating, feeding and dying. With language we can describe, catalog, and analyze a very large number of such events as well as imagine, and perhaps create, new ecological realities. Language is thus not merely a means of self-expression but also a tool of survival more powerful than bow-and-arrow, net or plow. In language we
> construct our battle plan for our daily skirmish with hard reality. ...This knowledge must be acquired, remembered, and passed on. [62]

> Knowledge, the elders say, enables a person to live in this world with intelligence and understanding. They recognize that knowledge is a distinctly human attribute. **They recognize that knowledge is a form of power**. (emphasis added)... A person with power reveals what he or she knows through the ongoing story of his or her life. A person with power does not disclose knowledge without a purpose. He or she may use power to heal relatives who are ill. He or she may use it to feed people. A person who "knows something" may even be obliged to use power to defend against an attack. These circumstances reveal the times and places in which power may be revealed. They define knowledge and power in terms of experience.[63]

In 1995, Conservation International, Ecotrust and Pacific GIS selected "percent speaking own language" as their **tribal diversity indicator**, in their study of Pacific Rain Forests and their People.

> **The Rain Forests of Home** reports the first results of an effort to assemble a portrait (of a bioregional community). It presents information on forest cover and indigenous languages as first proxies for forest integrity and cultural diversity throughout the entire North American coastal temperate rain forest bioregion... . This report offers the first comprehensive picture of the rainforests of home, one that reconciles scientific definitions and administrative boundaries with the

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[61]Hunn, Eugene S., 1990. **Nch'i-Wana; "The Big River": Mid-Columbia Indians and their Land**. Seattle: University of Washington Press, p. 78.
[62]Supra at 81.
[63]Ridington, Robin, 1990. **Supra** at xvii.

> natural watershed boundaries of the coastal landscape. The holistic perspective that it provides can help identify opportunities and priorities for conservation-based development.[64]

We conclude that the evolution of "own language speakers" between Treaty-time and the present is an important point of reference for referent Tribes. We are unsure to what degree we will be able to develop direct project-specific linkages with language in the present analysis.

Sections 2.1.4 through 2.1.4.4 have described the particular focal elements of assessment of Tribal circumstances and particular impacts. As noted, we will utilize this information, and other insights provided by the referent Tribes to assess overall potential effects on each Tribe associated with Lower Snake project alternatives.

2.1.5 Integration of Tribal Assessment with Non-Tribal Models for Assessing Circumstances and Potential Impacts on Tribes

While procedures consistent with Tribal viewpoints are essential to this analysis, it is also necessary to provide assessment of potential effects on tribes in conventional non-Tribal terms. Such assessment can be done without prejudice to Tribal interests by selecting additional procedures that will be considered reasonable by both Tribal and non-Tribal reviewers - and by developing an overall analytical construct that enables integration of selected non-Tribal and Tribal indicators of circumstance and potential impact into a comprehensive overview framework of logic.

This section will discuss one such overview framework, and will then go on to identify selected indicators that are common to non-Tribal analysts - and that will complement deployment of some of the Tribal indicators already discussed.

2.1.5.1 A "Hierarchy of Needs" Model for Integration of Tribal and Non-Tribal Assessment Measures

In the analysis presented here, a "hierarchy of needs" overview based on work by Maslow[65] may prove useful perspective for joint consideration of Tribal and non-Tribal indicators of circumstances and potential impact. Bachtold (1982), in work specific to damages to fisheries in the present referent area, has presented such an approach as "non-Tribal" in origin, but having properties "consistent with" Tribal circumstance and perspective.

> According to Indian belief and practice, "the Creator made food for all creatures and it must be free for all". Consequently, they shared what they had with those in need. ...

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[64]Conservation International, Ecotrust and Pacific GIS, 1995. **The Rain Forests of Home: An Atlas of People and Place: Part 1 - Natural Forests and Native Languages of the Coastal Temperate Rain Forest**. Portland. p. i.

[65]Maslow, A.H., 1968. **Toward a Psychology of Being**. Princeton, N.J.: Nostrand.

> Assured of sustenance, tribal members could turn their attention to higher level needs, such as need for mastery or power, which was viewed by the Yurok as "excellence in doing something". ... All parts of the body and spirit--the whole person--were believed to be coordinated by mental power which kept body and spirit in harmony....
>
> Unity of body and mind have also been expressed in Western contemporary psychology... . Whereas Indian belief often ascribed the motivation for human behavior to supernatural forces, Western psychologists constructed the unconscious. These psychologists explained that basic needs must be met before human-kind can be motivated to meet higher level needs. In order to be able to reach one's full potential as a person, everyone must have first succeeded in satisfying (a) physiological needs, (b) safety needs, (c) belongingness and love needs, and (d) self-esteem needs, all in this order. As Maslow explained, these "deficiency needs" form a hierarchy which underlies humankind's highest goal, "an increasing trend toward unity, integration, or synergy, within the person". Someone who is absorbed totally in fulfilling ongoing hunger needs, for example, will attend less to safety needs; and, a person whose security is constantly threatened will be less able to develop intimacy with others....
>
> When people are found to be behaving in ways that clearly indicate that they are under stress, the question must be asked, "Where on the hierarchy of needs have they been blocked...?"
>
> Regardless of the culture in which this growth occurs, all humans move through genetically determined stages which progress from the infant's learning to trust; the toddler's striving for autonomy; the young child's struggling for initiative; the older child's working for industry; the adolescent's straining for identity; the young adult's establishing of intimacy; the mature adult's achieving generativity; and, the attaining of integrity in old age. When normal development is distorted by an unfavorable environment, unhealthy traits characterize the developing organism, according to the stage of psycho-social growth, i.e., mistrust, shame and doubt, guilt, inferiority, identity diffusion, isolation, self-absorption and despair. [66]

Meyer (1998) has recently employed this perspective to provide a framework for integration of native and non-native information in an assessment of native circumstances and effects in the State of Hawaii.[67] A schematic representation of the framework is provided in Figure 1.

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[66]Bachtold, L.M., 1982. "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.

[67]Meyer, Philip A., 1998. **Niihau: Present Circumstances and Future Requirements in an Evolving Hawaiian Community**. Niihau, HI: Hoomana Ia Iesu Church, pp. 147-151.

2.1.5.2 Non-Tribal Indicators of Tribal Circumstances and Potential Impacts

This section identifies five non-Tribal indicators that will be integrated with those discussed in earlier sections, to provide an overall assessment of Tribal circumstances and potential impacts. Use of the first four of these have been previously affirmed in federal court[68]. The fifth involves use of a concept common in the economic profession - but which also has meaning for Tribes.

2.1.5.2.1 Tribal Poverty

The US Bureau of the Census provides data on the percentage of persons, and groups of persons, living below the poverty line. These data will be contrasted against percentages for state and national populations as a whole, and utilized as one indicator of Tribal circumstances.

> Poverty statistics...are based on a definition developed by the Social Security Administration in 1964 and revised in 1969 and 1981 by interagency committees. This definition was established as the official definition of poverty for statistical use in all Executive departments by the Bureau of the

[68]United States of America et al. v State of Washington et al. (Dec. 20, 1994). **Supra**.

> Budget (in Circular No. A-46) and later by the Office of Management and Budget (in Statistical Directive No. 14).
>
> The original poverty index provided a range of income cutoffs adjusted by such factors as family size, sex of family head, number of children under 18 years old, and farm-nonfarm residence. At the core of this definition of poverty was the economy food plan, the least costly of four nutritionally adequate food plans designed by the Department of Agriculture. It was determined by the Department of Agriculture's 1955 survey of food consumption that families of three or more persons spent approximately one-third of their income on food; the poverty level for these families was therefore set at three times the cost of the economy food plan. For smaller families and persons living alone, the cost of the economy food plan was multiplied by factors that were slightly higher in order to compensate for the relatively larger fixed expenses of these smaller households. Annual revisions of these SSA poverty cutoffs were based on price changes of the items in the economy food budget.
>
> As a result of the deliberations of a Federal Interagency Committee in 1969, the following two modifications to the original SSA definition of poverty were recommended: (1) that the SSA thresholds for nonfarm families be retained for the base year 1963, but that annual adjustments to the levels be based on changes in the Consumer Price Index (CPI) rather than on changes in the cost of food included in the food economy plan; and (2) that the farm thresholds be raised from 70 to 85 percent of the corresponding nonfarm levels. ...
>
> In 1980, another interagency committee recommended three additional modifications that were implemented in the March 1982 CPS as well as in the 1980 census: (1) elimination of separate thresholds for farm families, (2) averaging of thresholds for female-householder and "all other" families, and (3) extension of the poverty matrix to families with nine or more members. ...
>
> The poverty thresholds rise each year by the same percentage as the annual average Consumer Price Index. [69]

The Bureau of the Census considers the terms "below the poverty line" and "poor" to be interchangeable.[70]

The present study will utilize these data, and contrast them with historic narrative concerning Tribal circumstances, to determine cumulative effects, present poverty levels and potential future effects related to Lower Snake project alternatives.

2.1.5.2.2 Tribal Unemployment

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[69]US Bureau of the Census, 1991. **Poverty in the United States.** Current Population Reports Series P-60, No. 181, p. A-7.

[70]Supra at vii.

The US Bureau of the Census and the US Bureau of Indian Affairs each provide estimates of unemployment among the Tribes[71]. The Census data is more rigorous, but overestimates employment for any work designation over one week. The BIA data provides numbers that are likely more indicative of Tribal circumstances, particularly over winter months - but these estimates lack statistical rigor. This analysis will consider both data sets to draw conclusions respecting Tribal unemployment - how it compares to Tribal circumstances at Treaty times - how it is related to unemployment levels for citizens in general at present - and how it may be affected by project alternatives.

2.1.5.2.3 Tribal Per Capita Income

Per capita income data is readily available from US Bureau of the Census sources for both tribal and non-tribal populations. The Census defines total income as follows.

> 'Total income' is the algebraic sum of the amounts reported separately for wage and salary income; net nonfarm self-employment income; net farm self-employment income; interest, dividend, or net rental or royalty income; Social Security or railroad retirement income; retirement or disability income; and all other income.[72]

The income indicator is the narrowest employed in this analysis. Nonetheless, it is relatively easy to obtain and commonly used - and we will include it here.

2.1.5.3 Tribal Health

Bachtold suggests that health is indicative of a broad range of material, economic, social and psychological conditions experienced by individuals (Section 2.1.5.1). This perception is confirmed by a tribal spokesperson.

> Ultimately, health and way of life cannot be separated.
>
> (Armand Minthorn, CTUIR)

Further, comparison of health and health services between Tribal members and non-Tribal residents was accepted as valid indicator information by the Court in the US v Washington case cited earlier. In this study, we:

1. Gather data from cited sources to develop a baseline health and health services comparison between Tribes and non-Tribal residents of Washington, Oregon, Idaho and the United States as a whole.

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[71]See for example, US Bureau of the Census, 1990. **Special Tribal Run from the 1990 Census**; US Bureau of Indian Affairs, 1991. **Indian Service Population and Labor Force Estimates**.

[72]US Bureau of the Census, 1990. **Census of Population and Housing - Summary Social, Economic and Housing Characteristics - Washington.** CPH-5-49, p. B-15.

2. Utilize historic information to contrast Tribal health today with that in earlier times.

3. Consult with health professionals at referent tribes to validate or invalidate a hypothesis recently discussed by Trafzer (1997), involving analysis of death certificates for Yakamas living on their reservation between the years 1888 and 1964.

   The theoretical framework used in the presentation of Yakama death data is derived from work by Abdel R. Omran and Barry Popkin. Omran offers the theory and provides a model that informs us about Yakama epidemiological transitions. He argues that in the United States, there was an historical shift in the nineteenth century from "pandemics of infectious diseases to the degenerative and man-made diseases which are now the chief forms of illness and causes of death."...

   Omran argues that generally "mortality patterns distinguish three major successive stages of epidemiological transition including the Age of Pestilence and Famine, the Age of Receding Pandemics and the Age of Degenerative and Man-Made Diseases...." Yakama people began to enter the Age of Pestilence as Euro-American traders introduced infectious diseases to Native Americans living along the coast of the Pacific Northwest. Thus, throughout the entire nineteenth and early twentieth centuries, the Yakama lived in the Age of Pestilence, facing the scourge of many contagious diseases.... The Age of Pestilence and the Age of Receding Pandemics merged during the 1920s, giving way to the Age of Degenerative and Man-Made Diseases....

   In their ground-breaking study, **Fatal Years: Child Mortality in Late Nineteenth-Century America**, Samuel H. Preston and Michael R. Haines maintain that child mortality in 1900 was not linked to food because food was abundant and cheap. Their statement pertained to America as a whole, but it surely did not apply to most Native Americans, particularly those living on the Yakama Reservation. Certainly, as Popkin has suggested, the destruction of native food resources had some impact on the health of the people, especially when the people lost their native foods and received no supplements to replace them in their diets. ... Also, traditional native foods were (and are) far more than items to consume, for they were part of the sacred creation and were eaten ceremoniously during the year as part of religious ritual. ... This is not to argue that the loss of native foods was the only factor influencing death on the Yakama Reservation or that it was the most important condition surrounding death. It was one of many factors that influenced mortality on the reservation, factors born of policies and actions out of the control of native peoples.

   All the elements surrounding mortality on the Yakama Reservation. including the destruction of food resources, are difficult to quantify, but we know they influenced mortality on the reservation throughout the twentieth century. As a result of the destruction of food resources, white invasion, treaty making, the Plateau Indian War, political subjugation, Christian conversions, forced removal, relocation, and the reservation system, Indians living on the

> Yakama Reservation suffered a social anomie or depression that contributed to ill health and death....
>
> After 1859, when the United States ratified the Yakama Treaty, the confederated tribes of the Yakama Nation lived under the thumb of agents, ministers, and pro-government Native American factions. They witnessed Western expansion first hand as ranchers, farmers, lumber companies, miners, merchants, and other "settlers" overran their former lands. They lost hunting, grazing, fishing and root grounds. They lost their seasonal rounds by which they obtained their livelihood, and they slipped into a communal depression that weakened their minds and bodies, making them more susceptible to viruses and bacilli.
>
> This is a condition that cannot be quantified or measured scientifically, but anyone- native or non-native - familiar with Native Americans living within the early reservation system will attest to its existence. It surely had some effect on Indian health and one's vulnerability to disease. It is known that Yakama people lived in abject poverty with substandard housing, inadequate food, poor water, few sewer facilities, insufficient health care, little economic opportunity, and limited political power.... People lived to die and to die young. Still, Yakama people survived and did not vanish from the face of the earth.[73]

To gather further information concerning this hypothesis, expert health officials at each subject reservation, including Yakama, were asked the following questions.

* Is it your judgment that the hypothesis that the causal factors listed by Trafzer contributed significantly to Tribal ill health and death historically valid for your Tribe?

* Have the present health circumstances on this reservation changed? If so, in what way?

4. Finally, during the study the same panel of experts on Tribal health were asked:

* Would continued loss of fisheries be expected to have any health effects on Tribal members? Can you categorize the effects that would be expected?
* Would restoration of Lower Snake River salmon be expected to have any health effects on Tribal members? Can you categorize the effects that would be expected?

2.1.5.4 Tribal Assets and the Associated Values they Produce

A final indicator parameter focuses attention on the values produced from Tribal assets. **The value of early Tribal assets lay in The Land - interpreted broadly to include the land, water, salmon, animals, plants, minerals, and all that resided in the Land or upon it**. Tribal perspective with

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[73]Trafzer, Clifford E., 1997. **Death Stalks the Yakama: Epidemiological Transitions and Mortality on the Yakama Indian Reservation, 1888-1964**. East Lansing, Michigan: Michigan State University Press, pp. 1-9.

respect to these Tribal Trust Assets is evident in many of the citations provided earlier - and in the words of (then) CTUIR chairman Donald Sampson in a 1994 memorandum.

> Trust Assets are property in which Indians hold and maintain legal interests, and which are held in trust by the United States for tribes and individuals. They include, but are not limited to, lands, water, fish, wildlife, plants, minerals--essentially, everything necessary to preserve and maintain a way of life.[74]

Similarly, interest in the wealth of Tribal Lands was the principal motivation of the United States in seeking to make treaties (citation at Note 24) - and little difference exists between the words on asset valuation offered by Mr. Sampson (Note 74) and by conventional economic definition.

> (An asset is) an entity possessing market or exchange value, and forming part of the wealth or property of the owner.[75]

The Massachusetts Institute of Technology (MIT) economic dictionary goes on to point out:

> In economics an important distinction is made between 'real' assets, which are tangible resources like plant, buildings and land yielding services in production or directly to consumers; and financial assets, which include money, bonds and equities.[76]

> Anything which has a market value and can be exchanged for money or goods can be regarded as **wealth**. It can include physical goods and assets, financial assets and personal skills which can generate an income.... All wealth has the basic property of being able to generate income, which is the return on wealth. Thus, whereas wealth is a stock, income is a flow concept. The present value of this income flow constitutes the value of the stock of wealth.[77]

Tribal and non-tribal persons may discount income flows received over time due to consumer impatience, to take advantage of loanable funds, or for other reasons. But economists do not claim that persons discount the value of **assets** over time – unless those assets depreciate or become obsolete. More particularly, the tribes do not discount **treaty trust assets, such as tribal lands, salmon and wildlife** over time – nor do they consider them exchangeable for money or other goods and services. Tribes continuously assert that: **"Treaty Assets** are assured in Treaty agreements with the United States, retain their value in perpetuity, and are **"not for sale"**.

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[74]Sampson, Donald G., Chairman, CTUIR Board of Trustees, 1994. **CTUIR's Comments on the System Operation Review Draft Environmental Impact Statement**. Memorandum to Bonneville Power Administration et al., December 15, p. 13.

[75]Pearce, David W., 1992. **The MIT Dictionary of Modern Economics**. Cambridge, Mass.: The MIT Press, p. 18.

[76]Supra at 18-19.

[77]Supra at 460.

> We would like to see it (salmon) preserved for our future children. Maybe 100, 200 years--forever--I would say forever. Forever and ever. As long as there'll be an Indian on this earth.[78]

> We've got to stand up for our rights, you know, that we had, not only fishing but hunting rights. We've got to preserve them one way or another, regardless. As long as it ever exists. You know, let our youngsters live with them too.[79]

And to repeat part of an earlier citation from Delbert Frank Sr.;

> 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![80]

The details of tribal insistence on protection of Treaty assets will vary with the unique characteristics of each Treaty. However, preference for permanence of valued assets can be generally found in both tribal and non-tribal societies.

> (Tribal) behavior is similar to other collectives that set out to establish and protect unchangeable and enduring assets of wealth, ranging from The Capital, through abbeys and cathedrals, to state buildings, boulevards, monuments and cemetries. At the same time, states and groups set aside parks, reserves, viewpoints, national forests, ecosystems, and so on. Less tangibly, collectives create a constitution, set up jurusdictions, and draw national boundary frontiers. Less collectively, they enforce private laws of property which enable individuals to decide whether to continue to hold land and structures in a particular condition, or change them or transfer them. The public trust, the private trust, the treaty, the consitution, the land registry, the courts are all important facilitative institutions here. Many of these assets, public and private, tangible and intangible, man made and natural, are made durable, permanent, everlasting, in part or entirely because of the statement they make and the values and traditions of which they remind persons or groups.
>
> It is not unusual for collectives to designate an asset as permanent, to intend that it will continue to serve its functions and symbolism forever, and to refuse to "discount" its future. Those tribes who select such permanent assets and commitments are not thereby revealing a profound cultural difference. Others do so too. [81]

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[78]Hazel Miller, 1982. Personal communication, in, Meyer Resources, 1983. **Supra** at 29.
[79]Alan Moody, 1982. Personal communication, in, Meyer Resources, 1983. **Supra** at 29.
[80]Delbert Frank, Sr., 1982. Personal communication, in, Meyer Resources, 1983. **Supra** at 30.
[81]Scott, Anthony, 1999. "Comments on Final Tribal Circumstances Draft, May 10", **Memorandum** to P. Meyer,

Since the tribes do not devalue their tribal trust assets over time**,** this assessment will not discount the future value of Tribal Trust Assets, compared with their value today.

Economists and Tribes have always agreed that **Tribal Lands are of high value**. In fact, it is the struggle for this Land, including the resources upon it and the waters flowing through it, that has colored relations between non-Indian citizens of the region and the Tribes from contact times to the present. Consequently, the concept of "Tribal assets" provides a framework useful to the Tribes and to non-Tribal analysts as well.

As Scott identifies (Note 81), treatment of Treaty-protected waters, salmon, tribal land and wildlife as undiscounted permanent tribal trust collective assets is not inconsistent with discounting of other elements in the DREW analysis where appropriate.

Where annual income flows are subject to consumer impatience or interest opportunity cost, economists use a **discount rate** to progressively reduce the weighting given to benefits and costs incurred in future years, relative to present years. The Drawdown Regional Economic Workgroup intends to discount such future benefits and costs at 4.75% (the discount rate preferred by BPA); and 7.275% (the discount rate preferred by the US Army Corps of Engineers). They will also display results without discounting. If one assumes a $1,000 impact will occur each year for 100 years, the practical effect of each of these rates of discount can be displayed in Table 1.

Table 1

Actual Benefits or Costs Counted Each Year, Per $1,000 Impact
- At Selected Discount Rates and Future Time Periods -

Discount Rate	Years Into the Future				
-%-	10 years	25 years	50 years	75 years	100 years
	----------annual value in dollars----------				
---	1,000	1,000	1,000	1,000	1,000
4.75	629	313	10	3	1
7.25	497	174	3	1	--

It can be observed that, as increasingly large positive discount rates are used, economic analysis becomes less and less concerned with any impacts that do not occur almost immediately. In the Lower Snake Drawdown circumstances where project implementation costs will be incurred at the outset, and salmon recovery benefits under any PATH are not expected for several years - the

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July 12, p. 6.

influence of selected positive economic discount rate assumptions upon conclusions reached may be particularly significant.[82]

In sum, our approach to valuation of tribal assets in this report will be:

1. Identify trends in the availability to the tribes of Tribal Trust Assets (particularly, land, water, fish and wildlife) from contact times to the present.

2. Relate tends in the availability of these Asset, and the annual benefits flowing from them, to present **material** and **cultural** values provided annually to each referent Tribe. This assessment will consider the range of indicators discussed previously.

3. Examine the effect, if any, of Lower Snake project alternatives on Tribal Assets, and consequently, on the annual stream of values they produce at benchmark time periods.

2.1.6 Differing Concepts of Value – a Cautionary Note

Economic analysis usually distinguishes between "value in use" and "value in exchange".

> Since the time of Aristotle onwards it has been traditional to separate the concepts of use value and value in exchange. Value in use is not an intrinsic quality of a commodity, but its capacity to satisfy human wants. Value in exchange is the worth of a commodity in terms of its capacity to be exchanged for another commodity.[83]

Webster variously defines "intrinsic" as:

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[82]Leading economic experts on discounting have identified that where a positive interest rate is required, a real rate approximating 2 percent may be more appropriate - and that the GAO and CBO sensitize such a rate by also discounting at 0 and 4 percent. They also point out that discounting is not likely to be useful where intergenerational fairness is an issue. (See special issue on discounting, in, **Journal of Environmental Economics and Management**, 18, 1990.) Intergenerational fairness is a central concern of the referent Tribes.

For a further applied discussion of technical issues associated with discounting, see: Meyer, Philip A., Richard Lichtkoppler, Robert A. Hamilton, David Harpman, Charles L. Borda and Paula M. Engel, 1995. **Elwha River Restoration Project: Economic Analysis: Final Technical Report**. A Report to The National Park Service, The US Bureau of Reclamation and the Lower Elwha S'Klallam Tribe. Davis, CA, pp. 1- 10.

[83]Pearce, David W., 1992. **Supra** at 446.

> Private, secret: belonging to the innermost constitution or essential nature of a thing: being good in itself or irreducible.[84]

Since the late nineteenth century, economic models have principally addressed exchange values associated with the "allocation of scarce resources to specific uses rather than searching for intrinsic value"[85] - and that has been the mainstream focus of work within the Lower Snake Drawdown Regional Economic Workgroup (DREW).

From the perspective of affected tribal cultures, analytical constructs of value must differ somewhat. Even in contact times, Tribes also had a well developed system of exchange values, although these were not initially very understandable to non-Indians.

> One of the most erroneous conceptions perpetrated by the whites is that the aboriginal Indian had no sense of values. ...(T)he earliest white traders were delightfully shocked at the amazing "bargains" they were able to make with the natives....
>
> The whites, of course, judged the situation solely on the basis of their own tradition of values that had evolved in a utilitarian world of the age of metal and glass. Viewed objectively, the aboriginal reaction to first contacts with European trade goods was not particularly strange at all. From a practical standpoint, the first iron tool obtained by a village was worth more to the inhabitants than any number of furs. Furs could be replenished by their own efforts at any time, but an object of iron, never. In this sense, native-white contact was a meeting of opposites. Each valued highly what the other possessed, and neither much valued what the other desired. However, as soon as the Coastal Indians became aware of the quantity and variety of goods that the whites had at their command, and the great value that the whites ascribed to furs, they took advantage of the situation--advantage, that is, from their own point of view.
>
> Naturally enough, the natives bargained in terms of the traditional values of their cultures. And fortunately for the profits of the fur trade, these cultural values were nonutilitarian in many respects....
>
> The Indians, then, not only possessed different sets of values than the white man, but in many instances clung to these tenaciously, long after the raison d'etre had ceased to exist.[86]

Even today, where the tribes participate in "white man's market exchanges" voluntarily - or where such participation is sometimes forced - differing value perceptions based on differing culture still exist. In

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[84]Webster's Third New International Dictionary, 1971. Chicago. p. 1186.
[85]Pearce, David W., 1992. **Supra** at 447.
[86]Griswold, Gillet, 1954. **Aboriginal Patterns of Trade Between the Columbia Basin and the Northern Plains**. Masters Thesis, Montana State University, pp. 29-32.

particular, tribal cultures share a strong concern for intrinsic values - both use and nonuse related - with economists of the previous century.

> What kind of foods did God set aside for you, reserve for you (non-Indians)? Like salmon and deer meat and the roots and berries were set aside for us. That's what we still obtain yet. We still go out and get it. And that's what we eat today. And that's what we use for communion with God.[87]

> It's just that salmon are part of the country, they're part of the environment. They belong here as much as Indians belong here. And in that way they complement each other. They've become part of us because it's what we depend on to live... . You know, it becomes a part of the person's or peoples' culture.[88]

These differences in perception of value pose strong risks that economists may culturally encapsulate project impacts on tribes. Too often in the past, economic valuation models have misrepresented tribal effects and damaged tribal interests. Alternatively, tribal values have not been treated substantively - and such values have been marginalized and appendicized in related reports[89]. This has been damaging to reasonable consideration of tribal effects.

Our present report attempts to improve on this adverse record - combining economic construct from both historic and contemporary economic reasoning - and merging it with value constructs considered relevant by the five subject tribes.

2.1.7 Assessing Tribal Circumstances and Benefits - A Summary of Method

Following the discussion of this section, the procedure used here will:

1. Identify changes in Tribal material and cultural circumstances from pre-treaty to present times for each referent Tribe. Particular attention will be paid to the terms of each Tribe's Treaty (s) as they relate to assessment issues for Lower Snake project alternatives.

2. Identify Tribal Trust Assets that may be affected under Lower Snake project alternatives. These trust assets are the pathways which connect impacts of the Lower Snake project to its effects on the five referent Tribes. Tribal Trust assets assessed will include salmon - and other wildlife and plants where impacts may be identified. Each project alternative's potential impact on "the overall wellbeing of the study Tribes" will be considered.

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[87] Hazel Miller, 1982, in, Meyer Resources, Inc. **Supra** at 38.
[88] Antone Minthorn, 1982, in, Meyer Resources, Inc. **Supra** at 38.
[89] i.e. US Army Corps of Engineers, Bonneville Power Administration and US Bureau of Reclamation, 1995. **Supra**.

3. Develop **cultural and material indicators** of Tribal wellbeing to assess Tribal circumstances and potential project-related impacts. These indicators will consider the cultural, nutritional and material role of salmon, and if possible, of wildlife, of roots and berries; traditional Tribal settlement and use areas; and Tribal language. They will also assess Tribal poverty, unemployment and income. Contemporary circumstances and potential project impacts related to Tribal health will be examined, using a hypothesis developed during assessment of Yakama on-reservation deaths between 1888 and 1964.

4. Consider these indicators of Tribal circumstances and potential project effects using a "hierarchy of needs" framework that bounds the interrelationship between land, water, natural resources, beneficial activities - and the physiological, social and personal wellbeing of the Tribes and their members.

3.0 Assessing Potential Tribal Effects of Lower Snake River Project Alternatives

Tribal perspective and EPA guidance are congruent in considering historic causal trends important to description and comprehension of existing circumstances - and to assessment of cumulative effects (see previous). In this section, discussion of the evolution of each Tribe to its present condition is provided. Particular attention will be paid to changes in the indicator characteristics identified in prior methodological discussion.

3.1 Linkages Between Lower Snake River Project Alternatives and Referent Tribes

The principal effects of the Lower Snake River Project alternatives will relate to effects on fish (primarily salmon), on traditional Tribal villages and other culturally important locations, and on usual and accustomed fishing, hunting and gathering areas (recall Section 2.1.2.2). Potentially, these direct effects will relate to the levels of food available under each project alternative, to villages, burial sites and/or to fishing/hunting/gathering areas uncovered should the four project reservoirs be drawn down[90].

3.1.1 Securing Tribal Assets

In order to understand linkages between potential project actions and Tribal assets, one must first understand the manner in which the Tribes secured and used the resources they depended on. Both in historic times and today, the Tribes of the Columbia/Snake basin have depended on two interrelated land areas: a "home territory" area where they established (usually permanent) winter villages - and "usual and accustomed" fishing, hunting and gathering areas which were partly inside the Tribes' home territory and partly outside it. Traditionally, groups within each present-day Tribe selected a home base within their territory to provide shelter from the extremes of winter weather, for proximity to winter food

[90]While Tribal hunting and gathering sites will also be potentially affected by the Lower Snake River Project, consideration of fishing linkages are considered sufficient to determine "which Tribes will be affected" as the four lower Snake River reservoirs are drawn down.

sources (such as some forms of game), and for security from attack from any potentially hostile outsiders.

Each Tribal group went forth in the spring from these base areas to its usual and accustomed fishing, hunting and gathering areas - visiting each when the fish were running, the game were available and the roots and the berries were ready for taking. These visits made up the **seasonal round** for each tribal group. They were determined by where and when each resource was available, and by the mobility of each Tribal group to move in time from harvest area to harvest area, and to return to their base at the onset of winter. Detail for each Tribe will follow. The point to understand at the outset is **it was the interaction between base areas and those areas essential to each Tribal group's seasonal round that provided for the material survival needs of the Tribes**.

> ...nothing could be more stable than the repetition, year after year, of the same shifts of residence from winter village to a round of summer fishing camps, invariably at the same sites and in the same sequence. [91]

All base areas and many of the usual and accustomed harvest places were within the territories considered "to belong" to each particular Tribe. But some "usual and accustomed" harvest places were not. Relationships between tribes in the referent area were generally characterized by cooperation and friendship, save for some adjacent areas between the Nez Perce and Bannock peoples. For example:

> ...people like the Nez Perce accepted friendly visitors into their territory and freely shared access to their resources. Chalfant notes:
>
> > The Nez Perce invited many tribes to share the harvest of their (camas) grounds on Camas Prairie and at Weippe, Idaho. These groups included: Cayuse, Umatilla, Yakima, Flathead, and even Crow, Spokane, and Colville Indians.... The Umatilla, Cayuse and Yakima used to fish along the Wallowa River in summer…[92]

Similarly, the Nez Perce regularly fished at Celilo and other sites within the territory of downriver tribes. Lane, Lane and Nash have summarized these relationships.

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[91]Hewes, quoted in, Walker, Deward E., 1967. **Mutual Cross-Utilization of Economic Resources in the Plateau: An Example from Aboriginal Nez Perce Fishing Practices**. Washington State University Laboratory of Anthropology. Report of Investigations No. 41. Pullman, WA., pp. 13-14.

[92]Chalfant, quoted in, Lane & Lane Associates and D. Nash, 1981a. **The Clearwater River Indian Fisheries and Lewiston Dam**. Report to the US Bureau of Indian Affairs, p. 10.

> While there was considerable freedom in use of fishing places in widely dispersed locations, it is important to understand the aboriginal tenure system. Like other Plateau people, the Sahaptans had clear concepts of territoriality. These included the right to live in the territory and the right to use the resources of that territory according to accepted rules and precedents. These rights were recognized and respected by others.
>
> The missionary Asa Smith, writing of the Nez Perce and Cayuse in 1840 ...noted that respect for ownership rights in resources was vital because of the limited carrying capacity of the local environments. At the time he observed that because of the uneven distribution of certain kinds of resources, it was advantageous for bands to share particularly favorable resource areas.
>
> Within their own territories, people had special rights to particular places based on customary occupation and use. These rights were most clearly defined with respect to living sites and major fishing places. With respect to fishing places, rights of primary use and responsibility for regulating activities relating to the fishery rested with the recognized owners.
>
> Visitors wishing to use a fishing place in the territory of another group generally were expected to obtain permission from the owners unless such permissive use had become established as customary through habitual use over time. Permissive use might be solicited by indirect request; often an invitation was proffered by the owners....
>
> Sharing enabled people to cope with the ever present problem of recurrent local shortages. It also provided means to more efficient and more equitable resource use by providing access for large numbers of people to particularly favorable resource areas. ...
>
> One of the results of these patterns was that **a group might have usual and accustomed fishing places <u>outside</u> as well as inside their own territory**. (our bolding and underlining)[93]

In fact, this is precisely the case for the Nez Perce, Umatilla, Yakama and Warm Springs tribes, who carefully protected their "usual and accustomed" harvest places in each of their Treaties.

The Shoshone and Bannocks were known as "roaming tribes", and also sought to retain access to off-reservation "hunting" areas upon which they had always depended.

3.1.2 Linkages between Tribal Fishing and the Lower Snake River Project

Some of the "usual and accustomed places" of the Nez Perce, Yakama and Umatilla tribes fall within the lower Snake River corridor. Some are located above it. Some are below it. The Confederated Tribes of the Warm Springs Indian Reservation (at least) fish for Snake River salmon runs in the

[93]Lane & Lane Associates and D. Nash, 1981a. **Supra** at 61.

mainstem Columbia River. Consequently, all four tribes will be affected by project-related changes in levels of lower Snake River salmon, steelhead and sturgeon. This will, in turn, increase or diminish Tribal assets, and affect the material and cultural wellbeing of the four CRITFC Tribes. The Treaty rights of the tribes stand undiminished, but the degree of consistency between federal action and federal responsibility will similarly be affected by selection of alternatives currently being considered along the lower Snake River.

Traditional fishing places of the **Shoshone-Bannock Tribes** are protected by the Fort Bridger Treaty, as interpreted in State of Idaho v Tinno. While there was some communication between Shoshone-Bannock with the tribes to the north and the west, sharing of traditional fishing places between these groups was not the norm. Lane & Lane Associates and Nash again quote Chalfant.

> Permission to use their (Nez Perce) lands was never granted to the Shoshonean tribes to their south. That the Shoshoni, Paiute and Bannocks were traditional enemies and in a state of war with the Nez Perce from time immemorial to late historic times is well known.[94]

Consequently, potential linkage between alternative project actions on the lower Snake River and the Shoshone-Bannock Tribes must depend on whether affected salmon, steelhead and sturgeon stocks proceed sufficiently far upriver to reach traditional harvest places of the Shoshone-Bannock peoples. This question is easily resolved. While the area of primary interaction between Nez Perce and Shoshone-Bannock peoples has been periodically contested, scholars have identified significant Shoshone-Bannock historic presence throughout the area of the upper Salmon River, its southern tributaries - and thoughout most of the Weiser River drainage[95].

> Fish constituted an important part of Northern Shoshone and Bannock subsistence. Trout, perch and other fish were found in streams throughout the region, but the most important fish, the salmon, was restricted to the Snake River below Shoshone Falls, to the lower Boise and Weiser rivers, and to the southern tributaries of the Salmon River, including the Lemhi.[96]

Leaving the issue of exact determination of boundaries to others, we can safely conclude that Snake River salmon, steelhead and sturgeon potentially affected by Lower Snake River Project alternatives swim upstream into Shoshone-Bannock traditional territory and are potentially accessible at Shoshone-Bannock traditional fishing areas. This conclusion holds for time periods prior to construction of the dams of the Middle Snake, and for periods thereafter.

3.1.3 Linkages between Usual and Accustomed Tribal Areas and Project Reservoirs

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[94]Chalfant, in, Lane & Lane Associates and D. Nash, 1981. **Supra** at 11.

[95]Murphy, Robert F. and Y. Murphy, 1986. "Northern Shoshone and Bannock", in, **Handbook of North American Indians: Great Basin**. Volume 11. Washington, D.C: The Smithsonian Institution, p. 286.

[96]Supra at 285.

Finally, we turn to the issue of **tribal presence within** the lower Snake River reservoir areas. The reservoir influence of the Lower Snake River Project goes from about four miles above Lewiston on the Snake and Clearwater Rivers downstream to the area of Ice Harbor Dam, near the confluence of the Snake and Columbia Rivers.

Lane, Lane and Nash have identified the importance that water courses held for the tribes.

> The Nez Perce were organized and linked to territories in named winter villages which were usually located where tributary streams entered mainstreams. In turn, all the villages along a mainstream or a section thereof were linked, more or less as a watershed unit. Often the name of the watershed, the group of villages, and the most important village on the watershed had variants of the same name.
>
> In addition to these named local groups, there were larger units which, whether or not they had political or isolating social structure, did have geographic coherence. There may have been six such units (along the Snake below the Clearwater, on the Grande Ronde, on the Salmon, and on the Snake above the Clearwater).[97]

Thus, along many stream sides, Tribal fishing sites and Tribal villages were congruent.

> Nez Perce villages and fisheries extended down the Snake on both banks to the vicinity of the mouth of the Tucannon River. Beyond this, there were other groups of people along the Snake and the Columbia most of whose descendants retain treaty fishing rights. ...
>
> The Palouse lived on the north bank of the Snake River below Nez Perce territory. These people were Sahaptin speakers and they were closely related to the people living in the villages farther down the north bank of the Snake River. Chalfant, who investigated them for the Department of Justice during the Indian Claims Commission hearings said: "...the Palus no longer exist as an identifiable group..."
>
> The Palouse today are also represented in the Confederated Tribes of the Umatilla Reservation although they are not formally recognized. The Palouse were supposed to be included in the Yakima Treaty of 1855. There were Palouse present at the signing of the treaty but some of the Palouse people were uninterested in or hostile to the treaty making. Between 1855 and 1858 they joined with Kamiakin in hostilities against the U.S. Defeated at the end of this period, they ceased to exist as an identifiable group and dispersed as landless refugees. Many drifted about the country refusing to settle on a reservation. Others settled with friends and kin on the Colville, Yakima, Umatilla and other reservations.

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[97]Lane & Lane Associates and D. Nash. 1981a. **Supra** at 9.

The territory of the Palouse centered about the lower Palouse River and their major village was at its mouth....

The Walla Walla, sometimes called the Wallula, lived along the Walla Walla River, along the Columbia near the mouth of the Walla Walla, and a short distance downstream along the Columbia. They also occupied territory downstream from the Nez Perce on the south bank of the Snake River and perhaps on the north bank as well. Perhaps because of the importance of fishing in their lives, they seem not to have moved about a great deal....They occupied the same territory from when they were first encountered by Whites until they were removed to the Umatilla Reservation. Even after the treaty of 1855, a very large number remained scattered along the Columbia at their traditional fishing sites. ...
The people living downstream from the Palouse along the north bank of the Snake to its juncture with the Columbia have been variously named and identified. Some writers include them with the Palouse. Others linked them to or included them with the Walla Walla. Some writers set them apart with other names. Considering those who treat them as a separate group, three names are used by one authority or another. These are Wanapam, Wauyukma, and Walula.

...the juncture of the Snake and the Columbia was the location of major fisheries which were used by many surrounding peoples....

The Cayuse had access to the Clearwater anadromous fish runs although they did not fish along the Snake and the Columbia to the same extent as their Sahaptin neighbors. At the time of European contact, they were living in and around the northern part of the Blue Mountains, close to but not on the Columbia River. They were in close and friendly contact with their Sahaptin neighbors, particularly the Nez Perce... .

Evidently Lewis and Clark met them on the Snake River. They called them the Ye-let-po and placed them on We-ar-cum (Asotin?) Creek.

The Umatilla ...seem to have occupied lands about the mouth of the Umatilla River and along the south bank of the Columbia, from above the mouth of the Umatilla, down to the vicinity of Willow Creek (Oregon). Ray places them on the north bank of the Columbia as well....

The term Yakima had been known (to non-Indians) since the early nineteenth century. ... Cox stated that:

> The Yackamans are a numerous tribe, who inhabit the lands on the northern banks of the Columbia, from its junction above Lewis' River (the Snake) until some distance above a river which flows from the northward, and is called after the name of the tribe. ...

The Tenino were people who shared a common Sahaptin dialect and lived, in part, along the Columbia from Celilo Falls upstream. On the south bank, they occupied at least the downstream

watersheds of the Deschutes and John Day rivers. On the north bank, they occupied an indefinite span of country upstream from Celilo Falls. ...

The Wishram and the Wasco were closely related people living at the Dalles. The Wishram lived on the north (Washington) side and the Wasco lived on the south side of the Columbia:

> These Indians, most of whom are now on the Yakima Reservation, Washington, ...are known by their Yakima and Klickitat neighbors (tribes of the Sahaptin stock) as Wu'cxam, which, in its anglicized form of Wishram, or Wishham, is their common appellation today.

The Klikitat were the westernmost Sahaptins speaking a dialect closely related to that of the Kittitas (Upper Yakima) and Yakima.[98]

At Treaty times, discussion with these individual tribes was not pursued on a "group by group" basis. Nor were tribes' "home territories" universally respected by US treaty negotiators. Rather, the US government - backed by its military, and the hostility of non-Indian residents - "consolidated" the tribes identified in the immediately preceding citation into four main Reservation groups. These "consolidated Tribal groups" incorporated Indians from previously existing bands and tribes - and afforded "treaty status" to four such groups, called - The Nez Perce Tribe, the Confederated Tribes of the Yakama Indian Nation, The Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs Reservation of Oregon[99]. Many original bands were included and/or forced into these groups. Other bands were left out - intentionally or otherwise. Table 2 provides an outline relating contemporary Treaty Tribal organization for the CRITFC tribes to preexisting Tribal bands and groups - based on information from Kappler.[100]

Table 2

The Relationship Between Present Tribal Treaty Organization and Pre-Contact Tribal Groupings in the Lower Snake Reservoir Area

Present Tribal Treaty Organization	Original Tribal Groups Included	Other Tribal Groups Present/ Not Present
The Nez Perce Tribe	Nez Perce Indians living in Idaho and downstream along the Snake River.	The Wallowa bands of Nez Perce were forced from their lands in 1863. After the Nez Perce War, some of

[98]Supra at 12-27.

[99]This general statement also applies to the present day Shoshone-Bannock treaty tribes.

[100]Kappler, C.J. (ed), 1972. **Indian Treaties: 1778-1883**. New York: Interland Publishing, pp. 694, 698 and 714.

		these Indians returned to the Nez Perce Reservation, some were exiled to the Colville Reservation, some returned to the Wallowa country and some died in the East or disappeared.
The Yakama Indian Nation.	Yakima. Palouse. Pisquouse Wenatshapam Klikitat Klinquit Kow-was-say-ee Li-ay-was Skin-pah Wishram Shyiks Ochechotes Kah-milt-pah Se-ap-cat	Other original tribal groups were also included at Yakama. Today, Palus also reside on the Umatilla Reservation and on the Colville Reservation.
The Confederated Tribes of the Umatilla Indian Reservation.	Walla Walla. Cayuse. Umatilla.	Palus also reside on this Reservation.
The Confederated Tribes of the Warm Springs Reservation of Oregon.	4 bands of Walla Wallas (Taih, Wyam, Tenino & Doc-spus). 3 bands of Wascos (Ki-gal-twal-la, Dalles & Dog River.)	

In sum, the evidence considered here suggests the following.

1. Ancestors of at least three of the CRITFC Tribes were **accustomed** to living in fishing villages and **had fishing territories** within the range of influence of the four Lower Snake reservoirs.

Nez Perce villages and home fishing territory extended downstream on the Snake River to the confluence of the Tucannon and Snake Rivers - an area presently influenced by the reservoirs of **Lower Granite, Little Goose** and **Lower Monumental dams**.

The **Walla Wallas**, now part of the Confederated Tribes of the Umatilla Indian Reservation, occupied territory and fished on the south side of the Snake River, downstream from Nez Perce territory - and may have fished on the north side of the river as well. These areas are presently influenced by the reservoirs of **Lower Monumental** and **Ice Harbor dams**.

The **Palouse** (or Palus) home territory was centered at the confluence of the Snake and Palouse Rivers. Palouse peoples are one of the listed tribes and bands of the Yakama Indian Nation, and also live on the Umatilla Reservation today. Their original territory is within the range of influence of the reservoirs of **Lower Monumental** and **Ice Harbor dams**.

2. Tribes now associated with the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Nation (CTUIR), the Yakama Indian Nation and the Confederated Tribes of the Warm Springs of Oregon cooperate in their fishing - and did so in ancient times. It was consequently **usual** for these tribes to fish in each others' territory - and they were **accustomed** to doing so. It is reasonable to assume that such cooperation included their fisheries of the Lower Snake River. In addition, the **Cayuse**, now part of the CTUIR, were accustomed to fish with the Nez Perce on the Clearwater River. These joint fishing areas may also be within the influence of the reservoir associated with Lower Granite Dam. Consequently, it can be reasonably concluded that the **usual and accustomed fishing villages and fishing places** of the four CRITFC tribes are distributed throughout the approximately 140 miles of river presently inundated by Lower Snake reservoirs.

3. Some tribal groups were scattered during the mid-1880's treaty making process - and reliance on ethnicity and kinship lines would identify a broader geographic distribution of persons whose tribal relatives "once lived on the Lower Snake". Some of these peoples will be represented in this analysis through association with study tribes. Others will not be.

Finally, while there are some oral reports of particular Shoshone-Bannocks and Nez Perce fishing cooperatively, we have found no specific citation confirming that Shoshone- Bannock regularly fished within the confluence of the four Lower Snake reservoirs that are the subject of this report. Given this lack of evidence, documentation of the less-than-cooperative overall relationship between the Shoshone-Bannock and the Nez Perce, and the distance from the Salmon River country to the Snake River below Lewiston, it is considered unlikely that the Shoshones or Bannocks maintained villages or traditional fishing places within the reservoir areas of the four Lower Snake River dams discussed here.

4.0 Circumstances and Impacts on Nee-Me-Poo (Nez Perce)

EPA guidance defines cumulative impacts as effects of a project, when added to the impacts of other past, present and reasonably foreseeable future actions (at Note 17). This section provides information

on past impacts and related present circumstances on Nee-Me-Poo (We, the People), the first two elements of three required for cumulative effects assessment. Reasonably expected future effects on Nee-Me-Poo will be discussed in a following project impacts chapter of the report.

4.1 Accustomed Tribal Areas and Seasonal Harvest Rounds of Nee-Me-Poo

At contact times, the Nez Perce occupied a home territory that covered parts of Idaho, Oregon and Washington, and has been estimated between 13 million[101] and 17 million acres[102]. They exploited resources over a far greater area, conservatively estimated at 147 million acres.

> (The Nez Perce) customarily exploited a much larger territory conservatively set at 230,000 square miles. They ranged from Kettle Falls in the north to Burnt River and American Falls in the south and from Willamette Falls in the west well out into the Plains, certainly as far as the territory of the Crow, and probably much farther.[103]

Tribal historian Allen P. Slickpoo and Deward Walker talk of Nee-Me-Poo as follows:

> Aboriginal Nez Perce (home) territory has been estimated at 13,204,000 acres. We probably were the largest group in aboriginal Idaho and our settlements ranged from thirty to 200 individuals, depending on the season and the type of social group. We were divided into the upper and lower Nez Perces, primarily on the basis of dialect differences. The upper Nez Perces were somewhat more oriented toward a Great Plains life style. ...
>
> Along with their travels, that included parts of southern Idaho, eastern Oregon and Washington, as well as down into the Columbia River, the Great Plains soon became a well-traveled area, although their permanent home became the northcentral part of what is now the State of Idaho. ...
>
> Nez Perce territory spanned the Clearwater River and extended to the south and middle forks of the Salmon River drainage basins. The deep canyons cut by the Clearwater, Salmon and Snake rivers brought about extensive seasonal migrations for food.[104]

The Nez Perce traveled through their usual and accustomed territories in search of food, taking each resource in its appropriate time and place. Salmon was the mainstay of their existence.

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[101]Slickpoo, Allen P., Sr. and Deward Walker. **Noon Nee-Me-Poo: Culture and History of the Nez Perces**. Nez Perce Tribe, p. 29.

[102]Walker, Deward E., 1967. **Mutual Cross-Utilization of Economic Resources in the Plateau: An Example from Aboriginal Nez Perce Fishing Practices**. Pullman: Washington State University, Laboratory of Anthropology, Report of Investigations No. 41, p. 1.

[103]Supra.

[104]Slickpoo, Allen P., Sr. and Deward Walker. **Supra** at 29-30.

> (T)he Nez Perces were impressively dependent on aquatic foods in the aboriginal period.... For example the Nez Perces regularly took the following types of fish: chinook, silver, dog and blueback varieties of salmon; Dolly Varden, cut throat, brook, lake, rainbow, and steelhead varieties of trout; several kinds of suckers and white fish, sturgeon, squaw fish, lampreys, and an unidentified but numerous minnow.... The four types of salmon mentioned were the most important and best liked fish....
>
> Given the size of this (salmon) catch and its consequent importance for the Nez Perce diet, it is not difficult to understand why downward fluctuations in the size of runs were critical. As we have seen for the Plateau generally, such fluctuations were one of the primary reasons for Nez Perce fishing in other parts of the Plateau as well as for other Plateau groups fishing in Nez Perce streams. As we have seen, also, such normal fluctuations were one of the primary stimulants of trade and travel in the aboriginal Plateau. Accumulating evidence suggests that this is a very ancient pattern, long antedating the appearance of the horse.[105]

The Indian Claims Commission, in 1967, concluded:

> The Principal fish (of the Nez Perce) was salmon. This was a very important food item.[106]
>
> ...the (Nez Perce) economic cycle can generally be summarized as ten months of salmon fishing and two months of berry picking, with hunting most of the year; that the principal items of food in the diet of the Nez Perce were roots, salmon and other fish and game..."[107]

Lane, Lane and Nash (1981a) note:

> Fishing was so important to the Nez Perce that all villages were located at fisheries. Spinden, who made the first comprehensive study of Nez Perce culture, writes:
>
> > ...As remarked before, they (villages) were situated on the banks of streams or on islands in the streams. A favorite location was near a riffle where salmon could be caught.... In the uplands the Nez Perces never built permanent villages, though in a few places, where camas and kouse were abundant, they constructed temporary summer camps.[108]

The Nez Perce also took other resources, each in its appropriate time and place. Historian Slickpoo and Deward Walker provide a flavor of the gathering of roots and berries.

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[105]Walker, Deward E., 1967. **Supra** at 24-26.

[106]United States Indian Claims Commission, 1967. **The Nez Perce Tribe of Indians v. The United States of America**. Findings of Fact, Preliminary Statement. Docket No. 175, March 21, p 96.

[107]Supra.

[108]Lane & Lane Associates and D. Nash, 1981a. **Supra** at 71.

> The various roots we gathered ripened in the early spring in the lower elevations of the Lewiston area, but roots in areas such as Oo-yipe (Weippe) sometimes did not ripen until mid- August. Our basic (root) foods were kehm-mes (camas) bulb, the thlee-tahn (bitterroot), khouse, tsa-weetkh (wild carrot), and keh-kheet (wild onion). Fruits gathered included serviceberries, gooseberries, hawthornberries, thornberries, huckleberries, currants and chokecherries. Pine nuts, sunflower seeds, black moss, and pine bark were also eaten.
>
> We made our life according to the seasons which we named as follows: El-weht (Spring); Ta--yum (Summer); Sehk-nihm (Fall); A-nihm (Winter).[109]

The Nez Perce calendar reflects this seasonal round of activities. The calendar displayed in Table 3 is based on information from Slickpoo and Walker (pp. 30-31), supplemented by a calendar provided by Leroy Seth, a Nez Perce elder. Spellings differ, one from the other, as authors attempt to convey the phonics of the Nez Perce language.

[109]Slickpoo, Allen P. and Deward Walker. **Supra** at 30.

Table 3

Nimiipum Inmitwit: Nez Perce Year of Seasons

Nez Perce Period of the Year	Approx. Non-Tribal Period	Characteristics of the Period
WEWXP	Spring	
Lah-te-tahl	March	New life begins. Flowers and plants begin to blossom.
Keh-khee-tahl	April	First harvest of keh-kheet roots.
Ah-pah-ahl	May	High rivers from melting snow. Move to higher ground to harvest roots. Bake Up-pa (a loaf) from Khouse.
TAYAM	Summer	
Toose-te-ma-sah-tahl	June	Continue to dig roots. Blueback salmon begin to show up.
Khoy-tsahl	July	Blueback salmon returns.
Tah-ya-ahl	August	Salmon reach the upper streams to spawn. Weather is hot.
SEXNI'M	Fall	
Pe-khoon-mai-kahl	September	Fall salmon runs go up river. Finger-lings go down-river to the ocean.
Hope-lul	October	Colder weather. Tamarack needles are shedding and trees turning color. Buck deer are running.
Sekh-le-wahl	November	Leaves shedding and turning color.

		Large animals mating.
ENI'M	Winter	
Ha-oo-khoy	December	Doe carries her young. No hunting of female game.
We-lu-poop	January	Cold weather. Snow.
Ah-la-tah-mahl	February	Hard to build a fire. Freezing weather.

4.2 Natural Capital and Annual Productive Yield of Original Nee-Me-Poo Lands

Viewed from either tribal or non-tribal perspective, the lands and waters of the Nez Perce traditional territory represented the "natural capital" which allowed tribal peoples to survive and prosper. In economic terms, the fish, game, roots, berries and other lifeway materials produced and sustained by the Land can be viewed as the annual produce or yield from Nez Perce natural assets. As noted in the prior section, salmon was the key element of this annual produce. Several authors have estimated the amount of salmon that may have been taken, on average, by the Nez Perce in pre-contact times. These estimates have been based: (i) on salmon's likely role in fulfilling nutritional requirements of individual Nez Perce; and, (ii) on observations of tribal catch at various fishing stations.

Hewes[110] assumed an average person living in the Columbia/Snake region in pre-contact times would have required 2,000 calories per day to survive. He further judged that this intake would be supplied daily by approximately two pounds of food - chiefly salmon, supplemented by game - as most other foods had relatively low fuel values[111]. Finally, he conservatively assumed that "somewhat less than one half of the caloric requirement of the average native consumer" would come from salmon - and estimated a per capita annual consumption of 365 pounds for the area[112]. Craig and Hacker (1940) similarly estimated average annual per capita consumption of salmon by native peoples in the area at one pound per day[113] Hewes arbitrarily adjusted his estimate downward to 300 pounds per capita per year for the Nez Perce - based on his assumption that they were less intensive salmon fishers than the tribes of the mid-Columbia[114].

---

[110]Hewes, Gordon W., 1947. **Aboriginal Use of Fishery Resources in Northwestern North America**. Phd. Dissertation. Berkeley: University of California, p. 213. Hewes' pre-contact estimates of salmon consumption are approximately based on the period up to 1780.

[111]Supra at 214.

[112]Supra.

[113]Craig, Joseph A. and Robert Hacker, 1940. **The History and Development of the Fisheries of the Columbia River**. Washington, D.C: US Bureau of Fisheries, Bulletin No. 32, p. 142.

[114]Hewes, Gordon W., 1947. **Supra** at 223-227.

Walker identifies additional native uses of salmon, for example for fuel, and concludes that Hewes' estimates of consumption are low. Walker estimates a range of possible annual per capita consumption between 365 and 800 pounds for Plateau tribes - and suggests the median of that range, 583 pounds per capita[115].

Finally, Swindell (1942) identifies that tribes of the mid-Columbia area caught fish for trade, as well as for own consumption. A respondent indicated that each family, having taken care of their own needs, would catch more than a third more additional salmon for trading purposes[116].

For this analysis, we will incorporate conclusions from each of these earlier authorities. We select Walker's median estimate of 583 pounds per capita for annual consumption of salmon in the mid-Columbia/Snake area in the early 1800's and before. Noting that "lower river" Nez Perce had full access to their own bountiful fisheries on the Snake, the Clearwater, the Salmon and other rivers - as well as to the abundant mid-Columbia fisheries - and that "upper river" Nez Perce incorporated a somewhat greater element of Plains lifestyle - we follow Hewes, and reduce our Nez Perce annual per capita consumption estimate by 18 percent, to 479 pounds. Finally, we consider the information on additional catch of salmon for trade on the mid-Columbia to be somewhat conditioned by the substantial abundances offered in those fisheries - and increase our "for own use" estimate for Nez Perce by 16.65 percent, half of the mid-Columbia "for trade" figure reported by Swindell. In this manner, we arrive at a per capita estimate of annual Nez Perce catch of salmon in the early 1800's of 559 pounds. Utilizing a Nez Perce pre-contact population estimate of 5,000 persons from Walker[117], this results in an estimated early 1800's annual Nez Perce salmon catch of 2.8 million pounds. If a later (1863) population estimate[118] of 2,800 persons is referenced, resulting Nez Perce annual salmon catch would be 1.6 million pounds.

While salmon was the Nez Perces' key survival resource, the tribe also depended on a rich array of game, roots, berries, native vegetables and medicinal plants, each taken in its own appropriate time and season (see previous). These resources were provided by the land of the Nez Perce traditional areas - but no set of data exists to enable direct estimates of the annual magnitude of pre- contact harvest in these other areas - for food, for other own use, for trade or for personal enjoyment. Nevertheless, some inferential estimate of the potential magnitude of such harvest is useful to our analysis. We will develop inferential estimates in the following way.

1. We utilize data from Lane, Lane and Nash (1981), estimating Nez Perce fish use at 40 percent of total food consumption[119], and our own judgement that consumption of fish "for food" only by the Nez Perce may have approximated 480 pounds per capita in pre-contact times, to estimate total annual food consumption by the Nez Perce at 6 million pounds.

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[115]Walker, Deward E., 1967. **Supra** at 19.
[116]Swindell, Edward G., 1942. **Supra** at 165.
[117]Walker, Deward E., 1967. **Supra** at 25.
[118]"Mooney", in, Lane & Lane and D. Nash, 1981a. **Supra** at 44.
[119]Lane & Lane Associates and D. Nash, 1981a. **Supra** at 79.

> Salmon was the most important, but not the only fish utilized by the Nez Perce. Consequently, this procedure may produce an underestimate. By about 1865, declines in Nez Perce population, primarily due to epidemics, would have reduced estimated total food consumption to 3.4 million pounds.

2. Contemporary procedure by the US Bureau of the Census estimates that families on an economy budget spend approximately one third of their income on food[120]. We will employ that convention here - and assume that the Nez Perce in pre-contact times obtained annual produce of both food and nonfood items from their usual and accustomed lands and waters "equivalent to" 18 million pounds of food. By 1865, due to the ravages of epidemics on the Nez Perce population, this "equivalence" estimate is reduced to 10 million pounds.

As noted, this estimate is inferential. Recent discussion suggests that the ratio of food costs to total income may have been falling for Americans over recent time. On the other hand, the Bureau of the Census estimates apply to families on a low-cost food budget, while the Nez Perce of the early 1800's considered themselves well off - with extensive herds of horses, firs, dentalium ornaments and other valued possessions. For example:

> The principal wealth of the Nez Perce was horses, and individuals possessed as many as 50 to 100 head.[121]

> Wealth in horses was highly respected and our leaders and their families had large herds, some as large as several hundred horses. Horses were exchanged as gifts, sold, and acquired through raids. We had elaborate horse trappings made of rawhide, horse hair, bone and antler, and decorated with dyes, porcupine quills, and beads. Different saddles were made for men and women and for packing.[122]

4.3 A Broader Perspective of Nez Perce Living Circumstances in Pre-Contact Times

Possessed of adequate food and other resources, tribal health in the pre-contact times has been viewed in comparatively positive light by subsequent commentators. Trafzer, writing of the Yakama, and referring to neighbor tribes as well, notes:

> Prior to their contact with whites, the Yakama suffered severe eye ailments and they died from many causes, but few from communicable diseases such as smallpox, measles, typhoid, typhus, tuberculosis, influenza, or pneumonia. Although the Indians of the Columbia Plateau did not live a utopian life before white contact, their standard of living was relatively high due to diet, climate, housing, and the availability of resources.[123]

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[120]Recall Note 69.
[121]Griswold, Gillett, 1954. **Supra** at 63.
[122]Slickpoo, Allen P. and D. Walker. **Supra** at 31-32.
[123]Trafzer, Clifford E., 1997. **Supra** at 71-72.

The interconnectedness of Nez Perce traditional lifeways are summarized by Caroline James.

> The Nez Perce depended on the land of their ancestors for their food, shelter, clothing, and comfort of spirit. To the Nez Perce, land was and is the everlasting source of life. The cyclic nature of the weather dictated the patterns of their lives. In the summer, they moved up to the mountains to escape the heat and also to hunt, gather, and collect plants and berries as they ripened in different elevations. From spring through fall roots were gathered, and in the winter, steelhead, salmon and white fish were caught and cooked over fires. People's lives revolved around the land; their livelihood came from nature. [124]

Taken together, the evidence presented in preceding quotations indicates that, in pre-contact times, the Nez Perce peoples substantially achieved the hierarchical requirements for a satisfactory life identified by Maslow, and cited by Bachtold.

> In order to reach one's full potential as a person, everyone must have succeeded in satisfying (a) physiological needs, (b) safety needs, (c) belongingness and love needs, and (d) self-esteem needs, all in this order.... Fully functioning people are those who have been able to fulfill basic needs in a secure environment, where their interaction with others includes
>
> mutually caring relationships, and they view themselves and are viewed by others as persons of value.[125]

This "fully functional" Nez Perce society establishes the baseline from which to assess subsequent **cumulative effects** in our report (Figure 2).

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[124]James, Caroline, 1996. **Nez Perce Women in Transition: 1877-1990**. Moscow, Idaho: University of Idaho Press, p.6.

[125]Bachtold, L.M., 1982. **Supra** at 19.

4.4 Changes in Nee-Me-Poo Circumstances Due to the Treaties of 1855 and 1863

By the 1850's, movement of settlers, miners and others into the Nez Perce territory exacerbated relations with the Nez Perce - and Governor Issac Stevens was commissioned to draft treaties with the Nez Perce and other northwest tribes. The objective of the United States was straightforward - to obtain tribal lands without an outright war. The response of the Nez Perce and other tribes was mixed. Some tribal reaction was hostile - preferring to fight the United States rather than lose the lands of their ancestors. For many, particularly those led by older chiefs, initial response to treaty overtures was noncommittal. Other tribal persons, possibly fearing inundation by lawless settlers and miners, felt that what the United States offered "was all they could get"- and basically agreed to the US treaty offer. It was this last "agreeable" group of Indians that Governor Stevens asserted to be Nez Perce "chiefs" and "leaders", as he signed them up in only a few days in 1855.[126]

[126]For further discussion of these dealings, see for example, Slickpoo, Allen P. and Deward

Irrespective of how the Treaty with the Nez Perces of 1855 was arrived at, it has remained a basis for legal decision making by US courts to the present day. For the purposes of this analysis, the principal salient results of the 1855 Treaty were:

1. The United States obtained title to over 6 million acres of former Nez Perce territory, together with a commitment from Nez Perce signatories that the Nez Perce would live in peace on their remaining approximately 7.5 million acres of Nez Perce lands.

2. The Nez Perce retained title and the rights of exclusive use to 7.5 million acres of their homeland, **and** retained the right to travel around to fish, hunt and gather roots, berries and plants at their usual and accustomed places in the 6+ million acres they had just **ceded** to the United States.

The Nez Perce had given up major portions of their homeland - at substantial material and emotional cost. Yet the Nez Perce signatories had kept half their territory, together with all their usual and accustomed fishing, hunting and gathering areas - and it must have seemed to them that their people could at least continue their seasonal rounds and maintain their supplies of food. On this basis, they may have thought that, while less wealthy, the Nez Perce could still sustain a "reasonable" standard of living - while peacefully sharing their traditional territory with the whites.

The Nez Perce soon discovered this was not to be. Immediately following the Treaty of 1855, gold was discovered in Idaho, and whites spilled onto the reserved Nez Perce lands. Allen Slickpoo, Nez Perce historian, has combined prior research with his own knowledge.

> Gold was discovered in the neighborhood of Fort Colville and Pierce, Idaho, and the announcement of it was made about the time of the holding of the council. As was usual on such occasions, hundreds of whites came flocking to the gold districts. The rush commenced soon after the close of the council. As the routes of the whites led through our country, the new intruders committed excesses and outrages of the grossest nature upon us. They were not satisfied with stealing our horses and cattle, but they claimed the privilege of ravishing Indian women and maidens at their liberty.
>
> In 1861 there were no less than 10,000 miners in the Nez Perce country prospecting for gold. To attempt to restrain these miners was like attempting to stop a cyclone. Treaty stipulations were disregarded and trampled under foot. The superintendents with the aid of loyal chiefs restrained us from hostile action. But within our heart was growing a feeling of distrust, disrespect, and hatred which was to well up into a mighty, unquenchable burst of passionate flame....
>
> In the fall of 1860 our reservation was so overrun with settlers rushing to the mines, that, to avoid conflict, an agreement was entered into (between some Nez Perce and the United States) ...that that

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Walker. **Supra** at 77-78.

> portion of the reserve lying north of the Snake and Clearwater Rivers, the South Fork of the Clearwater, and the trail from said South Fork by the "Weipe root ground" across the BitterRoot Mountains was opened to the whites in common with the Indians for mining purposes. In defiance of the law, and despite the protestations of the Indian agent, a town-site was laid off in October, 1861 on the reservation and Lewiston, with a population of twelve hundred, sprang into existence....
>
> It was recommended that further negotiations be entered into with the Nez Perce tribe with a view to the purchase of that portion of their reservation containing the gold. This region had been represented as rugged, barren and mountainous - unfit for civilization - and therefore of little use or no value to the Indian.
>
> The Treaty of 1863 was concluded in the valley of Lapwai,...on the ninth day of June, 1863. It was signed only by those of us referred to as the Upper Nez Perce group....
>
> The Upper Nez Perces...occupied primarily the Lapwai region. The Lower Nez Perces... occupied the Wallowa region....
>
> Those who actually signed the treaties had no authority to commit the (Nez Perce) nation as a whole. This fact has been steadfastly maintained by the Wallowa or "non-treaty" Indians from the last words of Old Joseph - that he "signed no papers" - to the present time. The fact is further substantiated by a Court decision made in 1901.[127]

Peterson (1995) confirms many of these observations.

> Each day (in the early 1860's) more prospectors streamed into the country. In open violation of the law, many ventured south of the Clearwater into Salmon River country. Soon infringements became flagrant, none more so than the establishment of Lewiston, a town that boomed into a thriving trading center at the confluence of the Snake and Clearwater rivers, smack in the heart of sacred Nez Perce land....
>
> Soon (1863) government officials began pressing the Nez Perce for access to even more land, hoping to legitimize the trespasses at Lewiston and in the mining regions.[128]

A letter by Many Wounds, great grandson of the legendary Nez Perce chief Red Grizzly Bear, to the Senate Committee on Indian Affairs provides further information.

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[127]Supra at 144-147.

[128]Peterson, Keith C., 1995. **River of Life, Channel of Death: Fish and Dams on the Lower Snake**. Lewiston: Confluence Press. p. 63.

> Their (the US 1863 treaty negotiators) treacherous scheme was to execute a new treaty, under color of legality or under a sham agreement to execute such a new Treaty, the purpose of which was to limit the reservation of the Nez Perce People as to permit the miners to hold on to the gold-bearing lands. The Indians did not wish to give up their Salmon River rights, any more than Chief Joseph desired to yield up his Wallowa country. They therefore had to devise ways and means for getting such a new treaty into existence as would dispossess the Indians of the gold lands and thus oblige the U.S. Government to confine the Indians to their restricted confines which it was their wicked design to hem them inside of. Pursuant to these ideas, these mischievous and unscrupulous factors got together a few Indians whom they styled "head men", all of whom were of the upper Nez Perces, lived tributary to the Christian Missionary region about Spalding, Idaho, and many of whom were styled "head men" for the special occasion; and dealing with the un-representative make-believe chiefs, they purported to have made a Treaty with the whole Nez Perce People, and by it - the false and graft contract called the Treaty of 1863 - they pretended to have bought from the whole Nez Perce People, their homes and hunting and fishing grounds.[129]

Liljeblad (1972) confirms this observation.

> The Nez Perce scrupulously kept their treaty obligations and made far-reaching concessions to the white intruders, but Indian conciliation could not keep pace with the influx of white settlers who became increasingly provocative. By utilizing the rivalry and state of disagreement between leaders of the different bands, the government commissioners in 1863 succeeded in negotiating a new treaty signed by a minority group and reducing the reservation to a fraction of its former size, thus forcing the majority of the Indians to give up their lands, village sites, and camping places.[130]

McWhorter adds:

> We shall not dwell on the mock proceedings of this treaty, a travesty on national honor. Suffice it to say that for the meager sum of $262,500 an empire was wrested from its rightful owners.[131]

Finally, Beckam (1998) notes:

> Although relatively isolated from Euro-Americans until the opening of the region east of the Cascades to settlement in 1859, the Indians of the Plateau were subjected to repeated trespass and carving up of their reserved lands.[132]

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[129] In, Slickpoo, Allen P. and D. Walker. **Supra** at 149.

[130] Lileblad, Sven, 1972. **The Idaho Indians in Transition: 1805-1960**. Pocatello: A Special Publication of the Idaho State University Museum, p. 27.

[131] L.V. McWhorter, quoted in, Evans, Steven R., 1996. **Voice of the Old Wolf: Lucullus Virgil McWhorter and the Nez Perce Indians**. Pullman: Washington State Univ. Press, p. 175.

[132] Beckham, Steven D., 1998. "History Since 1846", in, **Handbook of North American Indians: Plateau**. Vol.12. Washington, D.C.: The Smithsonian Institution, p. 156.

The 1863 “treaty” reduced the Nez Perce reservation lands from 7.5 million acres to 760,000 acres - so that, within a time span of 8 years, the Nez Perce lost almost 90 percent of their home territory, some 12 million acres. The US “promise” of tribal access to usual and accustomed fishing, hunting and gathering areas was not affected by the 1863 “treaty” - and the right of access to springs and fountains in their ceded areas was added. However, for those Nez Perce that had hoped the 1855 Treaty would allow them to live reasonably, and at peace with the whites, events in the following years - and the 1863 “treaty” itself - must have disabused them of such ideas.

In 1873, a limited area was reserved for the Wallowa Nez Perce in the Wallowa Valley by executive order - but the clamor from whites in Oregon became so great that the President rescinded this order two years later[133]. As a result of the 1863 “treaty” and the rescinding of Nez Perce reserved land in 1875, the Wallowa Nez Perce, led by Looking Glass and Young Joseph, became engaged in the conflict sometimes termed “Chief Joseph’s War”. The Nez Perce loss of land resulting from the Treaty of 1855 and that of 1863 are illustrated in Figure 3.

[133]Supra at 27-28.

Attempts by US citizens to gain more tribal lands and resources at Nez Perce, and elsewhere among Northwest treaty tribes, did not stop after the 1850's and 60's. As Hunn notes:

> The settlers' demands for more and more land led to the passage of the Dawes' Severalty Act (a.k.a., General Allotment Act) by Congress in 1887. The pious justification of this abrogation of treaty guarantees was that it would encourage the Indians' transition to a civilized way of life by virtue of the alleged moral force of private property ownership, a powerful element of the "liberal" political ideology of the day. The hidden agenda was clearly otherwise. All reservation lands remaining after each enrolled tribal member received his or her 80 acres of farmland or 160 acres of grazing or timber land was to be declared *surplus*. The government was then authorized to buy this from the tribes for distribution by sale or homestead title to the citizenry at large. Furthermore, the Indians' allotted acres - after a period of up to twenty-five years in trust status - could be converted to *fee patent* ownership, that is, their lands could be freely bought and sold.[134]

Nez Perce tribal historian Slickpoo confirms these observations.

> During the 1880's a growing hostility toward the reservation system kept growing. Whites objected to reservations largely because they blocked off large land areas from white exploitation. In time Congress yielded to the white pressures and in 1887 passed the Dawes Act. Under this act, the president could, whenever he saw fit, divide up a reservation, and give each member of the tribe on that reservation a certain number of acres. Upon making a choice (of land) the individual was to receive a fee patent which stipulated in part that the land would be held in trust by the United States government for twenty-five years. It was felt that twenty-five years was all that was necessary for Indians to learn how to live more like whites, to adopt white customs, and in short, to become "responsible citizens".[135]

However, the whites were not prepared to wait 25 years to obtain more tribal lands.

> The Burke act in 1906 again amended the Dawes act. This act provided that the Indian holding an allotment would not become a citizen, nor fall under (the protection of) the civil and criminal laws of state or territory until his trust patent had been exchanged for a fee patent. However, the mandatory twenty-five year waiting period was removed and the new act stipulated that any time the Secretary of the Interior felt that an individual was capable of taking up the responsibilities of citizenship, the trust patent could be exchanged for a fee patent....
>
> Many of our people lost the trust status of their allotments because of the "forced patent" clause. Even today it is questionable whether such lands were taken from us by voluntary or involuntary methods.[136]

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[134]Hunn, Eugene S., 1990. **Supra** at 278.
[135]Slickpoo, Allen P. Sr., and D. Walker. **Supra** at 219.
[136]Supra at 220.

> The Dawes Severalty Act of 1887 became the means for the most significant assault on tribal land tenure of any measure since the ratification of treaties and cession of aboriginal homelands in the 1850s and 1860s. Allotment was another variant of the scheme of consolidating Indians, reducing their land base, and increasing government control and oversight over their activities.[137]

In 1893, the US government obtained 542,000 acres of Nez Perce "so called" surplus tribal land[138] - reducing Nez Perce ownership of the lands within their Reservation boundaries to less than one million acres.

> On November 8, 1895, President Grover Cleveland declared the Agreement of 1893 to be in effect and ten days later the unallotted lands were opened to white settlement. The subsequent rush for homesteads could be described as somewhat similar to the Oklahoma land rush when the Indian Territory was opened to homesteading.[139]

The adverse effects of the Dawes Act upon the Nez Perce continued well into the present century. Non-Indians continued to obtain Nez Perce land from fee patent holders, until, by 1976, they held the greatest part of the lands within the 1863 boundaries of the Nez Perce reservation (Figure 3).

As of 1976, the Nez Perce owned only 175,000 acres[140] within their Reservation boundaries - **approximately one percent of their traditional homeland**. Further, due to the Dawes Act, these lands were discontinuous, and checkerboarded within the 1863 reservation boundaries (Figure 4). This further impaired the ability of the Nez Perce to initiate resource protection programs and economic development projects that might benefit Nee-Me-Poo.

We conclude that cumulatively, over the period from 1855 to the early 1980's, **virtually all of the wealth associated with lands of the Nez Perce home territory has been transferred to non-Indian residents of the region**. Even using the reduced area under the 1855 Treaty as a basing point, by the early 1980's, only 2 percent of these lands remained in Nez Perce hands. These transfers of assets from the Nez Perce to non-tribal citizens of Idaho, Oregon and Washington have been variously effected through Treaty negotiation, by unilateral action of the US Congress, by misrepresentation and subterfuge, by breaking promises to the Nez Perce, and by the outright application of threat and force. They have enabled non-Indians to develop vast agricultural areas, to generate extensive amounts of cheap electricity and have supported lucrative forest and minerals based enterprises. They have left the Nez Perce peoples destitute.

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[137]Beckham, 1998. **Supra** at 166.
[138]Slickpoo, Allen P. Sr., and D. Walker. **Supra** at 225.
[139]Supra at 226.
[140]This figure includes land reserved in trust, tribally owned land and Nez Perce allotted land.

4.6 Nez Perce Access to Usual and Accustomed Fishing, Hunting and Gathering Areas

The Treaty of 1855 guaranteed Nee-Me-Poo both exclusive use of their reservation lands, and the right to fish, hunt and gather at usual and accustomed places outside their reservation boundaries. Prior sections identify how exclusive use guarantees were breached by US miners and settlers. Over the time following the Treaty, Nez Perce access to usual and accustomed tribal resources outside their reservation were similarly "cut off" - by white settlements, use of public land for grazing, fencing, and general harassment of Indians whenever they left the reservation - if, in fact, they were permitted to leave at all. Often, these actions were supported by local and state government. This result was not surprising - for US policy was not only to wrest as much land as possible from the tribes - but also to confine the tribes on what little tribal land they had left.

> Anglo Americans in the West thought the Indian's fate was the price of progress; it was the Indian's problem and none of their own. They expected their government to take land from the Indians and give it to the whites. They expected, too, more indirect aid in reallocating resources, as when federal troops protected buffalo hunters who slaughtered buffalo for market and, in the process, made it impossible for nomads to continue their accustomed way of life.[141]

Throughout the latter part of the 19th Century, and much of the 20th Century, the Nez Perce (and other Stevens treaties tribes) have fought a losing battle to preserve access to the off-reservation survival resources that were assured in the Treaty of 1855.

> (Following 1877) the Nez Perce attempted to adjust to their rapidly changing world. The rich pastures and fisheries of the Wallowa were closed to them. They continued to fish the Salmon river drainage but they were increasingly cut off by settlement from old camp grounds and fishing sites.[142]

These cutoffs increased the importance of remaining tribal mainstem fishing sites[143]. In this sense, had they been able, the Nez Perce would have needed to take much more than their estimated treaty times catch of 1.6 million pounds of salmon from these remaining sites, to compensate for preemption of harvests of fish, game, roots and berries at other usual and accustomed sites that were lost. Yet even at

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[141]White, Richard, 1991, p. 237.
[142]Lane & Lane Associates and D. Nash, 1981a. **Supra** at 51.
[143]Supra.

mainstem sites the northwest tribes needed to repeatedly refer to the courts to beat back attempts to preempt their treaty resource-access guarantees[144].

4.7 Changing the Production Function for Nez Perce Lands and Waters

Economists describe the manner in which the output of a good or service and the inputs of capital and labor required to make it are combined as a **production function**. In early times, the Nez Perce combined their own efforts with their natural assets - their lands, waters, fish, game, roots, berries – to "produce" the foods and other material incomes that provided the annual basis for their survival as a people.

As the 20th century progressed, not only has Nez Perce access to traditional fishing, hunting and gathering grounds been greatly diminished, but where access was secured, non-Indians had often changed **the production function** for lands and waters upon which Nez Perce Treaty guarantees depended. Increasingly over time, when Nez Perce came to the meager number of usual and accustomed places they had left to exercise their Treaty-protected right to fish, hunt or gather, **they found the salmon and other resources were no longer there!** Rather, the land and waters of the Nez Perce traditional territory have been employed in new productive combinations that grow agricultural cash crops, support commercial logging and produce electricity - but that have severe adverse consequences for salmon, game, roots, berries and tribal medicinal plants.

By 1975, available chinook salmon habitat in the Columbia basin had been reduced to less than half of its original amount[145]- and associated annual salmon catches by all fisher groups had fallen to only 1.4 million salmon over the 1987-1991 period[146]. Conversely, by the end of the 1970's, over 7 million acres of irrigated agriculture had been developed in the Columbia Basin[147] - and an extensive network of dams to produce hydroelectric energy has been developed.

This **transformation of Nez Perce lands and waters has been achieved over the objections of the Nez Perce Tribe. It has enriched the non-tribal peoples of the basin - at the expense of the Treaty-based resource assets, particularly in river's capability to produce salmon for the**

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[144]See, Cohen, Fay G., 1986. **Treaties on Trial: The Continuing Controversy over Northwest Indian Fishing Rights**. Seattle: University of Washington Press, pp. 54-60.

[145]The Independent Scientific Group, 1996. **Return to the River: Restoration of Salmonid Fishes in the Columbia River Ecosystem**. A Report to the Northwest Power Planning Council, p. 353.

[146]Bonneville Power Administration, US Army Corps of Engineers and US Department of the Interior, 1995. **Columbia River System Operation Review: Final Environmental Impact Statement**. Appendix O: Economic and Social Impact, p. 3-23.

[147]Supra at 355.

tribe, that the Nez Perce believed they had assured to themselves in the Treaty of 1855. This arbitrary transformation of Nez Perce Treaty-protected wealth and associated income must be added to the other actions responsible for impoverishment of the Nez Perce people[148].

In sum, the assets available to the Nee-Me-Poo from Nez Perce lands has been reduced to a very small portion of that which existed in 1855 and before. Tribal usual and accustomed harvests from Nez Perce fisheries have also been greatly diminished. Restriction of tribal access to usual and accustomed harvest locations and continuing harassment by some non-Indians have contributed significantly to this reduction. Transformation by non-Indians of the Treaty-protected production functions that assured Nez Perce peoples their guaranteed fishing opportunities have reduced the Treaty-based assets and related income of the Nez Perce yet again. These actions have had the cumulative effect of transferring extensive wealth associated with Nez Perce Treaty-protected lands, waters and associated activities from Tribal to non-Tribal residents of the region.

4.8 Lower Granite, Little Goose, Lower Monumental and Ice Harbor Dams

Four run-of-the-river hydroelectric dams were built on the Lower Snake River between 1962 and 1975. These dams effectively impounded the Lower Snake River from the Ice Harbor Dam near the confluence of the Snake and the Columbia to a point approximately four miles upriver of the confluence of the Snake and the Clearwater rivers near Lewiston, Idaho. Construction of these dams - and their predecessors - was not without contestation or controversy.

> A myth has developed about the callous attitude of early Army Engineers in the Pacific Northwest toward the preservation of anadromous fish runs. Specifically, the myth claims that the Corps did not seek fish-passage facilities at Bonneville Dam, the lower Columbia's first great multipurpose project; that only after unrelenting public pressure did they compromise. The myth is wrong....
>
> In fact, the Corps' initial design, submitted to Congress in 1933, included fish-passage facilities. Facing pressure from the federal government to get unemployed people working immediately at Bonneville, the Corps had no time to develop detailed fish passage plans. Yet the original budget included $640,000 for fishways. (F)ish passage - once the Engineers completed final planning - cost over $7 million.... It is inaccurate to say the Corps showed indifference toward fish. Forced to act quickly during the project's initial planning stages, the Corps subsequently cooperated with state and federal fishery agencies and commercial fishing interests... .
>
> The effort seemed to pay off, for at first Bonneville appeared to be a success. ...
>
> Even in the midst of this success some remained skeptical. All Bonneville actually proved, they claimed, was that most strong upstream and downstream migrants could overcome one large dam. While praising Bonneville's success, the Interior Department's Bureau of Fisheries also warned that the cumulative effects of more dams might doom anadromous fish. As early as 1938 biologists

[148]Recall pp. 55-62. .

> realized that some fish died attempting to pass the dam. Later studies showed mortality rates for downstream migrants to be as high as 15 percent. Lose that many fish at each dam and the string of federal projects proposed from Bonneville to Lewiston could exterminate Idaho's anadromous fish. Fishery people could live with Bonneville, but they would fight to prevent dams on the lower Snake, the gateway to some of the most significant salmon and steelhead spawning grounds in America.[149]

By 1937, controversy with respect to proposed Lower Snake dams was evident - with representatives of the Inland Empire Waterways Association (IEWA) in support, and fishery agencies expressing concern[150]. Initially, IEWA attempted to work with fishery interests, but:

> The alliance between fishery agencies and the IEWA would be short-lived as the agencies stridently fought lower Snake dams. In 1945 an Oregon chapter of the chamber of commerce urged the IEWA to "adopt measures to effectively combat" the "highly organized" opposition to dams by fish and wildlife agencies.[151]

By this time, the Corps of Engineers had been unable to avoid the tide of special interest ebbing and flowing through the Lower Snake dams debate.

> Even the Corps' Assistant Chief of Engineers Thomas Robins, a man generally sympathetic to fishery concerns during his tour of duty in the Pacific Northwest, grew exasperated with the increasing animosity of fishery advocates. Testifying before Congress in 1941 he noted that Bonneville fishways had been eminently successful and claimed he had every reason to believe fish could safely pass in both directions over Snake River dams fitted with similar facilities. The dams' turbines were "absolutely incapable of hurting the fish. If you could put a mule through there, and keep him from drowning he would go through without being hurt. Before we put the wheels in, we carried on experiments with fish, and proved conclusively that the pressure of the turbines will not injure fish." It was a broad statement.
>
> Actually, the turbines at Bonneville and other Columbia River dams did kill fish, although researchers eventually found that the barriers also created numerous other, more serious difficulties for the migrants unrelated to turbine mortality. Dams, in other words, killed fish in a variety of ways. Still, Robins' comment provided fuel for advocacy groups like the IEWA and became almost a soundbite, a sort of shorthand, knee-jerk defensive mechanism: "since turbines don't kill, dams are safe."[152]

The tribes knew that these dams threatened the salmon. But if their counsel was sought, it was not listened to. This period of conflict between dam advocates on the one hand, and fishery agencies on the other continued into the 1950's. Again, Peterson summarizes.

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[149]Peterson, Keith C., 1995. **Supra** at 108-109.
[150]Supra at 109.
[151]Supra at 110.
[152]Supra.

> (A)nother myth has developed concerning fish and dams along the Columbia/Snake waterway, this one perpetuated by the Corps of Engineers, the Bonneville Power Administration, and hydropower advocates. This myth states that in the 1930's and 1940's, when the Engineers began construction Northwest dams, fishery biologists worried only about passing adult fish and expressed no concern about getting juveniles to the sea. "When hydroelectric dams were originally constructed in the Northwest it was believed that providing adequate upstream passage over the dam was sufficient to sustain salmon and steelhead runs." reads a publication of the Northwest Power Planning Council, a statement frequently repeated by employees of the Corps and hydropower advocates in public meetings and during conversations. It is a convenient myth, for it absolves the Corps and BPA of much of the blame for the extreme losses of juvenile fish the dams would eventually cause, losses that would lead to exterminating or endangering several species. "We just didn't know," becomes a familiar refrain. But the Corps did know. So did the Bonneville Power Administration.
>
> It is true that biologists now know much more about the problems dams cause downstream-migrating juveniles than they did in the 1930s, 1940s, and 1950s. ... But it is more a deception of recent political convenience than a statement of facts known at the time to say the Corps was unaware of the difficulties its river work caused smolts. ...
>
> As early as 1934 the Bureau of Reclamation recognized the difficulty of attempting to get juvenile fish past a major dam. Largely because of this vexing problem, the Bureau chose to provide no fish passage at Grand Coulee, and that dam forever blocked the upper Columbia to anadromous fish. In 1947 biologist Harlan Holmes began studying juvenile mortalities at dams and discovered some turbines could be "literal sausage grinders." In 1952, when Holmes estimated that Bonneville Dam killed 15 percent of juveniles passing through, the Corps refused to publicize his report. In 1948 the U.S. Fish and Wildlife Service stated of the proposed lower Snake dams specifically, "Adequate facilities can be provided for the upstream passage of fish... The potential loss of downstream-migrating fingerlings presents a more serious problem. ... The lower Snake River dams collectively present the greatest threat to the maintenance of the Columbia River salmon population of any project heretofore constructed or authorized."[153]

Fishery agencies were successful in pressing their concerns over the proposed lower Snake dams into the mid-1950's, so Herb West of the IEWA switched his strategy.

> Having had little luck persuading Congress of the dams' safety, West sought other causes for the Northwest's decreased fish runs. His bogeymen became those who fished the rivers. Greedy Indian, commercial and sport fishers, not dams, were primarily responsible for declining returns. It was an argument that would be repeated often by dam builders and power producers in the decades to follow. And it had some merit.
>
> Beginning with the advent of the Columbia River's commercial canning industry in the 1860s, commercial fishers had taken a severe toll, as had, to a lesser extent, Indians and sport fishers.

---

[153]Supra at 112-113.

> However, due to a variety of new laws and seasons, runs had largely stabilized by the 1930s. When federal dams came, fish faced yet another obstacle, and runs of wild salmon and steelhead again plummeted. Unless the debate's focus could be shifted from dams to other fish-kill causes, the lower Snake might never get its development. So the Corps of Engineers joined West in making the case against commercial fish operations.... The North Pacific Division had formed their office primarily to construct McNary and the four lower Snake dams. (By 1955) They had completed McNary. If Congress continued to refuse funding for Ice Harbor there might well be no reason for the District to exist. So the District attempted some persuasion of its own, despite the agency's rhetoric that it never lobbies, instead doing only as Congress wishes. After a year of observing fish passage at McNary, like West, the Corps announced a scientific victory. Results there, the Corps asserted, "discount considerably the claims of the fish industries that dams on the river are a hindrance to the anadromous hordes;" enough fish had eluded the real culprits, "the commercial fishermen's nets and sportsmen's lures," to insure survival.[154]

The mythical hypotheses of the 1930s, 1940s and early 1950s that "dams don't kill fish" were refuted with finality by the death of millions of Columbia River salmon. The following myth that "its someone else's fault" was also refuted when, despite increasingly strict regulation of fisheries - millions more of the salmon stocks that had survived initial impacts, died also. These results are evident from Snake River run size estimates of the Columbia Basin Fish and Wildlife Authority (CBFWA) (Table 4).

Table 4

Characterization of the Condition of Snake River Salmon and Steelhead at the End of the 1980's

Species	Historic Run Size	Run Size: 1954-69	Run Size: Late 1980's	CBFWA Comment re. Effect of Lower Snake Dams
	-------numbers of salmon------			
Spring Chinook	100,000+	40,000	18,000	Stocks depressed due to L. Snake & Columbia mainstem dams.
Summer Chinook	1,000,000+	51,000	5,000	Stocks depressed. due primarily to hydroelectric system.
Bright Fall Chinook	---	33,000 (1954 high)	2,000	Stocks depressed - due to dams, habitat loss & fishing.
Summer Steelhead (1940)	233,000	80,000	77,000	Stocks generally healthy. Reductions due primarily to dams.
Grande Ronde Sockeye	700,000	---	0	Stock extinct. Restoration limited

[154]Supra at 117.

	(approx.)			by Snake & Columbia dams.
Salmon River Sockeye	-signif.-	1,000	2	Stocks depressed/decreasing - due primarily to Sunbeam Dam & Columbia & Snake River dams.
Clearwater Coho	-signif.-	---	0	Extinct - due to mixed stock fishing & Columbia/Snake River dams.
Grande Ronde Coho	-signif.-	---	0	Extinct - due to mixed stock fishing & Columbia/Snake dams.

Source: Columbia Basin Fish and Wildlife Authority, 1990. **Integrated System Plan for Salmon and Steelhead Production in the Columbia River Basin,** pp. 25 to 121.

In recent years, these hypotheses have been reborn. The Corps of Engineers (and others) once again turn their attention to "technological breakthroughs" that offer hope of assisting salmon to safely pass dams. And some bureaucrats, seemingly forgetting the conclusion of the US Fish and Wildlife Service in 1948 (Note 152), still assert uncertainty that removing the Snake River dams will help the salmon substantially - and urge less stringent adjustments to the status quo, and further study of a wide range of elements in the river and the ocean that might affect the way restoration turns out. This opinion has less credence with publication of latest PATH findings[155], and their review by a panel of independent experts, but it is still argued by some.

Tribal elders, leaders and scientists are skeptical of such arguments. They have experienced more than 50 years of claimed scientific breakthroughs at the dams. But these "breakthroughs" have an empirical record of failure - and the salmon have continued to decline.

The same empirical record clearly shows the major role of the Lower Snake dams as killers of salmon - and the tribes find statements that "we're not sure and need to do more work to see if dam removal would significantly help salmon" devoid of either a sense of the history of the river, or of sound empirical justification. They also believe that such "status quo and study" responses are contrary to the direction of the federal district court of Oregon[156] - and worry that these assertions are less indicative of the limits of science than, to use Petersen's earlier terminology, "a deception of recent political convenience".

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[155]PATH Scientific Review Panel, 1998. **Conclusions and Recommendations from the PATH Weight of Evidence Workshop**. September 8-10. Vancouver, Canada.

[156]See, Blumm, Michael C., M.A. Schloessler and R.C. Beckwith, 1997. "Beyond the Parity Promise: Struggling to Save Columbia River Salmon in the mid-1990's", in, **Environmental Law**. 27:21, p. 23.

Most importantly, the Tribes worry that if the salmon once again have to die to refute these new claims - there will be no salmon left in the Snake River.

This history of institutional interface with the Columbia/Snake river and its salmon is important to an assessment of the effects of project alternatives at lower Snake River on cumulative trends affecting tribal peoples and their resource assets. Of particular importance is the insight it provides concerning how river managers have dealt with uncertainty with respect to impacts on salmon - as uncertainty continues to be a major issue at both biological and social scientific levels in the Feasibility Study. As the information in this section illustrates, throughout much of the twentieth century, river managers were willing to accept significant levels of risk to the salmon of the Columbia and Snake rivers as they developed their in-river projects and initiatives. Their philosophy with respect to the salmon seemed to be, "we don't know much about the salmon, but we are confident we can use technology to maintain significant stock levels in the system". This risk-insensitive approach facilitated transformation of the production function of the rivers to produce vast wealth for electrical consumers, irrigated agriculture, navigation enterprises and other (primarily) non-Indian interests.

In the 1990's, as salmon stocks have become threatened and endangered, salmon recovery projects have become a focus for feasibility analysis - as they are here. However, **as the focus for in-river project action has switched from development of electricity, irrigated agriculture, navigation services, etc. to restoring salmon, treatment of risk to salmon by key management entities has switched completely as well**. **Now, where action to save and restore salmon is the issue, some of the same river managers are claiming "they need to be highly certain of salmon results" before they can act.** In technical terms, they are demonstrated to be far more risk adverse with respect to uncertainty when the issue is saving the salmon, than when the issue was developing the river for other uses.

From an economic perspective, this inconsistency with respect to how river managers and their technicians have treated uncertainty regarding salmon has two complementary effects. During much of the 20th century, it facilitated an arbitrary transfer of theTreaty-protected wealth-creating capabilities of the Columbia and Snake rivers from the tribes to non-tribal citizens, who enjoy the greatest portion of benefits associated with power production, irrigated agriculture, navigation and so on. In recent years, the "switch" to avoid uncertainty where salmon recovery is concerned is delaying and/or negating remedial action - and preempts rebalancing transfers of Treaty wealth back to the tribes.

The effect of these inconsistent policies, and of the lower Snake River dams, on the peoples of the Nez Perce is clear. As noted earlier, Nez Perce villages and traditional use areas extend down the Lower Snake River on both banks to at least the vicinity of the mouth of the Tucannon River. The lower Snake River dams have directly inundated these areas - as well as usual and accustomed fishing locations the Nez Perce shared with tribal peoples living downriver from there to the confluence with the Columbia (recall Table 2). Consequently, substantial numbers of Nez Perce village areas, usual and accustomed fishing areas, burial areas and spiritual areas were drowned when these four dams were put in.

Lower Snake River dams, together with dams on the mainstem Columbia, contributed significantly to the destruction of Nez Perce Treaty-reserved salmon, steelhead, sturgeon, eulechon - as well as flooding areas Nez Perce peoples were accustomed to go to gather roots, berries and medicinal plants - and are consequently major contributors to destruction of Treaty assets assured to the Tribe in the Treaty of 1855, and to the present adverse circumstances of the Nez Perce peoples.

As we have noted, from an economic perspective, the "dams don't kill fish" and "its somebody else's fault" hypotheses facilitated massive transformation of the production function of the lower Snake River - and with it, a massive transfer of Treaty-protected Nez Perce wealth, from the Nez Perce Tribe to non-Indian residents of the region. And today, the "new science can fix the dams/ we need more testing and study" hypotheses effectively protect against redistribution of any significant portion of "taken Tribal Treaty assets" back into Nez Perce hands.

4.9 Post-Contact Nez Perce Tribal Health

The population of the Nez Perce peoples plummeted after initial contact due to pestilence brought by early white explorers and trappers. Hunn, talking of the Columbia River tribes, notes:

> The new life promised by the coming of the whites and widely prophesied brought a very high price. As far as can be ascertained at present the first bill came due about 1775. Robert Boyd believes, based on a meticulous survey of early documents, that the first wave of smallpox might have come from the west about 1775 from ships exploring for furs along the north Pacific coast... .
>
> Smallpox again ravaged along the Columbia in 1801, attacking a new generation of susceptibles grown up since the first visitation. This likely carried off another 10 to 20 percent, reducing the original population to about half by the time of Lewis and Clark's exploration. In their journals Lewis and Clark describe old men with pockmarked faces among the Upper Chinooks of the Lower Columbia River and were told the disease had struck a generation before. Smith documents its ravages among the Nez Perce at about the same time.
>
> (T)he Plateau people next found themselves in the path of thousands of immigrants crossing the continent over the Oregon Trail....With the immigrants came a potpourri of diseases against which the Indians had no resistance. In 1844 there was scarlet fever and whooping cough, in 1846 more scarlet fever, and so forth. Many white settlers saw this mortality of the Indians as an act of God, clearing the rich bottomlands...for Christian settlement.[157]

Accordingly, Nez Perce population plummeted from pre-contact times to the end of WW II. The estimates in Table 5 are from Walker (1967) and Lane & Lane and Nash (1981).

Table 5

[157]Hunn, Eugene S., 1990. **Supra** at 27-32.

Estimated Historic Population of the Nez Perce Tribe - Selected Years

Year(s)	Population
Pre-contact (approx. 1780's)	5,000
1863	2,800
1893	2,009
1910	1,433
1940	1,469

Trafzer(1997) estimates that pestilences among Columbia/Snake tribes predominated into the 1920's and 30's when modern preventative medicine began to reach the reservations[158]. Speaking of the Yakama, but generalizing with respect to neighbor tribes, Trafzer hypothesized that by the 1950's, degenerative and man-made disease had become a principal focus for tribal mortality - and that loss of traditional diet from native foods, the pressures of white invasion and violence, dislocation to reservations, loss of autonomy and control over their lives, high poverty and low medical services all affected tribal mortality adversely.[159] Again, these observations are congruent with the devastation of the Nez Perce resource base, with the violation of Nez Perce peoples discussed in earlier sections of this report and with the findings by Bachtold.

4.10 Present Circumstances of the Nee-Me-Poo

Having reviewed the cumulative devastation to Nez Perce Treaty-based and other resource assets, the attendant abuses suffered by Nez Perce peoples, and the continuing and cumulative transfers of wealth from the Nez Perce to non-tribal residents of the Columbia/Snake area from Treaty times through much of the 20th century - it is appropriate to determine whether significant recent changes have occurred and to assess the present circumstances of the Nez Perce peoples.

4.10.1 Remaining Nez Perce Lands

Enrolled Nez Perce tribal membership currently stands at approximately 3,000 persons[160] - a little more then double the level of the 1930's and 40's. Yet Nez Perce lands, held in tribal trust, in individual trust, or in fee simple, have again declined, from a level of 175,000 acres in 1976, to a present level of

[158]Trafzer, Clifford E., 1997. **Supra** at 3.
[159]Supra at 3-6.
[160]Nez Perce Tribal Administration.

94,000 acres[161]. This latter acreage represents 1.2 percent of the lands the Nez Perce believed they had secured for their own use in the Treaty of 1855.

> Today the Nez Perce people hold fragments of land scattered in the canyon breaks and plateau areas of the Clearwater Drainage. The land is a remnant of the former holdings and rings with hollow treaty language which promised no white man would ever live there without consent of the tribe. ...
>
> The land and what it held was valuable to non-Indians. Gold, grass, grain and timber combined with governmental policies and practices transformed the Nez Perce Reservation into a landscape mostly owned by non-Indians. The General Allotment Act of 1887 and the Indian Apportionment Act of 1894 opened the reservation and flooded the lives of Indian people in new and confusing ways. The game was depleted, the roots were depleted, the fish were going quickly--the verdant landscape remade into field and farm, harvested timberlands, small towns, amid a small patchwork of "Indian Land". The sons of hunters, fishermen and warriors needed a job and there were few to be had. If one theme stands clear in the economic and social matrix of the Nez Perce it is loss of land and the mining of the remaining land for anything of cash value.[162]

4.10.2 What Remains of the Salmon

The status of fisheries - particularly salmon - upon which the Nez Perce depend, is similarly desperate. While salmon stocks continue at dire risk, federal agencies seek solutions whose results are certain - and which will minimize or have no adverse effects on entrenched (non-salmon) economic interests. Federal judicial opinion has judged such "status quo" approaches ineffective.

> Two landmark judicial opinions called attention to the ineffectiveness of salmon restoration efforts in 1994. Both the Ninth Circuit and the federal district court of Oregon characterized the plans promulgated by the Northwest Power Planning Council (Council) under the Northwest Power Act and the National Marine Fisheries Service (NMFS) under the ESA as substantively inadequate. The Ninth Circuit faulted the Council's plan for failing to give proper deference to the views of fisheries agencies and for adopting river flow measures advocated by power interests, despite what the court considered "an overwhelming consensus among (fishery) agencies and tribes in favor of higher flows and more scientifically-based biological objectives." The district court struck down NMFS's 1993 biological opinion (BiOp) on Columbia Basin hydroelectric operations because it was "too heavily geared toward a **status quo** that has allowed all forms of river activity to proceed in a deficit

[161]Nez Perce Office of Legal Counsel, 1999.

[162]Central Washington University, 1991. **Potential Effects of OCS Oil and Gas Exploration and Development on Pacific Northwest Indian Tribes: Final Technical Report**. US Minerals Management Service OCS Study MMS-91-0056, pp. 256-257.

> situation", resulting in "relatively small steps, minor improvements and adjustments - when the situation literally cries out for a major overhaul." (our bolding)[163]

In recent years, some agencies have rationalized failure to restore the Snake River salmon by claiming they are "uncertain about what to do". Substantial uncertainty exists with respect to the effects of dams on salmon - but this did not impede action to build the dams in the first place.

From a Tribal perspective, uncertainty is not the problem. Rather, economic interests who, as noted earlier in this report, have obtained substantial amounts of wealth via negotiation, by changing the laws, and by illegal destruction and/or taking of Nez Perce Treaty assets - and who have unilaterally transformed the land and waters of the Columbia Snake system to obtain still more wealth at Tribal expense - are understandably reluctant to see any significant portion of that wealth redistributed back to the Nez Perce Tribe. From this perspective, "claims of uncertainty about what to do" are viewed as substantially influenced by "status quo" distributions of wealth - and to Tribal ears, sound the same as claims that the Dawes Act "was good for the Indians" - as some of its backers prepared to steal away more of the Nez Perce tribal wealth in earlier times.

This situation is exacerbated by what the Tribes view as an overly optimistic view by some federal agencies of the salmon restoration potentials associated with discrete structural changes at Columbia/Snake dams, despite decades of evidence to the contrary - and too often, a refusal to seriously consider contrary Tribal information, advice and counsel.

> While biologists studied and debated, Indians, living by the river, saw fish quality decline and sea gulls eating dead smolts out of dam spillways. More often than not, Indian concern and counsel was ignored.[164]

It is these wealth transfer concerns that likely underlie attempts to establish two conditions for Snake River salmon restoration that, given present circumstance, may be inconsistent with recovery of the stocks**:** no substantial income redistribution (complete mitigation) for some economic sectors; and, high certainty before action is taken. The tribes are concerned that such insistence in the face of the perilous condition of Snake River salmon will likely ensure that, race by race, the salmon of the Snake River continue to dwindle toward extinction.

> And while the arguments raged, the salmon continued to decline. Recent (1995-1996) run size estimates for many Columbia Basin stocks are the lowest in recorded history.[165]

As a result of this devastation, Nez Perce catches are now very small. Tribal fish managers estimate an annual average Nez Perce Zone 6 commercial catch of approximately 105,000 pounds for chinook, steelhead, sturgeon, coho and sockeye combined for the period 1990-1993. Tribal Snake River catch is for Ceremonial and Subsistence (C&S) purposes only - and is more limited - with a chinook salmon

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[163]Blumm, Michael C., M.A. Schloessler and R.C. Beckwith, 1997. **Supra** at 23-24.
[164]Meyer Resources, 1983. **Supra** at 72.
[165]Blumm, Michael C., M.A. Schloessler and R.C. Beckwith, 1997. **Supra** at 28.

take estimated of approximately 55,000 pounds in 1997[166]. Using these estimates, **Nez Perce present harvest approximates 10 percent of the fish we estimate was taken by the Nez Perce around Treaty times**.

4.10.3 A General Assessment of Present Nez Perce Material Circumstance

Henry Penney summarized the general material predicament of the Nez Perce Tribe in 1982.

> Well, I think that looking at our depleted resources that you can see what we had before was about 14 million acres of area, probably even greater than that if you consider when the Nez Perce went to Montana and the Dakotas for buffalo. You know, there's a vast amount of resources out there that's not available to us now. And each treaty and agreement since 1855 has gradually taken away a lot of our resources.... How do we get the tribal members back on par with the dominant society? We have very limited resources now.[167]

The magnitude of the present Nez Perce resource predicament can be illustrated by reference to our earlier approximation that Nez Perce lands and waters in pre-contact times produced annual benefits equivalent to more than 18 million pounds of food (p. 51). Applying the direct salmon losses discussed here - and using our estimates of loss of Nez Perce lands as a proxy for loss of non-salmon traditional production - we can conclude that the Nez Perce peoples today obtain from their Treaty-based resources production equivalent to less than 500,000 pounds of food per year - **approximately 2 percent of the value their lands originally produced**.

This difficult Tribal economic situation stood little changed through the mid-1990's. Nez Perce peoples continue to obtain limited revenue from timber, limestone and convenience store sales and from other small business initiatives[168] - as well as lease revenue from some fee lands. Data from the US Bureau of the Census and from the Bureau of Indian Affairs translate the overall effect of these initiatives into non-Indian statistical terms (Table 6).

Table 6

Comparative Data Showing the Relative Circumstances of the Nez Perce Tribe - 1989-91

Economic Indicator	Nez Perce Tribe	Idaho	Washington	Oregon
Families in Poverty (%)	29.4	9.7	10.9	12.4

[166]Based on data from the Nez Perce Department of Fishery Management, and assuming an average size per Chinook of 18 pounds.

[167]Henry Penney, in, Meyer Resources, Inc., 1983. **Supra** at 45.

[168]Nez Perce Tribe, 1997. **Nez Perce Tribe Overall Economic Development Plan: 1997-1998**. pp. 18-27.

Unemployment: US Census (%)	19.8	6.1	5.7	6.2
: BIA	62.0*			
Per Capita Income ($'000)	8.7	11.5	14.9	13.4

*The US Bureau of the Census employs a relatively liberal "employment" standard. BIA's employment measure requires employment over a longer time period to qualify. The higher BIA unemployment estimate is judged to better reflect the degree of material difficulty the Nez Perce experience - particularly in winter months.

Source: US Bureau of the Census - 1990 Census Data. US Bureau of Indian Affairs - 1995 Indian Population and Labor Force Estimates..

By 1996 the Nez Perce Tribe had identified one economic activity that offered a measure of economic hope for its people. In the fall of that year, the Tribe opened Clearwater River Casino. By 1997, the Tribe estimated that this casino, and one at Kamiah was employing some 240 persons - 95% of them tribal[169] - with an estimated annual payroll of some $2.8 million[170]. This single initiative is insufficient, by itself, to return Nez Perce peoples to even a moderate level of material wellbeing - but it offers hope for significant material improvement. The Nez Perce gaming operation is in its infancy, and more time is needed to confidently assess any long term role it may play in the Nez Perce economy. Further, some Idaho politicians, having again "found wealth" on Nez Perce lands, proposed to enact laws to transfer significant portions of potential tribal gaming revenues to non-Indian residents of the region[171]. Prior sections of this report indicate that such "wealth transfer" actions by non-Indians are fully consistent with those of their regional predecessors. Such "anti-Indian" gaming initiatives continue to contribute to the uncertainty of the material future of the Nez Perce Tribe. The overall importance of Tribal gaming employment in providing some measure of economic relief for the Nez Perce Tribe is illustrated in Table 7.

Table 7

Estimated Number of Employees in Nez Perce Tribal Enterprises: 1997

Enterprise/Activity	Estimated Employment	
	Full Time	Part Time
Gaming enterprises	240	

[169]Supra at D-1.

[170]Developed from information in: Nez Perce Executive Committee, 1997. **State Challenges Nez Perce Gaming**. Office of Legal Counsel, Lapwai, Idaho, p. 1.

[171]Supra at 3.

Tribal government	178	
Convenience stores	16	4
Limestone enterprise	4	25-30
Forest Products enterprise	6	22
Land Commission (agriculture)	5	
Arts and Crafts	2	2

Source: Nez Perce Tribe Overall Economic Development Plan: 1997-1998, Appendix D-1.

4.10.4 Nez Perce Tribal Health

Nez Perce tribal health is coincident with the difficulties already described. The Northern Idaho Service Unit of the Indian Health Service covers Nez Perce, Lewis, Clearwater, Idaho, Latah and Boundary counties - and principally services Nez Perce tribal members[172]. Indian Health Service (1994) reports that the 1989-1991 age-adjusted death rate for Indians in the Northern Idaho Service Area exceeded that for "all other races" by 1.7 times[173]. Table 8 provides comparative statistics for the five leading causes of tribal death.

Table 8

Leading Causes of Tribal Death - Northern Idaho Service Area: 1989-1991

[172]More recently, Nee Poo Health Center.

[173]US Indian Health Service, 1994b. **American Indian and Alaska Native Mortality: Idaho, Oregon and Washington, 1989-1991**, p. 24.

Cause of Death	Native American	All Other Races	Ratio of NA to Other Races
	-----deaths per 100,000 population----		
Heart disease	80.8	89.2	0.9
Motor vehicle accidents	69.3	17.3	4.0
Cerebrovascular disorders	73.1	24.2	3.0
Malignant Neoplasms	59.5	113.2	0.5
All Other Accidents	37.1	15.9	2.3

Source: US Indian Health Service, 1994. **Supra** at 55.

Diabetes mellitus and musculoskeletal problems are also significant causes of death - accounting for 6.5% of total deaths each[174].

High accident-related death rates for the Nez Perce are consistent with Bachtold's hypothesis relating loss of foods, poverty and loss of a meaningful activity environment to mistrust and despair[175] - and with Trafzer's hypothesis relating native mortality to man-made pressures and events[176]. Experts on Nez Perce health were also concerned about linkage between loss of traditional Nez Perce foods, particularly salmon, and the high rates of diabetes evident among the Tribe[177].

> Diabetes stems from many factors. But increasing salmon content in present-day Nez Perce diets would definitely reduce diabetes-related mortalities for the Tribe. Salmon replace saturated fats with Omega 3 fatty acids in the diet, bringing body weight and blood sugar down. The exercise involved in harvesting salmon and other native foods also acts to reduce body weight and improve health. As a result, incidence of diabetes would be reduced, and better control of the disease among Nez Perce would be achieved.[178]

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[174]Supra at 56.

[175]At Note 66.

[176]At Note 73.

[177]The Nez Perce expert group included: Leroy Seth, Nez Perce Elder and Patient Advocate; Vanda Osborn, Nez Perce Community Health Director; Karen Carter, Director, Nee-Me-Poo Health Clinic; Julie Keller, Dietitian; Susie Ellenwood, Maternal Child Health Nurse; and Irene Kipp, Community Health Educator.

[178]Julie Keller, Nez Perce Dietitian. **Personal communication** at Lapwai, May 6, 1998.

The Nez Perce health group echoed Bachtold in also emphasizing the positive role that traditional fishing, hunting and gathering plays in building the self-esteem of tribal members.

> Traditional activities such as fishing, hunting and gathering roots, berries and medicinal plants also build self-esteem for Nez Perce peoples - and this has the capability to reduce the level of death by accident, violence and suicide affecting our people. When you engage in cultural activities you build pride. You are helped to understand "what it is to be a Nez Perce" - as opposed to trying to be someone who is not a Nez Perce. In this way, the salmon, the game, the roots, the berries and the plants are pillars of our world.[179]

The Nez Perce health group noted that opportunities to practice traditional fishing, hunting and gathering pursuits are increasingly limited in the present day - and that Nez Perce members are still often threatened and harassed as they try to pursue such activities.

> Sometimes I feel like I'm looking for the last fishing spot that's left - fishing for the last fish that's left. How will I go and get it? Will I get beat up if I go?[180]

Yet the Nez Perce health group was unanimous that salmon remained a key to Nez Perce cultural survival - and that removal of the Lower Snake reservoirs and restoration of tribal salmon would benefit tribal health and lifeways.

> Our traditional activities are being buried deeper and deeper. We need to restore them, not just talk about it. As long as there is one fish - as long as there is game - as long as we keep our language - we will not die.[181]

> Reservoir removal would restore Nez Perce fisheries, it would provide more opportunity to hunt game, it would provide more gathering places. It would bring the land to life. [182]

The difficulties of the Nez Perce people have also been confirmed by an outside commentator.

> The personal suffering and tragic lives of many (Nez Perce) people are not revealed in the cold reports of tribal and federal governments. It can, however, be seen and felt in the towns and the countryside--in the eyes of men and the despair of mothers with few or no options for change. When you can no longer do what your ancestors did; when your father or mother could not do those things either; when they or you found little meaning in and limited access to the ways of

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[179]Leroy Seth, Nez Perce Elder and Health Advocate. **Personal communication** at Lapwai, May 6, 1998.

[180]A Nez Perce woman during the Health Group meeting at Lapwai on May 6, 1998.

[181]Leroy Seth, **Supra**.

[182]Nez Perce Health Group, **Personal communication** at Lapwai. May 6, 1998.

> mainstream culture--the power of 70 percent winter time unemployment, and 46 percent of the population below poverty level, is visible throughout the Nez Perce landscape.[183]

Finally, the key role that **language** plays in protecting the health of a culture was discussed in earlier methodological sections of this report. Through the 19th century, it is safe to say that all Nez Perce were able to speak in their native language(s). Today, beset by loss of traditional opportunities and attendant economic and social impoverishment, it is estimated that only about 32 percent of Nez Perce retain the capability to speak in their own tongue at home[184].

Again employing a Maslow-based framework, present overall circumstances of the Nez Perce Tribe are outlined in Figure 5.

[183]Central Washington University, 1991. **Supra** at 258.
[184]US Bureau of the Census, 1990 CP-2-1A, p. 38.

5.0 Circumstances and Impacts on the Shoshone and Bannock Bands

This section provides information on past impacts and related present circumstances of the peoples of the Shoshone and Bannock Bands of Indians.

5.1 Traditional Tribal Areas and Seasonal Harvest Rounds of the Shoshone and Bannock Bands

This report refers to the Shoshone and Bannock peoples who principally lived in what is now the State of Idaho.

> The Northern Shoshone and Bannock Indians occupied an area roughly coincidental with the political boundaries of the state of Idaho, south of the Salmon River. The names Northern Shoshone and Bannock do not refer to discrete political or social entities. The term Northern Shoshone has arisen in anthropological usage only as a general means of distinguishing Shoshones of the upper Columbia drainage from the Western Shoshone of Nevada and Utah and the Eastern Shoshone of western Wyoming. The Western Shoshones differed from both the eastern and northern populations in lack of horses and access to the buffalo hunting areas of the Plains... .The Eastern and Northern Shoshones are less easily distinguished from each other. The conventional division made between them rests primarily upon their separate locales and the importance of salmon fishing to the Northern Shoshone diet. The Indians themselves made no recognition of the Eastern, Northern and Western distinction; and actual social units among the Northern Shoshone varied in type from composite, mounted bands to isolated families or small clusters of families uninvolved in larger political units. Consistent with this variety and fragmentation, there are no clear cultural boundaries, and the Northern Shoshone blended into and merged with the other Shoshone to the south and the east.
>
> The distinctiveness of the Bannock rested on a basis different than that of the Northern Shoshone. The Bannock were Northern Paiute speakers who had migrated from Oregon into the general area of the Snake River plains, where they lived among Shoshone speakers in peaceful cooperation. The Bannock became differentiated from their fellow Northern Paiutes to the west through the acquisition of the horse and participation in organized buffalo hunts, but the populations continued to

> interact socially, and the separation was not deep enough or long enough to result in substantial linguistic divergence.[185]

Initially speakers of distinct languages, the close living arrangements of what Murphy and Murphy term the "Northern Shoshone and Bannock" peoples enabled a relatively rapid movement toward inter-cultural understanding and intelligibility between these two peoples.

> A.L. Kroeber (1907) was the first to report that they (the Shoshone and Bannock) spoke separate and mutually unintelligible languages. ...
>
> (But) the spread of the Numic languages in the Great Basin, with the consequent separation between Western and Central Numic, was recent enough so that Bannock and Shoshone remain quite similar languages, and there was considerable Bannock-Shoshone bilingualism among both groups in southern Idaho.... Among the consequences of the regency of the spread of the Numic languages is the absence of major dialect differences, whose development was retarded by continued contacts among the highly mobile seminomadic groups (Liljeblad 1957). This is a most important point, for one of the characteristics of Shoshone and Bannock groups was their openness, their interchangeability of members, and the continual move and flux of people. This tended to minimize dialect differentiation, just as it did cultural separation. On both the linguistic and cultural levels, the Shoshone and Northern Paiute, including the Bannock, evidenced small and incremental change from area to area. The absence of sharp discontinuities was a function of their social life.[186]

Thus, at its broadest, Shoshone and Paiute speakers extended west into Oregon, south into Utah and Nevada, and eastward as far as Wyoming - with no firm boundaries between resident or migratory groups. This study - dealing with cumulative losses of salmon to tribal populations, and subsequent salmon restoration activities in the Lower Snake River area - provides a narrower focus for Shoshone-Bannock analysis - namely, **those Shoshone and Bannock groups who would be directly affected by salmon abundances during their subsistence rounds**.

The locations where salmon that passed through the Lower Snake River were harvested by Shoshone and Bannock peoples can be generally identified.

> Fish constituted an important part of Northern Shoshone and Bannock subsistence. Trout, perch and other fish were found in streams throughout the region, but the most important fish, the salmon, was restricted to the Snake River below Shoshone Falls, to the lower Boise and Weiser rivers, and to the southern tributaries of the Salmon River, including the Lemhi.[187]

The range of the salmon defines an area that follows the Snake River and its tributaries through much of south-central Idaho. To the north, it includes much of the Salmon River basin, including the Lemhi River

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[185]Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 284.
[186]Supra at 284-285.
[187]Supra at 285.

and other southern tributaries. To the west, it extends to the Oregon border and into the Owayhee, Malheur and Burnt Rivers of Oregon. Turning east, its follows the Snake River through southern Idaho to Shoshone Falls - which is sufficiently proximate to substantial Shoshone-Bannock populations using the Fort Hall area to include them in our affected study referent group. In sum, our assessment in this study will generally be bounded by the map provided by Murphy and Murphy in their Smithsonian Institution article[188] - focusing on Shoshone-Bannock populations dependent on areas roughly outlined by present boundaries of the State of Idaho to the west, east and south - inclusive of descendants of fishing peoples now resident on the Duck Valley Reservation on the Idaho/Nevada border - and to the aforementioned areas of the Salmon River drainage to the north. This focus recognizes and will account for seasonal migrations of some Shoshone and Bannock peoples further eastward in search of buffalo. It also recognizes that reports exist of some cooperative fishing for salmon to the north and west of these approximate boundaries[189]. However, for the purposes of identifying primary linkage between potential actions at Lower Snake River dams and the wellbeing of Shoshone-Bannock peoples, this study focus is considered reasonable and sufficient[190].

Shoshone-Bannock peoples did not confine themselves to single locations - so they depended broadly on the fish, game, roots, berries and other plants available within the areas they lived in and traversed - and cannot be defined as dependent on only one resource or one resource area.

> According to an indigenous Shoshonean tradition...people who remained for a shorter or longer time in a certain region, and had their subsistence more or less temporarily from a particular kind of food procurable in this locality, were often named after this food. Thus, families joining a buffalo-hunting expedition to the Plains proudly called themselves kutsundeka'a, which means "buffalo eaters"; at other times, individuals of the same subgroup might have been called agaideka'a or "salmon eaters". Small groups of Shoshoni, when hunting in the mountain districts of central Idaho, were often called tukudeka'a, which means "mountain sheep eaters" (in local English usage corrupted to "Sheepeaters"); but the same Indians, when wintering on the Lemhi River, were called "salmon eaters". Various Shoshoni groups foraging north and south of the present state border between Idaho and Utah were sometimes called "rabbit eaters", at other times "seed eaters", or, when visiting the pinon groves in northern Utah, "pine-nut eaters". There are several dozen such "food-named groups" on record... . To interpret them as native terms for culturally distinct or politically independent units or "tribes", as has frequently been done in the literature, is utterly wrong.[191]

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[188]Supra at 286.

[189]e.g.. Albers, Patricia C., J. Lowry and G. Smoak, 1998. **The Rivers and Fisheries of the Shoshone-Bannock Peoples**. University of Utah: American West Center, pp. 5, 70.

[190]In adopting this convention, our present report reserves commentary on any broader issues that may be associated with Shoshone-Bannock traditional harvest areas.

[191]Liljeblad, Sven, 1972. **The Idaho Indians in Transition: 1805-1960**. Pocatello: Idaho State University Museum. p. 18.

Rather, the Shoshone and Bannock people traveled across the lands they depended on - taking each food resource in its appropriate place and season.

> During the 1700s and into the reservation era, the Shoshone-Bannock tribes followed a pattern of land use based on the availability of resources in specific areas of their domain.Their lifestyle was dependent upon the land, what the land could provide, and when it could provide it. In the winter months the primary food was dried meat taken from the fall hunts of buffalo, elk and deer, as well as roots and berries that could be found within the region of the winter camp. For the Bannocks, this camp was usually made on the Snake River above Idaho falls at the mouth of Henry's Fork. Mule deer and cottontail rabbits which also wintered in this area provided the Bannocks with an additional source of subsistence. Historically the Shoshones wintered apart from the Bannocks in a region which offered them more protection from their enemies. They tended to spend the winter on the Portneuf River between Pocatello and McCammon, Idaho, and occasionally farther south at Malad City, Idaho. As with the Bannocks, the Shoshones relied on dried buffalo meat from the fall hunt and whatever game could be hunted in their winter encampment.

> Spring found both the Bannocks and the Shoshones broken into smaller groups for hunting and in the late spring and summer traveling to fisheries for salmon. Salmon was the main food source in the spring and summer, along with various roots such as that of camas and other plants which could be collected. During the midsummer and fall, the primary activity was the hunt for buffalo and other game animals. At this time of year, roots and plants were collected. Although they were involved in a pattern of cyclical land use, the Shoshones and Bannocks followed their food sources and so they did not have set locations to visit at all times of the year. While plants and to a slightly lesser extent fish, were relatively dependable, larger game was not and thus the Indians had to follow the game to wherever that might lead.[192].

While salmon was an important element in the diet of virtually all Shoshones and Bannocks, seasonal rounds varied between groups - and salmon was most important for those whose seasonal rounds were closest to the salmon bearing rivers.

> Most of the subsistence patterns of Shoshone and Bannock bands involved seasonal cycles with different but nonetheless wide ranging migratory movements. There was yet another pattern associated primarily with the Shoshone and Bannock bands who wintered and remained much of the year along the lower and middle reaches of the Snake River and its tributaries.[193]

It should be noted that careful reading of authorities such as Albers et al. (1998) indicate that their geographic definition of "lower" and "middle" Snake River seems to differ from the "Lower Snake"

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[192]O'Neil, Floyd A., A. Freedman and G.E. Smoak, 1995. **The Land Use Practices and Patterns of the Shoshone-Bannock Tribes 1804-1870**. Mimeo. September 21. pp. 1-3.

[193]Albers, Patricia C., J. Lowry and G. Smoak, 1998. **Supra** at 55.

definition used in the DREW analysis. DREW defines the "Lower Snake" area as extending from approximately Lewiston, Idaho downriver to approximately the confluence with the Columbia River. Albers et al. describe the "lower" Snake River as downstream of the mouth of the Brunei River, and mention the Boise, Payette and Weiser rivers and their sister tributaries, the Owayhee, Malheur and Burnt rivers as being part of this "lower Snake River" territory[194]. Much of the Salmon River basin, including the Lemhi and other southern tributaries should also be clearly included in this definition - but as we have identified earlier, there is no reference to regular Shoshone-Bannock subsistence rounds "lower down" on the Snake River between Lewiston and the Snake River mouth at the Columbia. Albers et al. define the "middle" Snake River as extending downstream from Shoshone Falls to the mouth of the Bruneau River[195]. For the area they define as the "Lower Snake", Albers et al. note:

> The region was rich in food resources. As Julian Steward wrote, "The rivers afforded salmon, the meadows had roots, especially camas, and pasturage for horses, and the low altitude produced mild winters". Indeed, the resources of this region were so abundant that the population who wintered here did not have to move far afield to make their livelihood. And in the salmon season, from the late spring through early fall, it supported an even larger population as the banks of the rivers became filled with Shoshones and Bannocks from the mountainous regions to the north, from the desert highlands to the south and west, and from the upper Snake River plains....Salmon and other fishes were a major part of local diets....
>
> This portion of the Snake River was a major crossroads, where the riparian trails of six major waterways came together. This was a location where Shoshone and Paiute speakers intermingled, where they traded, intermarried, celebrated together, and collaborated in common subsistence pursuits like fishing, and where they also joined ranks in times of conflict and war.[196]

Similarly, for the area they describe as the "Middle Snake River", Albers et al. note:

> Further upstream from the mouth of the Bruneau to Shoshone Falls, the middle reaches of the Snake also supported a local population who wintered in the area, and during the salmon runs, it hosted peoples from many other locations as well. According to Julian Stewart, the "main economic life" of the groups who wintered on the middle Snake "centered around fishing and seed and root gathering". Like some of the populations who stayed in the river valleys farther west, they wintered at various valley locations near their salmon caches and for protection from the raids of predatory bands. Many of them traveled north to Camas Prairie to dig roots in the early spring and to the mountains north and south of the river to hunt in the fall.
>
> The groups who drew much of their subsistence from this area were identified by several different terms, including Taza Agaitika, "Summer Salmon Eaters", Pia Agaitika, "Big Salmon Eaters",

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[194]Supra at 55-59.
[195]Supra at 59.
[196]**Supra** at 56-58.

> Koa'agaitika, "Fish-trap Salmon Eaters", and Yahandika, "Ground Hog Eaters", the last two names also applied to people on the lower Snake....
>
> Although salmon and other fish were the main subsistence pursuit of those who wintered along the middle reaches of the Snake, a variety of insects and roots were also important in local diets. Hunting was not a significant subsistence pursuit in this area.[197] [198]

Considering the information presented here, we reach the following conclusions.

1. The Shoshone and Bannock peoples ranged over a vast territory, taking various foods - each in its appropriate place and season - and depending on the particular areas and circumstances in which each group found themselves.

2. The salmon of the Snake River were a significant element of these seasonal rounds for virtually all Shoshone-Bannock peoples - and were the principal element of diet for peoples who wintered along the Salmon drainage, and along the Snake River and its tributaries upriver to Shoshone Falls.

5.2 Natural Capital and Annual Productive Yield of Original Areas of the Shoshone and Bannock Bands

In this section we draw an inferential baseline concerning the lands and waters in the area through which the Shoshones and Bannocks roamed - the "natural capital" that allowed these tribal peoples to survive. In economic terms, the fish, buffalo, other game, roots, berries and additional lifeway materials can be viewed as the natural assets of the Shoshone-Bannock, producing annual material and revenue returns for their people. Tribal and non-tribal peoples often value the annual produce of lands and waters of the Shoshone-Bannock differently - but as our earlier historical section showed, both tribal and non-tribal interests understood that these lands and waters were of great value to those who could gain access to them and utilize them.

As salmon provides the direct linkage between actions at the four Lower Snake dams/reservoirs and Shoshone-Bannock peoples, our estimates will focus there. Hewes (1947) estimated that Bannock, Northern Paiute and Northern Shoshone peoples consumed 50 pounds of salmon per capita per year in pre-contact times[199]. This figure may be reasonable for Shoshone-Bannock peoples who wintered at some distance from the "salmon rivers", and only visited them during particular salmon runs. The figure is clearly too low, however, for Shoshone-Bannocks who spent most of the year in close proximity to these rivers (recall previous section 5.1) - particularly when compared to the 583 pounds per capita

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[197] **Supra** at 59-61.

[198] The Camas Prairie referred to in this quotation is an important resource for all "lower" and "middle" Snake Shoshone and Bannock Indians. It is different from, and south of, the "Camas Prairie" referred to in earlier discussion of Nez Perce seasonal rounds.

[199] Hewes, Gordon W., 1947. **Supra** at 227.

median estimate Walker attributed to the Nez Perce[200], and up to 500 pounds per capita Hewes attributed to tribes fishing on the mid-Columbia[201]. Given this conclusion, we will employ the following protocol.

1. Utilize Hewes' annual estimate of 50 pounds of salmon per capita for Shoshone-Bannock wintering and spending much of their time away from "salmon rivers".

2. Apply Walkers' annual estimate of 583 pounds of salmon per capita for tribes immediately to the north to Shoshone-Bannock peoples spending most of their year close to the "salmon rivers" - and, following general procedure for other study tribes, adjust this upward by 25 percent (to 729 annual pounds per capita) to allow for harvest taken for trading purposes.

3. Utilize population estimates in Murphy and Murphy (1986), adjusted by data from Clemmer and Stewart (1986) and Leland (1986), to distinguish between these two groups.

Murphy and Murphy, citing Stewart, estimate a Shoshone-Bannock population of 3,000 persons during the 1860's[202]. It is unclear to what degree this estimate accounts for Shoshone and Paiute fishers of the Bruneau and Owyhee drainages, however. Clemmer and Stewart (1986) estimate that about 300 such people agreed to settle at Duck Valley between 1882 and 1886[203]. We consequently utilize an 1860's base population estimate of 3,300 persons. Populations of Shoshone and Bannock bands were much higher at contact times – but epidemics ravaged Indian tribes following contact with the Whites. Leland (1986) suggests a depopulation ratio of 3.4 to 1 for Great Basin Indians, from contact times to the lowest tribal population observed in the 20th century[204]. Applying this ratio to an estimated Shoshone-Bannock population low of 1,688 persons in 1930[205] - adjusted upward by 200 Indians at Duck Valley - we obtain a pre-contact (late 1700's) population estimate of 6,400 persons for our Shoshone-Bannock study referent group.

Finally, Murphy and Murphy's estimates break out subpopulations in the Shoshone-Bannock area as follows (Table 9).

Table 9

Estimated Shoshone-Bannock Populations in the 1860's

[200]Walker, Deward E., 1967. **Supra** at 19.
[201]Hewes, Gordon W., 1947. **Supra** at 227.
[202]Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 289.
[203]Clemmer, Richard O. and Omer C. Stewart, 1986. "Treaties, Reservations, and Claims", in, **Handbook of North American Indians: Great Basin**. Vol. 11. Washington, D.C: The Smithsonian Institution, p. 531.
[204]Leland, Joy, 1986. "Population", in, **The Handbook of North American Indians: Great Basin.** Vol. 11, Washington, D.C: The Smithsonian Institution, p. 609.
[205]Supra at 612.

Area	Estimated Population
Fort Hall	1,200
Lemhi (incl. Shoshone, Bannock & Sheepeaters)	1,200
Boise Shoshone	245
Bruneau Shoshone	355

Source: Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 289.

The Boise and Bruneau Shoshone clearly would be categorized as fish eaters. Further, some of the Shoshone-Bannocks counted (after resettlment) at the Fort Hall and Lemhi reservations would also fit into the fish eater category - as would many Shoshone-Bannocks settling at Duck Valley. For this calculation, we will categorize 50 percent of Shoshone-Bannocks as salmon eaters, and 50 percent of Shoshone-Bannocks as less frequent users of salmon. On this basis, and utilizing the calculating protocol outlined on the previous page, we arrive at an overall annual per capita salmon consumption estimate for Shoshone-Bannocks of 389 pounds - and a total annual consumption estimate of 2.5 million pounds in the pre-contact period. If we consider the lower human population estimates from the 1860's, our procedures produce an annual fish consumption estimate of 1.3 million pounds for the referent Shoshones and Bannocks.

Finally, using the same procedure as for other study tribes, we expand the Shoshone-Bannock salmon consumption estimate, first to estimate "total food consumption" in historic times - and second to derive a minimum estimate of total produce from Shoshone-Bannock natural resources, expressed in "food equivalents".

We have been unable to identify a direct estimate of the proportionate role that salmon played in the Shoshone-Bannock food cycle. Rather, we assume that the average overall food requirements for the Shoshone-Bannock would have been about the same as for adjacent northern tribes - and follow Lane, Lane and Nash (1981a) in estimating that fish consumption amounted to about 40 percent of total diet for Indians living near the river (Note 118). On this basis, we reach an inferential conclusion that salmon provided an average of about 28 percent of the Shoshone-Bannock diet for all Shoshone-Bannock peoples considered together - wherever they were located[206]. Proceeding as with other study tribes, this produces an annual "all foods" estimate of Shoshone-Bannock consumption in pre-contact times of approximately 6.0 million pounds - and of 3.1 million pounds in the 1860's.

[206]Recalling previous discussion, this figure would be substantially higher for Shoshone-Bannock "fish eaters", and lower for Shoshone-Bannock's spending less time along the "salmon rivers".

Again employing a contemporary procedure used by the US Bureau of the Census - which estimates that food accounts for one third of the income requirements of an economy budget for a average family (recall Note 69) - we can infer that the Shoshone and Bannock peoples must have annually obtained both food and non-food items from their usual and accustomed lands and waters "equivalent to" approximately 18 million pounds of food in pre-contact times, and equivalent to 9.3 million pounds of food in the 1860's.

5.3 A Broader Perspective of Shoshone-Bannock Living Circumstances in Pre-Contact Times

We have already cited information provided by Albers et al.(1998), respecting the resource-rich environment historically available to those Shoshone and Bannock peoples to be found along "salmon streams". More broadly:

> Before the era of treaty-making, which began in 1863, the predecessors of the Shoshone and Bannock bands who would later become members of the Shoshone-Bannock Tribe of Idaho ranged over a wide area which extended from the Sweetwater River in Wyoming in the east to the Deschutes River of Oregon in the west and from the Missouri River in the north to the Humboldt River in the south. ... In subsistence, the heart of their range was the Snake River, its tributaries and its sister rivers, the Salmon to the north and the Bear to the south....
>
> These riparian corridors were the routes by which the Shoshone and Bannock bands not only traveled to procure subsistence and engage their trade with neighboring peoples, but they were also the locations of their encampments. The corridors were rich in fish, game and plant resources the Shoshone and Bannocks depended upon for their livelihood. Productive salmon fisheries were located along the Snake River below Shoshone Falls and along the Salmon River to its head waters. These two rivers and the others the Shoshone and Bannocks traveled contained a variety of non-anadromous species which were regularly harvested as well. The banks of the rivers and their affluents held abundant plant grounds where many nutritious roots were dug, an assortment of berries were picked, and a wide range of seeds, grasses and leaves were gathered for food, medicine and other purposes. The valleys supported large and varied animal populations, which included the bison and antelope plains of the upper Snake River, the elk and moose grounds in the Bear River drainage, and the beaver and bighorn trails in the Salmon River basin.[207]

Considering this and earlier citations, together with additional information contained in identified references, we conclude that while not all Shoshone and Bannock peoples may have matched the affluence of some other tribes, in historic times they seldom lacked subsistence foods - which represented the essential material elements of their existence. While information is limited, it is also reasonable to conclude that, in the sense identified by Bachtold[208], the Shoshone and Bannock bands were "fully functional" - able to provide for their own physiological and safety needs, speaking their own

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[207] Albers, Patricia C., J. Lowry and G. Smoak, 1998. **Supra** at 19-20.
[208] Recall Section 2.1.5.1.

languages, sure of “where they belonged”, and viewing themselves as worthwhile members of Shoshone-Bannock society (Figure 6).

> Autochthonous Indian trade profited by the arrival of Canadian fur traders and trappers who moved in strong brigades through the Snake River country in the 1820's and 1830's, and by the simultaneous activity of their American competitors who held their summer rendezvous on the Green River in Wyoming. From 1825, when the first great rendezvous took place, and for fifteen years thereafter, not only the nearby Shoshoni and Ute participated in these events; mounted bands of Flathead and Nez Perce, each one counting hundreds of men, women and children, moved for weeks through Shoshoni territory to exchange their peltry and other products for the goods which the American pack trains had brought from St. Louis to the mountains. It was a time of prosperity and mutual amity between Indians and whites.[209]

This period of amity soon began to change, however.

> The discovery of gold in 1860 and the resultant beginning of permanent white settlement brought about a conflict between two divergent cultural forms, the primitive civilization of nomadic hunters, and the commercialized one of settled miners, cattlemen, farmers, and industrialists. ...
>
> In the knotty web of evils which changed the short "period of pleasant contact" into a prolonged period of mutual suspicion there are, first of all, two things to be noted: the disregard of the white immigrants for the need of the natives to exploit resources essential for survival under primitive conditions, and the lack of efficient and impartial control by a superior administrative authority in regulating disputes during the initial and most crucial stage of contact.[210]
>
> Permanent white settlement of Shoshoni territory in Idaho began in 1860 in the Bear River Valley. Contrary to the policy of the United States that the occupation of Indian land could be authorized only after the Indian title to the land had been extinguished by treaty and compensation, the immigration on Bear River proceeded with uncontrolled appropriation of the wintering grounds of the local Shoshoni population. The fertile valley had once been the range center of several numerically strong bands, but extensive trapping operations by white men in the 1820's had been a disturbing moment. In 1863, the major part of the remaining native population, presumably about three hundred individuals who had congregated in their winter village near the town of Franklin, was massacred by a military command under the pretext of executing a punitive action in retaliation of formerly committed depredations.[211]
>
> When white men came to stay in the country of the people, they came suddenly and by the thousands; and they took possession of the land without formal relinquishment by its old occupants. With the discovery of gold in the early 1860's on John Day River in Oregon and in the Boise Basin and on Jordan Creek in Idaho, boom towns sprang up almost overnight, and prospectors

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[209]Liljeblad, Sven, 1972. **Supra** at 20-21.
[210]Supra at 23.
[211]Supra at 30.

> penetrated every part of the territory. In the wake of the miners, many white settlers brought in livestock which caused rapid destruction of the food plants upon which the Indians depended. Living at a bare subsistence level to begin with and seeing their existence threatened by foreigners who possessed inconceivable resources, the people aimed their flint- pointed arrows at the "white buffaloes", as they called the cattle grazing among the seed patches on the old food-gathering grounds which the newcomers now called their ranches. The unexpected consequences were not long in presenting themselves to the people. Raids by parties of white volunteers organized by miners and settlers on defenseless Shoshoni and Paiute camps became increasingly common. Confounded by fear, the people did not know which way to turn.... The concentration of the native population for mutual protection and the fear of moving about freely made foraging extremely difficult and raids on the white settlements more common. The people soon found themselves hemmed in by a chain of forts and camps, most of the troops being massed in the Boise military district. Detachments continually took the field, scouting southwestern Idaho and southeastern Oregon in search of Indians who, wherever found, were mercilessly slaughtered regardless of sex or age.
>
> In the face of a public opinion favoring extermination of the Indians at any price, the governor of Idaho Territory had meanwhile established contact with the Shoshoni occupying the Boise Valley and with some of the scattered groups south of the Snake River. In 1864 and 1866, he concluded separate treaties with these Indians, who in their own interest consented to go to reservations at the discretion of the United States Government. These treaties were never ratified. However, all Indians still to be found in this corner of Idaho were gradually rounded up by the soldiers and brought into custody near Boise.[212]

Shoshone and Bannock bands to the north and east, who generally traveled by horseback, faired better during this period.

> The principal bands of mounted Shoshoni and Bannock had the good luck to be left to themselves until finally approached by the United States Government for treaty negotiation. By that time, they were well prepared to meet the challenge. On their annual journey of a thousand miles or more from their headquarters on the Snake and Lemhi Rivers to the Camas Prairie in the west and to the far-off buffalo country in the east, they had developed a certain amount of band solidarity - at least in times of distress - and had learned to submit to a more or less temporary leadership of entrusted men who knew how to negotiate with the whites. They were well armed, and had fought the hostile Plains Indians for generations, and they felt that they were perfectly capable of taking care of themselves as long as they were free to come and go where they pleased. Their chiefs claimed that they had always been on friendly terms with the white people they had met so far.[213]

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[212]Supra at 32-33.
[213]Supra at 31.

A series of abortive treaty discussions followed. Finally, in 1868, the Fort Bridger Treaty established a reservation of some 1,800,000 acres at Fort Hall, Idaho[214]. This Treaty did not initially include the so-called Lemhi group of Shoshone - who, in 1875, moved to a small reservation created for them by Executive Order, where they continued to live until 1907[215]. Also:

> Between 1882 and 1886, about 300 people under Bruneau John, Big Jim and Panguitch consented to locate permanently at Duck Valley under threat of being sent to the Yakima Reservation.[216]

Assignment of a homeland within specific boundaries must have been a difficult concept for the Shoshone and Bannock bands, who roamed over far more extensive areas during their seasonal rounds - and whose culture did not treat land as "owned". In fact, Shoshone and Bannock leaders were very careful that the Fort Bridger Treaty stipulated that they could continue to conduct their seasonal rounds, going to each area and in each season where they knew food would be available. Albers et al. (1999) report:

> The Fort Bridger treaty of July 3, 1868 guaranteed the Shoshones and Bannocks reservations, as well as,
>
> > …the right to hunt on the unoccupied lands of the United States so long as the game may be found thereon, and as long as peace subsists among the whites and the Indians on the borders of the hunting districts.
>
> There can be little doubt that the (Shoshone-Bannocks) understood fishing as part of this general hunting right. There is no distinction in the Shoshone and Bannock languages between the verbs "to hunt" and "to fish".[217] [218]

The perception by the Shoshone-Bannock of "salmon fishers as hunters" continues today.

> " **NOTICE**
> **SHOSHONE-BANNOCK**
> **SALMON HUNTERS**
>
> The Business Council hereby provides notice to
> Tribal hunters, salmon monitors, and game wardens..." [219]

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[214]Supra at 34.
[215]Supra at 37.
[216]Clemmer, Richard O. and O.C. Stewart, 1986. **Supra** at 531.
[217]Albers, Patricia C., J. Lowry and G. Smoak, 1998. **Supra** at 114-115.
[218]This conclusion respecting the symmetry of "to hunt" and "to fish" in Shoshone and Bannock languages was stated by the Court in State of Idaho v. Tinno , Supreme Court of Idaho, 1970.
[219]Fort Hall Business Council, 1998. Preamble to **Fishery Management Notice**. Various dates.

The importance of Shoshone-Bannock off-reservation harvest areas has been further stated in testimony to the U.S. Congress.

> The Shoshone-Bannock Tribes, like many other Indian tribes, possess extensive off- reservation federal treaty rights to use federal lands... . The Shoshone-Bannock use rights include hunting, fishing, trapping, gathering of wild foods, grazing of livestock, and cutting of timber... . Exercise of these traditional use rights...reaches to the essence of the Shoshone-Bannock culture and subsistence economy. These traditional activities remain sacred to the Shoshone-Bannock today, just as they were at least 6,000 years before the birth of Christ. ... The history and nature of these treaty rights must be understood. Overriding federal law and the honor of this Nation as well as the states demands no less.[220]

Shoshone and Bannock bands removed to the Fort Hall reservation over following years. However, where white settlers saw wealth could be acquired, they paid little or no attention to the Fort Bridger Treaty - or its protections afforded the Shoshones and Bannocks.

> White encroachment on the reserved Indian land occurred as usual. Wealthy stockmen who kept cattle grazing on Indian land and even took up residence within the reservation limits, and against whom the (Indian) agent was powerless, could not see how fifteen hundred Indians who had neither cattle nor plows nor any permanent structures of any kind could possibly make use of so much land.[221]

The circumstances of the Shoshones and Bannocks at Fort Hall were further exacerbated by the fact that neither their prior hunting and fishing experience, nor the resources available to them at Fort Hall, were sufficient to sustain even a moderate level of survival solely on the reservation.

> The true establishment of the Fort Hall Reservation began with the arrival of the Boise and Bruneau Shoshones in the spring of 1869, and from the beginning it was clear that survival on the underfunded and undersupplied reservation was going to be a struggle. White officials had no choice but to accept, and indeed encourage, the continuation of traditional subsistence practices. On the one hand, the Shoshones and Bannocks had no desire to give up their traditional life ways. In his first monthly report from Fort Hall, Captain Powell blamed the Indians' "disposition to roam" for their lack of interest in agriculture. He added, "away they went in pursuit of game and fish". Idaho's superintendent of Indian affairs Colonel Lancey Floyd-Jones also recognized that,
>
> > They will, very naturally, ask to be permitted to visit when practicable, their hunting and fishing grounds - the Bannocks to hunt the Buffalo, in the vicinity of the Wind River mountains and the Shoshones the fisheries and hunting grounds about the head waters of

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[220]Testimony by Echohawk, before the U.S. House Committee on Interior and Insular Affairs, Subcommittee on Mines and Mining, November 22, 1980, in, Johnson, Edward C., 1986. "Issues: The Indian Perspective", in, **Handbook of North American Indians: Great Basin**. Vol. 11. Washington, D.C: The Smithsonian Institution, p. 593.

[221]Liljeblad, Sven, 1972. **Supra** at 34.

> the Malad River, which embraces the Kamas grounds of the district, rich in the various roots of which they are exceedingly fond.

On the other, the government never provided an adequate subsistence for the Indians on the reservation. In 1871, Fort Hall Agent Montgomery Berry lamented;

> I am not at all astonished at the action of my predecessors in giving the Indians long permits of absence from the reservation, having been obliged to do precisely as they did, viz, push the Indians out on fishing and hunting excursions for the purposes of economy.

Thus, whether pulled by cultural traditions or pushed by hunger, traditional subsistence practices remained crucial for the Indians at Fort Hall.[222]

The agent at Fort Hall was aware of the risk involved each time his protégés took their departure. He urged them to keep at a respectable distance from white settlements and - as he put it himself - from "going any place that might cause a conflict". The Indians gathered their staple food, the camas bulb, in large quantities west of the Big Wood River in the vicinity of the present town of Fairfield, an area generally called "The Camas Prairie". The region was referred to in the Fort Bridger Treaty as "Kansas Prairie", apparently in consequence of the understandable ignorance of the clerk who had couched the text of the treaty. The second article of this treaty explicitly states that "reasonable portions" of the area were to be reserved for the unrestricted use of the Indians. White settlers were nevertheless permitted to move in and use the camas for hog food.[223]

Thus, an undetermined further area of Camas Prairie, assured to the Shoshones and Bannocks in the Treaty of Fort Bridger - but either "taken in error", or "illegally taken because of an error" - were never formally credited as treaty lands - and most of these protected assets were effectively transferred into non-Indian hands. It would seem that this correction of this "error", together with accounting for the "Lemhi reservation" lands, taken back in 1907, would put Shoshone-Bannock original treaty-assured lands at at least two million acres.

As with other study tribes, loss of traditional Shoshone-Bannock assets did not stop with treaty signing.

> The first major encroachment on the (Fort Hall) reservation came with the building of the Union Pacific Railroad from Ogden, Utah, through the reservation to the mines of western Montana in 1877, followed two years later by the extension of the railroad to Oregon. As a result of the railroad cessions, and the growth of the city of Pocatello as a transportation hub and center for White

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[222]Albers, Patricia, J. Lowry and G. Smoak, 1998. **Supra** at 116-117.
[223]Liljeblad, Sven, 1973. **Supra** at 35.

> squatters, the boundaries were renegotiated in 1881; by 1900 the reservation acreage was halved.[224] [225]

Given the desperate material circumstances of the Shoshone and Bannock peoples, and the threats of violence from Whites, it is not clear that the term "negotiated", contained in the preceding citation, is appropriate. Nonetheless, by whatever means, within approximately twenty years, the Shoshone and Bannock peoples had lost approximately half of the lands they believed they had reserved for themselves in the Fort Bridger Treaty - to the Union Pacific, to Pocatello, and to other White purposes. During this period, preemption by Whites of traditional tribal fishing activities also continued with little or no abatement. For example:

> Throughout the 1860s and 1870s, white-owned fish traps which all but prevented runs from ascending the Lemhi River were a source of friction between the Indians and white settlers.[226]

Confined to an ever diminishing land area, threatened and abused by white settlers when they attempted to go to their usual and accustomed harvest areas, often finding resources had been preempted or destroyed if they reached those areas - whatever sustaining conditions the Shoshone and Bannock peoples had hoped to achieve by the Fort Bridger Treaty - they found little to sustain themselves in the decades that immediately followed.

5.5 Further Allotment of Lands Reserved to the Shoshone and Bannock Peoples

The Dawes Act of 1887, and the amending Burke Act of 1906, was represented by some proponents as a measure to facilitate entry of tribal peoples into mainstream society - by "allotting" small acreages to individual families, with the proviso that these parcels could subsequently be sold to anyone. In fact, the actual effect of these Acts, and similar measures, was to separate the Indian from still more of his wealth in land.

> Beginning...in 1869, there was an attempt to streamline the administration of Indian matters and to apply a uniform policy to all reservations. The purpose of this policy was to de- Indianize the Indians; to make them into rural farmers of Christian faith, literate in English (and preferably speaking no other language), "unfettered" by ancient traditions and customs, and skilled in blue-collar professions that would turn Indian communities into approximations of rural American towns. The cornerstones of this policy were: a resident agent for each reservation; one or more Christian missions for each community; establishment of farming as the dominant economic strategy, regardless of the pre-existing expertise of their inhabitants; removal of all Indians to reservations or creation of reservations around them; and implementation of behavioral codes meant to encourage acculturation. Between 1890 and 1929, the effort to "stamp out nativism" was particularly acute.

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[224]Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 303.

[225]The term "White squatters" refers to the fact that the area that is now Pocatello was originally part of the Fort Hall reservation, under the Bridger Treaty.

[226]Albers, Patricia C., J. Lowry and G. Smoak, 1999. **Supra** at 125.

> The effort aimed at banning religious ceremonies, prohibiting Native doctoring, and mandating sectarian Christian instruction in government-operated schools. Those who defied the bans and prohibitions were punished, often with imprisonment for weeks or months. ...
>
> The "pan-reservation" policy must be judged a failure on nearly all counts. First, it should be noted that fewer than 60 percent of all Great Basin Indians were actually on reservations. Even for well settled reservation groups several factors intervened between the implementation and accomplishments of the government goals. One factor was the significant resistance to acculturation and domination, ranging from the Bannock War of 1878 to institution of the Ghost Dance, Cry, and Sun Dance in many communities. A second fact was that most reservations were only marginally suited to agriculture: many lacked adequate water or had water usurped by non-Indian users up-stream. Those that did have adequate water were far removed from transportation facilities and had precariously short growing seasons. Third, local non-Indian interests often worked against the goals of reservation administrators, hoping either to dislodge Indians from desirable lands or to divert water or mineral resources from Indian control. In many cases, administrators and Indians were powerless to halt outright encroachment....
>
> Another reason for failure was the variability in length of contact and reservation-based experiences among (tribal) groups. Mere placement of several different ethnic groups on one reservation did not automatically melt away differences or fuse the groups into a single reservation community.... Finally, the ostensible attempt to create reservation communities of farmers was predicated on a dependency model that set up the agent and his staff as wholesalers of seeds and farming implements, marketers of agricultural products, and caretakers of Indian financial affairs.... At the same time, the world in which Indians were expected to operate was based on a capitalistic model that assumed a primary drive on the part of all human beings to acquire and accumulate wealth naturally and to affix a monetary value to all goods and services. Often, both the dependency and capitalistic models violated Indian systems of ethics and social relationships. Such contradictions resulted in patronized and beleaguered communities that were anything but self-sufficient.[227]

With specific reference to the reservation at Fort Hall:

> Further shrinkage of (Shoshone-Bannock) reservation lands was brought about by the Dawes Severalty Act of 1887 and the allotment of reservation lands to individual Indian families during the years 1911 to 1916. Aridity and poverty of soil made small holdings infeasible, and the program was largely a failure. Allotment in severalty was terminated by the Indian Reorganization Act of 1934, and as of 1956, there were 277,900 acres of (Shoshone-Bannock) land in allotment, 204,600 acres in tribal ownership, and 41,400 acres in government holdings. The land problems were exacerbated by lack of irrigation water and the fact that the Fort Hall Irrigation Project of 1912 and subsequent water developments mainly benefited White farmers. Add to this the flooding of the Snake River bottomlands by the American Falls Reservoir, the inroads of timber and

[227]Clemmer, Richard O. and O.C. Stewart, 1986. Supra at pp. 539-541.

> phosphate mining interests, and further cessions for highway and other rights-of-way, and it becomes clear that the integrity of the Fort Hall Reservation has been seriously compromised.[228]

Clemmer and Stewart identify the following alienations of tribal Treaty lands of the Shoshone-Bannock, subsequent to 1868 (Table 10).

Table 10

Alienation of Shoshone-Bannock Treaty Lands Subsequent to 1868

Alienating Action	Year	Acreage
Taken by Union Pacific Railroad.	1888	1,840
Taken by Marsh Valley Homesteaders.	1889	297,000
Taken by Congress for homesteading, the city of Pocatello and mining under the Dawes Act.	1900	418,000
Taken by BIA for Lemhi Indians.	1907	325,000
Lemhi Reservation taken for homesteading.	1907	64,000
Taken by Congress for American Falls Reservoir.	1924	28,000
Takings n.e.s.	1950-1971	864

Source: Clemmer, Richard O. and O.C. Stewart, 1986. **Supra** at 544.

As a result of these policies and actions, by 1956, the Shoshone and Bannock peoples at Fort Hall had only 524,000 acres of marginally productive land left from the approximately two million acres that US

[228]Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 303.

government negotiators told them at the Fort Bridger treaty talks would secure their future[229]. The Indians living on the Duck Valley Reservation were not subjected to the allotment procedures[230].

5.6 Shoshone-Bannock Access to Traditional Fishing, Hunting and Gathering Areas

While the Shoshone-Bannock peoples now living at Fort Hall had lost approximately 74 percent of their Treaty lands by the 1950s, this was not the most serious economic or cultural impediment they have had to deal with. It will be recalled that the Shoshone and Bannock were "roaming" peoples - going to each traditional area at the appropriate time to harvest their natural food sources. It was this seasonal round that assured their survival. And it has been White actions to "corral the Indians off" from such widely dispersed Treaty food sources, or to destroy these sources altogether, that has had the most devastating effect on Shoshone-Bannock wellbeing.

> From 1868 through 1877, the hostility of settlers and inadequate facilities of Fort Hall made life virtually impossible for the Bannocks and Snake River Shoshones that had been targeted for relocation to the reservation. For one thing, the reservation had been illegally settled by homesteaders, and the town of Pocatello had become entrenched. For another thing, although Bannocks and Shoshones had been guaranteed access to traditional hunting, gathering and fishing areas the hostility of settlers off the reservation was as great as those encroaching on Fort Hall, and many Indians were so fearful of reprisals that they did not leave the reservation to gather foodstuffs for the winter. Inadequate rations at various times forced the Indians to either starve on the reservation or to risk punishment for leaving to gather food.[231]

Resistance by non-Indians to tribal use of usual and accustomed harvest places - and action against Indian interest to protect the wealth acquired by non-Indians - has continued through the 20th century. For example, commenting on a tribal vote in the 1930's concerning the Indian Reorganization Act - an Act to provide more empowerment to tribes, Liljeblad (1972) notes:

> Rejections were caused in the main by campaigns on a local level from those people, mostly white, who feared that they would lose advantages of one kind or another through the application of a new policy. In his annual report, the Commissioner of Indian Affairs made the following comment:
>
> > Joining hands in this campaign of misrepresentation were stockmen who feared that the Indians would run their own stock on the land hitherto leased to white interests; traders who were afraid of losing their business through the competition of Indian consumers' cooperatives; merchants and politicians in white communities on the edge of the reservations; a few missionaries who resented the extension of the constitutional guarantee of religious liberty and freedom of

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[229]In 1968, the Indian Claims Commission awarded the Eastern Shoshone and Northern Shoshone-Bannock $15.7 million in compensation for lands taken in southeastern Idaho and Utah. This did not include takings on the Boise River, or on Camas Prairie.

[230]Clemmer, Richard O. and O.C. Stewart, 1986. **Supra** at 543.

[231]Clemmer, Richard O. and O.C. Stewart, 1986. **Supra** at 530-531.

> conscience to Indians...; lumber interests which did not want to see Indian tribes exploit their own forest resources. [232]

Even when tribes can secure access to traditional harvest areas, anticipated food resources are often no longer found there. Beginning in contact times with destruction of camas grounds by settlers' pigs, and preemption of tribal salmon catches by non-Indian downstream weirs, a range of activities have progressively acted to change the way in which land and water in Shoshone- Bannock country is combined - to produce electricity, irrigation, minerals and other products of value to the non-Indian - rather than fish to feed the Shoshone-Bannock peoples. Albers, et al. (1999) follow a modern "coyote story" with the following comment.

> This newer version of a story where Coyote creates structures along the Snake River is an apocryphal tale, a foreshadowing of the modern era when the building of great concrete dams diminished the salmon runs on the Snake River and confined them largely to locations below the Hell's Canyon Dam. When the older version of this story was told by generations of Neme long past, anadromous species of fish were still abundant along the Snake River below Salmon Falls and throughout the Salmon River basin. ...
>
> Mining was one of the first industrial developments to impact Idaho's water and its fisheries. ...(G)old strikes took place among many watercourses in the heart of the Neme's territorial range. The Boise Basin and the Yankee Fork of the Salmon River were among the locations where the food procurement sites were damaged by mining and where the local Neme were displaced as a result....
>
> Dams, created to harness the hydroelectric power of the Columbia River and to store water for agricultural use, also degraded local fisheries. Dams were constructed on the Columbia and its tributaries until 1975 and scientific studies indicate these dams contributed substantially to the endangerment and extinction of several species of salmon. This took place throughout the salmon's range but it was especially pronounced along the Snake where some of the Neme's richest and most productive fisheries were located in historic times.
>
> More recently, agricultural pesticides have had deleterious effects on riparian environments in the greater Northwest as well.... Whether singly or in combination with one another, agriculture, dams and mining irreversibly changed Idaho's riparian environments; and in the process, they forever altered the Neme's access to many of the traditional fisheries guaranteed them under the Fort Bridger Treaty of 1868.[233]

These actions have seen a Snake River salmon and steelhead all-species historic run size estimated at 2 million+ fish decline by 90 percent, to an estimated 200,000 fish in the mid- twentieth century - and

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[232]Liljeblad, Sven, 1972. **Supra** at 71.

[233]Albers, Patricia C., J. Lowry and G. Smoak, 1998. **Supra** at 220-222.

decline by half again to about 100,000 salmon and steelhead by the late 1980's.[234] In tribal eyes, these impacts extended well beyond counting fish.

> My grandfather explained to me how the elk, as it grows up, eats plants that have nutrition and medicine in them. It stores these things in its body as it grows - and carries the medicine with it. One day, at the right time, we go and hunt it. Often we put it away for the winter, when we need the protein. Same with the salmon.
>
> When the willows turn a certain color, the old people tell us, "it's time to go fish" - when it turns a little yellower, "the summer run's coming". We don't see that anymore. Once you put the dams in, those willows are gone - that identify the time to go fishing. Its the whole river system - the gravels, the sage - it all adds up.
>
> It takes a long time to learn these things - sometimes a whole lifetime to learn about the river - sometimes a whole lifetime to learn to talk Indian - that's what I always tell the kids. You have your whole lifetime to speak Indian - don't give up because someone blasts you.
>
> And that also applies to the salmon. Our people have always talked to the salmon - to the animals. For they also have a spirit. You can't get away from it.[235]
>
> The tribes were never consulted when they were building the dams. There are sacred sites all along where they built the dams. That's the places where our people used to go to get the fish and to pray. Today we can't do that because the dams destroyed these places - and in that way, they've destroyed our customs and traditions.
>
> Not only that - but today we have no fish. Water quality is way below where it should be. I don't believe in "EPA standards". We need to consider that "pristine means pristine" - and not try to depend on just what the scientist thinks.
>
> When they base all their decisions on human consumption, they forget to look at the fish. They forget to look at the resources that grow along the river. They forget to look at the alkali that's with the system - the gravel - the land. It's all part of the river.[236]
>
> Some non-Indians say; "All these bad things happened before I got here." But it was their forefathers who displaced the Indians - who raped our mothers and our daughters - who killed the children - and then forced us to go to different areas because of precious metals - because they wanted the water - because they wanted the forests. These are the ugly histories they say do not

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[234]Columbia Basin Fish and Wildlife Authority, 1990. **Integrated System Plan for Salmon and Steelhead Production in the Columbia River Basin**. Portland, pp. 25-121.

[235]Hobby Hevewah, Shoshone-Bannock Councilor, at Fort Hall, July 17, 1998. **Personal communication**.

[236]Supra.

pertain to them - yet unfortunately some of us still carry the hurt and pain within our hearts. Some of that old history will hopefully be remembered some day - because they did it to us. They need to know it was their forefathers.

One way of correcting that is to recognize our Treaty. Too many times the non-Indian complains: "Why do the Indians come here?" "Why do they get a fish free?" Now you know why! Because of their forefathers! And one way of correcting that is by going back and recognizing what they did. It's Ugly! Totally Ugly! [237]

5.7 Post-Contact Shoshone-Bannock Health

The Shoshone and Bannock peoples considered in this study were also adversely affected by contact with new "white man's diseases" against which they had no immunity - and by 1873 their population is estimated at just under 2,000 persons[238]. Leland (1986) provides estimated Shoshone and Bannock populations from that date forward until 1950 (Table 11).

Table 11

Estimated Historic Populations of the Northern Shoshone and Bannock Peoples - Selected Years

Year(s)	Population
Pre-contact	3,000
1873	1,937
1890	1,925
1910	1,699
1930	1,688

[237]Supra.
[238]Leland, Joy, 1986. **Supra** at 609.

1950	2,292

Sources: Murphy, Robert F. and Y. Murphy, 1986. **Supra** at 289.
Leland, Joy, 1986. **Supra** at 609-612.

By 1950, Shoshone-Bannock populations were recovering. However, information from Knack (1986) makes clear that the **linkages suggested by Bachtold and Trafzer between poverty and ill health were evident among Shoshone and Bannock peoples in the recent past.**

> (In 1963) (t)he average cash income per employed worker (at the Fort Hall Reservation) was $1,780, or $540 per capita.... Over 12 percent of the population earned less than $100, and 42 percent earned less than $300 per year.... In 1950, the income of Idaho non-Indians was 36 percent greater than the average at Fort Hall, and in 1967, it was more than twice the Indian average.
>
> The social consequences of this economic situation were plain... . Only 5 percent of Fort Hall housing was rated as comparable to that of surrounding rural non-Indians.... Fort Hall houses were small, substandard and crowded....
>
> The Fort Hall study documented another social result of the economic situation, its effect on the health of the people. While, like Indians generally, they had lower than state and national rates of death due to cancer and heart disease, many other categories were disproportionately high - 3.66 times the Idaho rate for accidents, 4.25 times the influenza and pneumonia, 15.5 times the tuberculosis, 89 times the dysentery, 29 times the meningitis, and 29 times the deaths due to measles. All these categories can be attributed to poor and uninsulated housing, unsanitary water sources and waste disposal, and inadequate and untimely health care. In short, "the single worst factor found in relation to diseases at Fort Hall is the general living conditions of the people".[239]

5.8 Present Circumstances of the Shoshone and Bannock Peoples

Previous sections have reviewed the cumulative adverse effects on the Shoshone and Bannock peoples from progressive destruction of their Treaty-based and other resource assets - and the transfer of benefits from those resources to non-Indians. This section considers whether any significant recent changes have occurred with respect to these adverse trends - and assess the present circumstances of the Shoshone-Bannock peoples.

5.8.1 Remaining Shoshone-Bannock Lands and Resources

[239]Knack, Martha C., 1986. "Indian Economies, 1950-1980", in, **Handbook of North American Indians: Great Basin**. Vol. 11. Washington, D.C: The Smithsonian Institution, pp. 575-576.

In 1996, the Native American population in and adjacent to the Fort Hall reservation stood at approximately 3,700 persons[240] - up somewhat from our pre-contact estimate. In addition, 1,003 Native Americans were reported resident on the Duck Valley Reservation by the 1990 Census[241]. Lands of the Shoshone-Bannock Reservation have increased slightly from levels of the 1950's, to approximately 544,000 acres - with about 3 percent of these lands held in fee simple[242]. Thus, the Shoshone-Bannock today exist on approximately 27 percent of the Reservation lands they believed they had secured in 1868. From an economic perspective, much of this land is marginal. The Duck Valley Reservation consists of 293,700 acres - virtually all in tribal ownership[243].

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

The Pacific Northwest River Basins Commission (1974) reported that "as many as 17,000 fall chinook and 10,000 steelhead were recorded as once having migrated annually into and through the Hell's Canyon reach of the Snake River"[244]. These runs are now gone - and the run size for Snake River salmon and steelhead was reported down to 5 percent of its historical levels by the 1980's[245]. The runs are lower still today. Shoshone-Bannock members harvested approximately

2,000 pounds of salmon in 1997 - and only for subsistence purposes[246]. For the ten year period 1989-1998, Shoshone-Bannock salmon harvests have averaged 795 pounds annually. **This figure is less than one-tenth of one percent of estimated Shoshone Bannock harvest near Treaty times.** It is approximately one-third of one percent of estimated pre-contact Shoshone-Bannock harvests.

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[240]Shoshone-Bannock Tribes. 1998.
[241]US Bureau of the Census, 1990. CP-2-1a, p. 5.
[242]Office of Legal Counsel, Shoshone-Bannock Tribes. Personal communication, 1998.
[243]Liljeblad, Sven, 1972. **Supra** at 52.
[244]Pacific Northwest River Basins Commission, 1974. **Anatomy of a River**. Portland, p. 85.
[245]See Table 4.
[246]Shoshone-Bannock Department of Fisheries, 1998. **Draft 1998 Shoshone-Bannock Tribes Anadromous Fish Recovery and Management Plan**. May 15.

But even these stark statistics understate the impact of these resource losses as seen through Shoshone Bannock eyes.

> The tribes have looked at the river as a system, a life giving entity that provided for our needs. My grandfather was a medicine man. One day he showed me a spring out here. He talked to the water and said, "Your soul and the water's soul can communicate." The water had religious as well as life-giving properties. Now there are no more medicine men. Up on the Salmon River, my grandfather walked on the backs of salmon. That's something that was once ours. I wish we had it today. A lot of things have been lost. How you pray has pretty much been lost. Now we hire engineers and identify and quantify our "needs" for water. Mankind invented dams and pipes and sprinklers and all these wonderful things and spent a lot of money screwing up the river. Now, no one will spend the money to correct the problems. Now we dam the river and hold the water hostage.[247]

5.8.2 A General Assessment of Present Shoshone-Bannock Material Circumstance

Present-day Shoshone-Bannock circumstances caused by this cumulative destruction of tribal trust resources and transfer of tribal wealth to non-Indians can also be seen in contemporary statistical data. Table 12 compares the relative economic circumstances of the Shoshone-Bannock peoples with peoples in Idaho and Oregon as a whole.

Table 12

Comparative Data Showing the Relative Circumstances of the Shoshone-Bannock Tribes

Economic Indicator	Shoshone-Bannock	Idaho	Oregon

[247] Arnold Appenay, Shoshone-Bannock Council Member, in, Palmer, Tim, 1991. **The Snake River: Window to the West**. Washington, D.C: Island Press, p. 42.

Families in Poverty(%)	43.8	9.7	12.4
Unemployment: US Census (%)	26.5	6.1	6.2
: BIA	80.0*		
Per Capita Income ($'000)	4.6	11.5	13.4

*The US Bureau of the Census employs a relatively liberal "employment" standard. BIA's employment measure requires employment over a longer period of time to qualify. The higher BIA unemployment figure is judged to better reflect the degree of material difficulty the Shoshone-Bannock experience - particularly in winter months.

Source: US Bureau of the Census - 1990 Census of Population: Social and Economic Characteristics - American Indian and Alaska Native Areas. 1990 CP-2-1A.
: US Bureau of Indian Affairs, 1995. Indian Service Population and Labor Force Estimates.

At present, Shoshone-Bannock employment at Fort Hall depends principally on phosphate-related industrial activity, tribal governance, gaming and a cluster of small businesses near the highway - consisting of a trading post, clothing store, restaurant and truck stop - as well as a tribal farm. Principal employment of Fort Hall Shoshone-Bannock members is identified in Table 13.

Table 13

Principal Employment of Shoshone-Bannock Members

Activity	No. Employed
Phosphate industry	500
Governance	290
Gaming	139
Tribal enterprises	85

Source: TERO Office. Shoshone-Bannock Tribe. June, 1998.

In summer, an additional approximately 150 jobs may be obtained in construction[248]. These figures are slightly improved from levels of 1995, chiefly due to an expanded tribal gaming business[249]. However,

[248]TERO Office. Shoshone-Bannock Tribe. June, 1998.

this improvement still leaves approximately 68 percent of the Shoshone-Bannock potential work force unemployed in summer - and unemployment rises to an estimated 72 percent in winter months. Further, some Idaho politicians, in a manner fully consistent with their historic predecessors, have been attempting, under cover of law, to capture substantial portions of Shoshone-Bannock gaming revenue for non-tribal interests - thus putting the modest employment gains Shoshone-Bannocks have been able to achieve over the past few years at risk.

The economy at Duck Valley is similarly bleak, with the 1990 Census reporting 35 percent of Indian families living below the poverty line and 25 percent unemployment[250]. The US Bureau of Indian Affairs reports 48 percent unemployment on the Idaho portion of the Duck Valley Reservation in 1995[251].

5.8.3 Shoshone-Bannock Tribal Health

Shoshone-Bannock tribal health indicators reflect the adverse conditions previously described. The Fort Hall Service Unit of the Indian Health Service serves Bannock, Bingham, Caribou, Lemhi and Power counties. Indian Health Service (1994) reports that the age-adjusted death rate for Indians in the Fort Hall Service Area exceeded that for "all other races" by 2.3 times[252]. Table 14 provides comparative data for the 6 leading causes of tribal death.

Table 14

Leading Causes of Tribal Death - Fort Hall Service Area: 1989-1991

Cause of Death	Native American	All Other Races	Ratio of NA to Other Races
	----deaths per 100,000 population----		
Heart Disease	338.8	121.5	2.8
All Other Accidents	104.6	20.3	5.2
Malignant Neoplasms	112.9	108.9	1.0
Cirrhosis of the Liver	56.3	6.5	8.7
Diabetes Mellitus	69.9	11.9	5.9

Source: US Indian Health Service, 1994. **Supra** at 47.

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[249]Office of Legal Counsel. Shoshone-Bannock Tribe.

[250]US Bureau of the Census, 1990. 1990 CP-2-1A, pp. 58 & 84.

[251]US Bureau of Indian Affairs, 1995. **Indian Service Population and Labor Force Estimates**. p.14.

[252]US Indian Health Service, 1994b. **Supra** at 24.

Motor vehicle accidents are also a significant killer of Shoshone-Bannock peoples, accounting for 5.9 percent of deaths in the 1989-1991 period[253].

A 1996 "Community Needs Assessment", conducted on the Fort Hall Reservation by the Shoshone-Bannock Health and Human Services Department, in collaboration with Centers for Disease Control (Atlanta, GA), confirms the problematic nature of Shoshone-Bannock health[254].
In its Executive Summary, that report notes:

> Despite great improvements in recent decades, the health of Native Americans continues to lag behind that of the overall United States population. For the period 1989-1991, life expectancy was still about three years shorter for Indians than for the U.S. white population. Most of the major causes of death that are considerably more prevalent among Indians than among other Americans are related to individual behaviors, especially alcoholism, diabetes and intentional and unintentional injuries. Thus, any efforts aimed at substantially reducing mortality and improving health among Native Americans must recognize the importance of the behavior of individuals and not be limited to the provision of medical care.[255]

As Bachtold (Note 66) and Trafzer (Note 73) point out, when peoples are denied the opportunity for meaningful activity, separated from essential elements of their very "Indianness" and treated unjustly at almost every turn, such unacceptable levels of adverse health can be predicted.

Significant improvements in Tribal health services continue to be made on the Fort Hall Reservation[256]. But many of the health problems already cited remain.

> A lot of our people suffer from diabetes, high blood pressure, alarmingly high triglyceride levels. We have a lot of overweight kids, low levels of immunization - we have a lot of people with low hemoglobins, who suffer from anemia. In our present existence, high calorie/low nutrient foods are characteristic of diets on the reservation.[257]

> Many of our accidental deaths involve drugs or alcohol. Generally, this does not involve kids who are brought up in traditional ways.[258]

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[253]Supra at 46.
[254]Shoshone-Bannock Tribes, 1997. **Community Needs Assessment**. Health and Human Services Department, in collaboration with Centers for Disease Control (CDC).
[255]Supra at 1.
[256]Allison Blacksmith, Nutritionist. Fort Hall Tribal Clinic. **Personal communication**. July 16, 1998.
[257]Supra.
[258]Jim Cutler, Director of Tribal Health. Shoshone-Bannock Tribes. **Personal communication**. July 16, 1998.

According to Shoshone-Bannock leaders and experts, the health of the salmon and the health of tribal peoples are interrelated.

> When you're at a young age and catch your first salmon, he had what the white man calls "a ceremony". He first experiences the enjoyment of the catch. Then he says a prayer that he'll be able to catch another one. It is the same when we cut a tree. We talk to the tree, and tell it what we are going to use it for. In this way, the young person broadens his senses - understands more about who he is.
>
> The biggest step is to give his catch to someone. That puts him on the right trail - it ties him to the land and to the people. And somehow, after you've done that, its easier to hunt for your fish and game. You know where to go - what to see - what to smell - what to look for.
>
> It all adds up, and it all comes back to being Indian. That's when you earn respect from your people - it ties you to the earth. When you go through that, you appreciate your father's and your peoples' teaching.[259]

This quote from a Tribal leader gives definition to some of the requirements that Bachtold identifies to be requisite for development of the healthy personality. More clinically:

> Loss of the salmon is one of the significant reasons for the health problems our people have. Fish would be a good preventative tool for many of the complications our young people are facing today - such as obesity, which turns to diabetes, kidney disease and so on. Salmon contain high levels of omega-3 fatty acids, and its consumption benefits the diabetic. These fatty acids also reduce blood pressure, assist prevention of arthritis, lower cholesterol and triglyceride levels, and provide other health benefits. It has also been reported that such fatty acids are important for brain development and function - which has particular relevance for our young people. Fishing also provides exercise - which is important for health.
> Hunting and fishing is an effective health preventative. In addition to the other benefits I have mentioned, it also provides mentorship and self-esteem[260].

Finally, in historic times, every Shoshone or Bannock person spoke their own language. Today, according to US Bureau of the Census data, only 34 percent of people at Fort Hall speak their "own language" in their home[261]. Even at the more isolated Duck Valley Reservation, only 38 percent of Shoshone-Bannock peoples are estimated to speak their own language[262].

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[259]Hobby Hevewah. **Supra**.
[260]Allison Blacksmith. **Supra**.
[261]US Bureau of the Census, 1990. CP-1-1A, p. 34.
[262]Supra at 33.

As with other study tribes, present circumstances of the Shoshone-Bannock Tribes are also characterized by the type of Maslow hierarchy diagram suggested by Bachtold (Figure 7).

6.0 Circumstances and Impacts on the People of the Yakama Indian Nation

This section provides information on past and related present circumstances of the fourteen tribal peoples who now form the Yakama Indian Nation (Table 2)[263]. Expected effects of Lower Snake project options will be discussed in the later project impacts section of this report.

6.1 Accustomed Tribal Areas and Seasonal Harvest Rounds of the Peoples of the Yakama Indian Nation

In pre-contact times the peoples now living together as the Yakama Indian Nation (YIN) ranged over 12 million acres[264], from the confluence of the Columbia and Methow Rivers southwesterly along the Columbia to the Cascade Range[265]. This territory included Mount Adams in the Cascades and the north side of the Snake River, downstream of the confluence of the Palouse[266]. From this territory, traveling parties of the peoples now described as the Yakama also fished, hunted and/or traded westward as far as the rivers flowing into Puget Sound, and eastward as far as the buffalo country. Above all, the Yakama were people of the land.

> In the beginning, our Creator spoke the word and the earth was created. He spoke the word again and all living things were put on earth. And then He said the word and we, the people, were created and planted here on this earth.
>
> We are like the plants on this earth. Our food was put here as plants to feed us; just like when we plant a garden. That is the way our earth was in the beginning.

---

[263]Yakama is the present spelling utilized by the Yakama Indian Nation. In earlier written references, Yakima was the spelling most often used.

[264]Confederated Tribes and Bands of the Yakima Indian Nation, 1977. **The Land of The Yakimas**. Toppenish, p. 10.

[265]Selam, Leroy B., 1975. **The Yakima Indians: Study and Analysis of the Yakima Water Rights**. Masters Thesis. Oregon State University. Corvallis, p.23.

[266]Lane & Lane and D. Nash, 1981a. **Supra** at 21.

> There were salmon, deer, elk, and all kinds of birds. It is as if our bodies are the very end of the earth, still growing while our ancestors are all buried in the ground.
>
> He named everything he created. He put water on this earth. He made it flow into the rivers and lakes to water this great garden and to quench the thirst of the people, the animals, plants, birds and fish.
>
> He took the feet of the people and made them walk on the earth. He created the horse; which is like a human being. He put the horse and the people together to help one another.
>
> All the land where we live and where our ancestors lived was created for the [Indian] people.[267]
>
> ...the Yakima today still live on the same land that has been a part of their traditional territory for thousands of years. Their roots are deeply sunk into the earth. Their sense of identity is clear. As a result, many of the Yakima's cherished traditions still live, imparting a sense of the wisdom that sustained the people in the past and enabled them to survive into the present.[268]
>
> The land don't belong to the Indian; the Indian belongs to the land.[269]

As did their neighbors, the Yakama peoples of the pre-contact era lived with the land - following seasonal rounds of fishing, hunting and gathering - in each usual and accustomed location at the appropriate time and season.

> The Yakima derived their subsistence primarily by fishing and by gathering wild plants, but they supplemented their supply by hunting. In order to obtain as much food as possible, they traveled to wherever plants or wildlife were most plentiful during a specific time of year. Although the camps they established at these sites were temporary, they had an air of permanence because people tended to return to the same areas year after year.[270]

A general sense of these seasonal rounds is provided in Table 15.

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[267]Excerpted from "The Way It Was: Anaku Iwacha, Yakima Indian Legends", in, Schuster, Helen H., 1990. **The Yakima**. New York: Chelsea House Publishers, p. 13.
[268]Schuster, Helen H., 1990. **Supra** at 19.
[269]Robert Jim, 1972, in, Schuster, Helen H., 1990. **Supra** at p. 21.
[270]Schuster, Helen H., 1990. **Supra** at 21.

Table 15

A General Profile of the Seasonal Rounds of the Yakama Peoples

Time of Year	Characteristics of the Period
February.	Snow begins to melt - and Yakamas begin to break winter camps in the Valley bottoms. Before leaving these camps they harvested the first plant food of the new year - a wild celery called khasija.
Late February & into March.	The Yakama arrived at fishing stations on the Columbia, Lower Snake and Yakima rivers, and their tributaries. These rivers teemed with early run salmon (nusukh), including chinook, silver, sockeye and chum. The Yakama also fished for steelhead, resident trout, sturgeon, suckers and lampreys.
Late April.	Harvests from fishing sites declined, and the Yakama moved to root-digging grounds - where the women gathered more than 20 varieties of roots, and the men hunted for deer, and other wildlife such as elk, bear, wolves, foxes, mountain sheep and goats, and birds.
June.	Families returned to fishing sites to harvest the second salmon run of the season.
July.	Families moved to cooler higher elevations, where the men hunted and the women gathered wild plants.

August.	Many Yakama families traveled south to the Klikitat territory to gather roots. They traded with other Indian groups and fished for trout. In mid-month, women and girls, guarded by an older man or a boy, went into the mountains to pick huckleberries.
Early Fall.	Families began to return to the river valleys for the fall fish runs. Often, these fishing centers were also places for extensive trade between tribal groups. Families gathered and stored the supplies they would need for winter, and some men went into the mountains to hunt deer and elk.
Mid-November.	Families returned to their winter camps in the valley bottoms, which were protected from severe winter weather. They repaired their homes for winter, made tools and needed clothing during this quiet time. They remained there until snow-melt, socializing, and living on the roots, berries, salmon, venison and other foods they had gathered in previous months. Sometimes, the men ventured out to do limited hunting during this winter period.

Source: Developed from, Schuster, Helen H., 1990. **The Yakima**. pp. 21-25.

Of the resources of the "land" which the Yakama depended on, water was first, salmon was second, and the other food sources were also required, each in its season.

> Since immemorial days we have had great prophets to guide our laws that had been established for us to follow and which we do so at the present knowing the living God still exists; first, the water; second, the salmon; third, the big game; fourth, the roots; and fifth, the berries. All of which we used each year to give thanks to our living God, which when first taken are new to us each year, in other words "communion" with our living God through the water and the food he provides us with each year.[271]

> We were talking about the essence of the teaching as our Creator handed down to our people, which has been handed down through centuries or through generations. And I always sing that song before we eat and when I'm coming back from services. That's at the Longhouse with the Seven Drum religion. And this song does explain the three promises God made to mankind, not just to Indian people, to mankind: that the food would always be plentiful if it's carefully been kept, and used in care and respect for the food itself. The first food is salmon to us; that's our first food. And we recognize that, as such, without it our life would not have its full potential as far as our existence is concerned.... (T)he salmon goes and then comes back. The old ones give up their life for the new

[271]Martin Hannigan, Chairman, Yakima Tribal Council, **Letter**, to K.R.L. Simmons, Yakima Tribal Attorney, Billings Montana. August 9, 1949.

ones, just like the mother gives birth to young. That is what we're taught -- to show respect and have empathy for the salmon.[272]

Since the beginning of time -- since time immemorial the people of the YAKIMA NATION have been told the history of our ancestors and their ancestors before them by our tribal elders. History and legends are kept and handed from one generation to the next generation.

Ranking first is our Creator's most precious gifts of water, and land -- Mother Earth. These he gave us for our daily use, our sustenance, our survival. He blessed the waters and instructed our First Peoples to take care of the water because it is there for a reason. For without water nothing can survive. There would be no rivers, streams or creeks for our salmon, trout, eels; No trees (forests), plants, roots (edible and medicinal) berries. There would be no animal life - no life at all.

It has been this way since our Creator placed us in this part of the world and instructed our First Peoples in the care, and the gathering of all fish, game, fowl, roots and berries. Creator chose certain men and women of the First Peoples to be teachers and showed them what fishes, animals and fowls that were allowed to give up their lives to sustain ours; what plants, roots and berries we could use to keep our bodies healthy and strong. He taught our Old Ones which trees and grasses we could use for shelter, for processing and storage of our foods.
Nothing is to be wasted, and so Creator taught us how to replenish all that He provided for our sustenance. Our Creator taught us how to survive on what he provided.

The Old Ones say the Creator told them to follow his path, a path of religion that would be in gratitude to Him for all that is provided for our sustenance and our life. Our religion begins all meals with His first blessing -- water, followed by Salmon, the deer/elk, first roots and berries. All meals conclude with water as we were instructed by the Creator.

Creator's second gift of life to the Yakima Indians is the Salmon. Salmon was placed in the Columbia and in its tributaries for us to harvest as the Creator said the salmon was to help nurture and sustain us. In return for the gift -- we are to care for the waters that sustain the salmon.[273]

Outside experts have reached similar conclusions with respect to the role of fishing in Yakama traditional life.

Fishing was a major economic activity for the Yakima. Some early writers referred to salmon as the "main staple" and "chief food resource"; and as a single item it probably was.[274] [275]

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[272]Tom Eli, at Toppenish, October 22, 1982. **Oral Testimony**, in, Meyer Resources, 1983. **Supra** at 39-40.

[273]Aguilar, Florence L., 1995. Yakama Indian Nation, Cultural Resources Program. **Memorandum** to Johnson Meninick. May 29.

[274]Schuster, Helen H., 1975. **Yakima Indian Traditionalism: A Study in Continuity and Change**. Phd. Dissertation. University of Washington, Seattle, pp. 69-70.

6.2 Natural Capital and Annual Productive Yield of Original Yakama Lands and Other Resource Assets

In economic terms, the lands, waters and salmon producing capacity of the traditional territories of the Yakama peoples represented the "natural capital" upon which they depended. This natural capital produced the annual harvests of salmon and other fishes, of game, and of roots, berries and plants that allowed the peoples who are now called the Yakama to survive and prosper. As noted earlier, salmon was the key element of this annual produce.

Hewes estimated that the Yakima, Klikitat, Palus and Wanapum peoples would have consumed approximately 400 pounds of salmon per person per year in pre-contact times (approx. 1780), based on caloric requirements[276]. Walker identified additional uses of salmon, for example, for fuel, and suggested a median consumption of salmon per capita of 583 pounds for Plateau tribes[277]. Swindell identified that tribes of the mid-Columbia caught salmon for trade as well as for their own consumption - with one respondent indicating that a family on the river would catch a third more additional salmon for trading purposes.

Allowing for Hewes' differentiation between consumption rates for downriver tribes and his average rates for the Plateau (+9.6%), adjusting to coincide with Walker's median estimate, and increasing harvest by a further 25 percent as a discounted adjustment for Swindell's trade observation, we estimate an annual per capita salmon catch for the peoples now known as the

Yakama Indian Nation of approximately 800 pounds in pre-contact times. This also coincides with the upper range of Walker's average estimate for all Plateau tribes[278].

Schuster estimates that, prior to contact in about 1805, and ensuing epidemics, the population of Upper and Lower Yakima bands was approximately 7,000 persons[279]. Estimates of the population of Yakima bands at Treaty times (1855) vary from 2,000 persons (Schuster[280] and Selam[281]), to approximately 3,000 persons (McWhorter[282]), and to 3,500 persons (Fitch[283]).

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[275]See also, Smith, Courtland L., 1979. **Salmon Fishers of the Columbia**. Corvallis: Oregon State University Press, pp. 6-7.
[276]Hewes, Gordon W., 1947. **Supra** at 237.
[277]Walker, Deward E., 1967. **Supra** at 19.
[278]Supra.
[279]Schuster, Helen H. **The Yakimas: A Critical Bibliography**. American Indian Bibliographical Series. Bloomington, Indiana: Indiana University Press, p. 22.
[280]Supra.
[281]Selam, Leroy B. **Supra** at 30.
[282]McWhorter, Lucullus V., 1913. **The Crime Against the Yakimas**. Yakima: Republic Print, p. 5.
[283]Fitch, James B., 1974. **Economic Development in a Minority Enclave: The Case of the**

Using the middle 1855 estimate of 3,000 persons, and our per capita annual harvest estimate of 800 pounds - we estimate that peoples of what is now the Yakama Indian Nation likely harvested approximately 5.6 million pounds of salmon annually prior to contact, and approximately 2.4 million pounds of salmon in the mid-1800's.

Lane, Lane and Nash estimated that Yakima fish consumption in pre-contact times amounted to approximately 40 percent of total food consumption, based on estimates from the nearby Umatilla peoples[284]. On this basis, and using the extrapolations discussed previously for other tribes, total annual food consumption by Yakama bands is estimated at 9.2 million pounds in pre-contact times, and at 3.9 million pounds in 1855.

Finally, use of the US Bureau of the Census estimate that contemporary families on an economy budget spend one third of their income on food[285], would result in an estimate that Yakama bands gathered both food and non-food items from their usual and accustomed lands and waters equivalent to 28 million pounds of food in pre-contact times, and equivalent to 12 million pounds of food in 1855.

6.3 A Broader Perspective of the Living Circumstances of Yakama Peoples in Pre-Contact Times

Expert assessment suggests that the Yakama peoples were generally well off in pre-contact times.

> The rich environment of the Yakima homeland allowed prehistoric peoples to prosper there.[286]
>
> Throughout this vast primeval (Yakama) expanse the accumulated wealth of millions of years was deep buried or heaped upon the land. Other wealth swam in the seldom silent rivers, congested at the fisheries along the Columbia or winged low above the marshes.[287]

In these times, Yakama wellbeing extended across material and spiritual lifeways.

> The People's survival from year to year, generation to generation, was assured. **Their way of life was in rhythm with nature. Earth and life were sacred. The land taught material and spiritual values**.[288]
>
> The relationship of the Yakama to the earth, animals, and plants was far more than economic. It was a spiritual relationship that originated at the beginning of time. This axiom is at the heart of

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Yakima Indian Nation, Washington. Phd. Dissertation. Stanford University, p. 75.

[284]Lane & Lane Associates and D. Nash, 1981b. **The White Salmon River Indian Fisheries and Condit Dam**. A Report to the US Bureau of Indian Affairs, Portland, p. 68.

[285]Recall Note 69.

[286]Schuster, Helen H., 1990. **Supra** at 16.

[287]Relander, Click, 1962. **Strangers on the Land**. Yakima, WA: Franklin Press, p. 5.

[288]Confederated Tribes and Bands of the Yakima Indian Nation, 1977. **Supra** at 3.

> Yakama tradition, culture, and history, and without an appreciation of the significance of the earth and spiritual beliefs, there is little understanding of any aspect of Yakama history.[289]
>
> Although the Indians of the Columbia Plateau did not live a utopian life before white contact, their standard of living was relatively high due to diet, climate, housing, and availability of resources. Most tribes, even those from other language families, coexisted in relative peace, sharing food resources, geography, and ceremonies.... Yakama people "knew what to expect as causes of death. Predictability is of course, a staple of human existence."[290]
>
> It was as Wa-tum-nah said in his predictions, "We are a happy people - but it would not always remain so".[291]

As with other neighbor tribes, pre-contact Yakama peoples exhibited the physiological, safety, belongingness and love, and self-esteem characteristics required for a fully functional society, outlined by Maslow, and cited in Bachtold[292] (Figure 8).

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[289]Trafzer, Clifford E., 1997. **Supra** at 23-24.
[290]Supra at 71-72.
[291]Selam, Leroy B., 1975. **Supra** at 23-24.
[292]Bachtold, L.M., 1982. **Supra** at 19.

6.4 Changes in Yakama Circumstances Following the Treaty of 1855

As with neighbor tribes, the coming of the white man resulted in great changes for the Yakama peoples.

> Life changed for us forever on the morning of October 17, 1805. On this date the Lewis and Clark Expedition arrived at the confluence of the Taptette (Yakima) and the Ench-wana (Columbia) Rivers....

> After Lewis and Clark came other explorers, fur trappers and traders. These strangers were welcomed as guests, and as tradition required, were extended our hand in friendship....
>
> America's growing population was moving west. They came along the trails through our Valley urged on by the discovery of gold and the desire for land.... Our people watched these events with growing concern....
>
> In 1850 Congress enacted the Donation Act which invited settlers to occupy the Pacific Northwest Lands. No longer was the white man a visitor. He began to live on our land, and he now wanted to divide it up and own it privately for himself. Our People could not conceive of buying and selling land, of owning a part of Nature for oneself. We stood in awe of Nature.
>
> > "My Mother is the earth, my Father the light, when I die, my body returns to my Mother and my spirit to my Father"...
>
> The Yakimas feared the rising, irresistible tide of people with ideas about private property that threatened to deprive them of their land. These strangers brought diseases to which the Indians had no resistance. Tribes in the Willamette and Grand Ronde Valleys and along the Columbia were wiped out in appalling numbers....
>
> Eager to clear the land for white settlement, the (federal) government began hurried preparations for the making of treaties which would establish federal title to the land. Governor Stevens began a series of negotiations with the Tribes along the coast of Washington Territory and then moved inland. In the summer of 1855 the Walla Walla Valley was the site selected for negotiations that would lead to a treaty with the inland Tribes of the Walla Wallas, Cayuse, Umatillas, Nez Perce and the Tribes and Bands of the Yakimas.[293]

These Treaty negotiations troubled tribal peoples. This is evident in the words of Yakima Chief Kamiakin.

> We wish to be left alone in the lands of our forefathers, whose bones lie in the sand hills and along the trails, but a pale face stranger has come from a distant land and sent words to us that we must give up our country, as he wants it for the white man. Where can we go? There is no place left.
>
> Only a single mountain now separates us from the big salt water of the setting sun. Our fathers from the hunting grounds of the other world are looking down on us today. Let us not make them ashamed! My people, the Great Spirit has his eyes upon us. He will be angry if, like cowardly dogs, we give up our lands to the whites. Better to die like brave warriors on the battlefield, than live

[293]Confederated Tribes and Bands of the Yakima Indian Nation, 1977. **Supra** at 5-8.

> among our vanquishers, despised. Our young men and women would speedily become debauched by their fire water and we should perish as a race.[294]

At the same time, dialogue from Governor Stevens included substantial threats.

> In the summer of 1854, Governor Issac Stevens met with Ow-hi, leader of the Upper Yakimas. Governor Stevens told Ow-hi that he wanted to make a treaty with the Indians of Eastern Washington and Oregon concerning purchase of Indian lands. Ow-hi advanced the position of no sale lands. It was at this time that the threat of genocide was made by Governor Stevens. He asked that Ow-hi deliver a message to the leaders of the tribes indicating that a council be gathered and that if the tribes did not make a treaty, the white people would take the land, anyhow. He further stated that in addition to the land grab by the European descendants, the soldiers would come and "wipe them off the face of the earth...".[295]
>
> The Indians were called in council, including the Nez Perces, Yakimas, Cayuses, Palouses, and Walla Wallas. Several days were occupied in feasting and talking, but apparently making no progress in the aim of the meeting, finally the Governor getting out of patience, recapitulated all that had been said and offered, and concluded by saying:
>
> > "If you do not accept the terms offered and sign this paper (holding up the paper) you will walk in blood knee deep."[296]

Given this "incentive":

> All the chiefs signed, Kamiakin was the last, as he turned to take his seat, the priest punched me and whispered, "Look at Kamiakin, we will all be killed." He was in such a rage that he bit his lips that they bled profusely.[297]

The Yakima Treaty was subsequently ratified by the US Senate in 1859. The Yakima Treaty required that 14 different tribes and bands live together on 1.2 million acres, later referred to as the Yakima Reservation - approximately 10 percent of their original home territory[298]. As with other "Stevens treaties", ability to move from food source to food source, harvesting each resource in its appropriate time and place, was critical to the peoples who are now described as the Yakama - and they retained the right:

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[294]Chief Kamiakin, 1854, in, Yakima Indian Nation, 1978. **1855 Yakima Treaty Chronicles**, p.4.

[295]Selam, Leroy B., 1974. **Supra** at 25-26.

[296]Pambrun, Andrew D., 1855. Interpreter at the Walla Walla Treaty Council, in, Yakima Indian Nation, 1978. **1855 Yakima Treaty Chronicles**. p. 17.

[297]Supra.

[298]Confederated Tribes and Bands of the Yakima Indian Nation, 1977. **Supra** at 10.

…to fish within the reservation and outside it "at all usual and accustomed places", right to hunt, gather roots and berries, and pasture horses and cattle on "unclaimed land.. ."[299]

6.5 Allotment of Yakama Lands - To Tribal Members and to Whites

Non-Indian efforts to obtain Yakama land did not stop with the Treaty of 1855. The principal means for further alienation of Yakama land was the Dawes' Severalty Act of 1887 (also known as the Allotment Act) - and as subsequently amended.

> ...the Allotment Act...ended common ownership of the entire Reserve and brought the members of the Tribe closer to the white man's ideas of dividing the land and owning individual plots. The results of this Act were momentous. It led to non-Indian ownership of much of the most valuable flat land and made the Yakimas a minority on their own Reservation.
>
> The Allotment Act provided for the allotting of tracts of this tribally owned land to individual Indians. Reluctant at first, but forced by government pressure to divide up the Reservation, a majority of tribal members finally agreed to accept the new plan whereby individuals received tracts in various sizes up to 160 acres.
>
> ...This Act allowed allotments to be given along the Columbia and Wenatchee Rivers. Members could retain in this way their traditional fishing sites. Allotments were also made at good water or good grazing locations. This explains how a number of Yakimas made their homes on the ancient sites inhabited by their ancestors but not located within the boundaries of the Reservation.
>
> ...With the granting of allotments, the Indian owners were allowed to request and obtain fee patents removing the trust restrictions from their land. They were then free to dispose of the lands to any buyer they chose. Land sales became frequent to land hungry whites with the result that much of the valuable irrigated land went out of Indian ownership very quickly. Towns on the reservation, such as Toppenish and Wapato, were founded during this period through purchases of fee patent land from Indian owners and through special bills enacted by Congress.
>
> As many individual Indians were persuaded to sell their land, most of the flat fertile land in the northeastern part of the Reservation became rich ranches owned by whites. Today (1977) non-Indian ownership amounts to 253,280 acres, leaving 1,118,638 under Indian ownership – mostly mountain timberland and dry foothills good for stock grazing. Today (1977) 80% of the 27,000 people living within the boundaries of our Reservation are non-Indian.
>
> The allotment Act undermined the treaty handed down by our ancestors.[300]

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[299]Yakima Indian Nation, 1978. **Supra** at 23.

[300]Yakima Indian Nation, 1977. **Supra** at 18-19.

Non-Yakama reviewers have been similarly critical.

> The beginnings of new times and changed days commenced with explorations, forerunner years to military occupation and land settlement. Wrongs imposed during this era by others stronger and powerful enough to do so have never been denied. Yet these intolerances have never been rectified through just compensation or by full use of an element upon which no monetary evaluation can be placed. ...
>
> The earth did not know the strangers in the way it knew its children, the First People.
>
> The strangers came.
>
> They took more and more country, squeezing the First People with an ever tightening force. Whether they were explorers, missionaries, miners or land settlers they seemed determined to exterminate a culture older than the Pyramids. Modified in hundreds of ways this determination carried through the settlement and upbuilding years has never relaxed. Nor is it likely to ease as long as there is Indian-owned land, and while a multitude of friends keep their tongues silent.
>
> Always the land seizures have been defended on the thin pretext of "progress". Yet here were people whose masses of population existed in contentment without knowledge of gold and silver currency. They took their wealth as it was offered, from the earth.[301]
>
> The majority of Yakima Indians were reluctant to accept allotments. ...
>
> The Yakima's fight against allotment of reservation land failed, however. To enforce its policy, the government informed all resisters that if they did not claim their allotments, the land would be opened to non-Indian homesteaders. Eventually most Yakima reluctantly accepted allotments.
>
> As the Yakimas were assigned tracts and issued fee patents, non-Indians began to infiltrate their land. Many promoted fraudulent land deals, often with the assistance of bootleg whiskey. The Indians' rights were ignored, and Indian-white relations worsened....
>
> As allotment continued, Yakima country soon became like a checkerboard, as non-Indians established holdings among the Indian-owned allotments....
>
> By 1914, when allotment of the Yakima Reservation ended, 4,506 tribal members had received a total of 440,000 acres, leaving 780,000 acres still tribally owned. Today (1990), non-Indians own about 253,280 acres, more than half of the Indian land originally allotted.[302]

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[301]Relander, Click, 1962. **Supra** at 6.
[302]Schuster, Helen H., 1990. **Supra** at 81-83.

De-watering of Treaty lands also created difficulties for the Yakama peoples.

> With the opening of the reservation, many existing problems escalated. Large-scale irrigation projects were developed both on and bordering the reservation. Political and legal battles quickly raged over who had the rights to the irrigation water. The irrigation projects drew water to off-reservation lands, diminishing the supply that was needed for reservation irrigation and for the Indians' livestock.[303] [304]

Checkerboarding of tribal and non-tribal ownership within Reservation boundaries further exacerbates difficulties for tribal governments, by severely limiting Tribal jurisdiction over non-Indians living on-Reservation[305] [306].

In 1900, the federal government corrected an "error" associated with the original survey of the reservation, returning an additional 357,879 acres to the Reservation[307]. Recent YIN Reservation acreages under control of Yakama peoples are identified in Table 16.

Table 16

Present Yakama Land Holdings Within the Yakama Reservation

Type of Ownership	Acreage
Yakama in Trust	866,445
Yakama Individual Fee Ownership	260,000
Non-Indian	253,280
Total Reservation Acreage	1,379,725

Source: Schuster, Helen H., 1990. **Supra** at 83-84.

6.6 Yakama Access to Usual and Accustomed Fishing, Hunting and Gathering

[303] Supra at 84.

[304] For a further discussion of shady practices with respect to diversion of Yakama water, see, for example: McWhorter, Lucullus, L., 1913. **Supra** at 5-14.

[305] For example: Brendale v. Yakima Indian Nation, 106 L.Ed 2d 343 (1989); and Duro v. Reina, 109 L.Ed. 2nd 693 (1990).

[306] "Checkerboarding" describes the random dispersal of Yakama (trust and fee) and non-Yakama land holdings within the reservation.

[307] Schuster, Helen H., 1990. **Supra** at 83-84.

The 1855 Treaty guaranteed the peoples of the Yakama Indian Nation (YIN) the right to fish, hunt and gather at usual and accustomed places within and outside their reservation boundaries. Given that their homeland was reduced to one-tenth of its former size by the Treaty, and that the peoples of the YIN traditionally harvested over a more extensive area, this guarantee was essential to their material and cultural survival. But subsequent to the Treaty, the access of YIN peoples to usual and accustomed harvest places was progressively reduced. In part, this was due to the spread of white settlement over YIN traditional areas - as YIN rights to hunt and gather were conditioned in the Treaty by the availability of public lands. With respect to hunting and gathering, this adverse effect was partially mitigated by the Yakama retention of extensive upland areas within their 1855 Treaty Reservation boundaries - and, in fact, today, about one third of their Reservation is "closed" to non-Yakamas, and extensive traditional gathering and ceremonial activities are still undertaken by tribal members in this area.

Usual and accustomed fishing resources of the Yakama have not fared well, due to attempts to preempt Tribal access to these resources in early years, and to the progressive transformation of the land and water upon which the salmon depend. On balance, these actions have eliminated Yakama Treaty assets, and created wealth for other interests, at Yakama expense.

> Irrigation dams prevented salmon from making their regular spawning runs, prompting more controversies involving fishing rights. In addition, small salmon, or fingerlings, were often caught in lateral irrigation canals. Unable to reach the rivers, they perished by the millions.... White fishermen on the Columbia added to the problem by using fish wheels. ...
>
> The Yakama's right to fish at their traditional sites was also threatened. White homesteaders on lands adjoining the fisheries sometimes refused to allow the Indians to cross their lands in order to reach these stations. In 1905, the U.S. Supreme Court upheld the Indians' right to use their ancient and accustomed fisheries in *U.S. v. Winans*, a case brought against a white settler whose homestead blocked Indian access to these sites. The Court also ruled that the treaties the Indians had made with the United States were to be interpreted in the way the Indians had understood them. It stated that "a treaty was not a grant of rights *to* Indians but a grant of rights *from* them".
>
> However, non-Indian fishermen often ignored the ruling. Eight years later, U.S. Attorney Francis Garrecht was called to defend Yakima Nation fishing rights in *U.S. v. the State of Washington*, a case involving two principal Yakima chiefs, George Meninock and Jim Wallahee. Meninock presented the following speech as part of the tribal testimony:
>
> > 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.

Through the years, the Yakama Indian Nation was fairly successful in defending its treaty rights in the federal courts, but the abuses against them continued. For instance, the Yakima's traditional Indian fishing grounds at the Long Narrows and Great Cascades were flooded in 1938 when the government constructed Bonneville Dam on the Columbia River. Congress passed legislation promising that the salmon and steelhead that had been destroyed would be replaced by hatchery fish. However, this act was implemented by establishing almost all of the hatcheries downriver from Bonneville Dam, where only non-Indians fished, instead of upriver in the tribal fishing areas. Similar problems arose in 1941 when Grand Coulee Dam was built on the Columbia and blocked miles of spawning grounds.

The late 19th and early 20th centuries brought the Yakima into conflict with both white settlers and government officials as the tribe tried to hold on to the land and resources that were legally theirs. These years were only a prelude to the battles the Yakima Nation would be forced to fight in the last decades of the 20th century.[308]

6.7 Changing the Production Function for Yakama Natural Assets

6.7.1 Tribal Perspective Concerning Yakama Lands, Waters and Salmon

The previous section identifies that the production function for the Columbia/Snake basin - defined as the manner in which residents of the area Basin combine lands, waters and associated assets such as salmon productive capability to create annual benefits - has changed over time; and in a manner that has increased the wellbeing of non-Indians in the region while reducing tribal peoples to poverty. Cheap electricity to support modern industries, millions of acres of irrigated agriculture, use of rivers and reservoirs as waterways and as depositories for waste, and the demise of available salmon harvests are particular features of this change. The Northwest Power Planning Council captured the essence of this wealth transfer in 1982.

> Three generations ago, when the Columbia River and its many tributaries ran free to the sea and the fish and wildlife flourished, the people of our region were presented an unmatched opportunity. To the credit of their vision, skill and courage, they harnessed this mighty river system into a seemingly boundless supply of low-cost electricity. Thanks to their visions of the time, we have all benefited immensely.

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[308]Supra at 84-87.

> But this achievement, like all great achievements, had a price. The development of the Columbia River System's hydro-electric projects dramatically changed the natural fish and wildlife habitat, especially that of the prized Pacific salmon and steelhead. The fish runs were nearly destroyed. It falls to the next generation to rebuild these natural resources which thrived before we came.[309]

Tribal peoples did little sharing in the benefits described by NPPC - and it was the Yakama Indian Nation and other basin tribes who have paid much of the price referred to in the previous citation. Understandably, as the tribes watched the center of their lifeways being destroyed, they raised their concerns and objections.

> My name is Watson Totus, member of the Yakima Tribal Council. I am a direct descendent of the Columbia River tribes and chiefs who signed the Yakima Treaty of 1855.
>
> I am protesting the construction of the Dalles Dam. It should never have been authorized by the United States Congress in 1950 and the 82nd Congress never should have appropriated $4,000,000 and let the contract for construction in 1952.
>
> I make this statement because the proposed dam violates the Yakima Treaty and threatens to abolish and destroy one of the most historical and scenic natural monuments in the United States. The dam would do irreparable damage to Celilo Falls fisheries, tribal traditions, and religion.
>
> My people fished at Celilo and many other tribal fishing places, both above and below the falls. Even yet, many Indians fish here to supplement their subsistence and livelihood. ...
>
> I teach my people that (1) water is blessed by God; (2) salmon is blessed by God, and it is the first food that we partake of in the "Washeat" church ceremonies on Sunday, fresh-root festivals and "first salmon-catch" festivals.
>
> I am now asking Congress to change its mind and not construct the Dalles Dam. It will make the spirits of my dead chief of long past rejoice and will build confidence in my present and future people that our treaties of 1855 are sacred and shall not be abrogated by Congress of the strongest and most religious country of the world, the United States of America.
>
> The spirits of my past chiefs cannot plead for justice. I can only pray, save Celilo Falls and all it represents. May the Great Spirit bless you all. I have spoken for my people.[310]

---

[309]Northwest Power Planning Council, 1982. **Letter to the People of the Pacific Northwest**, in, Draft Fish and Wildlife Program. Portland.

[310]Watson Totus, 1952, in, a **Presentation on Behalf of the Yakima Tribe**, to the U.S. Senate Sub-Committee on Civil Functions of the Army, May 12. Printed Hearings, pp. 434-435.

> As you come up the river, dam by dam by dam, every dam we look at and talk about has done some damage to the Indian culture and the Indian tradition, has taken away something every time a dam is built. And if you want to talk about Bonneville Dam then you go back to the very first dam, and it took away Cascade Rapids from the Indian people. It took away a big fishery. And as you come up, the Dalles Dam probably did the greatest damage of all, because it inundated the ancient fishing ground of Celilo and the rocks, and all of Spearfish and Tenino. The Dalles Dam also inundated an ancient burial ground....The John Day Dam inundated John Day Rapids and inundated Blalock Rapids all the way up to what is usually known as Patterson. And there was a great Indian fishing village in that area. Used to be a big rapids in that area. Naturally the dams were built on places that were shallowest, and those places were the places where Indians fished, in the rapids. McNary Dam, I don't know how much damage that did, but I suppose it did a lot of damage to spawning areas.... Priest Rapids has done a great deal of damage. It's ruined major spawning beds, and big, big fishing area, what we used to call Wannapum, Priest Rapids, Whitebluffs, all through that area.[311]

Evidence found throughout this manuscript suggest that many of the regions' residents, intent on creating wealth for themselves, had limited or no regard for the adverse impacts they were creating for the Yakama and other tribal peoples - terming such impacts the "price of progress"[312]. From the perspective of distributive economics, and recognizing that non-Indians reaped benefits while Indian peoples paid the "price", such a conclusion is not surprising.

In some cases, scientists and bureaucrats responsible for managing the salmon claimed "to know better" than tribal peoples.

> That's one thing you can't tell the biologist. They think they know more about it than the first people. Like last fall, they got the twelve hour season down there. They caught 70-some thousand fish. I looked at the television screen and saw that fish they were bringing out--pure black. That's fish that's been in the river a long time. When they first coming in from the ocean they got to be chrome, silver. They weren't that. I told them guys down at the meeting those fish were held back purposely. The way they do that is with electric fence impulse. You see some of that fish that gets down in there burnt. They got spots on them. The biologists didn't want to admit nothing. They said they come out of the ocean. No, they did not. They'd been in the river for a long time--I know.[313]

> I can tell you. The fish used to be really bright. ... When the Dalles Dam came in and then John Day Dam, they became very poor. Like he says, they fall apart.... The last fish I caught on the Yakima was up near what they call "Upper Dam", the last dam that began there. I was up there fishing and I caught a salmon. ...I gave it to the old man that lives there.... While he was sitting there talking, he said, "See out that window. It's changed since they put Dalles Dam in. I noticed the change in the

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[311]Rudy Saluskin, at Toppenish, October 22, 1982; in, Meyer Resources, 1983. **Supra** at 60-61.
[312]i.e. Note 301.
[313]Dave SoHappy, at Toppenish, October 21, 1982; in, Meyer Resources, 1983. **Supra** at 69.

> creek." He says, "I've fished here a long time. And the fish at that time used to be able to jump and reach the top of the dam. But today they jump, they barely reach halfway up." So it has taken away. ...They have become weak, like he says. And I'm thinking about that, and it seems to have lost a great deal of their constitution, what keeps them solid.[314]
>
> The hatchery fish live in a tube, and when they're released, they don't know how to camouflage themselves. When they hit the stream they jump around at the surface, and kind of bundle up together - and the birds come and pick them off. They have trouble now acclimatizing to the river. We didn't ever agree to let them make dummies out of our fish.[315]

In other cases, biologists claimed "not to know enough" to save the salmon. The following quote, written some fifteen years ago, and referencing Indian certainty concerning the adverse effects of dams on salmon, is similar to some aspects of current debate.

> Indian people have been consistently conservative in risking fisheries for other water-related development. Indian people correctly predicted the deleterious effects that dams and their associated mitigative measures would have on the salmon and steelhead of the Columbia River. **While biologists studied and debated, Indians, living on the river, saw fish quality decline and sea gulls eating dead smolts out of dam spillways. More often than not, Indian concern and counsel was ignored**. (Our bolding)
>
> It would appear that Indian people, with their extensive knowledge of the salmon, its characteristics and requirements, can provide valuable information for ongoing decision- making on the river....(T)heir advice on safety margins needed by salmon during flow, fish passage and other river-related decisions, their ability to quickly observe whether programs are working or not, and their basic common sense concerning the salmon resources of the river could be invaluable to any upper river restorative effort.[316]

Other non-Indians and their agencies are reported to have simply not told the truth, and buried salmon killed by dams at night.

> On these ladders they're talking about, I was one of those boys that went around to the farmers over in Nickleson area and Horsehaven area. Talked to the farmers about this (in 1956-57): We should have, its like a river, a channel, like a canal, somewhere above or down where the fish would go up. Well, the farmers went along. They had a big list of people signing that petition to have the dam fixed up. Well the Corps of Engineers agreed to it. They said, "We'll do it." But when the dam went up there was no channel.[317]

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[314]Tom Eli, at Celilo, October 28, 1982; in, Meyer Resources, 1983. **Supra** at 67.
[315]Bill Yallup, at Toppenish, October 3, 1997. **Personal communication**.
[316]Meyer Resources, 1983. **Supra** at 71-72.
[317]Warner Jim, at Celilo, October 28, 1982; in, Meyer Resources, 1983. **Supra** at 58.

> She's angry about when they took the Falls from the people that were here....She says, "What good would it do to speak up?"...Like the promises that they made to the Indians that we get free electricity from the dam. I think it was three months they got it. The next thing, the people were getting light bills and they were getting water bills.[318]
>
> I've got something to say to comment on the fishing. I know four people who were lucky to get jobs at the dams, and these are the things that they come back and tell me. I won't mention names, you know, because...I don't want to say my name, all right? These people work at the dams. They usually help clean the ladders out, fish ladders. And they hauled out tons of fish that were found under the steel grating that's under the fish ladders. A lot of them were dead or they were damaged pretty bad. These guys were working there and they had to clean the ladders out, you know, help. Well, they used to come home and they'd tell me about it. And they'd say they'd haul them out by the pick-up load. You know, these pick-ups they use at the dam. Cuz the guys that work there, they tell me, "Oh, we were cleaning fish ladders. And they took these fish out, and they dug holes, and they burned this fish. And then they buried them. To hide the evidence. And then they turn around and blame the Indians, that the Indians are catching all the fish.
>
> A lot of these things happened right when John Day Dam came up. They worked on the dam from '66, '67, '68. Then I think the last year they worked, since they quit hiring Indians out there, see. A long time ago they made a promise to the Indians that there would be ten percent Indians working on the dams. I don't think there's one Indian working on any dam now.[319]

Some officials compounded folly with attempts at intimidation and with arrogance. The following statement is from a US Army Corps of Engineers official, during a 1954 meeting with representatives of the Yakama Indian Nation.

> (I)t is noted...that the Yakima Tribe contend that the $23,000,000.00 represents only 85% of the total value of the Celilo fishery because of the alleged losses that occurred during the year 1947 to 1951, due to the construction of the Bonneville Dam. This office does not admit that there is any loss of the Columbia River fish due to the construction of Bonneville Dam. In fact, we categorically deny that there is a loss due to this reason. ...
>
> Mis-information sometimes attributed to the press, but for the most part disseminated by word of mouth, has created a false public opinion, especially among the Indians, that the fish runs at Bonneville have decreased in recent years due to the construction of Bonneville Dam. The actual

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[318]Warner Jim on behalf of an identified Yakama woman at Celilo, October 28, 1982: in, Meyer Resources, 1983. **Supra** at 58. The woman was afraid to identify herself because on the previous day a car had stopped on Hwy. 84 and a man had shot at her and her daughters as they fished on the Columbia River.

[319]Unidentified Yakama woman, at Celilo, October 28, 1982: in, Meyer Resources, 1983. **Supra** at 68-69. This is the same woman referred to in the previous citation.

> fact is that the runs have increased since 1938 and the convincing figures which are briefly stated above must be admitted as facts and taken into account if the contention that there is a loss due to Bonneville Dam is considered objectively and with unbiased honesty.[320]

Whether because the "price was right", because biologists were unsure, because tribal knowledge was ignored, because of unintended or forgotten promises, or due to arrogance and disingenuous behavior - the number of salmon that survive in the Columbia/Snake system has steadily declined. For the Yakama people, the human toll resulting from these wealth transfers along the river has been substantial. Where such destructive action has been accompanied by intent or deceit, reaction by some Yakamas has been one of anger and despair.

> I don't know what we would call such a policy. Genocide? Yes, I think perhaps that is the word.[321]

6.7.2 Economic Perspective Concerning Yakama Production Functions

Fitch (1974), in his Phd. dissertation at Stanford University, provides an economist's perspective of Yakama circumstances during the late 19th and early 20th centuries.

> The picture which emerges during the period after the opening of the Reservation (to whites) is one of stagnation of Indian economic activity. Downward trends in farming and livestock are evident... . A series of legal battles over Indian fishing rights had not been successful in re-establishing viable salmon fishing on the Columbia River for the Yakimas during this period. Access continued to be a problem, and the fish wheels were not eliminated from the river until 1926.[322]

Summing up from a later (1974) perspective, and discussing Yakama adaptive efforts, Fitch continues:

> The historical analysis makes a number of points quite clear. First of all, a large portion of the impact of the various modern activities which have been introduced to the Reservation has come in the form of payments for the use or purchase of resources to the Yakimas--that is, land rentals, timber sales and so forth. While recent improvements in Indian employment are encouraging,...the employment status of the Yakima is still deplorable.
>
> ...While the entry of outside factors to the Reservation economy may have greatly increased the returns to the Yakimas' natural resources, this has acted to limit returns to their human resources or labor, and in the long run to depress human capital formation applicable to modern production. ...

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[320]Othus, P.M., 1954. US Army Corps of Engineers. Statement to a Yakima Indian Tribal Committee during compensation discussions associated with construction of the Dalles Dam. **Meeting** Minutes. Portland, Oregon, April 22, 1954, pp. 18-20.

[321]Tom Eli, at Celilo, October 29, 1982; in, Meyer Resources, 1983. **Supra** at 62.

[322]Fitch, James B., 1974. **Economic Development in a Minority Enclave: The Case of the Yakima Indian Nation, Washington**. Phd. Dissertation. Stanford University, p. 93.

> With the opening of the (Reservation) land market...there was a decrease in Indian production and an increase in land rentals. This response was probably reinforced...by discrimination against Indians in water project administration and in the government regulation of the use of individual Indian monies, tending to cause inadequate capital formation. Discrimination and a generally hostile reservation environment for Indians also contributed to stagnation in human capital formation. Given these unfavorable circumstances for participation in modern activities, together with renewed possibilities for fishing and the production of cattle, in the low-wage depression era the Yakimas returned to these two largely traditional activities. Note, however, that this switch was a joint result of (the lack of)
> economic incentives, the existence of traditional preferences and alternatives, and possibly discrimination--not due to any one of these factors alone.[323]

Meyer Resources (1983), writing eight years later, provides a more quantitative glimpse of Yakama circumstances.

> While the Yakimas are relatively better off than many tribes of the Columbia River, they cannot be considered wealthy by non-Indian standards. In 1975, per capita income was $2,100, compared to $5,827 in Yakima County and $6,284 in Washington State. Unemployment among Indians (1978) was estimated at 30 percent, compared to a 10 percent rate in the county. In 1982, unemployment was estimated at 72 percent of the employable Tribal labor force.[324]

6.8 Lower Granite, Little Goose, Lower Monumental and Ice Harbor Dams

As identified previously, peoples who now form the Yakama Indian Nation had usual and accustomed fishing stations and villages throughout the mid-Columbia area. They fished Snake River salmon stocks along the Columbia river - and the impacts of the four Lower Snake dams being assessed under this project directly affect Yakama fisheries and Yakama peoples.

The Palouse peoples had their principal village at the confluence of the Palouse and Snake Rivers - and their home territories and fishing areas also extended along the north bank of the Snake, from Nez Perce territory to its confluence with the Columbia[325]. The Palouse peoples were included in discussion at the Treaty with the Yakamas - and today descendants live on the Yakama and Umatilla Reservations[326]. In addition, they fished cooperatively with the Nez Perce at several upstream locations along the Lower Snake River (Section 3.1.3).

Consequently, in addition to the existence of usual and accustomed fishing areas along the Lower Snake River, and downstream on the Columbia River, an extensive array of villages, fishing sites, hunting and gathering areas, burial sites and other resources important to the culture and lifeways of the peoples of

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[323]Supra at 153-154.
[324]Meyer Resources, 1983. **Supra** at 27-28.
[325]Lane & Lane and D. Nash, 1981a. **Supra** at 9.
[326]Supra.

the Yakama Indian Nation are currently inundated by the reservoirs created by **Lower Monumental** and **Ice Harbor** dams. These Yakama areas and resources will most likely be found - but not exclusively - along the north bank of the original Lower Snake River.

It was earlier identified that the initial "allotment" legislation enabled Yakama peoples to receive title to some traditional sites that were off reservation[327]. Yakamas report that some of these sites were along the Lower Snake River, and have been affected by the dams.

> I no longer have any fishing sites, the Palouse peoples' fishing sites were destroyed by Ice Harbor Dam; the Corps of Engineers told us that we can fish below Ice Harbor dam, but I, nor the rest of the Palouse people utilize the fishing site... . I have not received full compensation for my loss, the loss of my birthplace, birth rights, and my rights to fishing; for I no longer enjoy my God's gift, the first food of my people, as well as the rest of the Columbia River Indian people.
>
> I want to know if my fishing site and my fishing right still exists. My fishing site is now below Ice Harbor dam, both sides of the Snake River. I have proof. I have in my possession a photo of a fisherman and his grandson.
>
> That area is my father's birthplace, and that now belongs to white people. I did not, nor my father, give any type of consent to let white people own that land. We did not receive any monetary compensation, nor did we receive any exchange of any land. So I want someone to do right by that crime committed to me and my Palouse people. Give me my food back. Give me my birthplace and birth right back.[328]
>
> My maternal grandmother was Palouse. She owned an allotment that is now inundated by Ice Harbor Dam. When it came time to build the dam, a Corps man named Ed Markley approached me and my brother to take money for this property. We refused. So he determined that other Indians had a 51% ownership and did a deal with them. I did not have access to a lawyer at the time to fight this injustice, but I have never agreed to sell my grandmother's allotment - and have never been compensated for it.[329]

Finally, the Yakama, as with other study tribes, have suffered adverse impact - first as river managers risked Snake River salmon stocks in order to transform the river for power, navigation and irrigation purposes, and today as those same managers set far higher standards for predictive certainty before taking action to restore Treaty-protected fisheries[330].

6.9 Post-Contact Yakama Tribal Health

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[327] At Note 300.

[328] Mary Chapman, at Toppenish, October 22, 1982; in, Meyer Resources, 1983. **Supra** at 57.

[329] Johnson Meninick, at Toppenish, July 22, 1998. **Personal communication**.

[330] Also recall discussion in Section 4.4.8.

In pre-contact times the peoples now known as the Yakama Indian Nation had a relatively good standard of living based on diet, climate, housing, an available resource base, and a satisfying and predictable rhythm of living[331]. During this period:

> Yakama (native) doctors were practitioners, holy people, pharmacists, shamans, and psychologists, and they recognized no division between mind and body.[332]

Selam (1975) notes that Yakamas living in the pre-contact period had a happy life - but that it was not to remain so[333].

From a health perspective, erosion of traditional lifeways followed fast after the coming of the whites.

> Indian doctors and Yakama people suffered several epidemics before the introduction of the reservation system, but they were largely powerless to prevent the waves of death that swept across the Columbia Plateau in the nineteenth century and those that struck the native population in the twentieth century.
>
> Smallpox was the first disease to strike Northwestern Indians. The first epidemic started in 1775, the result of sailors from trading vessels off the Northwest coast introducing it to native peoples. Another smallpox epidemic traveled up the Missouri River in 1873, but its effect upon the Plateau is unknown. In 1801, still another smallpox epidemic spread among the native people of the Northwest, reducing the original population to about one half by the time of Lewis and Clark's expedition in 1805. In 1824-25, and in 1853, smallpox likely killed more Indians. In 1830, "fever and ague" broke out at Fort Vancouver, infecting native people for four years. The epidemic may well have been malaria, although it was linked to an outbreak of influenza, and the "mortality directly or indirectly attributable to this scourge...is 90%". The malaria outbreak in 1830 reportedly did not spread much above The Dalles, and Plateau Indians probably died instead from influenza, although the number of deaths is not known. In 1844, scarlet fever and whooping cough spread across the Columbia Plateau, and scarlet fever struck again in 1846. In 1847, measles moved across the Plateau, taking the lives of many Indians and sparking the killings of Marcus and Narcissa Whitman and others at the Whitman Mission which, in turn, triggered the Cayuse Indian War of 1848. These epidemics and the new diseases that followed killed numerous Yakama and their neighbors. Diseases depopulated the native peoples and strained the social, cultural, and spiritual fabric of Yakama society whose *twati* could not undo the horrors of white diseases.[334]

By 1865, the ravages of these diseases had more than halved the 7,000 Yakama pre-contact population estimated by Schuster[335]. Table 17 arrays Yakama population estimates between 1865 and

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[331]See Note 288.
[332]Trafzer, Clifford E., 1997. **Supra** at 40.
[333]At Note 291.
[334]Trafzer, Clifford E., 1997. **Supra** at 41.
[335]At Note 280.

1972 from Lane & Lane and Nash (1981b, p. 43). That publication should be referenced for original sources.

Table 17

Selected Population Estimates for Yakama Peoples, 1865 through 1972

Year	Population
1865	3,400
1892	2,700
1899	1,909
1910	2,679
1923	2,939
1928	3,000
1940	2,904
1950	3,598
1960	4,844
1972	7,480

Yakama ill health and death during this period did not stem from epidemics alone.

> For approximately thirty years, roughly from 1870 to 1900, native people living on the Yakama Reservation witnessed a radical cultural, social, and economic transformation of their native lands as white ranchers, farmers, politicians, bureaucrats, ministers, bankers, road builders, and a host of other whites invaded their country, altering nearly every aspect of traditional Indian life. The process accelerated in the twentieth century as hunting, root, berry, and grazing areas declined or were destroyed. Indians living on the reservation lost their native foods which were closely tied to their spiritual beliefs. They lost more than their economy, for they lost important threads of their social fabric. Indians living on the Yakama Reservation faced a social and cultural calamity by 1900, a communal depression that corresponded with a serious rise of infectious diseases, particularly tubercular infection. Between 1900 and 1940, the Yakama population suffered greatly from tuberculosis, pneumonia, and gastrointestinal disorders, bacterial infections that preyed on a Yakama host seriously injured by government Indian policies and the reservation system.[336]

It can be observed from this information that from the contact with the whites in the 1800's, through much of the 20th century, death - often from causes that the Yakamas could neither predict nor control - "stalked the Yakama". Trafzer suggests that principal causes of Yakama death during this period

[336]Trafzer, Clifford E., 1997. **Supra** at 70.

evolved - from an age dominated by "Pestilence and Famine" (contact through the early 20th Century) to an "Age of Receding Pandemics" featuring death from bacterial infections (from early century to the 1920's - 30's)[337].

By the 1930's, Trafzer concludes that causes of Yakama death had evolved still further, entering an "Age of Man-Made and Degenerative Diseases" that continues to the present.

> During the late twentieth century, alcohol-related deaths, diabetes, murders, and suicides rose significantly as accidental deaths and pneumonia continued to plague Yakama people... . Barry Popkin has argued that part of this transition to man-made disease is a predictable product of nutrition related to "modernization". He is correct in terms of Yakama people who had lost nearly all of their traditional foods by the 1940's... .[338]

Trafzer notes that loss of traditional foods, while important, is not a sole cause of Yakama mortality.

> Resettlement of the Columbia Plateau by whites, the building of dams, and the destruction of the natural foods familiar to the Yakama brought about a change in lifestyle and housing. Whites farmed, ranched, and logged many regions of the Columbia Plateau, modifying the environment, which was detrimental to Indians. Rather than moving about for a good portion of the year, the Yakama became confined to the reservation... . The health of the Yakama people suffered from inadequate sanitation, absence of clean ground water, polluted rivers from insecticides, and complete lack of any means of treating sewage. The change of housing among the Yakama contributed to their ill health, and as a consequence, the people became ill and died.[339]

Too often, death of Yakama and other tribal members has been following by post-mortem abuse.

> Before the early twentieth century, the Yakama and their neighbors usually wrapped the body in tule mats and placed it in crevices of hills and mountains. They also buried their dead in designated cemeteries, where they interred a number of people from the same area, village, or family. These cemeteries were and are sacred places to Yakama who revere the remains of their loved ones - long past and recent past. They respect the dead of their own people as well as the dead of other nations, believing that it was and is sacrilege to disturb burials of any people. Many believe that the spirits of the dead cannot rest if their bones are taken out of the earth or generally disturbed by contractors, pot hunters, etc.[340]

> A white rancher who hated (Yakama Chief) Kamiakin had led a scientist to the grave and had helped the "scholar" cut off Kamiakin's head with a shovel. The scientist tore off Kamiakin's head,

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[337]Supra at 2-3.
[338]Supra at 71.
[339]Supra at 75.
[340]Supra at 51.

placed it in a gunny sack, and took it to his lab for analysis. When the family found that Kamiakin's remains had been disturbed, they cleaned the remaining bones and reburied them on lands belonging to a friendly white rancher in eastern Washington territory. Members of the family knew the location of the grave, and they returned periodically to pray for the spirit of the famous chief. Kamiakin's head has never been recovered, and the associated grave goods buried with him have not been repatriated. However, some members of the Indian and non-Indian communities continue to search for Kamiakin's head so that it can be repatriated and reburied in the heart of the Columbia Plateau. The desecration of this grave is just one example of many that have occurred in the Pacific Northwest.[341]

When the United States began building power dams in the Pacific Northwest, construction crews ruined several burials in canyons along inland rivers, **including the Snake River**. Sometimes archaeologists working for the federal government raided Indian burials to preserve choice specimens for university collections before water from a new dam inundated the locations.

Mary Jim, a Palouse elder living today on the Yakama Reservation, still laments the theft of her grandfather from the family's cemetery on an island in the Snake River. She remembers the night in the 1960's when an amphibious vehicle came up the Snake River and moved onto the island. While white men dug up the grave, Mary's cousin, Charlie Jim, paddled out to chase the whites away. "They took our grandpa," Mary reported years later, "they took him. They went across. And they took that grave. They dug a hole and we hollered at them. Charlie Jim went out to tell them to stop. We waved red flags at them, telling them to stop. Then the car went through the water and on the ground too. We didn't know how to chase them or where they went. And we reported this to the agency but they never helped us." Unfortunately, the Palouse were not able to prevent the "scholars" from stealing the canoe coffin that contained the remains of Mary and Charlie's grandfather.[342] (Our bolding)

The Yakama and their neighbors have faced a continual onslaught by ghouls, construction crews, and government agencies that disregard and discredit the spiritual beliefs of the Northwest Indians in reference to their dead. Many Indians believe that when the graves of

their ancestors are desecrated, the souls of the dead are also disturbed, unable to rest until they are placed back into the bosom of the earth.[343]

White disease killed thousands of Yakama and their neighbor tribes in the 1800's and early 20th century. Violated by disease and in other ways in life, some of these persons have been violated again in death - through actions perpetrated by some, and permitted by others. Not only can the souls of these

[341]Supra at 57.
[342]Supra at 51-52.
[343]Supra at 57.

"violated" not rest, but many of their descendants, living today, cannot rest either until desecration of Indian graves stops - and the violated dead are returned to rest in the earth.

Trafzer concludes that, from the late 1800's though the mid-1900's:

> The reservation system of the United States destroyed the native standard of living and introduced a host of viruses and bacilli to the Indians living on the Yakama Reservation. The result was poverty, ill health and death among Yakama people. Once the United States had destroyed much of Indian culture, they failed to enrich it in accordance with trust and treaty responsibilities by providing minimal health care for native people living on the Yakama Reservation.[344]

Bachtold, writing with respect to Northwest tribes, concurs:

> It appears that Native Americans, as a group, have been blocked on the hierarchy of needs at basic levels. Many are dealing with survival - trying to resolve physiological and safety needs. This condition often leaves belongingness and self-esteem needs essentially unmet. Movement through developmental stages has been perilous, beginning with birth itself, increasing with entry into school, and peaking in excessive stress for young adults, who should be entering the productive years of life and in control of their environment.
>
> Alleviation of poverty conditions are clearly indicated as essential, for as Pareek emphasized, "Poverty is causally related to behavior, producing a series of behavioral patterns relevant to the conditions of poverty. ...
>
> Gloster...identified economics as potentially the key to improvement for Native Americans. He further maintained it is essential that they control their land and water. On this point he is congruent with the psychological prerequisite for a healthy personality outlined in this section - if Indian people are to obtain a greater level of achievement and satisfaction in their lives, and regardless of respective goals, it will be essential that they achieve a greater level of control over their psychological, social and economic environment.[345]

6.10 Present Circumstances of the Yakama Indian Nation

Having reviewed the cumulative pattern of abuse and impoverishment through distruction of Treaty assets and transfers of wealth to non-Indians that the Yakama peoples were subject to, this section

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[344]Supra at 153.

[345]Bachtold, L.M., 1982. **Supra** 31-33.

considers any recent changes in tribal opportunities and lifeways - and profiles present-day circumstances of the peoples of the Yakama Indian Nation.

6.10.1 Remaining Yakama Lands

Yakama tribal membership presently stands at 9,601 persons, a substantial recovery from earlier years of this century.[346]

Since losing approximately 90 percent of their homeland in the Treaty of 1855, the Yakama Indian Nation has been somewhat successful in holding onto the Treaty lands they retained. The ravages of the Dawes Act have facilitated the loss to the Yakama of a further almost 20 percent of lands within Reservation boundaries (253,280 acres) - but about 70 percent of Treaty lands are still in Yakama hands - 866,000 acres held in trust, and 260,000+ in fee simple ownership. The fact that significant portions of this land is forested, and that approximately one third of Reservation lands, in the western portion of the Reservation, are closed to non-Yakamas has allowed the YIN to retain and expand benefits for its people.

Commercial timber harvest has been a particular strong point for the YIN (Table 18).

Table 18

Volume and Value of Timber Harvested Under Yakama Sales Program - 1943 to 1992

Year	Volume in MBM	Value in Thousands of Dollars
1943-44	9,172	23.6
1950	29,906	361.7
1960	70,892	1,922.3
1970	116,271	4,406.7
1980	172,686	23,755.5
1990	93,523	19,749.9
1991	99,134	23,819.7
1992	93,688	28,513.3

Source: Yakima Indian Nation, 1993. **Yakama Indian Reservation Forest Management Plan: 1993-2002**. with, US Bureau of Indian Affairs, p. VII-3.

[346]Recall Table 17.

These forest activities employ approximately 137 Yakama Indians[347], generate important revenue for YIN infrastructure**,** and yield annual "dividend" payments that amounted to $1,753 per Yakama member in 1992[348]. The YIN has, for some years, been examining "adding value" earned from tribal timber harvest by establishing a timber processing facility - but such a facility has not been established to date.

Conversely, as we noted previously, much of the acreage the Yakamas have lost because of the Dawes Act is located in fertile valley areas of the Reservation - and YIN agriculture-based revenues have been substantially limited as a result. Meyer Resources (1983) reported that the Indian share of revenue from crops in the irrigated portion of the Reservation in 1981 was $2.7 million, out of total revenue of $79.5 million[349]. In 1990, the value of irrigated lands within the Reservation exceeded $200 million[350] - but we have no indication that the Yakama share of this revenue has increased substantially.

A number of additional economic initiatives are in the planning stage[351], but timber, agriculture, rental income from lessees of tribal land and fishing continue to be the sustaining features of the Yakama economy.

6.10.2 What Remains of the Yakama Salmon?

Protection and renewal of salmon in the Yakima River basin has been one of the principal efforts of the Northwest Power Planning Council's Fish and Wildlife Program. In 1997, the four tribes of the Columbia River Inter-Tribal Fish Commission (CRITFC) initiated a "direct commercial sales" program for some Zone 6 catches. This program has approximately doubled revenue received by participating tribal fishermen - and expanded the opportunity available to tribal members for involvement in traditional fishing and processing activities. Despite these promising developments, Yakama catches of salmon for the 1993-1997 period averaged less than half of tribal harvests at Treaty times (Table 19).

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[347]Yakama Indian Nation, 1993. **Yakima Indian Reservation Forest Management Plan: 1993 to 2002**. with US Bureau of Indian Affairs, p. VII-3.

[348]Supra at VII-5.

[349]Meyer Resources, 1983. **Supra** at 26-27.

[350]Yakama Indian Nation, 1996. **1996 OEDP Report**. Toppenish, p. 8.

[351]Supra.

Table 19

Estimated Commercial, Ceremonial and Subsistence Harvests of Salmon and Steelhead of the Yakama Indian Nation: 1993 to 1997

Year	Chinook	Steelhead	Sockeye	Coho	All Species
	----------in thousands of pounds----------				
1993	832.5	251.5	22.2	8.7	1,114.9
1994	696.7	174.5	2.7	22.5	896.2
1995	674.4	170.6	1.4	4.8	851.2
1996	1,181.3	173.5	4.3	4.4	1,363.5
1997	1,199.4	207.7	6.2	4.0	1,199.4
Five Year Average					1,128.7

Source: Developed from data provided by the Yakama Indian Nation, Department of Fisheries.

6.10.3 A General Assessment of Present Yakama Material Circumstance

The material wellbeing of members of the Yakama Indian Nation, relative to citizens of Washington State as a whole, is illustrated in Table 20.

Table 20

Comparative Data Showing the Relative Material Circumstances of the Yakama Indian Nation

Economic Indicator	Yakama Nation	Washington State
Families in Poverty (%)	42.8	10.9
Unemployment: US Census	23.4	5.7
: BIA (1995)	73.0	
Per Capita Income ($,000)	5.7	14.9

Source: US Bureau of the Census, 1990 - Special Tribal Run.
US Bureau of Indian Affairs, 1995 - Indian Population and Labor Force Estimates.

It can be observed that while timber and some fishing provide economic bright spots for YIN, as with neighbor tribes, the Yakama peoples' material prospects overall remain difficult.

6.10.4 Yakama Tribal Health

In 1992, the Center for Health Statistics of the Washington State Department of Health issued a report on People of Color in the state. They concluded:

> Currently, the health status of Native Americans is very poor, with high rates of mortality, infectious disease, and limitation of major activities due to chronic health problems.[352]

The same report identified that death rates for Native Americans were significantly higher through age 59 than for Washington residents as a whole[353].

These conclusions are generally supported by a 1993 analysis of American Indian health status in the State of Washington by the American Indian Health Care Association (AIHCA). The AIHCA study reported that, in Washington, the average Native American dying prior to age 65 loses 7.6 more years of life than his counterpart in the general Washington population - and that a Native American female dying prematurely (prior to age 65) loses 6.1 more years of life than her general population counterpart[354]. The study concludes:

> The health status of Washington's American Indians can be illustrated by birth characteristics, disease prevalence and mortality. The findings on all these factors form a picture of American Indian health that is, in many ways, alarmingly poor.[355]

Both the studies cited previously identify poverty as a causal factor with respect to the unsatisfactory level of health of Native Americans living in Washington State[356].

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[352]Washington State Department of Health, 1992. **People of Color**. Center for Health Statistics. Olympia, p. 51.

[353]Supra at 61-64.

[354]American Indian Health Care Association, 1993a. **Northwest Area American Indian Health Status and Policy Assessment Project: State of Washington Report**. Saint Paul, p. 47.

[355]Supra at x.

[356]Washington State Department of Health, 1992. **Supra** at 4; American Indian Health Care Association, 1993. **Supra** at ix-x, 22-23, 54.

Data from the US Indian Health Service further confirms these findings. Based on data from 1989-91, the Native American age adjusted death rate in the Yakima Service Area[357] was 1.9 times the rate for other races[358]. Table 21 provides comparative data on the five leading causes of tribal death in the Yakima Service Area.

Table 21

Leading Causes of Tribal Death - Yakima Service Area: 1989-1991

Cause of Death	Native American	All Other Races	Ratio of NA to Other Races
	-------deaths per 100,000 population-------		
Heart disease	215.0	141.6	1.5
Motor vehicle accidents	117.8	26.9	4.4
Malignant Neoplasms	102.8	129.6	0.8
Cirrhosis of Liver	80.0	5.7	14.1
All other accidents	44.5	16.1	2.8

Source: US Indian Health Service, 1994b. **Supra** at 214.

Diabetes are also a significant cause of Yakama death, accounting for 4.5% of mortalities[359].

These types of statistical outcomes are consistent with the hypotheses advanced by both Trazfer (Note 73) and Bachtold (Note 66) - relating unsatisfactory levels of health to poverty and deprivation-related stresses. Discussion with Yakama health experts provides further insight regarding present health conditions on the Reservation - and with fish and fishing.

> A lot of Yakama people don't have access to salmon on a daily basis. So that, of course, affects their health. They've lost a source of the type of protein that is very beneficial. Fish makes a positive contribution to the diet. Even giving the people an opportunity to eat fish two or three times a week

[357]The Yakima Service Unit serves Klickitat, Lewis, Skamania and Yakima counties.
[358]US Indian Health Service, 1994b. **Supra** at 136.
[359]Supra at 213.

would be beneficial. There is a real strong link between the fats salmon provide and preventing heart disease - and at present, heart disease is a major problem here.

What's been substituted for fish has the opposite effect on health. Hamburger and fried foods raise LDL's and cholesterol levels.

Diabetes is a problem at Yakama. The type we have here is Type II diabetes. Its onset has a strong link to poor diet and lack of exercise, which can lead to weight gain, which in turn exacerbates onset of diabetes at an earlier age. Diabetes in turn is linked with kidney and heart disease. Type II diabetes has a genetic component. But genes do not dictate destiny. Good diet and exercise will put off the onset of diabetes considerably.

The lack of traditional foods and the lack of traditional preparation of foods seems to have impacted worse than everything. The roots grounds are gone. The fishing grounds that sustained them through the whole year are largely gone. Its more than food. Its also loss of income - and there is a real spiritual component. Its part of their culture - part of their living.[360]

They don't consider what salmon really means to our people. When I was growing up, my whole life was centered around what we gathered - what we used. The fishing brought families close together - not only for the food, but also spiritually and for religion. That way the family was able to cure a lot of its own problems. Fishing is for the family as well as the food. When we lose the salmon, its not just one thing we've lost. You have to take everything into consideration.[361]

My specialty is psycho-social nursing. From my perspective, everything is tied together. Nothing is separate. The health of the kids is impacted every day. We see kids come in who are grossly overweight, and they're laying the groundwork for the diabetes to come. The impact of the loss of the salmon, and the loss of the traditional grounds - the loss of the time with the elders to learn the ways and to feel as if they're part of this community, instead of feeling alienated not only from their neighbors and their families but also from the bigger community of humans - has a devastating effect on the kids. I have moms come in here eighteen years old who have been pregnant two or three times, who use substances and who don't teach their children the old ways because they don't know them. They don't feed their kids the old foods because they don't have any idea what they were. So the loss of the food and the salmon is monumental - and it is all tied together. Food is a really big part of the Yakama culture - as it is elsewhere. Anywhere you look in the world, food carries culture. So if you lose your foods, you lose part of your culture - and it has a devastating effect on the psyche. You also lose the social interaction. When we can fish, we can spend time together - you share all the things that impact your life - and you plan together for the next year. Salmon is more important that just food.

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[360]Monicka Franz, Yakama Tribal Nutritionist. Personal communication at Toppenish. August 13, 1998.

[361]Vivian George, Yakama Indian Nation. Personal communication at Toppenish, August 13, 1998.

> In sum, there's a huge connection between salmon and tribal health. Restoring of salmon restores a way of life. It restores physical activity. It restores mental health. It improves nutrition and thus restores physical health. It restores a traditional food source, which as we know, isn't everything - but its a big deal. It allows families to share time together and build connections between family members. It passes on traditions that are being lost. If the salmon came back, these positive changes would start.[362]

Finally, health experts at YIN expressed concern regarding dumping and leaching of toxins into the waters of the Columbia/Snake system. A study by the Columbia River Inter-Tribal Fish Commission (1994) identifies that CRITFC tribes, because of the material and cultural importance of fishing to them, consume about nine times more fish than national norms used by EPA to set health standards[363]. Subsequent work by Harris and Harper (1997) identifies that exposure levels for tribal members who target traditional foods is far higher[364]. This suggests that study tribes may face significant risk from deposition of toxins in Snake and Columbia waterways - particularly from consumption of resident fishes. Further analysis of potential toxin loadings of key fishes is being pursued by the tribes, in coordination with EPA. Results are expected during 1999.

6.10.5 Present Incidence of "Own Language" Speakers Among the Yakama

According to the 1990 Census, approximately 15 percent of Yakamas still speak their original language at home[365].

6.10.6 A Diagrammatic Profile of Yakama Present Circumstances

Finally, present circumstances of the peoples of the Yakama Indian Nation are represented in Figure 9 using a Maslow-like diagram.

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[362]Chris Walsh, Psycho-Social Nursing Specialist. Yakama Indian Nation. Personal communication at Toppenish, August 13, 1998.

[363]Columbia River Inter-Tribal Fish Commission, 1994. **A Fish Consumption Survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin**. Technical Report 94-3.

[364]Harris, Stuart G. and Barbara L. Harper, 1997. "A Native American Exposure Scenario", in, **Risk Analysis**. Vol. 17, No. 6, pp. 789-795.

[365]US Bureau of the Census. 1990 CP-2-1A. **Supra** at 44.

7.0 Circumstances and Impacts on the Confederated Tribes of The Umatilla Indian Reservation

These sections provide information on the historic and related present circumstances of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Estimated impacts associated with Lower Snake River project alternatives will be discussed in a following section.

7.1 Accustomed Tribal Areas and Seasonal Rounds of the CTUIR

The peoples who presently form the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) originated from three tribes, the Walla Wallas, Cayuses and Umatilla - and a number of other bands[366]. Members of the Palouse peoples are included in these latter (Table 2).

Suphan (1974) has provided detail with respect to the traditional areas frequented by the peoples who are now the CTUIR. With respect to the **Umatillas**:

> The permanent camps or villages of the Umatilla Indians...were strung along both shores of the Columbia River from about the Gilliam-Morrow county line in Oregon upstream to the mouth of the Umatilla River; two other sites were along the lower course of the Umatilla. ...

[366]Kappler, C.J. (ed.) 1972. **Indian Treaties: 1778-1883**. New York: Interland Publishing, p.694.

During the summer treks, the Umatilla crossed over the Blue Mountains into the Grande Ronde valley to numerous fishing, root-gathering, hunting and berrying areas. ...In none of these subsistence areas were the Umatilla the sole exploiters, Walla Walla, Cayuse and Nez Perce Indians visiting these same spots. ...

Just east of the Grande Ronde Valley, the Umatilla exploited a spot on the Minan River, together with the Cayuse, Walla Walla and Nez Perce Indians, while they also journeyed into the Wallowa River Valley to subsistence spots about the present towns of Wallowa, Lostine, Enterprise, Joseph, and Wallowa Lake. These areas were also frequented by the neighboring Walla Walla, Cayuse and Nez Perce.

Further southward, in what is now Baker County, the Umatilla and Cayuse fished and hunted on Eagle Creek and on Pine Creek two miles above Halfway with the Nez Perce. The only other spots in Baker County known to have been utilized by the Umatilla Indians were on Anthony Fork some 5-8 miles above the town of North Powder, and in Sumter Valley near Lockhart on the Powder River; both were shared with the Cayuse.

To the west and south of the Grande Ronde Valley, the Umatilla people spread out into various fishing, hunting, and gathering spots on Snipe Creek just north of Albee, along Camas Creek at Ukiah and Lehman Springs, and to the heads of Winom, Cable, and Big creeks south of Lehman Springs. South of these areas, in what is now Grant County, the Umatilla occupied various spots along the forks of the John Day River from about Monument eastward.... Virtually every one of these sites was shared with the Cayuse, while those along the John Day, Silvies, and the Malheur River were also visited and exploited by the Warm Springs (Tenino), Columbia River Indians, and the Paiute. ...

...it may be concluded that the Umatilla Indians had their permanent winter quarters or villages along the Columbia from Alderdale, Washington, to the Umatilla River, and on the lower course of the Umatilla. Here too, were many accustomed fishing areas which extended farther eastward to the Oregon-Washington state line. In summer and fall, the Umatilla wandered in the Blue Mountains, Wallawa and Grande Ronde valleys, and along the John Day River to numerous subsistence areas for hunting, fishing, and gathering. It is impossible to say with what frequency any one spot was visited; undoubtedly those nearer the winter supply quarters were the more intensely and regularly used, simply because of convenience. Yet the distant sites along the heads of the Silvies and Malheur rivers were said by informants to be of paramount importance to the Umatilla not only because of their plentiful natural resources, but also because of the trading and social activities carried on there with other Indian groups.[367]

With respect to the **Cayuse**, Suphan reports:

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[367] Suphan, Robert J., **The Socio-Political Organization and Land Use Patterns of the Umatilla, Walla Walla and Cayuse Indians**. MA dissertation. Columbia University, pp. 128-134.

> The Cayuse wintered in several local groups along the upper courses of the rivers lying between the Columbia River and the Blue Mountains in what is now Oregon and Washington.
>
> ...The Cayuse bands remained in these winter quarters until well into the spring, for salmon runs ascended the Umatilla and Walla Walla rivers and their tributaries, while roots and berries could be found close to these camp sites. Some families either then or later in the year, journeyed to the Columbia to fish at the mouth of the Umatilla River with the Umatilla Indians; some went as far as Celilo Falls to fish and trade. However, the Cayuse seem to have depended more heavily on the annual migrations of salmon into the headwaters of such streams as the Grande Ronde, Minam, and Wallowa rivers for their supplies of this staple than on the Columbia River fisheries. During the balance of the summer and in the fall, they were then found making their circuits through the mountains and valleys intercepting the fish as they arrived at various places. This, too, was the season for hunting, berrying, and root- digging....
>
> Summing up, the Cayuse Indians were subdivided into seven or eight named local groups, collectively designated by themselves as Waiilatpu. Wintering along the northern foothills of the Blue Mountains from Butter Creek on the west to about where Walla Walla, Washington now stands, they spread out during summer and fall through the Blue Mountains, into Grande Ronde and Wallowa valleys, and as far as the John Day, Silvies and Malheur rivers.[368]

Suphan also provides some information with respect to the **Walla Walla** Indians.

> The Walla Walla Indians, or Walula as they called themselves, spoke a Sahaptin dialect said to have been closely related to that of the Nez Perce.
>
> Permanent sites of the Walla Walla were few in number, located on the Columbia near the entrance of the Walla Walla River. ...
>
> Fishing sites considered to "belong" to the Walla Walla Indians were along the Columbia on the east bank from a point about where the Oregon-Washington state line intersects the river upstream to the Snake River junction; the only known point on the west bank in this region was directly across from the entrance of the Walla Walla River. On that river, fishing areas extended upstream about two miles. In keeping with general native practice, these were not exclusively used, however, for the Cayuse fished at least one, while the site at the Snake junction was fished by the **Palus** and Upper Columbia (Wanapum) as well. ...
>
> Inland, the Walla Walla moved up both forks of the Walla Walla River and over into the country about the forks of the Wenaha River; subsistence spots along both these streams were used in

[368]Supra at 145-149.

> conjunction with the Cayuse. In the Grande Ronde Valley, they journeyed to sites about the present location of the towns of Hilgard and La Grande to which the Umatilla, Nez Perce, and Cayuse also resorted. On the Minam River, they exploited in a region about opposite Cove, Oregon. Further eastward, they ascended the Wallowa River to favored subsistence areas near where the towns of Minam, Wallowa, Lostine, Enterprise, and Joseph now stand, and at Wallowa Lake; the Umatilla, Cayuse and Nez Perce were present at all of these. As in the case of the Umatilla Indians, it is impossible to say with what frequency any one such spot was visited; informants alleged that each would be visited at least once yearly by some members of the Walla Wallas.[369]

Lane & Lane and Nash (1981a) also point out that the Walla Walla "occupied territory downstream from the Nez Perce on the south bank of the Snake River and perhaps on the north bank as well"; and that the **Palouse** territory was centered at the confluence of the Palouse and Snake Rivers, and that they "lived on the north bank of the Snake River below Nez Perce territory"[370].

As with neighbor tribes, salmon was the key resource for the tribal peoples now known as the Confederated Tribes of the Umatilla Indian Reservation.

> Salmon has played the key role for the people of the CTUIR since earliest remembered time. Every CTUIR leader and elder who speaks reminds us that the salmon is at the core of their material and cultural wellbeing.[371]

> When God created Indians on the Earth, he gave us everything. Main thing was salmon and meat. And all the vegetables--the potatoes, celery--everything, you name it, that's what he gave to us. And that's what we were raised on.[372]

> It's just that salmon was part of the country, they're part of the environment. They belong here as much as the Indians belong here. And in that way they complement each other. They've become a part of us because its what we depend on to live... .[373]

> The first catch, you know, the first spring salmon? We still have a big feast. Like in Celilo they do yet. They always did so our Creator would preserve it, help the Indian people to have more salmon

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[369]Supra at 135-144.

[370]At Note 98.

[371]Meyer Resources, 1995. **Assessment of the Effect on Trust Resources of the Confederated Tribes of the Umatilla Indian Reservation from Alternative System Operating Strategies (SOS) for Columbia/Snake River Flows**. A Report to the Confederated Tribes of the Umatilla Indian Reservation. Davis, CA, p. v.

[372]Mary Lawyer, on the Umatilla Reservation, October 13, 1982; in, Meyer Resources, 1983. **Supra** at 37.

[373]Antone Minthorn, on the Umatilla Reservation, October 13, 1982; in, Meyer Resources, 1983. **Supra** at 38.

> come up, and so they could get more fish to the Indians. Most of us people this way, we like fish. I know that's all I could eat; I can hardly eat meat anymore, but I can sure eat salmon. We're known this way as "salmon eaters" by the Montanas and the Dakotas; and they're meat eaters that way. That's what I hear. They tell me, "What do you like?" I say, "Salmon, of course. I'm from that way." So they call us "salmon eaters".[374]

7.2 Natural Assets and Annual Productive Yield of Original CTUIR Lands, Waters and Salmon

The lands, waters and salmon producing capability of the CTUIR traditional territory were the natural assets which allowed these tribal peoples to survive and prosper. These assets were responsible for the "annual harvests" of fish, game, roots, berries and edible plants upon which the CTUIR peoples depended. As noted, salmon was a key element for tribal wellbeing.

Hewes assumed that an average person living in the Columbia/Snake region in pre-contact times would have required 2,000 calories per day to survive[375], on this basis, estimated that each Umatilla and Walla Walla person would have consumed 500 pounds of salmon annually - and that each Cayuse person would have consumed 365 pounds[376]. Hunn (1990) considers these estimates to be conservative[377]. Walker (1967) identified that the tribes also used salmon for other purposes, such as fuel, and adjusted Hewes' annual per capita consumption estimates upward by a median figure of 16.6 percent[378]. Finally, information from Swindell (1942) suggests that tribal families fishing in the mid-Columbia area would catch more than one-third more salmon for trade, after having taken care of their own needs[379].

With respect to the population size of ancestors of CTUIR peoples, we follow estimates by Ray.

> Dr. Verne F. Ray testified, without contradiction by the government's expert witness, that the population of the three tribes in 1790 was approximately 5,000. He estimated that by 1850, the tribal populations had been reduced by epidemics to 2,300, as follows: 1,000 Walla Wallas, 800 Cayuse, and 500 Umatillas.[380]

Using Hewes estimates, adjusted by Walker - and, per Swindell, increasing harvest estimates for Umatillas and Walla Wallas by one third, and Cayuses by one-quarter, to allow for trade - we obtain the following estimated CTUIR harvests in pre-contact and at Treaty times (Table 22).

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[374]Carrie Sampson, on the Umatilla Reservation, October 13, 1982; in, Meyer Resources, 1983. **Supra** at 42.
[375]Note 110.
[376]Hewes, Gordon W., 1947. **Supra** at 227.
[377]Hunn, Eugene S., 1990. **Supra** at 148.
[378]Walker, Deward E., 1967. **Supra** at 19.
[379]Swindell, Edward G., 1942. **Supra** at 165.
[380]Confederated Tribes of the Umatilla Indian Reservation, 1979. **Tribal History**. Mission, p.2.

Table 22

Estimated Pre-Contact and Treaty Annual Salmon Harvests by Tribes of the CTUIR

Tribe	Per Capita Harvest		Total Annual Tribal Harvest			
		Consumption	Pre-Contact Period		About 1850	
	Consumption	Plus Trade	Population	Harvest	Population	Harvest
	-----pounds per year----			'000 lbs.		'000 lbs.
Walla Walla	583	775	2,200	1.7	1,000	0.8
Umatilla	583	775	1,100	0.9	500	0.4
Cayuse	426	532	1,700	0.9	800	0.4
Total CTUIR				3.5		1.6

Salmon was the principal, but not the sole food, for the pre-contact peoples of the CTUIR.

> All of Indian groups of the Middle Columbia River depended on fish, and particularly upon anadromous fish for their sustenance. However, it is doubtful if any depended upon this source of food to a greater degree than did the Walla Walla and their close kin the Umatilla. Murdock has estimated that between 36 percent and 45 percent of the food of the Umatilla came from the fisheries. Murdock's estimates are generally conservative. For the Walla Walla, if not for the Umatilla, we would suggest that their dependence on fishing may have been greater than that.[381]

Using these estimates, we assign the top of the range percentage to Walla Walla (45%), a median range percentage to Umatilla (40%), and adjust the Cayuse fish percentage proportionately downward (to 27%). We then apply these percentages to Hewes' estimates of "fish consumption only" from the previous page. These calculations estimate total annual annual food consumption by the three CTUIR tribes to be equivalent to 6.1 million pounds in pre-contact times, and to 2.8 million pounds around 1850.

Finally, if we were to utilize the US Bureau of the Census' present-day estimate that families on an economy budget spend one-third of their income on food[382] - we could infer that, at Treaty times, the CTUIR Tribes obtained food and non-food items from their usual and accustomed lands and waters equivalent to 8.4 million pounds of food each year - and equivalent to 18.3 million pounds in pre-

[381]Lane & Lane and Nash, D., 1981c. **Indian Fishing and the Walla Walla River System**. A Report to the US Bureau of Indian Affairs. p. 52.

[382]Note 69.

contact times. These estimates are inferential. It may be that in historic times, the ratio of food to non-food items obtainable by the tribes was greater than that used here. At the same time, however, the Census estimates are for "budget" families - and by the lights of the day, the CTUIR people lived well.

> The Plateau region of the Umatilla, Cayuse, and Walla Walla may be fairly described as one of relative abundance. From a pure survival standpoint, none of these Indians were customarily threatened with starvation, yet the cyclical, rhythmical nature of their food quest determined by the annual runs of fish, the ripening of the roots and berries, and the life-habits of the game resulted in their existing in a semi-nomadic state for about eight months of the year, and meant that the problem of subsistence was always the dominant factor of their lives. Yet the problem was only one of securing sufficient supplies, provided only that they keep on the move.[383]

> The horse was the key to expansion of the Sahaptian culture. Mobility of the horse brought the people into contact with other Indian cultures in Montana, Canada, California, Nevada, and the Pacific Northwest. The region was rich with food, materials for shelter, water, fish, game, and food and medicinal herbs. The geographical setting placed the people in the prime situation of being the middlemen of the trade between the Great Plains and the rich Pacific Coast cultures. The people were in essence the wholesalers and retailers between the two cultures.[384]

7.3 A Broader Perspective of CTUIR Living Circumstances in Pre-Contact Times

As Suphan notes, in pre-contact times, survival for the CTUIR peoples required only that they move with the natural food resources they depended on. The 1996 Comprehensive Plan of CTUIR provides further detail.

> The numbers of salmon, lamprey, steelhead, sturgeon and other fish were infinite. The fisheries were the staple of all life on the Columbia Plateau. Eagles, Bears, Coyotes, Cougars and Indians were amongst those who relied on the Salmon. Elk, deer, antelope, and many other smaller mammals were abundant. The rivers and streams abounded with beaver and otters, seals and sea lions were known to venture up the Columbia River to the great fisheries at Celilo. Several kinds of grouse, quail, and multitudes of geese and ducks, as well as hawks, owls, badger, rabbits, and other wildlife shared the diverse wetland, steppe, desert and upland.
>
> Roots, nuts berries, mushrooms, medicine, food, and fiber plants were seasonally available during the year. The hillsides were covered with lush bunch grasses, the timbered mountains were healthy, natural wildfires and floods were part of the cycle, the river vegetation was lush, and the water was cool and clean. The conditions were pristine and wildlife was naturally abundant. Survival was not easy for Indian people but the tools and resources were available to support Tribal life since time immemorial. ...

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[383]Suphan. **Supra** at 75-76.

[384]Confederated Tribes of the Umatilla Indian Reservation, 1979. **Supra** at 7.

> The abundance of Salmon in the Columbia and Snake Rivers gave wealth to the tribes who fished there. They dried and processed the salmon for their own subsistence and for trade to the other tribes of the Plateau and the surrounding regions. The vast grasslands and mountains populated with game, roots and berries were wealth for those tribes who occupied them. ...
>
> Wealth was personal strength, family, community, comfort and happiness.[385]

Like other neighbor tribes, the peoples of the CTUIR were devastated by epidemics once contact occurred[386], and more than half of their people lost[387]. Prior to that time, however, evidence suggests that the peoples of the CTUIR lived in a manner that was fully consistent with the hierarchical requirements for a satisfactory life identified by Maslow and cited by Bachtold[388]. This "fully functional" baseline condition is diagrammed in Figure 10.

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[385]Confederated Tribes of the Umatilla Indian Reservation, 1996. **The Comprehensive Plan**. pp. 11-14.

[386]Hunn, Eugene S., 1990. **Supra** at 27-32.

[387]Note 380.

[388]Note 66.

7.4 Umatilla, Walla Walla and Cayuse Circumstances, and the Treaty of 1855

The circumstances leading up to yet another "Stevens Treaty" in 1855 have been summarized in a recent CTUIR document.

> Estimates from 1842 to 1849 indicate a total of 12,287 immigrants moved through tribal homelands. ...
>
> Indian tribes were willing to live with the newcomers until relations were strained by continual immigration into their land, loss of resources, disease and other pressures. Certainly there were cultural differences between the Indians and non-Indians but in the beginning there was diplomacy, communication and consideration. After time non-Indians began to take land the U.S. Government had offered that it did not own. ...
>
> As immigrations began to increase, the Tribes heard rumors that government representatives were plotting to steal the homelands. The Donation Act of 1850, and territorial approval of settlers in the Columbia Plateau without regard to tribal consent, made for a pressure-packed situation.[389]

In 1855, treaty discussions were held in the Walla Walla Valley between peoples from the Nez Perce, Cayuse, Walla Walla, Umatilla, Yakama, Palouse and other tribes, and a United States delegation headed by Isaac Stevens, Governor of Washington Territory.

> The Umatilla Indian Reservation, the Yakama Indian Reservation and the Nez Perce Reservations were created during these negotiations.... The Umatilla, Walla Walla, and Cayuse tribes agreed to live on the Umatilla Indian Reservation.... The Cayuse, Walla Walla and Umatilla had ceded 6.4 million acres to the United States...and had reserved 510,000 acres to live. The Treaty was subsequently ratified by Congress on March 8, 1859.
>
> In negotiating such treaties Stevens was successful in his drive toward opening up the Columbia River and the Washington Territory. The Indian people who traditionally lived along the rivers for a major part of the year were systematically removed, sometimes by military force, to the reservations. This was the actual beginning of non-Indian control of the land.[390]

While the peoples of the CTUIR ceded away vast land-based wealth in the Treaty of 1855, they remain clear about the rights they still reserved for themselves. Most notably, these included the Reservation, and the rights to continue to fish, hunt and gather at usual and accustomed places.

> ...The rights we reserved were the basis of our economy and the core of our culture and religion. These rights include the right to fish at our usual and accustomed fishing stations throughout the Columbia Basin, and the right to a sufficient quantity and quality of water to maintain these fish runs. The Treaty also reserved the right of continued Tribal access to certain lands for hunting, for

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[389]Confederated Tribes of the Umatilla Indian Reservation, 1996. **Supra** at 17.
[390]Supra at 18.

> gathering traditional foods and medicinal herbs, and for religious purposes. **Without the promise that these rights and resources would be protected, our ancestors would not have signed the Treaty** (our bolding)**.**[391]
>
> The Treaty of 1855 between the United States and the Walla Wallas, Cayuses and Umatilla tribes, and bands of Indians, occupying lands partly in Washington and partly in Oregon Territories (now the CTUIR) defined and formalized the interests, rights and responsibilities of the signatories, and their successors, with respect to the natural and cultural resources of the Columbia River Basin. In the Treaty, the CTUIR ceded (**gave**) 6.4 million acres of land to the United States. In the Treaty, the CTUIR also specifically reserved, in perpetuity, rights to use, occupy and enjoy off-reservation lands and waters, to access them for the continuation of our traditional customs and practices, including plant, root and berry gathering, hunting for small and large game, and fishing at all usual and accustomed stations. ...
>
> Tribal rights secured by the Treaty of 1855 (and others), including the right to take fish at all usual and accustomed stations, were **not** granted to the CTUIR and other sovereign Indian Nations by the United States. We **reserved**--retained--such pre-existing rights as part of our status as a prior and continuing sovereign.[392]

These rights, codified in the "Stevens Treaties", remain in full force today. For example, in a recent Washington State fishing case, the Court concluded:

> The one significant promise for purposes of this litigation is the promise by the United States to the Indians that they would enjoy a permanent right to fish as they always had. This right was promised as a sacred entitlement, one which the United States had a moral obligation to protect. The Indians were repeatedly assured that they would continue to enjoy the right to fish as they always had, in the places where they had always fished.[393]

7.5 Further Allotment of CTUIR Lands - To Tribal Members and to Whites

Having obtained over 90 percent of the homelands of the Walla Wallas, Umatillas, Cayuse, Palouse and other represented tribes via the Treaty of 1855, non-Indian residents of the region immediately turned their attention to obtaining the rest.

> The Reservation boundaries were under attack even before it was surveyed. Public meetings were held in La Grande, Pendleton, and Walla Walla by the late 1860's, to remove the Indians from the

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[391]Statement of the CTUIR, in, Meyer Resources, 1995. **Supra** at 2.

[392]Confederated Tribes of the Umatilla Indian Reservation, 1995. **Identification of Trust Resources: System Operation Review**. Department of Natural Resources, April 27. pp. 6-7.

[393]United States of America, et al. v. State of Washington, et al. United States District Court, Western Washington District. No. CV 9213, Sub-proceeding No. 89-3. "Memorandum Opinion and Order", pp. 23-24.

> Umatilla Reservation. The settlers had discovered that Indian lands were capable of producing wheat, and the mountains were good for livestock grazing.[394]

If settlers could not immediately have all reserved land of the CTUIR Reservation, they got a good start via another one of the "**survey errors**" that seem consistently associated with the Stevens Treaties - and always against Tribal interest.

> The (CTUIR) Tribes had reserved 510,000 acres for the Reservation in 1855. The actually surveyed Reservation totaled approximately 245,000 acres or approximately half of the Reservation reserved by the Treaty.[395]

Some non-Indians concluded that even this arbitrary reduction in Reservation size left too much land in CTUIR hands.

> The Umatilla Reservation, though relatively small, was so extraordinarily rich in grazing land that, as early as August 15, 1870, Lieutenant W.H. Boyle could write from the Umatilla Agency that the amount of grass on the reservation was "without limit". "The horses and cattle," he observed, "are always in splendid condition, and scarcely need any care in winter, as grazing is good all year round, rendering it a very popular as well as profitable business to raise stock."[396]
>
> As early as July, 1867, the Agent for the Umatilla Reservation reported that the Indians under his care, fearful of losing their reservation, were causing him no end of "trouble and vexation". "The reservation", he wrote, "is completely surrounded by white settlements." ...
>
> So anxious are the white people in the vicinity to possess this land, that threats to remove the Indians by violence are not infrequently heard."[397]
>
> Some desperate emigrants attempted to obtain treaty lands by goading Indians into hostile acts. Others circulated petitions to Congress and the State Legislature requesting that the Indians be relocated.[398]

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[394]Confederated Tribes of the Umatilla Indian Reservation, 1996. **Supra** at 19.

[395]Supra.

[396]Oliphant, Orin J., "Encroachments of Cattlemen on Indian Reservations in the Pacific Northwest, 1870-1890", in, **Agricultural History**. pp. 43-44.

[397]Supra at 44.

[398]Kennedy, James B., 1977. **The Umatilla Indian Reservation, 1855-1875: Factors Contributing to a Diminished Land Resource Base**. Phd. dissertation. Oregon State University, pp. 77-78.

In 1881, rail and road easements began to appropriate remaining CTUIR land[399] - and these have continued to the present day. In 1882, Pendleton acquired 640 acres of CTUIR land - and another 200 acres in 1912[400].

The Slater Act, forerunner to the Dawes Act, was passed in 1885 and facilitated further transfer of CTUIR wealth in land to non-Indians.

> Failure to persuade the Confederated Tribes to sell the reservation fostered a renewed interest in the policy of land allotment. The concept was relatively simple. Each Indian would receive or be assigned to a parcel of land as stipulated in Article 6 of the 1855 treaty. The remaining land would then be sold with the proceeds deposited to the credit of the Indians.[401]

Implementation of the Slater Act provisions provided additional opportunity for sharp practices to alienate CTUIR wealth in land.

> In 1892, Professor C.C. Painter vividly described the situation on the Umatilla reservation to the Board of Indian Commissioners. ...His remarks were generally substantiated by news items appearing in the Pendleton East Oregonian and in the records of resident agents. According to Professor Painter the resident agent arrived on the reservation in a state of intoxication and was in that condition a number of times during the process of allotment. Tribesmen protested that aliens were allowed land; that some members of the tribe received no allotment; that the same piece of land had been allotted to more than one person; and that surplus land belonging to the Indians had been possessed by whites. Government officials informed the professor that the complaints were too vague and indefinite to become the basis of official action. There was no lack of evidence. In March of 1891, the East Oregonian favored retaining the resident agent despite his drinking problem. His replacement later expressed shock in finding three full blood Norwegian children receiving the benefits of tribal membership. ...
>
> The conduct of surplus land sales were no less surprising. Although the methods of obtaining land were not illegal, they were unethical. A writer for the East Oregonian was amused by a commotion staged to distract bidders from a McKay Creek land sale. The "clever trick" benefited a certain white rancher but constituted a loss to the Indians. ...it was not uncommon for several ranchers to pool their resources and outbid the independent rancher. Having outbid the independent, they would default on payment, and later obtain the land at appraised value. This was usually 25 percent less than real value.[402]

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[399]Supra at 84.
[400]Supra at 83.
[401]Supra at 86-89.
[402]Supra at 108-110.

As a result of the Slater Act, ensuing sharp practices, and widespread leasing of CTUIR land by Indian allottees, by 1895, ninety percent of the Reservation's arable land was farmed by non- Indians. Hunn, speaking of the allotment process, concludes:

> In 1914 the allotment rolls were closed, but the damage had been done. The best agricultural lands of the reservation had become a checkerboard of Indian and white ownership with whites resident within the reservation boundaries outnumbering Indians ten to one. Whites now (1975) own the most productive 10 percent of all Yakima Reservation lands. The Umatilla Reservation has experienced even more severe erosion of its land base.[403]

Drawing chiefly on Kennedy (1977), a general outline of the diminishment of CTUIR wealth in land during this period is displayed in Table 23.

Table 23

Diminishment of CTUIR Land: 1855 to 1975

Original CTUIR homeland.	6.9 million acres
CTUIR Reservation under the 1855 Treaty.	510,000 acres
CTUIR Reservation after "survey error".	245,000 acres
CTUIR Reservation in 1975.	157,982 acres

Thus, in a little more than 100 years, the CTUIR's Treaty-based ownership of land, secured by the peoples of the CTUIR in 1855, was reduced by about 70 percent. These remaining lands (as of 1975) amounted to 2 percent of their original homeland.

7.6 CTUIR Access to Usual and Accustomed Fishing, Hunting and Gathering Areas

The substantial diminishment of CTUIR lands, in 1855 and thereafter, together with the ongoing adverse pressure from surrounding whites, severely restricted CTUIR access to usual and accustomed fishing, hunting and gathering areas - even though such access had been guaranteed by Treaty.

> Although the Treaty of 1855 provided for the gathering of native foods and pasturing of livestock off reservation, such activities were becoming increasingly difficult. Confrontation with the emigrants must have been anticipated with every journey off reservation.[404]

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[403]Hunn, Eugene S., **Supra** at 279.
[404]Kennedy, James B., 1977. **Supra** at 79.

During the nineteenth century, the Plateau Indian population declined drastically. It might be argued that this would have taken pressure off the game resources. This was not the case, for the century brought thousands of non-Indians who, in the frontier tradition, also looked upon the game resources as a cheap supply of food. The end result of these changes was an intensification of fishing by Indians. ...

Native vegetable foods also declined in importance as they became less available during the nineteenth century. Here also the reason related to the advent of non-Indians. ... Some of the most important plants, whose tubers were used for food, grew in just those areas that were most suitable for non-Indian occupation and utilization. ...The native food plants were both reduced by the pasturing of stock and made inaccessible to the Indians as land was fenced off.

...The mountain basins and valleys at the edges of the arid or semi-arid regions of the Columbia Basin were very attractive to non-Indian settlers... .

Such settlement, by converting the lands around traditional fishing places to leased or private property blocked access to innumerable fisheries. Until cars and trucks were used, the availability and character of campsites was an important consideration in choosing a fishery. Horses were used for transport and a campsite required adequate grass for the horses. Increasingly, traditional campgrounds were fenced off or otherwise barred to Indians. Often, although not always, there was hostility toward Indians on the part of the settlers. Often this hostility was part of the traditional anti-Indian prejudice of so many frontiersmen. It was usually bolstered by accusations of damage to fences, crops, and grass; and of gates left open and stock strayed or lost. Fishing at many traditional fishing places declined because of such opposition.

The Wallowa Valley was an example. ... The (Indian) agents placed the Wallowa Valley off limits (in 1881) and thus cut off access to a rich hunting, fishing and gathering region. ...

So far as we know, no legal challenge was made to this cutting off of traditional fishing places. The locations were usually minor fisheries and the loss of any one of them may have been annoying but may not have seemed a critical issue. The number of fishermen affected (by each action) might have been very small. The situation was different than that on the Columbia River where interference with access has critically affected larger numbers of (Indian) people and has been challenged.

When Sahaptin-speakers such as the Walla Walla, Umatilla, and Cayuse traveled away from their home communities on foraging expeditions, they rarely went for a single purpose. On hunting trips, a given campsite would be selected that was convenient to berrying or root digging grounds. Fishing sites were often selected in terms of access to hunting grounds as well. Consequently, people might cease to use a perfectly good fishing location because adjacent camas beds had been destroyed or because nearby hunting was no longer possible. **The net result of the interaction of all these conditions and events was that fishing became more and more restricted to large**

> **mainstream fisheries and to tributary fisheries still accessible to the permanent community bases of increasingly sedentary (Tribal) people.** (our bolding) [405]

As usual and accustomed fishing, hunting and gathering areas were cut off from CTUIR peoples, and the Indians placed greater emphasis on fishing sites that were larger, and closer to their reservation, these larger sites also saw adverse pressure from whites. Initially, this involved direct competition for the fish. In 1866, Hapgood, Hume and Company located the first fishing cannery on the Columbia River[406], heralding an era of technological intensification of fishing effort and the entry of non-Indians into large scale fishing and processing. Subsequently, gillnetters, fish traps and seiners expanded "out in front" of Columbia and Snake rivers tribal fishers. The fish wheels, capable of taking thousands of pounds of fish per day, greatly intensified fishing power until outlawed in 1926[407]. As a result of these commercial developments, CTUIR and other tribal fishermen fishing Columbia and Snake rivers stocks soon

faced massive technology-driven competition from non-Indian fishermen, who, by 1911, were taking the lion's share of salmon originating from the Columbia and Snake rivers[408].

7.7 Changing the Production Function for CTUIR Lands, Waters and Salmon Producing Capability

As the 20th Century emerged, so did a new technique for taking Treaty wealth from the tribes. Non-Indians not only caught the lions share of salmon that were available, but began to **transform the rivers**. This transformation has, since its inception, increased production of irrigated crops and electricity - and reduced production of the salmon. Dams on the Columbia and the Snake rivers have played the greatest part in this transformation of the rivers' production function[409]. Some sense of the effect on salmon from this transformation is provided in Table 24.

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[405]Lane & Lane and D. Nash, 1981c. **Supra** at 54-55.
[406]Smith, Courtland, 1979. **Supra** at 16.
[407]Supra at 35-36.
[408]Su**pra** at 91-100.
[409]Northwest Power Planning Council, 1986. **1987 Columbia River Basin Fish and Wildlife Program**. Appendix E.

Table 24

Transformation of the Columbia/Snake River System from Salmon Production

Year	Estimated Harvest -millions of lbs.-	Benchmark
1872	17.0	
1900	25.8	Non-Indian fishing pressure increases.
1911	49.5	Salmon harvest peaks, aided particularly by the salmon wheel.
1927	37.7	The salmon wheel has been outlawed.
1931	27.0	
1933	26.8	Rock Island Dam completed. First dam on the Columbia mainstem.
1938	18.8	Bonneville Dam completed - First mainstem dam to impede Snake stocks.
1940	19.3	
1941	31.6	Grand Coulee Dam completed on the Upper Columbia.
1950	13.3	Anderson Ranch Dam completed on the Snake.
1952	10.7	Cabinet Gorge Dam completed on the Snake. Hungry Horse completed on the Snake.

1953	9.7	McNary Dam completed on the Columbia. Impedes Snake R. salmon.
1957	7.3	The Dalles Dam completed on the Columbia. Impedes Snake salmon.
1958	8.1	Brownlee Dam completed on the Snake.
1959	6.1	Priest Rapids Dam completed on Columbia. Impedes Snake salmon.
1961	5.4	Oxbow Dam completed on the Snake.
1961	5.4	Ice Harbor Dam completed on the Lower Snake River.
1967	9.4	Wells Dam completed on the Columbia. Impedes Snake salmon. Hells Canyon Dam completed on the Snake.
1968	5.6	John Day Dam completed on the Columbia. Impedes Snake salmon.
1968	5.6	Lower Monumental Dam completed on the Lower Snake River.
1970	12.6	Little Goose Dam completed on the Lower Snake River.
1974	6.3	Dworshak Dam completed on the North Fork of the Clearwater.
1975	8.2	Lower Granite Dam completed on the Lower Snake River.
1990	3.9	

Source: Smith, C.L., 1979. **Supra** at 110-112.
: Oregon Department of Fish and Wildlife & Washington Department of Fisheries, 1991. **Status Report**, p. 67.

Salmon catches have continued to decline in the 1990's, until, at present, the existence of some Snake River salmon stocks are threatened and/or endangered[410].

Tribal spokespersons have not agreed with the transformation of the Columbia/Snake system into one which produces extensive wealth associated with electricity and crops - but fewer and fewer salmon. As with their neighbor tribes, their concerns with respect to their Treaty resources have been largely ignored.

> The Indians didn't have no voice at all. Because I remember when they built the John Day Dam the fish wouldn't go up the fish ladders. And they said the fish down there just died by the thousands at The Dalles Dam, because they didn't know how to go up them ladders. Plus the water was several degrees warmer above than it was below, and they couldn't adjust to that. Everyone knew that, even white people.[411]

[410]Bonneville Power Administration, U.S. Army Corps of Engineers, Bureau of Reclamation, 1994. **Columbia River System Operation Review: Draft Environmental Impact Statement**. Appendix C-1; Anadromous Fish. DOE/EIS-0170, p. 2.2.

[411]Denny Williams, at Mission, October 13, 1982; in, Meyer Resources, 1983. **Supra** at 60.

> On each reservation, the story is the same. Inadequate provision for salmon and steelhead during dam construction and operation--consequent decline of natural stocks--broken and discarded promises by hydroelectric interests respecting safeguards and compensation--and severe inroads into capability for tribal survival. These conditions have also spawned a present attitude of almost universal mistrust among Indian people, accompanied either by hopelessness or outrage--depending on the person involved.[412]

The anguish associated with this transformation has been summarized by CTUIR elder Carrie Sampson.

> My heart cries for my people, cuz we are no more Indians. We have taken up all the white man's ways. If we were still Indians, we'd be living peacefully and happily the way we used to. All our horses are gone. No more cattle. All the pasture, the land, the hillsides, taken up by the farmers, by the white man. Our horses don't roam no more; we don't have no more horses of our own like we did at one time. Every inch of the tillable ground is taken up. Where our houses used to be, they tear that down, and they put wheat in there or peas right on every inch of the ground. And they've taken down all of the fences, and they've plowed through there. These big farmers, they've got everything in the world. The (Indian) owners have nothing. And they've taken everything. Like I say, they've taken our land, they've taken our rivers, they've taken our fish. I don't know what more they want.[413]

7.8 Lower Granite, Little Goose, Lower Monumental and Ice Harbor Dams

As with neighbor tribes, the CTUIR peoples directly fished Snake River stocks as adult salmon returned upriver. They fished these stocks both at their usual and accustomed fishing stations along the mid-Columbia, and along the lower Snake River. Lane & Lane and Nash (1981a) report that, on the Lower Snake River, the Walla Walla tribe occupied territory downstream of the Nez Perce on the south bank[414], perhaps from below the mouth of the Tucannon River to the confluence of the Snake and the Columbia Rivers. Palouse peoples, many of whom now reside on the Umatilla Reservation, lived along the north bank of the lower Snake, at and below the mouth of the Palouse River[415]. We consequently conclude that permanent cultural sites of the CTUIR peoples have been inundated by Ice Harbor and Lower Monumental Dams, and that Little Goose and Lower Granite Dams inundated Treaty fishing stations fished cooperatively by CTUIR peoples with the Nez Perce. These dams also

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[412]Meyer Resources, 1983. **Supra** at 71-72.
[413]Carrie Sampson, at Mission, October 13, 1982; in, Meyer Resources, 1983. **Supra** at 62.
[414]At Note 98.
[415]Supra.

flooded associated areas depended on by CTUIR peoples for hunting, and for the gathering of roots, berries and plants.

In order to properly assess impacts associated with lower Snake River reservoirs on tribes, and following Court direction (Section 2.1.1.5), it is necessary to consider "cultural resource" impacts from a tribal as well as an archaeological perspective. These perspectives differ.

> Tribes look at cultural resources differently than archaeologists do. King and Dodge (1996), working for Keepers of the Trust, speak about the differences between tribal and Euro-american (archaeological) worldviews in regard to cultural resources. Most generally, they note that (tribes consider that) a cultural resource is "any place that is valued by a tribe because of some sort of association with the tribe's ancestors" (p.2). They also point out that cultural resources can either be **places** or **practices**. The "practices" are centered around peoples' actions which may or may not require a special place. **It is the 'action' that is special to the cultural tradition or lifeway** (p.4). The "places are physical locations on the land that are important because something special is done there (vision questing, medicine gathering), because special things are located there (important plants, herbs, animals), because people did something there in the past (lived, buried the dead, etc.), or because they are associated with traditions (origin places, etc.)" (p.4). These places are generally considered under the archaeologist's term "site" or "traditional Cultural Property (TCP)". A final important general point Keepers of the Trust makes is that cultural resources "may be places where plants, animals, or minerals are found that are needed to maintain the ways of life passed down from the ancestors" (p.2).

The CTUIR agree with the Keepers' analysis. In Burney's analysis of why Hanford is a Traditional Cultural Property, he says;

> "Cultural resources significant to the CTUIR world-view include such things as the Indian people themselves, their communities, and their way of life; native elders with their unique information regarding their personal histories as well as tribal histories; clean air; clean water where salmon and other fish, eels, and other riverine resources so highly prized by the tribes for their traditional subsistence live; the root grounds providing a multitude of edible roots traditional to their dietary needs; and the berry patches, especially huckleberries, scattered throughout the Blue Mountains." (1998:7)

> The same is true for the reservoirs along the lower Snake River. Clearly, a crucial cultural resource for the CTUIR, as well as other Northwest tribes, is the salmon. Many of the archaeological sites within these reservoirs show evidence of the antiquity of the relationship between tribal members and these fish. Should this relationship be broken by the extinction of the salmon, the loss to the tribes' culture would be immeasurable.

> Another important difference between the way archaeologists and tribal cultural resource managers look at cultural resources is in ranking. Historically, laws set up by the federal government to manage cultural resources, and many of the archaeologists who interpret them, focus on

determining a site's eligibility for the National Register. Thus a site may be rated on whether it meets the criteria outlined in the National Historic Preservation Act. Sites that do not meet these criteria (these archaeologists say) do not warrant protection.

This is a foreign concept to tribal members, who prefer to see the interaction between cultural resource sites and landforms as a system. As the Keepers point out;

> "Rather than ranking places against one another and deciding which can be most readily sacrificed to change, a traditional person may want to look at the relationship among all the parts of the interacting landscape system, and decide whether or not proposed changes will disrupt the system." (p.6)

Archaeologists in particular and Euroamericans in general often fail to appreciate the importance American Indians ascribe to cultural resources. People need to understand that these sites are a library of the Tribe's heritage. Euroamericans read books to learn about the past and what their ancestors did. Tribal members turn to archaeological sites to understand and connect to the past and to their ongoing lifeways.[416]

A fuller discussion of legal and technical issues associated with cultural impacts and protection is provided in Appendix 2.

CTUIR cultural protection staff have focused their analytical attention for this project on the two lowest Snake River reservoirs, those associated with Ice Harbor and Lower Monumental dams. In general:

> When the CTUIR looks at Ice Harbor and Lower Monumental reservoirs, they see a system of cultural resources that is entirely out of balance. The river is a lake, much of the land where their ancestors lived their daily lives is under water, and the salmon have great difficulty in their migrations. The current system is unacceptable.[417]

A 1995 preliminary assessment by CTUIR staff identified approximately 150 sites of particular cultural significance within the Ice Harbor and Lower Monumental reservoirs (Table 25). These are believed to be only a portion of the sites along the Lower Snake where the ancestors of the CTUIR tribes lived, fished, hunted and/or gathered roots and plants[418].

Table 25

An "In Part" Summary of Sites of Particular Cultural Significance to the CTUIR

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[416]Dickson, Catherine, 1998. **Cultural Resource Protection Associated with Lower Snake Drawdown**. A Report to the Columbia River Inter-Tribal Fish Commission. Pendleton, Oregon: Confederated Tribes of the Umatilla Indian Reservation, Department of Natural Resources, Cultural Resources Protection Program, pp. 1-2.

[417]Supra at 2-3.

[418]CTUIR Cultural Protection staff. 1995.

- Affected by Lower Snake River Reservoirs -

Reservoir	Number of Cultural Sites
Ice Harbor	73
Lower Monumental	77

Source: CTUIR Cultural Protection Staff, 1995.

Finally, the CTUIR, have seen their Treaty wealth in salmon risked, and then taken, as the Lower Snake dams were built. In more recent times, they have suffered further, as some biologists and river managers have reversed their approach to uncertain actions - and refused to restore salmon to the river unless they can be guaranteed high probabilities of success for any rebalancing actions they might take[419].

7.9 Post-Contact CTUIR Tribal Health

As Hunn has noted, pestilence followed contact with white explorers, trappers and settlers for the tribes of the CTUIR and their neighbors.

> (T)he first wave of smallpox might have come from the west about 1775 from ships exploring for furs along the north Pacific coast... .
>
> Smallpox again rampaged along the Columbia in 1801, attacking a new generation of susceptibles grown up since the first visitation. This likely carried off another 10 to 20 percent, reducing the original population to about one half by the time of Lewis and Clark's exploration.... Two more waves of smallpox may have afflicted Indian people on the mid- Columbia. An outbreak of disease reported in 1824-25 may have been smallpox. The epidemic of 1853 was documented in detail by the McClellan survey party... .
>
> ...Though spared from malaria (which ravaged the lower Columbia tribes), the Plateau people next found themselves in the path of thousands of immigrants crossing the continent over the Oregon Trail. Seasonal respiratory disease had become commonplace among the Indians who congregated at fur trading posts each winter, a pattern repeated at the missions. In 1843 after a tour east, Marcus Whitman returned to his Walla Walla mission at the head of a train of one thousand settlers. This scene was to be repeated each subsequent year. With the immigrants came a potpourri of diseases against which the Indians had no resistance. In 1844 there was scarlet fever and whooping cough, in 1846 more scarlet fever, and so forth. ...
>
> This coincidence of Whitman's hosting the hordes of settlers arriving late each fall from their arduous overland journey and the outbreak of new epidemics was not lost on the Indians. When

[419] Also refer to Section 4.8.

> measles erupted about the time of the immigrants' arrival in 1847, the Indians concluded that Whitman's murderous influence must be stopped.
>
> ...On November 29, a group of Cayuses attacked the mission, killing Whitman, his wife, and eleven other whites, and taking some fifty captives... .
>
> The (pre-Treaty) history of Indian-white relations in the Columbia Plateau has been first and foremost a history of the ravages of disease, for the most part inadvertently transmitted by Old World immigrants to defenseless New World populations, which drastically reduced aboriginal populations and disrupted the social and spiritual fabric of Indian life.[420]

These epidemics reduced the population of CTUIR tribes to 2,300 persons by 1855[421]. Population continued a sharp decline through the balance of the 19th century - and then remained fairly constant through the mid-20th century (Table 26).

Table 26

Estimated Population of CTUIR Tribes: 1892 to 1950

Year	Population
1892	1,081
1899	1,013
1910	1,065
1920	1,117
1930	1,111
1940	1,135
1950	1,128

Source: Lane & Lane Associates and D. Nash, 1981c. **Supra** at 31-32.

Trafzer (1997) concludes that pestilence continued to predominate among the tribes of the Columbia and Snake rivers until the 1930's when modern preventive medicines began to reach the reservations. He further hypothesized that by the 1950's degenerative and man-made diseases had become prevalent as principal causes of Indian mortality. Incorporated in this new set of problems were: loss of traditional diet from native foods, pressures and violence from whites, social and economic dislocation of reservations, loss of autonomy and control over lives, high poverty and low medical services[422]. This

[420]Hunn, Eugene S., 1990. **Supra** at 27-32.
[421]At Note 380.
[422]Note 159.

hypothesis is consistent with observations concerning devastation of the CTUIR traditional resource base, and with the conclusions reached by Bachtold[423].

7.10 Present Circumstances of the CTUIR

This section reviews recent circumstances of the CTUIR - and particularly inquires whether recent circumstances have altered the cumulative adverse effects that CTUIR peoples have suffered.

7.10.1 Remaining CTUIR Lands

Enrolled CTUIR membership presently stands at 2,087 persons[424]. The present Treaty boundary of the Confederated Tribes of the Umatilla Indian Reservation encompasses 292,744 acres. Only 95,136 acres (32 percent) are in Indian hands (Table 27). This represents 1.4 percent of their original tribal homeland.

Table 27

Present Reservation Landholdings of the CTUIR and its Members

Type of Holding	Acres
Tribal fee lands	9,360
Tribal allotment lands	68,771
Tribal Trust lands	17,005
Non-Tribal Owned Reservation lands	197,608
Total Lands within Reservation boundaries	292,744

Source: CTUIR Planning Office.

7.10.2 What Remains of the Salmon?

The peoples of the Yakama, Nez Perce, Umatilla and Warm Springs Reservations fish in common in Zone 6 on the mid-Columbia River. Catches roughly reflect human population sizes, and associated numbers of fishers, from each reservation - with the Yakama's securing the largest catch, followed by

[423]At Note 66.

[424]Debbie Croswell, Public Information Officer. Confederated Tribes of the Umatilla Indian Reservation. **Personal communication**. August 3, 1998.

the Nez Perce, and then the Umatillas and Warm Springs. Aggregate statistics on all-tribes Zone 6 commercial catch are kept by CRITFC; the Yakamas and the Nez Perce keep their own Zone 6 catch subtotals, while the Umatilla and Warm Springs do not; and all tribes have some data on Ceremonial and Subsistence (C&S) catches in tributary rivers and streams. Given these circumstances, we have been able to approximate harvest levels for Nez Perce and Yakama peoples in previous sections of this report. However, such direct estimates are not available for either Umatilla or Warm Springs - and we have approximated **joint catch** for these two tribal groups as follows.

1. We use CRITFC catch data to estimate Zone 6 total tribal commercial catch of anadromous species at 820,000 pounds, the average for the years 1993-1997.

2. Based on data from the Yakama Indian Nation, we estimate Zone 6 commercial harvest by Yakama tribal members at 719,000 pounds.

3. Based on data from Nez Perce, we estimate that Nez Perce fishers take about 7.6% of Zone 6 tribal commercial harvest - 62,000 pounds of the estimated 820,000 base all-tribes commercial harvest.

4. Subtracting the harvest results from Steps (2) and (3) from the all-tribes Zone 6 commercial harvest estimated in Step (1), we obtain a residual commercial harvest estimate for the **CTUIR and Warm Springs tribes, considered together**, of 39,000 pounds.

5. Using Ceremonial and Subsistence (C&S) harvest data from all tribes, we estimate that an additional 38,000 pounds of anadromous fish are taken by CTUIR and Warm Springs peoples considered together for C&S purposes, in Zone 6, and in other tributary rivers and streams within their usual and accustomed territories.

6. Adding results from Steps (4) and (5), we estimated that fishers from the CTUIR and the Confederated Tribes of the Warm Springs Reservation have been able to harvest approximately 77,000 pounds of anadromous species annually over the 1993-1997 period.

It will be apparent that these estimates are only approximate, and will change with decreases or increases in abundance of salmonid stocks. However, they are considered accurate within a reasonable range of magnitude, and are sufficient to indicate that present harvests by CTUIR peoples represent only a small fraction (3 percent for the CTUIR and Warm Springs taken together) of the harvests they believed they had protected in their Treaty with the United States.

7.10.3 A General Assessment of Present CTUIR Material Circumstance

Preceding Sections 7.10.1 and 7.10.2 indicate that the peoples of the CTUIR have lost 68 percent of their Treaty-protected lands and approximately 97 percent of Treaty protected harvests of salmon and other anadromous fish. This destruction of tribal Treaty assets and stripping of wealth from tribal lands

and rivers has had a predictable result - severe impoverishment for the peoples of the Confederated Tribes of the Umatilla Indian Reservation.

Data from the US Bureau of the Census' 1990 Survey and from BIA (1995) provides a present- day comparison of CTUIR material circumstances, relative to those of non-tribal residents of Oregon (Table 28).

Table 28

Comparative Data Showing the Relative Circumstances of the CTUIR

Economic Indicator	CTUIR	Oregon
Families in Poverty (%)	26.9	12.4
Unemployment: US Census (%)	20.4	6.2
: BIA	21.0	
Per Capita Income ($'000)	7.9	13.4

Source: US Bureau of the Census - 1990 Special Tribal Run. US Bureau of Indian Affairs - 1995 Indian Population and Labor Force Estimates.

Recent Tribal economic activity and employment depends most heavily on government infrastructure, and on the CTUIR Wildhorse Casino and Hotel development - which also provides jobs for neighboring non-members. The Yellowhawk Health Clinic is also a significant employer of tribal members (Table 29). The Casino/Hotel complex has had a particularly positive impact in diminishing winter unemployment peaks - although overall unemployment rates remain unacceptably high.

Table 29

Major Employment Sources for the CTUIR - 1998

Enterprise/Activity	Estimated Employment	
	CTUIR	Non-CTUIR
Tribal government	217	146
Wildhorse Casino & Hotel	108	259
Yellowhawk Health Clinic	36	29
Tribal Police	7	19

Tribal Housing Authority	6	20

Source: CTUIR Public Information Office.

7.10.4 CTUIR Tribal Health

US Indian Health Service (1994b) reported that, for the 1989-1991 period, the age-adjusted death rate for Native Americans in the Umatilla Service Area exceeded that of non-Indians by 20 percent[425]. The Umatilla Service Area covers Umatilla and Union counties in Oregon. Table 30 provides comparative 1989-91 age-adjusted mortality data for the Umatilla Service Area and surrounding non-Indian residents - for the five leading causes of Native American death.

Table 30

Leading Causes of Tribal Death - Umatilla Service Area: 1989-91

Cause of Death	Native American	All Other Races	Ratio of NA to Other Races
	------deaths per 100,000 population-----		
Malignant Neoplasms	126.7	104.7	1.2
Heart Disease	104.5	101.3	1.0
Cerebrovascular Disease	63.5	20.6	3.1
Cirrhosis of the Liver	56.8	3.3	17.4
Aids/HIV	18.0	0.9	20.6

Source: US Indian Health Service, 1994b. **Supra** at 97.

While diabetes ranks slightly lower as a killer on the Umatilla Reservation than the causes of mortality listed in Table 30, it is still a substantial problem for CTUIR peoples. Hunn, writing about the peoples of the "Big River", makes the following comments with respect to potential relationships between diet and a new complex of tribal diseases, one of which is diabetes.

> How are we to understand this sudden appearance of a complex of diseases that were previously unknown or rare among Native Americans? The essential clue in this instance may lie in dietary changes. Indian peoples today have ready access to an abundance of processed foods that are high in short-chain carbohydrates and animal fats but low in long-chain carbohydrates and fiber. Such

[425]US Indian Health Service, 1994b. **Supra** at 75.

> processed foods are conspicuously marketed in our supermarkets and have now largely replaced traditional greens, roots, fish, and berries in the Indians' diet. Traditional foods had a high fiber content and were rich in essential vitamins and minerals well preserved by indigenous drying techniques. Healthy fish oils were the primary source of fats. Such foods provided all essential nutrients, including ample calories.[426]

The American Indian Health Care Association (1993) also evaluated Indian health status and services in the State of Oregon. Their findings tended to confirm the data from the Indian Health Service.

> State of Oregon findings indicate that the status of American Indian health lags behind the general population, and that health care facilities available to American Indians are limited in scope and underfunded. Furthermore, researchers found that there were severe access problems for all American Indians, whether they live on or off reservations. ...
>
> The health status of Oregon's American Indians can be illustrated by birth characteristics, disease prevalence, and mortality. The findings on all these factors form a picture of American Indian health that is, in many ways, alarmingly poor.[427]

As with other tribes, the CTUIR is making positive strides respecting tribal health. However, substantial challenges remain.

> Today the CTUIR is taking a more positive role in directly managing their own health care. Indian health and healthcare needs to improve, and the CTUIR realize that we must do this ourselves. Poor water quality, pesticides, no fish, and changes in traditional diet to commodities has affected the health of the tribes. One hundred and fifty years of alcoholism, drug abuse, diabetes and high cholesterol introduced by the non-Indian world has also weakened and hurt the people. The health of the Indian people is the future and we need to care for our family using western medicine and traditional beliefs to heal ourselves. With the Tribes limited successes there has been opposition and there are many issues to attend to. The Columbia River fisheries are dwindling, the forests are sick, the water is polluted. Through our Country passes thousands of miles of roads, power lines, pipelines, extensive irrigated land, cattle issues, water issues, forest and mineral speculators, private industry, developers, county, state and Federal governments. Within the CTUIR aboriginal territories is the Hanford Nuclear Reservation, the most polluted place in the Western Hemisphere.[428]

Tribal fish Commissioner Jay Minthorn expressed further concern with respect to water pollution at a 1998 EPA Conference on the subject.

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[426]Hunn, Eugene S., 1990. **Supra** at 283.

[427]American Indian Health Care Association, 1993b. **Northwest Area American Indian Health Status and Policy Assessment Project: State of Oregon Report**. Saint Paul, Minn., pp. ix-x.

[428]Confederated Tribes of the Umatilla Indian Reservation, 1996. **Supra** at 24.

> Water pollution affects many aspects of tribal life; our health, our source of food and our tribal heritage. Water quality takes precedence over all other resources, because it's the source of all living things. Of all the threats to our tribal life, water pollution is one of the most dangerous.

7.10.5 Languages of the CTUIR and Other Columbia/Snake River Tribes

With respect to the languages of the CTUIR, and neighbor study tribes, Hunn (1990) notes:

> The mid-Columbia Indians speak a dialect of Sahaptin. The Sahaptin language includes three main dialect divisions set apart by distinctive vocabulary items, pronunciation, and grammatical paradigms. Bruce Rigsby, a linguistic anthropologist who studied Sahaptin in detail during the 1960's, describes fourteen extant dialects, which he classifies as follows:
>
> *The Northwest Cluster*: Klikitat, Upper Cowlitz or Taitnapam, Yakima, and Kittitas or Pshwanwapam;
> *The Northeast Cluster*: Priest Rapids or Wanapam, Walla Walla, Snake River, and Palus; and,
> *The Columbia River Cluster*: Umatilla, John Day, Rock Creek (Washington), Wayampam (Celilo), Tenino, and Tygh Valley.
>
> Sahaptin is closely related to Nez Perce, spoken along the (lower) Snake River and its tributaries above the Palouse River junction, and the two languages together form the small Sahaptian language family.[429]

In previous methodological Section 2.1.4.4, we cited Hunn's conclusions concerning the importance of "own language" for tribes. We repeat his observations here.

> Learning a foreign language such as Sahaptin involves more than learning a strange set of sounds, getting used to unfamiliar grammatical patterns, and memorizing a new vocabulary. It also requires learning a new way of thinking and adopting a different perspective on reality.... The hypothesis of linguistic relativity...was put strongly by Sapir when he asserted that people who grow up speaking different languages do not live in the same world with just the labels changed, but live in unique worlds.[430]

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[429]Hunn, Eugene S., 1990. **Supra** at 61.
[430]Supra at 78.

Because tribes place strong emphasis on experience in learning how to live effectively, language not only illuminates culture, but also protects Tribal knowledge - and hence, tribal power.

> Human survival hinges on the outcome of such ecological events as finding food, eating, killing, escaping, meeting, mating, feeding and dying. With language we can describe, catalog, and analyze a very large number of such events as well as imagine, and perhaps create, new ecological realities. Language is thus not merely a means of self-expression but also a tool of survival, more powerful than the bow-and-arrow, net or plow. In language we construct our battle plan for our daily skirmish with hard reality. ...This knowledge must be acquired, remembered, and passed on.[431]

Ridington (1990) adds:

> Knowledge, the elders say, enables a person to live in this world with intelligence and understanding. They recognize that knowledge is a distinctly human attribute. **They recognize that knowledge is a form of power**. (emphasis added)... A person with power reveals what he or she knows through the ongoing story of his or her life. A person with power does not disclose knowledge without a purpose. He or she may use power to heal relatives who are ill. He or she may use it to feed people. A person who "knows something" may even be obliged to use power to defend against an attack. These circumstances reveal the times and places in which power may be revealed. They define knowledge and power in terms of experience.[432]

Thus, a persons' "own language" can keep knowledge from outsiders - and, in so doing, protect the power of tribal peoples.

Today, only a minority of members of the CTUIR, and of other tribes, speak their own language.

> Sahaptin survives in the memories of several hundred elders because it has served its people well, and it may yet survive to serve their descendants in a world dominated by languages of empire, such as English, Spanish, Arabic, and Mandarin Chinese....
>
> The extinction of languages such as Cayuse does not require that we imagine dramatic conflicts among linguistic "tribes" for domination over the Plateau populace. Hunter-gatherers do not create empires, they tend rather to mind their own business. Linguistic change is more likely a slow process whereby "successful" languages (that is, those learned by increasing numbers of people) spread at the expense of neighboring languages by *creeping*, not *leaping*[433].

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[431]Supra at 81.
[432]Ridington, Robin, 1990. **Supra** at xvii.
[433]Hunn, Eugene S., 1990. **Supra** at 64-65.

An estimated 9 percent of Native Americans living on or near the Umatilla Reservation speak their own language at home[434]. Strong efforts, led by Elders, continue to save the language and to teach it to younger members of CTUIR. Yet at present, the ability of CTUIR peoples to protect the power of their traditional knowledge through use of their own language must be judged to be endangered.

Finally, as with other tribes, we provide an outline of present CTUIR circumstances using a Maslow-based diagram (Figure 11).

[434]US Bureau of the Census. **1990 CP-2-1A**. p. 43.

8.0 Circumstances and Impacts on the Confederated Tribes of the Warm Springs Indian Reservation

This section provides information on past impacts and related present circumstances of the tribal peoples now known as The Confederated Tribes of the Warm Springs Reservation of Oregon (hereafter, The Warm Springs). Expected future impacts on The Warm Springs will be identified in the following "impacts" section of this report.

8.1 Accustomed Tribal Areas and Seasonal Rounds of The Warm Springs Peoples

The Confederated Tribes of the Warm Springs Indian Reservation report that the ancestors of present-day Warm Springs came primarily from three tribal groupings: the Wasco bands living along the mid-Columbia - who spoke Chinookan; the Warm Springs bands who lived upstream of the Wascos along the Columbia and its tributaries, and spoke Sahaptin; and the Paiutes, who lived in southeastern Oregon and spoke a Shoshonean language[435].

> Over the centuries, the Warm Springs and the Wascos had developed an extensive economic network along the Columbia, a network that depended on the river and its resources, particularly the salmon. The Paiutes, who occupied a vast territory south and east of the Columbia River, subsisted largely on hunting.

[435]Confederated Tribes of the Warm Springs Reservation of Oregon, 1984. **The People of the Warm Springs**. p. 15.

> The Wascos were principally fishermen and traders. With the closely related bands of Wishram Indians on the north side of the Columbia River, they frequently came in contact with other Indians from without the region. From neighboring Sahaptin bands, they obtained surplus game food; from the Clackamas to the west, roots and trade shells; from more distant eastern peoples such as the Nez Perce, furs, clothing and horses. In exchange, the Wascos traded root bread, bear grass that could be used for basket-making, and salmon meal that could be stored for long periods in fish skin pouches.
>
> While the Wascos remained in their village sites along the Columbia throughout the year, the Warm Springs bands moved between winter and summer villages. They depended more on game, roots and berries, so the Warm Springs Indians required a larger territory than the Wascos. But the salmon was also an important staple for the Warm Springs bands....Although the two tribes spoke different languages and observed different customs, they came in contact regularly and could converse with each other.
>
> The lifestyle of the Paiutes was considerably different. Fish was not as important for the Paiutes as it was for the tribes nearer the Columbia River. Their high plateau country required that they migrate widely and frequently for the plants and game they relied on. Except for overlapping territories, the Paiutes had little in common with the Chinookan and Sahaptin bands. Contact between the Paiutes and the Wasco or Warm Springs Indians was infrequent and, in early timers, usually occurred during territorial skirmishes.[436]

Confederated Tribes of the Warm Springs Reservation of Oregon (1984) also describes the territorial extent of each tribe's usual and accustomed harvest rounds.

> Although Paiute territory historically included a large area from southeastern Oregon into Nevada, Idaho, and western Utah, the Paiute bands which eventually settled at Warm Springs had lived in the area of Lake, Harney, and Malheur counties in Oregon.
>
> The original territories of the Wasco and Warm Springs tribes extended from the slopes of the Cascades to the Blue Mountains in the east and from the Columbia River to an east-west line south of the present city of Bend. Located principally in the northwest corner of this area along the Columbia, the Wascos shared many hunting and gathering areas with the Warm Springs bands. In the western portion, both tribal groups gathered berries and other plants; occasionally they journeyed into the Willamette Valley to harvest eels along the rocky shores and cliffs of the Willamette River and its tributaries. In the north along the Columbia River and its tributaries they fished for salmon and steelhead. They hunted game in the southern parts of these lands, and they dug roots in the Cascade Mountain Range and nearby lands to the east.[437]

8.2 Natural Assets and Annual Productive Yield of Original Lands of the Peoples

[436] Supra at 15-17.
[437] Supra at 17-20.

of the Warm Springs Reservation

Hunn and French (1998) estimated that in 1805 the population of the bands that now reside on the Warm Springs Reservation approximated 4,150 persons.[438] Estimates of populations in the mid-1800's are hampered by the fact that the ancestors of Paiute peoples now living at Warm Springs did not come to the reservation until later in the century[439]. Stowell (1987) has estimated that ancestors of present-day residents of the Warm Springs Reservation numbered between 1,000 and 1,400 persons at the time of the Treaty with the Confederated Tribes and Bands of Middle Oregon (1855)[440]. Lane and Lane Associates and D. Nash (1981d) cite Lee in estimating 962 persons on the Warm Springs Reservation in 1899[441]. For this analysis, we will utilize an estimated population of ancestors of the peoples of the Warm Springs Reservation of approximately 1,200 persons at Treaty times.

Hewes (1947) estimated that tribes of the mid-Columbia area annually harvested between 500 pounds of salmon per capita for consumption (full time fishers) and 400 annual pounds per capita (substantial fishers)[442]. He estimated per capita annual consumption for the Northern Paiutes at 50 pounds per capita[443]. Walker's median estimate of per capita consumption of fish for Plateau tribes is about 60 percent higher, and includes non-food consumption - for example, for fuel[444]. Swindell (1942) identifies that mid-Columbia tribes also caught salmon for trade - with perhaps one third more fish over "own consumption needs" taken for that purpose[445].

For this analysis, we assign Hewes' upper mid-Columbia estimate of 500 pounds consumed per capita per year to the Wascos, his Yakima/Klikitat estimate of 400 annual pounds per capita to the Warm Springs, and his Northern Paiute estimate of 50 annual pounds per capita to the Paiute ancestors of present-day residents of the Warm Springs Reservation. We then increased the Wasco and Warm Springs estimates by sixty percent, to account for Walker's revised estimates. We further increased Wasco harvest estimates by one third, and Warm Springs by one sixth, to account for fish caught for trade. Finally, we arbitrarily assumed that, at Treaty times, about 45 percent of the ancestors of present-day Warms Springs Reservation members would be Wasco, 45 percent Warm Springs, and 10 percent Paiute. The results of these assumptions and calculations are displayed in Table 31.

Table 31

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[438] Hunn, Eugene S., and David H. French, 1998. "Western Columbia River Sahaptins", in, **Handbook of North American Indians: Plateau. Supra** at 391.

[439]Confederated Tribes of the Warm Springs Reservation of Oregon, 1984. **Supra** at 37-39.

[440]Stowell, Cynthia D., 1987. **Faces of a Reservation: A Portrait of the Warm Springs Indian Reservation**. Oregon Historical Society Press, p. 128.

[441]Lane and Lane Associates and D. Nash, 1981d. **Willow Creek Anadromous Fish and Indian Fishing**. A Report to the US Bureau of Indian Affairs, p. 31.

[442]Hewes, Gordon W., 1947. **Supra** at 227.

[443]Supra.

[444]Walker, Deward E., 1967. **Supra** at 19.

[445]Swindell, Edward G., 1942. **Supra** at 165.

Estimated Per Capita Annual Salmon Harvest by Ancestors of Present-Day Members of the Warm Springs Indian Reservation - in 1855

Tribal Grouping	Estimated Population	Annual Per Capita Harvest	Total Harvest
		----------in pounds---------	
Wasco	540	1,064	574,560
Warm Springs	540	747	403,380
Paiute	120	50	6,000
Estimated Total Harvest			983,940

Lane & Lane and Nash (1981b) cite Murdock to estimate that fish made up between 46% and 55% of the diet of the Wishram and Chinookian peoples near the White Salmon River in pre- contact times[446]. We assume Murdock's upper range estimate (55%) to apply to the Wascos – and his lower range estimate (46%) to apply to the Warm Springs. We utilize the 27% of food as fish, estimated for the Cayuse in the previous chapter of this report, to estimate the percentage of "fish as food" for the Paiutes. Applying these percentages to an adjusted "food only" annual per capita consumption estimate for the Wasco (600 pounds), and revising our food consumption estimate for the Warm Springs proportionately (to 421 pounds), we are able to estimate a fish-equivalent "all foods" consumption estimate for the referent peoples of approximately 1.1 million pounds in the mid-1800's.

Finally, if we were to use a contemporary procedure of the US Bureau of the Census which estimates that families with economy budgets spend one third of their income on food, this would imply that ancestors of the Wasco, Warm Spring and referent Paiute peoples may have obtained natural production of edibles and non-edibles from their lands and waters equal to about 3.3 million pounds of food equivalents.

8.3 A Broader Perspective of Wasco, Warm Springs and Paiute Living Circumstances in Pre-Contact Times

As with neighbor tribes, the peoples of the Wasco and the Warm Springs, and to a lesser extent, the Paiutes, lived fairly well in pre-contact times.

> For thousands of years, the ancestors of the people of Warm Springs lived comfortably in "Middle Oregon." A moderate climate, an abundance of nutritious plants, and plentiful fish and game made their lives comparatively easy. Perhaps as a result of living in a land of plenty, they developed the

[446]Lane & Lane and D. Nash, 1981b. **Supra** at 68.

> characteristics displayed to the first white settlers. They welcomed non-Indians just as they had welcomed other Indian tribes to visit their land. They were generous, friendly and accommodating. The Indians had historically roamed freely through the ten million acres of central Oregon hunting, fishing, digging roots, gathering berries, and changing village locations.[447]

Undoubtedly, the Paiutes life was harder, and that of the Wascos and Warm Springs more comfortable. And these tribes, also like their neighbors, suffered greatly from the White man's epidemic diseases[448] - so that, by Treaty times, their populations were greatly diminished from those that existed pre-contact. But prior to contact, all had enough to survive, many lived well, and they were generally at peace - and in full control of their land, waters, fish, game and the other resources upon which their life depended. This fully functional society is characterized in Figure 12 using a Maslow-like diagram.

[447]Stowell, Cynthia D., 1987. **Supra** at xi.
[448]Hunn, Eugene S. **Supra** at 27-32.

8.4 Changes in Circumstances of the Confederated Tribes of the Warm Springs Due to the Treaty of 1855

As with other study tribes, the ancestors of the present Warm Springs peoples were pressured incessantly by the settlers in the early-to-mid 1800's. For example, in 1853, William Chinook, a Wasco, wrote:

> We are tormented almost every day by the white people who desire to settle on our land and although we have built houses and opened gardens they wish in spite of us to take possession of the very spots we occupy. ... Now we wish to know whether this is the land of the white mans or the

> Indians. If it is our land the white must not trouble us. If it is the land of the white man when did he buy it?[449]

This settler agitation resulted in government attempts, via treaty, to clear Indians from their productive lands. With respect to the Wascos and the Warm Springs, this meant moving them from their villages along the mid-Columbia - for the whites did not want tribal reservations established in close proximity to white settlement.

> Joel Palmer, Superintendent for the Oregon Territory, received orders in 1855 to clear the Indians from their lands. He did so by negotiating a series of Indian treaties, including the one establishing the Warm Springs Reservation.
>
> Meeting near the present city of The Dalles in June 1855, Palmer urged the tribes to move south of the Barlow Road - the main immigrant trail which paralleled the Columbia River into the Willamette Valley. During one negotiating session, Palmer is reported to have said:
>
> > I would like to accommodate him (Cush Kella, one of the chiefs of the Dalles band), but the great chief (U.S. President Pierce) knows this country. He has maps. He knows where the wagon road is. His instruction to me is to put the reservation off from the white settlement.
>
> As the session progressed, it became increasingly clear to the Indians that they would be forced to move onto the reservation Palmer had selected for them. Chief Mark, another representative of the Dalles Band, objected to Palmer's proposal:
>
> > The place that you have mentioned I have not seen. There are not Indians or white men there yet, and that is the reason I say I know nothing about that country. If there were Indians and whites there, then I would think it was a good country.
>
> Similar objections were voiced by other tribal representatives. Some expressed their preference for lands in the Tygh Valley, some for lands along the Columbia River, some for lands in the root-digging areas east of the Deschutes River. But Palmer warned that unless the tribes agreed soon, they would lose everything. The tribal spokesmen recognized that they had much to lose, but little with which to negotiate. After three days, 89 Indian leaders signed Palmer's treaty. Included were members of the Walla Walla, the Tygh, the Wyam, the Tenino, and the John Day bands which collectively came to be known as the Warm Springs Tribe. Also present were members of The Dalles and Dog (Hood) bands of Wasco Indians.[450]

In this manner, the above designated peoples were removed from an approximately 10 million acre homeland[451] with villages stretched along the mid-Columbia River corridor, and resettled in a 578,000

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[449]William Chinook, in, Stowell, Cynthia D. **Supra** at 121.
[450]Confederated Tribes of the Warm Springs Reservation of Oregon, 1984. **Supra** at 23-24.
[451]Supra at 24.

acre corner of their former homeland in the eastern foothills of the Oregon Cascades[452] - westerly of the present town of Madras. This land also lay in an area frequented by some bands of Northern Paiutes - traditional enemies of the Wascos and other Treaty signatories.

The Treaty was ratified by Congress in 1859. It followed the "Stevens" model, **guaranteeing the tribes noninterference within their reservation, the right to fish at their usual and accustomed off-reservation places, and to hunt and gather on unclaimed lands** - and made a number of other promises of material help and education for the Indian signers and their people.

In the mid-1860's the United States government attempted a treaty modification to terminate the Indians right to fish, hunt and gather foods off-reservation.

> The treaty (modification) was so one-sided and its terms were so materially misrepresented to the Indians that it was never enforced. A federal court nullified it in 1969.[453]

In 1871, the Warm Springs Reservation boundaries were finally surveyed. As with other study tribes, a "survey error" - as usual, against Indian interest - occurred, reducing the size of the Warm Springs Reservation by 60,000 acres of valuable timberland[454]. One hundred years later, most, but not all, of this land was restored to the Reservation[455].

Subsequent to 1879, several Paiute bands also moved onto the Warm Springs Reservation - despite the fact that they had previously conducted raids against Wascos and related peoples.

> Some Paiutes had traveled as far as the reservation lands in pre-treaty times to hunt and gather food, but Paiute lands generally lay farther east and south than Wasco and Warm Springs territory. No Paiutes were present at the treaty council that established the Warm Springs Reservation.
>
> Because their lands were more distant, the Paiutes in south-eastern Oregon had avoided contact with non-Indians longer than any tribes. By 1866, however, Paiute raids on neighboring Indian and non-Indian communities were increasingly frequent. The United States responded with military campaigns to subdue the Paiutes. Two years later, a peace treaty stopped the fighting but did little else. The treaty neither established a reservation for the Paiutes nor provided them with any goods or services. In 1872, President Grant set aside the Malheur Indian Reservation in southeastern Oregon for the Paiutes.
>
> Six years later, Bannocks from the Fort Hall Reservation in Idaho urged the Paiutes to join them in fighting the U.S. Army. Many Paiutes did so: others fled the reservation. The Army forced many Paiutes to move to the Yakima Reservation, and it captured and imprisoned at Fort Vancouver a

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[452]Stowell, Cynthia D., 1987. **Supra** at 109.
[453]Confederated Tribes of the Warm Springs Reservation of Oregon, 1984. **Supra** at 26.
[454]Confederated Tribes of the Warm Springs Reservation of Oregon, 1984. **Supra** at 34.
[455]Supra at 37.

number of others who fought with the Bannocks. In 1882, because no Paiutes remained on the Malheur Reservation, President Garfield returned its lands to the public domain.

In 1879, the federal government released the 38 Paiutes imprisoned at Fort Vancouver. Many moved to the Warm Springs Reservation later that year. During the next five years they were joined by other Paiutes who had lived at Yakima. Most of the Paiutes from the Malheur Reservation who did not go to Warm Springs returned to southeastern Oregon, settling near the town of Burns.

Indian Agent John Smith described the Paiutes' arrival on the Warm Springs Reservation in a September 1879 letter:

> I received...a request from Gen. O.O. Howard...to come to his headquarters at Vancouver Barracks...regarding a small band of Paiute prisoners held by him. Anticipating what his object might be, [tribal] members here voluntarily told me that if these Indians wanted to come here, to bring them home with me. ... My Indians will give them all assistance possible, and [will have] the most friendly feeling toward them which is remarkable since but a few years ago they were inveterate enemies.[456]

8.5 Further Changes in Circumstances of the Peoples of the Warms Springs Reservation

Conditions on the Warm Springs Reservation following the resettlement of Wasco, Warm Springs and Paiute peoples were difficult.

> The whole relationship of the river tribes to the land was altered when the reservation was established. Not only did they have to transfer their allegiance to a parcel of land that figured little into their culture, history, and accustomed lifestyle, they also had to learn new ways of inhabiting and using their land.[457]

The land of the new reservation was not as rich as those the tribes had left along the Columbia River corridor - but it was not without significant natural resources.

> The (new) land was hard to dislike. The reservation was, and is, a land of gentle, sage- covered hills, dramatic rock formations, steep canyons, hot mineral springs, pine and fir forests, mountain peaks, and clean, rushing water. The eastern half was a land given over to the brown tones of hot, dry summers and cold winters, but with a brief soft greening in spring and a yellow profusion of sage blossoms in the autumn. The timbered foothills and mountains to the west and north offer cool, green relief and watersheds for the streams.

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[456]Supra at 37-39.

[457]Stowell, Cynthia D. **Supra** at 126.

> The newcomers to the reservation found the game, roots and berries that had helped sustain them for millennia, although for many years they returned to their more familiar haunts to gather food. Trout, steelhead and salmon filled the reservation's rivers and streams, but nothing could match the flavor and volume of the Columbia River catch... .[458]

Whether because of the relatively remote location of the new reservation, or due to tribal leadership - and likely both - the peoples of the Warm Springs were spared much of the adverse impact of the Dawes Act of 1887, and the following allotment process. Only about 20 percent of the Warm Springs Reservation was originally allotted - and most of this was not taken out of trust status[459]. Further, there was no "surplusing" of Reservation lands by the federal government[460]. Consequently, most lands of the Warms Springs Reservation remained in Indian hands.

8.6 Warm Springs Access to Usual and Accustomed Fishing, Hunting and Gathering Areas

The lands of the Warm Springs Reservation provided a rich array of fishing, hunting and gathering opportunities. However, as with other study tribes, the Warms Springs peoples encountered opposition when they attempted to travel off reservation to Treaty-guaranteed fishing, hunting and gathering locations. This was a particular problem as they attempted to continue harvesting the rich catches of Columbia and Snake River salmon passing their usual and accustomed fishing locations on the Columbia - leading to extreme poverty in early years.

> While the people waited for the highly touted benefits of civilization, their traditional methods of providing for themselves was fast eroding. They sank further into poverty and dependence. In the early years, many families frequently exercised their off-reservation fishing rights, usually spending the salmon harvesting months on the Columbia and only wintering on the reservation, much to the exasperation of school superintendents and agricultural personnel. But their off-reservation rights were not always honored. In an 1890 letter to Washington, D.C., reservation agent J.C. Luckey reported:
>
> > The Indians were all but famishing. They raised no crops last year (weather prevented it), and had no supplies of fish, game to subsist upon; during the later winter months. The game is nearly all killed off and they were more than ever before denied the right to take salmon last summer at the Columbia river.
>
> Apparently, non-Indians in the ceded area had objected to the traffic of Indians off the reservation, and when fences and warnings failed to keep hunting and gathering parties off their land and fishermen away from the river, they pressed for a second treaty. The so-called Treaty of 1865 was signed by a handful of Indians who agreed to give up all the tribes' hunting, fishing and gathering

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[458]Supra.
[459]Supra at 135-136.
[460]Supra at 136.

> rights in the ceded area and to submit to a pass system for leaving the reservation - all for the paltry sum of thirty-five hundred dollars, which was to be spent on agricultural tools and supplies. This treaty was never enforced and was repeatedly discredited in court decisions, until it was finally pronounced dead by a federal judge in 1969. It may have been bogus, but the Treaty of 1865 was an accurate measure of the feelings harbored by settlers who made it increasingly difficult for their roaming neighbors to gain access to their traditional sites. While the off-reservation rights are still valid today, they are sometimes moot in the face of barbed wire, gates, dams, and poor salmon runs.

In the late 1800's and early 1900's, whites competed directly with the tribes for salmon catch.

> Well, I think Hoyt reaffirmed in 1873 or 1874, after the Modock War, when he put his hand out and said, "Water", and he said "yours" - that these are ours. And where the water comes from the mountains, the Indians recall at this time that means forest lands where the water comes from. So he said, "Water, streams, fish are yours on the main Columbia river. "Wa-la- wal-la" means a small tributary to the larger river, larger body. ... The (non-Indian) fishing started way back around 1876 when they (non-Indians) first started putting those fish wheels in there. As time went along, as long as the Indians were getting their share, whether it was their fair share or not, but the Indians harvested the salmon, so therefore they did not complain - looking at it as a gift from God that he had no control over. Live and let live.
>
> Then the white man started harvesting - didn't say anything about it. We didn't say; "Hey, you're catching too much of my fish." Because we thought that these people were really utilizing a resource for benefit so that he could survive in this country. And for that reason, maybe was a mistake that the Indians did not complain about non-Indians catching salmon, which he held sacred within his house.[461]

8.7 Changing the Production Function for Warm Springs Waters and Salmon Production Capabilities

As the twentieth century progressed, as early excesses of commercial harvest were brought under control, and when Warm Springs peoples were able to gain access to usual and accustomed fishing locations, too often they found the salmon diminished, or entirely gone. The peoples of the Warm Springs Reservation had their own mid-Columbia fishing territory, and fished cooperatively with CTUIR and Yakama peoples. It is therefore possible that they also fished from time to time along the Lower Snake River - but their usual fishing areas likely focused on the Columbia. While their fishing focus was the "lowest downstream" of our study tribes - the economic purposes for which whites transformed the lands and waters of the rivers were the same - power production and irrigated agriculture. With respect to dams:

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[461]Harold Culpus, October 6, 1982. Personal communication at Warm Springs, in, Meyer Resources, 1983. **Supra** at 40-41.

I think at the time the dams built up, like the Bonneville Dam--we seen the structure of that dam go up--and the fisheries was troubled immediately. We know the result of it. It began to show up then. And even before then when the non-Indian commercial fishermen moved into the Columbia River and built wheels and rerouted the stream to catch salmon by wheels for commercial purpose.... And the dams in the Snake River, as well as the dams in the upper Columbia. I was there when Roosevelt dedicated the Grand Coulee Dam with no fishways in the dam. And we know that there was going to be damage from that dam because we visit the dam often and the people upriver found out that it had done away with all the upriver salmon that spawned in Canadian waters as well as in the upper Columbia. All the big salmon. And that damage we seen as it came along by the construction of dams in the Columbia River. No doubt that it was probably the greatest damage to the fishing resource at that moment. ...

It's definite that the dams had the first and the real major effect on the salmon runs. We know that because by experience fishing in the Columbia River we seen this, from the time there was no dams to the time there were dams in the river. We know that a problem existed. There were different problems that affected upstream as well as downstream migrants, by the falls of the dams on the water. And different changes in the life cycle of the salmon were seen. That was already interpreted by our people. That would be a cause of a major effect on the salmon run in the future. The changing into lakes from a free, cold running stream, tributaries on the Columbia and down the Columbia, you know, that was going to effect eventually the mainstream runs of our fish industry. And it came about - no doubt.

That's what our people said. They were not educated, but they knowed it was going to happen, in fact, in time to come. Because you don't fool with nature. That was their word. Whenever you fool with it you're going to cause a problem in the future. And it seemed like there was no real plan for it. Whenever they build a dam, they promise us; "We will enhance, the fishery loused up by dams upstream." The government didn't do that.[462]

The treaty between two sovereign nations is a court of law. Treaty was recognized to be the supreme law of the land between two nations. In that supreme law of the land it plainly tells us if I do any damage to a non-Indian the law will take care of me to make corrections for what I did wrong. The same applies to him, the other part of the sovereign nation. Now, we have a claim--as long as I served on that fish committee. You're doing it wrong by clearing off my fish - by bringing nitrogen super saturation below every dam that you have built up to now.

Now correct that wrong that you're doing me. Make possible a safer way for the adult fish to go back up to their spawning area. And the smolts that hatches in the usual spawning areas need to go back down to the ocean to grow. ...

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[462]Delbert Frank Sr., Tribal Chairperson, at Warm Springs, October 6, 1982. Personal communication, in, Meyer Resources, 1983. **Supra** at 70-71.

> It's up to us, the Indians. "Say there Mr. Bonneville, you're the first dam below here that's killing the fish. Correct that now." We get up to the Dalles Dam, we do the same thing. John Day, and right on up the river... Let's correct this problem. Then we'll have fish for everyone. ...
>
> We could tell you all about our tribal ways of preparing fish rules. But still, the damage is there below each dam. So the best we could do is work on that part. Work with the Army Engineers. They're willing to build a dam. They should be willing to get safer means of getting salmon back upstream. That's our problem. The biggest problem we face.[463]

As with other study tribes, progressively through the twentieth century, the lands and waters of the Columbia/Snake system - upon which the peoples of the Warm Springs Reservation depended for their Treaty-protected salmon - have been transformed - until today, they produce vast energy, agriculture, navigation and infrastructural wealth for non-Indian residents, but only sub-minimal amounts of wealth from the natural assets the tribal peoples believed they had ensured to themselves by the treaties of the mid-1800's.

8.8 Lower Granite, Little Goose, Lower Monumental and Ice Harbor Dams

As downstream neighbors of the tribal peoples now resident at CTUIR, across-river neighbors of the Yakamas, and co-fishers at some sites with the Nez Perce, the peoples of the Warm Springs Reservation are fully affected by changes to Snake River salmon stocks caused by the lower Snake dams. It is also likely that from time to time they have fished along the lower Snake River, in common with their upstream neighbors. We have not encountered evidence that the people of the Warm Springs Reservation maintained permanent villages or other sites within the four reservoir areas of the lower Snake.

8.9 Post-Contact Warm Springs Tribal Health

The Wasco and Warm Springs peoples shared fully in the ravages of diseases spread by contact with white explorers and settlers[464]. In fact, their place as the most downstream of study tribes may have provided relatively greater exposure to epidemics raging "up from the coast". It is reasonable to assume that as with neighbor tribes, by treaty times, death had reduced the population of these tribal peoples to perhaps one-third or more of pre-contact numbers.

The wellbeing of the peoples relocated to the Warms Springs Reservation suffered for other reasons beside epidemics.

> Native people uprooted from their land lose far more than the comfort of familiar surroundings. Displaced from a natural environment that has shaped and defined them for generations, they are apt to lose the whole focus of their economy, and ultimately, of their culture. This was true for the

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[463]Linton Winishut, at Warm Springs, October 6, 1982. Personal communication, in, Meyer Resources, 1983. **Supra** at 78-79.

[464]Hunn, Eugene S., 1990. **Supra** at 27-32.

people of the Columbia River and Great Basin when they were moved to the Warm Springs Reservation. With the disruption of seasonal cycles and well- established trade patterns, the whole rhythm and momentum of their culture was broken. And behind the cultural turmoil was the more basic problem of physical survival.

Life for the new inhabitants of the Warm Springs Reservation became characterized by poverty and a sedentary non-productivity. People dependent on wresting a living from the earth became dependent on barrels of flour, sugar, and crackers distributed from the commissary at the Warm Springs Agency. Poignant stories are still told about people's great- grandparents trying to make a palatable gravy or bread out of crushed pilot crackers, or fearing corn kernels because they look too much like the teeth of old people. And often there was not enough of these foods.

While it is unlikely that the U.S. Government intended for the people of the Warm Springs to starve, it is clear from the provisions of the Treaty of 1855 (the U.S. Government intended) that the tribes were to be utterly dependent on the government until such time as they were "civilized", i.e. schooled in the economic and social patterns of the white culture.[465]

The boarding school represented a very thorough effort at "civilizing", from the arguably humane delousing treatments to the irrelevant lessons in etiquette and the staff's refusal to acknowledge any value in Indian culture. Although the regimen relaxed somewhat and the content of the curriculum was updated through the years, the mission of the school remained the same until it was absorbed by the local school district in 1961 and the dormitories closed in 1967. People in their forties tell the same stories their parents and grandparents tell about having their braids cut, being punished for speaking their own language, and learning from the disdain of teachers and administrators to feel shame for their Indianness.[466]

These conditions of heightened mortality, inadequate supply of traditional foods, general poverty and loss of control over family and lifestyle seem generally consistent with the hypotheses of illness and stress advanced by Bachtold[467] and Trafzer[468]. Consequently, and for a broad range of physiological and psychological reasons, the number of members living on the Warm Springs Reservation continued to decline into the 1940's (Table 32).

Table 32

Estimated Population of the Peoples of the Warm Springs Reservation Selected Years

Year	Population

[465]Stowell, Cynthia D., 1987. **Supra** at 132.
[466]Supra at 174.
[467]Note 66.
[468]Note 73.

1855	1,200
1899	962
1910	780
1935	479
1940	477
1945	560
1972	1,683

Sources: Stowell, 1987. **Supra** at 128.
Lane & Lane and Nash, 1981d. **Supra** at 31.

8.10 Present Circumstances of the Confederated Tribes of the Warm Springs Reservation

Having reviewed the cumulative adverse effects that have impacted the peoples of the Warm Springs Reservation since early times, this section assesses the present circumstances of the tribes.

8.10.1 Remaining Lands of the Warm Springs Reservation

The Warms Springs Reservation represents only about 6.5 percent of the original homelands of the Wasco, Warm Springs and Paiute ancestors of present reservation residents. However, land approximately equivalent to that reserved the 1855 Treaty is still in Indian hands. The greatest part of the Reservation is in forest and range land (Table 33). Table 34 specifies land holdings of the Warm Springs Tribe and its members. Approximately 17,000 acres outside the reservation boundaries are also included in present day Warm Springs holding totals.

Table 33

Categorization of Land Use on the Warm Springs Reservation - 1982

Land Use Type	Acreage
Commercial Forest	319,025
Range lands	244,677
Conditional Use Areas	66,381
Community Areas	7,495

Agriculture	2,660
Lakes and Reservoirs	1,783
Rural Housing	884
Total Acres	642,905

Source: CH2M Hill, 1982. **Warm Springs Reservation Draft Comprehensive Plan**. Developed for the Confederated Tribes of the Warm Springs Reservation, pp. xiv-15.

Table 34

Land Holdings of the Warm Springs Tribe and Its Members
- and Non-Tribal Reservation Holdings -

Categorization of Land	Acres
Tribal lands	586,803
Tribal Allotted lands	54,246
Tribal Fee lands	15,844
Tribal Trust lands	999
Indian Fee lands	218
Non-Tribal lands (all categories)	2,102
Total Land Within Warm Springs Reservation	643,000

Source: Confederated Tribes of the Warm Springs Reservation Planning Office.

It is these Treaty land-based resources and activities that have stood near the center of tribal economic development strategies in recent years.

8.10.2 What Remains of the Salmon?

While the tribes of the Warms Spring Reservation have retained the greatest portion of their treaty lands, transformation of the production function of the Columbia and Snake rivers has lead to the loss of almost all their salmon producing capability. We have previously estimated, based on all-tribes data for Zone 6 tribal commercial harvests, and data on ceremonial and subsistence catch from each CRITFC tribe, that present-day harvests for the Warm Springs and CTUIR peoples, taken together, have declined to approximately 77,000 pounds - 3 percent of the harvest they are estimated to have taken in Treaty times[469].

Yet, while salmon are now scarce, they continue to play a key role in the life of the Warm Springs people.

> Most sacred of the native foods is salmon.... Since the white settlers took an interest in the rivers and their resources, the salmon have had to contend with fish wheels, gillnets and concrete dams, suffering great declines in their populations. Now, where there was once plenty and trade flourished peacefully, Indian fishermen launch their motorboats and dip their nets into rivers of controversy.
>
> Who among the generations of fishermen poised on the rocks with their spears and nets could have guessed that one day the rapids would lie still behind dams and that there would not be enough fish to feed their people or trade with their neighbors? Who could have envisioned courts instead of headmen telling the fishermen when to drop their nets into the river, and the fishermen sitting in jail for doing what their fathers had taught them to do? Who could imagine life without salmon?
>
> Even the treaty, with its provision that the Indians would forever be able to fish "at all usual and accustomed grounds and stations...in common with all citizens", could not have anticipated the loss of salmon to generator turbines in four major mainstem dams and to overzealous ocean harvests. ...
>
> Though only a few Warm Springs men are now dependent on the river for their livelihood, salmon still figures into reservation life in a profound way. It is the central ingredient of every cultural event, served and shared as a way of honoring a person or an occasion. At feasts, salmon itself is honored. Besides its tangible presence in the diet and ceremony of the people, salmon has become a symbol of cultural continuity, of the importance of planning cautiously today so that children and grandchildren may know the taste of the sweet pink meat. It is not just on behalf of the few remaining Warm Springs fishermen that the Tribal Council has fought for tribal fishing rights. It is in the interest of all who value the conservation of the salmon resource and the continuation of the tribal culture.[470]

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[469]Recall prior Section 7.10.2.

[470]Stowell, Cynthia D., 1987. **Supra** at 179-180.

> (T)he law of the Treaty's never going to change. You're going to still be responsible for protecting what I reserved as a part of the Treaty agreement. ... (The Indian treaty negotiators) said, "You're going to be responsible forever, because that's my reserved right-- something that I reserved." Which was salmon; it's the most important one. So there's no question there that the people hold you responsible forever to manage the salmon and all of the foods that they reserved. ... I understand that now some people say, "Why, the fisheries resource's getting small, its 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 good rivers, clean rivers and the salmon. Let's go another way." That's a question coming pretty close I understood. And that is not the case. We're going to be there to say, "You're going to keep your promise. Forever!"[471]

8.10.3 A General Assessment of Present Warm Springs Material Circumstance

Today, the Confederated Tribes of the Warm Springs Reservation have 3,825 registered members[472]. Utilizing their retained Treaty land base, the Warm Springs peoples have built a reputation as one of the most economically progressive Reservations in the United States[473]. Some of their most important industrial activities are based on their 398,466 acre timber resource.

> The annual average volume of log purchases (from Warm Springs), 1971 to 1980, approximated 88 million board feet. In 1980, Warm Springs Forest Products, a tribal enterprise operating a sawmill and associated plywood and veneer facilities on the reservation, took over 80 percent of their logs from Indian contractors and paid them $4.7 million. Stumpage of $5.9 million was paid to the tribe, while $2.1 million in mill wages was paid to Indian mill workers, and $284,000 in dividends to the tribe itself.[474]

By 1990, the timber and sawmill operation were reported to be doing "about thirty million dollars in sales"[475] per year. Present forest based-activity includes a revised forest plan to provide a sustainable cut of smaller diameter timber and a new processing capability to cope with these changed tree sizes. This adjustment will reduce revenue flows for the Warm Springs, but is necessary to accommodate both exhaustion of bigger-sized trees on the reservation, and the higher value demands of new wood products markets.

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[471]Delbert Frank Sr., Warms Spring Chairman, at Warm Springs, October 6, 1982, in, Meyer Resources, 1983. **Supra** at 30.

[472]Confederated Tribes of the Warm Springs Indian Reservation, Department of Vital Statistics.

[473]White, Robert H., 1990. **Tribal Assets: The Rebirth of Native America**. New York: Henry Holt and Co., p. 187.

[474]Meyer Resources, 1983. **Supra** at 24-25.

[475]White, Robert H., 1990. **Supra**.

The Tribes also own and operate Kah Nee Ta Resort, a first class tourism facility, net $4 million annually from operation of a hydroelectric dam[476], and have developed a capability for light manufacturing activities. Table 35 offers an employment profile for the Reservation based on White (1990), and present-day Warm Springs staff estimates. Numeric estimates are not available for some categories.

Table 35

Profile - Major Employers of Tribal Members - Warm Springs Reservation, 1990 and Today

Economic Activity	Estimated Employment	
	1990	Present day
Tribal Government	600	594
Forest Products	340	142
Ka Nee Tah Resort	75-175*	50
Tribal Casino	--	24

[476]Supra.

Warm Springs Composite Products	--	24
Indian Health Service		--
Bureau of Indian Affairs	50	--
Native Arts and Crafts	- undetermined number -	

*Employment varies between summer and winter.

Source: White, Robert H. **Supra** at 211. Confederated Tribes of the Warm Springs Indian Reservation, Department of Personnel.

In 1990, the Confederated Tribes of the Warm Springs Reservation were reported to be the largest employer in central Oregon[477]. Today, a casino has been added at Ka Nee Tah - providing jobs and revenue for the tribes. Yet data from the 1990 US Census strongly suggests that these promising initiatives have not been sufficient to make up for loss of salmon resources and other aspects of Warms Springs traditional lifestyle (Table 36).

Table 36

Comparative Data Showing the Relative Material Circumstances of the Warm Springs Peoples

Economic Indicator	Warm Springs Tribes	State of Oregon
Families in Poverty (%)	32.1	12.4
Unemployment: US Census (%)	19.3	6.2
: BIA	45.0	

[477]Supra at 211.

Per Capita Income ($'000)	4.3	13.4

*US Bureau of Census employs a more liberal "employment" standard - as BIA's measure incorporates employment over a longer period of time to qualify. The higher BIA unemployment figure is judged more accurate for winter months.

Source: US Bureau of the Census - 1990 Special Tribal Census Run. US Bureau of Indian Affairs - 1995 Indian Population and Labor Force Estimates.

8.10.4 Warm Springs Tribal Health

Following Bachtold[478] and Trafzer[479], the adverse impacts on material and cultural wellbeing experienced by the Warm Springs are also reflected in information on tribal health. The Warm Springs Service Unit of the Indian Health Service serves Clackamas, Harney, Jefferson and Wasco counties. The majority of Native Americans in this service area are members of the Warm Springs - and the data considered here provide a "reasonable indication" of health circumstances for the Warm Springs Reservation. The Indian Health Service (1994b) reports that for the 1989-91 period, the age-adjusted death rate for Indians in the Warm Springs Service Unit was 1.6 times the rate for "all other races"[480]. This is the highest comparative rate for all Oregon IHS units. Less than a decade ago, White wrote:

> Despite all these (economic) efforts and the tribe's relative prosperity, the intractable problems of Warm Springs boil down to a single brute measurement: the average life expectancy within the Confederated Tribes is thirty-eight years. I asked every tribal official I met to verify that figure, and every one of them did. "Put it this way," said Ralph Minnick, "ninety percent of our people my parents' age, who would now be between fifty-five and sixty-five, are dead." [481]

Table 37 provides comparative data concerning the five leading causes of tribal death in the Warm Springs Service Area.

Table 37

Leading Causes of Tribal Death - Warm Springs Service Area: 1989-91

Cause of Death	Native American	All Other Races	Ratio of NA to Other Races
	-----deaths per 100,000 population-----		
Heart Disease	145.6	120.1	1.2

[478]Note 66.
[479]Note 73.
[480]US Indian Health Service, 1994b. **Supra** at 75.
[481]White, Robert H., 1990. **Supra** at 242.

Motor Vehicle Accident	90.0	18.6	4.8
Pneumonia/Influenza	70.0	13.3	5.3
All Other Accidents	45.7	11.9	3.9
Malignant Neoplasms	49.6	119.2	0.4

Source: US Indian Health Service, 1994b. **Supra** at 106.

Cerebrovascular disease (5.2%), cirrhosis of the liver (5.2%), SIDS (5.2%), diabetes mellitus (4.2%) and suicide (4.2%) are also significant killers of Warm Springs peoples[482].

The difficulties revealed by these data conform to the hypotheses of material and cultural loss postulated by Bachtold and Trafzer. Many tribal members, blocked at fundamental levels in meeting food, shelter and safety needs - and prevented from engaging in the worthwhile activities of their ancestors - see their self-worth underdeveloped or diminished. Yet they struggle on.

> (W)hat of the young medical intern who spends two years on the reservation answering his pager or his doorbell at all hours? He knows people by their stab wounds, their diabetes- ravaged legs, or their children lost in car wrecks. Perhaps he has not had time to feast with the people at the longhouse or bathe with them at the sweathouses. It is common for people who come to Warm Springs with a nostalgic image of the Indian to leave pronouncing the culture dead. They see "remnants" - perhaps a bit of paid pageantry or a halfhearted beadwork demonstration - and they feel pity. Or they see the collision of white and Indian culture - a pop can flying out the window of a pickup overflowing with kids and powwow music - and they feel anger. What they do not stay long enough to see is the undercurrent of culture that still flows beneath these layers of visible loss. Deep-routed religious and cultural traditions still offer solace and a sense of pride to many tribal members seeking refuge from the confusion of the twentieth century or simply wanting to celebrate their Indianness. Yes, there are certain gaps in their cultural memories and disagreements over ritual. But the people of Warm Springs do not play at being Indian; there is a real continuity of customs and beliefs from the last century despite the interruption in their lifestyle.[483]

Tribal commentators on the Warm Springs Reservation emphasized the spiritual relationship between the salmon and the Indian people - and the need for sufficient tribal control over matters affecting salmon and tribal peoples[484]. They noted that the salmon was important for putting food on the table,

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[482]US Indian Health Service, 1994b. **Supra** at 105.

[483]Stowell, Cynthia D., 1987. **Supra** at 163-164.

[484]A tribal discussion was held on October 1, 1998 at Warm Springs, with Mrs. Janice Clements, Chair of the Warm Springs Health Committee, Mr. Stanley Simtustus, Chair of the Warm Springs Fish and Wildlife Committee, Ramona Baez and Mini Yahtin (Health Committee), Terry Courtney Jr. and Harold Blackwolf (Fish and Wildlife Committee), and Willy Fuentes,

but that it was far more than that - and played an important cultural and spiritual role in the continued survival of their members as tribal peoples[485].

> When you lose your traditional foods, you threaten your culture - and then you risk losing your values too. None of that is good for your health.[486]

> Salmon is very important to our Indian lives. I have trouble with thinking of salmon only as dollars. You can't drink dollars. You can't eat dollars. Salmon is important to our spiritual life. It helps our spirit survive.[487]

> Some of the relationships between salmon and the wellbeing of tribal members are subtle. Having regular places and times to fish and to hunt brings stability to our lives. It gives us some sense of control, and makes us feel better about ourselves. It helps us connect to a higher power. This, in turn, is good for our health - and results in less risky behavior.[488]

Protection of Warm Springs lifeways through use of "own language" is also difficult in the present day. Data from the 1990 US Census suggest that only 12 percent of Native Americans on or near the Warm Springs Reservation now speak their own language at home[489].

> The gradual silencing of the native languages on the reservation seems at times like an irreversible cultural loss... . Today, very few people, mostly elders, would consider Sahaptin, Wasco, or Paiute their first language; a few more, mostly the next generation, are bilingual. But the younger generations are usually exposed to the languages only at ceremonies or during school lessons.[490]

We employ a Maslow-based hierarchical diagram to profile present circumstances of the Confederated Tribes of the Warm Springs Indian Reservation in Figure 13.

General Manager for Human Services at Warms Springs.

[485]Supra.

[486]Janice Clements. Chair of the Warm Springs Health Committee. **Personal communication** at Warm Springs, October 1, 1998.

[487]Terry Courtney Jr., Warm Springs Fish and Wildlife Committee Member. **Personal communication** at Warm Springs, October 1, 1998.

[488]Willy Fuentes, Human Services General Manager, Confederated Tribes of the Warm Springs Reservation of Oregon. **Personal communication**. October 1, 1998.

[489]US Bureau of the Census. 1990 CP 2-1A, p. 43.

[490]Stowell, Cynthia D., 1987. **Supra** at 186.

9.0 A Summary of Historic and Present Circumstances for the Nez Perce Tribe,

Shoshone-Bannock Tribes, Yakama Indian Nation, Confederated Tribes of the Umatilla Indian Reservation and Confederated Tribes of the Warm Springs Reservation of Oregon.

9.1 Treaties Between the Five Study Tribes and the United States.

The Treaties signed between the five study tribes and the United States government establish that these tribes are sovereign entities, with rights to set their own priorities and develop and manage Tribal and trust resources**.** The principal Treaties signed between the five tribes and the United States are listed in Table 38. The first four listed are part of the group sometimes known as "the Stevens treaties".

Table 38

Treaties Between the Five Study Tribes and the United States

Treaty	Signing Date	Present Tribal Organization
Treaty with the Yakima Tribe	June 8, 1855	Yakama Indian Nation
Treaty with the Umatilla Tribe	June 9, 1855	Confederated Tribes of the Umatilla Indian Nation
Treaty with the Nez Perce Tribe	June 11, 1855	Nez Perce Tribe
Treaty with the Tribes of Middle Oregon	June 25, 1855	Confederated Tribes of the Warm Springs Reservation of Oregon
Fort Bridger Treaty	July 3, 1868	Shoshone-Bannock Tribes

These Treaties addressed the unique circumstances of each tribal grouping. With respect to the present study;

* The five tribes ceded more than 60 million acres of lands to the United States - encompassing most of the referent area affected by the present study.

* The tribes agreed to move on to approximately 12.2 million acres of lands, termed "Reservations". The United States agreed that the Indians could live on these Reservations without interference from whites, and have an exclusive right to fish, hunt, gather and graze their animals within Reservation boundaries.

* The CRITFC tribes reserved the right, **outside the Reservation boundaries**, of continuing to take fish at usual and accustomed places, in common with the citizens of the territory**,** and of erecting temporary buildings for curing them; together with the privilege of hunting,

gathering roots and berries, and pasturing their livestock upon open and unclaimed lands.

* The Shoshone-Bannock Tribes "reserved the right to hunt on the unoccupied lands of the United States as long as game may be found thereon**"** - and the Court in State of Idaho v Tinno asserted that the term "to hunt" also meant "to fish".

Treaties between each of the five Tribes and the United States are "high law" . Court cases have affirmed that they cannot be overturned or contradicted by ordinary federal laws, by state laws, or by interagency agreements. The United States Supreme Court has further affirmed:

> In construing any treaty between the United States and an Indian tribe...the treaty must...be construed**,** not according to the technical meaning of its words to learned lawyers, but in the sense they would be naturally understood by the Indians. (in US vs. Washington, 1974)

The Supreme Court has developed a set of rules, termed the **cannons of construction**, to govern the interpretation of the treaties. The three primary rules are:

* Treaties are to be interpreted the way Indians would have understood them.

* Ambiguous expressions must be resolved in favor of the Indians.

* Treaties must be liberally interpreted.

The Canons of Construction are particularly important in defining Tribal entitlements to salmon. At Treaty times, tribal negotiators **reserved the right to harvest salmon at traditional locations throughout their ceded areas from a Columbia/Snake River system which was fully functional and productive. If the tribal Treaty negotiators had perceived that they were bargaining to reserve "only a small fraction" of the salmon available in 1855 – the treaty negotiations would have been much different, if they had occurred at all**. This reservation of natural assets from a "fully functioning river system", conditioned by the "fair share" provisions in US v. Washington and US v. Oregon, defines the tribal entitlement to salmon.

The Treaty signers, both tribal and non-tribal, were clear that the Treaties were designed to care for the needs of the tribal peoples into the future, without limit. Successive tribal leaders have reminded us of this intent. **There is no date in time subsequent to 1855, nor level of tribal consumption, nor subsequent decline in salmon productivity of the rivers, that cuts off tribal Treaty entitlement – short of the "fair share from the fully functioning river system", perceived by the Treaty signers.**

Finally, federal tribal trust responsibility includes, but is not limited to, treaty obligations. Its central thrust recognizes a federal duty to protect tribal lands, water, other resource assets, and the native way of life from the intrusions of the majority society. Each federal agency is bound by this trust responsibility, and must deal with tribes according to the "most exacting fiduciary standards".

For these reasons, treaties, and federal tribal trust responsibilities, set a high standard against which projects affecting resources and activities protected by treaty must be evaluated.

9.2 Changes in Treaty-Protected Resource Assets and Activities of the Five Study Tribes from Treaty Times to the Present.

9.2.1 Transfer of Tribal Assets in Treaty-Protected Lands to Non-Indians

In the treaties negotiated between the five study tribes and the United States in the mid-1800s, the tribes ceded more than 40 million acres of land to the United States – leaving themselves with approximately 12 million acres of Reserved lands – together with rights to fish, hunt and gather at traditional locations thoughout their ceded territories.

Today, the five study tribes own a total of 2.6 million acres of land within their original Reservation boundaries – only 22 percent of the Reservation lands they reserved for themselves in the treaties with the United States. The other 9.5 million acres of Reservation lands - together with the wealth they produce - are no longer in the hands of the tribes or their members. These lands have been primarily taken from the tribes by force; by "survey errors" of Reservation boundaries, seemingly always made in favor of non-Indian interest; by creation of "new" law, including post-facto legislation and pseudo-treaties to legalize prior illegal takings by non-Indians; and via subsequent laws that facilitate the transfer of tribal wealth from Reservation lands into non-Indian hands.

Particularly notable among these actions was the "steal" treaty with some Nez Perces in 1863, with took away almost 7 million acres from the Nez Perce Reservation, and the Dawes Severalty Act of 1887. The Dawes Act (together with the earlier Slater Act in 1885, and the Burke Act of 1906) privatized tribal lands, allotted a limited measure of these lands to each tribal member, and declared a substantial portion of Reservation lands "surplus" to tribal needs. It also provided that whites could purchase the tribal lands declared as "surplus", as well as tribal allotments, following a waiting period eventually amounting to 20 years. As a result of these and other actions, present tribal holdings of lands within reservation boundaries are greatly reduced, save on the Warm Springs Reservation; non-Indians usually hold the highest valued lands within each Reservation; and on four of the five study tribe Reservations, lands held by tribes or tribal members are interspersed in a "checkerboard" with lands held by nonmembers - further exacerbating difficulties associated with tribal Reservation resource protection and economic development.

Table 39 profiles the scope of tribal land ownership from contact times to the present. Estimates for the time of contact with whites consider only "home territory", and do not include the far greater area across which the ancestors of these tribes roamed. By "contact times", authorities generally refer to the period from about 1780 through 1805 or a little later.

Table 39

An Estimate of the Extent of Tribal "Own Lands" - Contact Times to the Present

Benchmark	Nez Perce	Shoshone/ Bannock	Yakama	Umatilla	Warm Springs
	----------in thousands of acres----------				
Contact times.	15,000.0	**	12,000.0	6,900.0	10,000.0
Retained Treaty lands -1855.	7,500.0		1,600.0	510.0	578.0
Land retained after boundary "survey error" (Umatilla only)..				245.0	
Retained after 1863 "steal treaty" with Nez Perce.	760.0				
Retained after Fort Bridger Treaty of 1868.		(approx.) 2,000.0			
Lands owned today - after Dawes Act "surplusing" & sales/ right-of-way takings/ and other losses.	94.0	544.0	1,126.0	158.0	658.0
: Percentage of Original Homeland now tribally owned*.	0.6%	na	9.4%	2.3%	6.7%
: Percent of Treaty Lands now tribally owned*.	1.2%	27.2%	70.4%	31.0%	100.0%

* Owned by the tribe, and/or by individual tribal members. Nez Perce percentage based on 1863 Treaty acreage.

** We have found no quantitative estimate of the area roamed by the Shoshone and Bannock peoples, nor the peoples now resident on the Duck Valley Reservation.

In sum, Table 39 shows that, since 1855, there has been a substantial trend inside the boundaries of most Reservations to transfer tribal wealth in Treaty-reserved assets into non-tribal hands. For the Nez

Perce, Treaty-reserved wealth in land has been almost wiped out. For the Shoshone- Bannock at Fort Hall and the peoples of the Umatilla Reservation, wealth has been drastically reduced. Substantial losses have also been incurred within the boundaries of the Yakama Reservation. In most instances, it has been the land that is most suitable for economic activity that has been targeted and obtained by non-Indians.

9.2.2 Transfer of Treaty-Protected Tribal Assets of the Rivers to Non-Indians

While transfer of tribal wealth in treaty-protected lands has had a drastic impact on four of the five study tribes, it is an insufficient indicator of the full seriousness of cumulative losses suffered by the tribes. Virtually all bands now represented in the five study tribes were originally "roaming" bands, to a greater or lesser extent. They followed their traditional foods to their sources, harvesting each food at its appropriate place and in its appropriate season. For four of the five tribes, **salmon** was the most important food. For the Shoshone-Bannock, salmon took an important place alongside the buffalo. This fact is affirmed by both tribal spokespersons and outside experts in the preceding narrative. For the few bands that did not roam, salmon and other near resources provided a substantial basis for year-round subsistence and trading.

The CRITFC tribes clearly understood their dependence on salmon - and in the treaties they signed with the United States in 1855 and 1868, they ceded vast amounts of land, **but were careful to reserve for their continued use all of their usual places where they were accustomed to going to harvest their foods - both inside and outside their (new) Reservation boundaries**. Explicit in the treaties of the Nez Perce, Yakama, Umatilla and Warm Springs:

> **Article 3: The exclusive right of taking fish in all streams, where running through or bordering said reservations, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.**

The Shoshone-Bannock peoples also sought to protect their access to the traditional areas where they gathered their foods. The Fort Bridger Treaty identifies these rights as follows:

> **Article 4: The Indians herein named...shall have the right to hunt on the unoccupied lands of the United States so long as game may be found thereon, and as long as peace subsists among the whites and the Indians on the borders of the hunting districts**.

And State of Idaho v Tinno states that these rights include fishing.

Despite treaty protections, the food resources of the study tribes have been devastated over ensuing years. In the years immediately following the treaties, non-Indian encroachment into the reservations by force, often legalized retroactively, made it impossible for the tribes to retain exclusive jurisdiction over fishing, hunting and gathering activities **within** Reservation boundaries. Outside the Reservation

boundaries, hostility, racist behavior and cultural encapsulation by some whites, has made it difficult and sometimes dangerous for tribal members to pursue their Treaty-protected fishing, hunting and gathering activities. And in early times, settlers transformed camas grounds to pig rooting areas, cut off tribal salmon runs with fish wheels and weirs and fenced off areas from game - and from the tribal hunters and gatherers who depended on these areas.

Tribal losses of treaty-protected salmon resources initially resulted from the same causes as losses of land-based game, roots, berries and plants - direct preemption by competing non-Indian harvesters, and obstruction or denial of access to usual and accustomed fishing places, which were often fenced off by non-Indian property owners. With respect to fishing, most of these illegal acts were eventually challenged, and struck down by federal courts. But these preemptions of tribal fishing, which, year by year, effectively separated the tribes from their treaty-protected assets in salmon, continued into the 1970's, when the Boldt Decision in U.S. v. Washington, and the following settlement in U.S. v. Oregon, reaffirmed and provided some quantitative guidelines for tribal fishing rights. In the interim, non-Indian preemptions continued to take tribal Treaty-protected wealth from the river area, and tribal peoples suffered greatly.

With each Court affirmation of tribal Treaty-guaranteed access to fishing sites, the tribes looked forward to once again sustaining their people with the salmon. Over time, they have discovered this is increasingly difficult, if not impossible. For during the struggle to reaffirm the Treaty right to fish, **the Columbia/Snake system was being transformed - to produce electricity, irrigation for agriculture, navigation services, and waste disposal - but not salmon**. Economists term this "transformation of the production function" associated with the river. Simply put, when the tribes went to reclaim the salmon-related assets they had protected in their treaties, they found these assets had largely disappeared - transformed by actions to produce electricity, agricultural irrigation and navigation, primarily for the benefit of their non-tribal neighbors. Because salmon and its values are broadly distributed among tribal peoples[491], such adverse impacts resonate throughout the study tribes.

As each dam was constructed, the tribes objected, calling on the government to reconsider - pointing out that these actions were contrary to the treaties the United States had signed with them, and predicting adverse consequences for their tribal peoples. These tribal objections and concerns were ignored, given little weight, or actively opposed by non-Indians.

Transformation of the rivers' production function, the associated destruction of Treaty assets by non-Indian interest, and the resulting transfer of the rivers' wealth from Treaty tribes to non-Indians, in large part failed to honor the protections for the tribes contained in the Treaties. River agencies assured the tribes that while risks to salmon from dam construction and other river transformation activities were not well understood, the agencies were confident that "risk to salmon could be managed" and that technology could take care of the salmon as other economic development proceeded along the river. In

[491] i.e. Lane & Lane Associates and D. Nash, 1981c. **Supra** at 49ff.

fact, such assurances have been followed by the loss of the greatest part of the salmon resources of the Columbia and Snake River systems.

Today, dominant agencies continue to examine and test "technological breakthroughs" to protect salmon passing dams. But, in a 180 degree reversal – some of these same agencies now state they wish to "avoid uncertainty" associated with salmon restorative actions - and advise more technological manipulation, study and delay. The earlier "we can manage risk to salmon as we go" stance by dominant agencies facilitated transfer of river wealth from the tribes to non-Indians. Today, the same agencies' "we don't want to act until we're more certain" stance consolidates previous takings of tribal wealth - through delay and/or preemption of rebalancing to restore the Columbia and Snake Rivers' salmon-related wealth to tribal peoples.
Conversely, tribal leaders and experts conclude that substantial restoration of the salmon producing capabilities of the Snake River system cannot wait any longer.

Table 40 illustrates the losses in potential salmon harvests incurred by the five tribes due to these cumulative actions and agency policies. Today, most harvest for the four CRITFC tribes is taken below the lower Snake River dams. Contact-times (1780's through early 1800's) and treaty-times estimates (1855 for CRITFC tribes/ 1868 for Shoshone-Bannocks) are for salmonids only. Treaty-time estimates differ from "contact" estimates due to epidemic-driven declines in tribal populations between the two periods. Estimates of per capita consumption are assumed the same for the two periods. Tribal per capita consumption may have declined somewhat by 1855, where some tribal members where harassed by non-Indians - but there is no evidence that such a trend was yet universal. Finally, as noted, due to data limitations, present-day harvest estimates are considered jointly for the peoples of the Warm Springs and the Umatilla Reservations. Estimates of present-day Tribal harvest needs represent the mathematical product of early 1800's/1855 per capita harvest estimates for tribal members and present-day tribal populations. Again, the reader is cautioned not to equate tribal harvest at any point in time with Treaty entitlement.

Table 40

A Comparison of Estimated Tribal Harvests from the Columbia/Snake System
Contact Times to the Present

Benchmark	Nez Perce	Shoshone/ Bannock	Yakama	Umatilla	Warm Springs
	----------harvest in thousands of pounds----------				
Estimated harvest in Contact Times.	2,800	2,500	5,600	3,500	3,400
Percentage of fish in diet.	40%	28%	40%	38%	50%
Estimated Harvest at Treaty Times.	1,600	1,300	2,400	1,600	1,000

Current tribal harvest.*	160	1	1,100	---77---
Percentage Reduction from Treaty-period harvest.	90.0%	99.9%	54.0%	97.0%
Present Harvest as a Percentage of Present Need.	9.4%	0.04%	14.3%	1.7%

*Current harvest estimates for the Nez Perce, Shoshone-Bannock and Yakama peoples include some catch of non-salmonid species. Shoshone Bannock estimates include Sho-Pai Duck Valley peoples.

**Northwest Power Planning Council (1985) estimated potential annual tribal catches of salmon, pre-1800, for all system tribes, at approximately 42 million pounds (p.44).

These data, along with other information in this report, have been presented "tribe by tribe". This emphasizes the unique characteristics and history of each tribal people. At the same time however, it masks the considerable degree of intertribal cooperation that existed in Treaty times, and continues to exist today among the CRITFC tribes – and the adverse impacts that forced relocation to Reservations had on many tribal families and communities.

> In our ancestors' time, we were all people of the river. We were known by the site of our village. We cooperated. We usually talked the same language. We intermarried, and had relatives in many different villages. In many ways, we were all one people.
>
> When the Reservations came, one part of a family was sometimes sent to one reservation, and another part to another – just because we lived on different banks of a river.
>
> (Eugene Greene, Sr. Confederated Tribes of the Warm Springs Reservation of Oregon)

9.2.3 Cumulative Effects from the Taking of Wealth from Study Tribes

A review of Tables 39 and 40 clearly shows that, cumulatively, from Treaty times to the present day, the five Treaty tribes have seen key Treaty assets destroyed, and much of their wealth taken from them - and transferred to non-tribal residents of the region.

> Some non-Indians say; "All these things happened before I got here." But it was their forefathers who displaced the Indians - who raped our mothers and our daughters - who killed the children - and then forced us to go to different areas because of precious metals - because they wanted the water - because they wanted the forests. These are the ugly histories they say do not pertain to them - yet unfortunately some of us still carry the hurt and pain within our hearts.
>
> (Hobby Hevewah, Shoshone-Bannock Councilor, at Fort Hall, July 17, 1998)

> My heart cries for my people, cuz we are no more Indians. We have taken up all the white man's ways. If we were still Indians, we'd be living peacefully and happily the way we used to. All our horses are gone. No more cattle. All the pasture, the land, the hillsides, taken up by the farmers, by the white man. Our horses don't roam no more; we don't have no more horses of our own like we did at one time. Every inch of tillable ground is taken up. Where our houses used to be, they tear that down, and they put wheat in there or peas right on every inch of the ground. And they've taken down all of the fences, and they've plowed through there. These big farmers, they've got everything in the world. The (Indian) owners have nothing. And they've taken everything. Like I say, they've taken our land, they've taken our rivers, they've taken our fish. I don't know what more they want.
>
> (Carrie Sampson, CTUIR Elder, at Mission, October 13, 1982)

> When the United States began building power dams in the Pacific Northwest, construction crews ruined several burials in canyons along inland rivers, including the Snake River. Sometimes archaeologists working for the federal government raided Indian burials to preserve choice specimens for university collections before water from a new dam inundated the locations.... The Yakama and their neighbors have faced a continued onslaught of ghouls, construction crews, and government agencies that disregard and discredit the spiritual beliefs of the Northwest Indians in reference to their dead. ...
>
> The reservation system of the United States destroyed the native standard of living and introduced a host of viruses and bacilli to the Indians living on the Yakama Reservation. The result was poverty, ill health and death among the Yakama people.
>
> (Clifford Trafzer, in, Death Stalks the Yakama. Michigan St. U. Press, 1997)

This targeting of "anything of value in Indian hands" by non-Indians continues today - where, for example, states attempt to appropriate revenue from cigarette sales, gambling, and any other small areas of hope on the bleak tribal economic landscape.

> If one theme stands clear in the economic and social matrix of the Nez Perce it is loss of land and the mining of the remaining land for anything of cash value.
>
> (Central Washington University, A Report to the US Minerals Management Service, 1991)

9.3 Present Circumstances of the Study Tribes

The devastating present-day results from this progressive destruction of tribal assets, and the associated taking of tribal wealth in lands, waters and salmon, are displayed statistically in Table 41. Data for the states of Washington, Oregon and Idaho are provided for comparison.

The reader is reminded that while such measures of relative wellbeing are commonplace in the dominant non-tribal culture – they do not always "fit well" or "sit well" with tribal peoples. The following quote from Nathan Jim, Sr., a Fish Commissioner from the Confederated Tribes of the Warm Springs Reservation of Oregon, succinctly captures this tribal concern.

> I don't much like this talk of unemployment and poverty. Before the white man came, we had no such thing as poverty. We lived off the land. We fished, we hunted, we gathered roots and berries. We worked hard all year round. We had no time for unemployment.
>
> Poverty came with the Reservations. We were forced to live away from our salmon and our other resources. Our poverty is our lack of our Indian resources. These resources are being destroyed by the white man. That's what's causing our poverty.[492]

Whether discussed in tribal terms, or via standardized non-tribal statistics – the present severe difficulties of the tribes are inescapable.

Table 41
Present Circumstances of the Five Study Tribes

Indicator of Wellbeing	Nez Perce	Shoshone/ Bannock	Yakama	Umatilla	Warm Springs	Idaho	All Residents Oregon	Wash.
Families in Poverty (%)	29.4	43.8	42.8	26.9	32.7	9.7	12.4	10.9
Unemployment (%)	19.8	26.5	23.4	20.4	19.3	6.1	6.2	5.7
:In winter (%)	62.0	80.0	73.0	21.0	45.0			
Per Capita Income ($'000)	8.7	4.6	5.7	7.9	4.3	11.5	14.9	13.4
Percent Who Can Speak their Tribal Language (%)	25.0	34-38	15.0	9.0	12.0	--	--	--
Ratio of Tribal Death Rate to Non-Tribal Death Rate.*	1.7	2.3	1.9	1.2	1.6	--	--	--

*Data is age-adjusted.

Even these stark data fail to capture the full seriousness of the present circumstances of the peoples of the Nez Perce Tribe, the Shoshone-Bannock Tribes, the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warm Springs Reservation. They are punctuated by premature death - particularly from deprivation-related causes,

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[492] Nathan Jim, Sr., 1999. Warm Springs Commissioner to the Columbia River InterTribal Fish Commission. **Personal communication**. CRITFC Tribal Study Session on Tribal Impacts from Drawdown of Lower Snake River dams. March 10.

that have led both tribal and non-Tribal health service providers in the early 1990's to describe tribal health circumstances as "poor", and as "alarmingly poor". Table 42 identifies death causes that are particularly adverse for the tribes, relative to non-tribal neighbors. Tribal statistics are for slightly larger Indian Health Service geographical units.

Table 42
Ratio of Tribal to Non-Tribal Deaths per 100,000 Population, for Health Areas Associated With Each Study Tribe - Selected Leading Causes of Tribal Death

Cause of Death	Nez Perce	Shoshone/ Bannock	Yakama	Umatilla	Warm Springs
Cirrhosis of the Liver	*	8.7	14.1	17.4	*
Motor vehicle accidents	4.0	*	4.4	*	4.8
All Other Accidents	2.3	5.2	2.8	*	3.9
Diabetes mellitus	*	5.9	*	*	*
Cerebrovascular disorders	3.0	*	*	3.1	*
Pneumonia/ Influenza	*	*	*	*	5.3
Heart disease	0.9	2.8	1.5	1.0	1.2
Malignant Neoplasms	0.5	1.0	0.8	1.2	0.4

*Comparative data not available in published form.

Too-high death rates for cirrhosis and accidental death are consistent with Bachtold (1983), who links loss of foods, impoverishment, and loss of meaningful activity, to tribal mistrust and despair - and with Trafzer (1997), who hypothesizes that tribal mortality in recent times is substantially linked to man-made pressures and events.

Central Washington University (1991) provides a useful encapsulation for Nez Perce, that is also appropriate to the present circumstances of the other impoverished study tribes.

> The personal suffering and tragic lives of many (Nez Perce) people are not revealed in the cold reports of tribal and federal governments. It can, however, be seen and felt in the towns and the countryside--in the eyes of men and the despair of mothers with few or no options for change. When you can no longer do what your ancestors did; when your father or mother could not do these things either; when they or you found little meaning in and limited access to the ways of mainstream culture--the power of 70 percent winter time unemployment, and 46 percent of the population below the poverty level, is visible throughout the Nez Perce landscape.
> (Central Washington University, A Report to the US Minerals Management Service, 1991.)

Salmon has played a central role in the lives of the peoples of the study tribes since time immemorial. Commentator after commentator identifies salmon at the center of tribal culture and material wellbeing - as do the tribes themselves. The CRITFC tribes took great pains to specifically reserve their Treaty

right to take salmon at their "usual and accustomed places" in each of their treaties with the United States - and the Shoshone-Bannock have also established off reservation access to salmon, in their Treaty and in the courts.

Indians have consistently opposed subsequent transformations of the Snake and Columbia rivers that have been adverse to the system's capability to produce salmon.

Today, remnant salmon remain connected to the core of tribal material and cultural life. Faced with bleak present circumstances, and severely limited prospects for remedy, the tribal peoples still look first to the salmon with hope of a better future.

> Traditional activities such as fishing, hunting and gathering roots, berries and medicinal plants build self-esteem for Nez Perce peoples - and this has the capacity to reduce the level of death by accident, violence and suicide affecting our people. When you engage in cultural activities you build pride. You are helped to understand "what it is to be a Nez Perce" - as opposed to trying to be someone who is not a Nez Perce. In this way, the salmon, the game, the roots, the berries and the plants are pillars of our world.
>
> (Leroy Seth, Nez Perce Elder, May 6, 1998)

> My specialty is psycho-social nursing. From my perspective, everything is tied together. Nothing is separate. The health of the (native) kids is impacted every day. We see kids come in who are grossly overweight, and they're laying the groundwork for the diabetes to come. The impact of the loss of the salmon, and the loss of the traditional grounds - the loss of the time with the elders to learn the ways and to feel as if you're part of the community, instead of feeling alienated, not only from their neighbors and their families but also from the bigger community of humans - has a devastating effect on the kids. I have moms come in here eighteen years old who have been pregnant two or three times, who use substances and who don't teach their children the old ways because they don't know them. They don't feed their kids the old foods because they don't have any idea what they are. So the loss of the food and the salmon is monumental - and its all tied together. Food is a really big part of the Yakama culture - as it is elsewhere. Anywhere you look in the world, food carries culture. So if you lose your foods, you lose part of your culture - and it has a devastating effect on the psyche. You also lose the social interaction. When you fish, you can spend time together - you share all the things that impact your life - and you plan together for the next year. Salmon is more important than just food.
>
> In sum, there's a huge connection between salmon and tribal health. Restoring salmon restores a way of life. It restores physical activity. It restores mental health. It improves nutrition and thus restores physical health. It restores a traditional food source, which as we know, isn't everything - but its a big deal. It allows families to share time together and build connections between family members. It passes on traditions that are being lost. If the salmon came back, these positive changes would start.
>
> (Chris Walsh, Psycho-Social Nursing Specialist, Yakama Indian Nation, August 13, 1998)

> Salmon are the centerpiece of our culture, religion, spirit, and indeed, our very existence. As Indians, we speak solely for the salmon. We have no hidden agenda. We do not make decisions to appease special interest groups. We do not bow to the will of powerful economic interests. Our people's desire is simple--to preserve the fish, to preserve our way of life, now and for future generations.
>
> (Donald S. Sampson, Chair, CTUIR Board of Trustees, December 15, 1994)

> If the dams are maintained in place, I'm not so sure we will find justice. We must restore the fish so they can multiply and get back to aboriginal numbers. They say they'll do this and do that, but so far, its been a one way street of decline. There's been no justice there.
>
> (Hobby Hevewah, Shoshone-Bannock Councilor, at Fort Hall, July 17, 1998)

9.4 The Effect of the Lower Snake Dams on Study Tribes

The four lower Snake River dams have significant, but not sole, responsibility for the desperate present circumstances of study tribes. Their construction has transformed the production function of the Snake River, destroying Treaty-protected assets and taking wealth in salmon away from study tribes, while increasing the wealth of non-Indians through enhanced production of electricity, agricultural products, transportation services and other associated benefits. These impacts on Snake River salmon must be considered in context with the effects of other system dams - together with adverse effects from pollution, water diversion and other acts.

At the same time, creation of the four lower Snake reservoirs has directly inundated approximately 140 river miles of Tribal usual and accustomed areas - and these impacts can be considered the exclusive responsibility of Ice Harbor, Lower Monumental, Little Goose and Lower Granite dams.

9.4.1 Impacts of the Lower Snake Dams on Salmon

Beaty et.al. (1999) begin with Northwest Power Planning Council estimates of pre-contact salmon run sizes, and estimate cumulative losses of salmon due to loss of habitat and passage mortality as each US Army Corps of Engineers dam was constructed on the Columbia/Snake system – together with estimates of lost **potential** harvest returns resulting from these actions[493]. These loss figures, benchmarked for the year each dam was constructed, estimate substantial damages from the four lower Snake River dams – which significantly exceed PATH recovery estimates under any action alternative for these dams.

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[493] Beaty, Roy E., Henry J. Yuen, Philip A. Meyer and Michael A. Matylewich, 1999. **Cumulative Impacts on the Peoples of the Nez Perce, Yakama, Umatilla and Warm Springs Indian Reservations from Construction and Operation of US Army Corps of Engineers' Dams in the Columbia River Basin Upstream of Bonneville Dam, Inclusive**. Columbia River Intertribal Fish Commission. A Report to the Administration for Native Americans.

Information provided previously in this report shows that the tribe farthest upriver - the Shoshone-Bannocks (and the Sho-Pai at Duck Valley) - have lost virtually all of their 1855 period anadromous harvest.

The Nez Perce Tribe has lost about 90 percent of their 1855 harvest, and this number substantially underestimates percentage losses in the Snake and Clearwater rivers, due to present-day Nez Perce participation in Zone 6 mid-Columbia tribal fisheries.

Several Snake River tributaries that historically produced significant salmon runs, including the Salmon, the Grande Ronde, and undamed portions of the Clearwater system, are located below the absolute anadromous fish barrier created by the three Hells Canyon dams. Consequently, one could expect that, if Lower Snake dams had little or no adverse effect on Snake River anadromous stocks, proportionate losses to harvests by the Shoshone-Bannock, Duck Valley Sho-Pai and Nez Perce tribes above the lower Snake dams would be much closer to losses experienced by tribal fishers in the mid-Columbia - who have also experienced substantial loss of traditional fisheries. Review of data from Table 40 indicates this is not the case (Table 43).

Table 43
Estimated Losses of Tribal Fishers - Ordered from Upstream to Downstream

Tribal Group	Harvest Target Area	Present Harvest as % of Treaty Times	Present Harvest as % of Present Needs
		----------in percent----------	
Shoshone-Bannock	Above lower Snake dams.	0.1	0.04
Nez Perce	Above lower Snake dams.	1.0	1.0
	Below lower Snake dams.	9.0	8.4
	Total above and below dams.	10.0	9.4
Yakima, CTUIR, and Warm Springs	Below lower Snake dams.	23.5	9.6

Consideration of this information leads to the following conclusions.

* Snake River anadromous stocks have been reduced significantly as a result of construction and operation of the four lower Snake River dams.

* Losses of Treaty-protected tribal harvest are almost 100 percent for the Shoshone-Bannocks and Duck Valley Sho-Pai's.

* The Nez Perce have lost virtually all of their traditional harvests above the lower Snake dams. This observation holds, even recognizing that the Nez Perce took some of their harvest from mid-Columbia sites in Treaty times. Considering harvest both above and below the four study dams, the Nez Perce have lost approximately 90 percent of their 1855-level harvests.

* It follows that the lower Snake dams have had a substantial adverse effect on the upstream Treaty fisheries of the Idaho tribes - even allowing for the presence of other upstream dams and salmon-adverse actions in the Snake River system.

* Finally, adverse impacts from lower Snake dams on harvests of the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs and upon Nez Perce fishers downstream of the four dams have also been substantial - as these tribes harvest Snake River stocks as they swim by. The impact of these losses of mid-Columbia harvest will be the product of the absolute losses incurred and the proportional role that Snake River stocks play in total fisheries along those reaches of the Columbia River.

9.4.2 Inundation Effects on the Tribes from the Four Lower Snake Dams

In addition to killing treaty salmon, the reservoirs created by the four lower Snake River dams have directly inundated approximately 140 miles of usual and accustomed living, fishing, hunting, gathering and ceremonial areas of (at least) three of the study tribes. The cultural resources approach of the tribes is holistic - and considers such things as the Indian people themselves, their communities and lifeways, the unique information of elders, clean air, clean water where salmon and other fish prized for their traditional subsistence live, hunting and gathering grounds, and other resources important to tribal life "all together".

The home territory of ancestors of the Nez Perce extended from upriver, through the lower Clearwater River in the vicinity of the present town of Lewiston, Idaho, and down the lower Snake River to about the confluence with the Palouse River on the north bank, and the confluence with the Tucannon River on the south bank.

Some bands of the Walla Walla peoples, now part of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), lived downstream of the Tucannon River along the south bank of the Snake.

The Palouse people, who now reside within the Yakama Indian Nation and the CTUIR, as well as on the Colville Reservation, originally lived at the confluence of the Palouse and Snake Rivers, and downstream along the north bank of the Snake.

These tribes often fished in common with each other and with most of their neighbors, including the tribes that presently make up the Confederated Tribes of the Warm Springs Reservation of Oregon. Other bands of Indians that are now represented by present-day treaty tribes may also have fished the lower Snake River - particularly as it neared its confluence with the Columbia. Table 44 outlines only the primary linkages between these study tribes, the home territories of their ancestors in the lower Snake area, and their relationship to the four reservoirs under study.

Table 44

The Relationship Between Present Tribal Treaty-Based Entities and Pre-Treaty Tribal Groups in the Lower Snake Reservoir Area

Present Organization	Original Tribal Groups in Lower Snake Territory	Inundation by Lower Snake Reservoirs
Nez Perce Tribe	Nez Perce Indians living along the Clearwater River, and downstream along the lower Snake to Palouse River (north side) and Tucannon River (south side).	Lower Granite. Little Goose. Lower Monumental.
Yakama Indian Nation	Palouse peoples living at the confluence of the Snake and Palouse Rivers and downstream along the north riverbank. Possibly other bands near the mouth of the Snake.	Lower Monumental. Ice Harbor.
Confederated Tribes of the Umatilla Indian Reservation	Palouse peoples living at the confluence of the Snake and Palouse Rivers, and downstream along the north riverbank. Walla Walla peoples living from the mouth of the Tucannon River downstream along the south bank of the Snake River.	Lower Monumental. Ice Harbor.

Preliminary work suggests that there are between 600 and 700 sites of particular tribal material and cultural significance associated with the four lower Snake dams. This number may eventually prove to be an underestimate. In the words of CTUIR cultural protection staff:

> When the CTUIR look at Ice Harbor and Lower Monumental reservoirs, they see a system of cultural resources that is entirely out of balance. The river is a lake, much of the land where their ancestors lived their daily lives is under the water, and the salmon have great difficulty in their migrations. The current situation is unacceptable.

Further, construction of the four lower Snake dams involved purchase of individual Indian allotments by the US Army Corps of Engineers along the river corridor from a number of Indians and others. During

the preparation of this report, several tribal respondents have stated that they consider the process associated with said purchases unfair, and against tribal interest.

Finally, transformation of the lower Snake River from "free flowing" to a series of reservoirs has also facilitated permitted discharge of potentially dangerous toxins into lower Snake waters. This raises serious concern, in the tribal view, regarding threats to water purity, to the anadromous fish and other creatures that depend upon that water, and for persons, tribal and non-tribal, who may also depend on said water, fish and game.

10.0 Assessment of Tribal Impacts on the Nez Perce, Shoshone-Bannock, Yakama, Umatilla and Warm Springs Tribes from Lower Snake River Dams

10.1 Project Alternatives Considered in this Analysis

Original identification of project alternatives by the agencies associated with this report was broad, and has been discussed elsewhere. As studies progressed, it became clear that PATH, the biologist group charged with estimating impacts on salmon and steelhead for each project alternative, would only develop quantitative impact estimates for Snake River spring/summer chinook, for fall chinook, and for steelhead - for three project general alternatives. These alternatives estimate the impact of changes at four lower Snake River dams: Ice Harbor, Little Goose, Lower Monumental and Lower Granite. The alternatives are generally defined as:

Alternative A1 (Base Case): Configuration and operation of lower Snake dams as they are today. Columbia and Snake rivers salmon flow augmentation as described in the 1995 Biological Opinion.

Alternative A2 (Transportation): The four lower Snake dams remain. Structural changes at dams and flow augmentation changes - as defined in other work groups - are made to enhance salmon survival over dams and in reservoirs.

Alternative A3 (Draw Down): Parts of each dam are removed to facilitate drawing the lower Snake River down to near natural river flow conditions - so that salmon and steelhead would not be blocked by the structures or impeded by reservoirs. Under A3, present levels of fish flow augmentation would be retained.

10.2 Criteria for Assessment of Impacts from Project Alternatives on Study Tribes

10.2.1 General Assessment Criteria

This tribal assessment focuses on whether or not each project alternative makes significant progress toward meeting the following responsibilities:

1. **Meet obligations under Tribal Treaties, or under tribal trust responsibility**. In particular, this assessment will focus on the tribal treaty right "of taking fish at usual and accustomed places", or at traditional fisheries and fishing areas more generally, and on tribal sites of material and cultural significance.

2. **Meet Distributive Justice Standards, defined by EPA's Environmental Justice (EJ) Guidelines, 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 that 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."

These overarching considerations have both been discussed earlier in our report. Because the lower Snake dams are responsible for some, but not all, of the adverse circumstances experienced by the study tribes, our assessment here considers both **explicit project effects** from the three project alternatives posed, and the role of each project alternative with respect to **cumulative effects** experienced by the tribes from progressive transformation of the lower Snake River from producing salmon to producing hydroelectric power, water for irrigation, barge transportation and related purposes. We follow the EPA EJ guidelines in defining cumulative effects as:

"the incremental impact(s) of the action when added to other past, present, and reasonably foreseeable future actions."

10.2.2 Benchmark Criteria for Assessing Impacts on Salmon and Steelhead

10.2.2.1 Contribution to Reestablishment of Tribal Treaty Fishery Assets

Each project alternative, A1, A2, and A3, will first be evaluated according to a common tribal benchmark – **substantial recovery of treaty-protected Snake River salmon and steelhead production capabilities and harvests from the cumulatively depressed levels that have damaged the tribes through much of the twentieth century**.

Tribal fishing of these stocks was guaranteed by the treaties of 1855 and 1868, between the tribes and the United States. Subsequent transformation of the lower Snake River to benefit electricity, irrigated agriculture, and river navigation interests has almost eradicated these stocks, contrary to the treaty-guarantees provided. The Treaty tribes consider that reestablishment of these tribal fishing opportunities is the only acceptable treaty remedy. Columbia River Intertribal Fish Commission (1995) has

established performance goals by which to assess "fully fishable" stock levels on the Snake River system (Table 45). Taken in total, these salmon recovery goals suggest an all-species recovery figure of 11.3 million pounds of salmon, inclusive of spawning escapement requirements and tribal harvest, for the Snake River. These recovery goals are conditioned by judgements concerning 'feasible recovery", related to upstream Snake River dams. The Beaty et al. (1999) model[494] estimates annual all-species salmon mortalities from the four lower Snake River dams alone of between 8.4 and 14.3 million pounds – or between 243 million and 410 million pounds of losses since they were constructed.

Table 45

Tribal Goals for Recovery of Selected Treaty-Based Runs of Salmonids in the Snake River System

System Component	Spring Chinook	Summer Chinook	Fall Chinook	Sockeye	Coho	Steelhead
	----------in thousands of salmon----------					
Snake River mainstem.			18.3			
Tucannon River	3.0		2.0			2.2
Clearwater River	60.0	50.0	50.0		14.0	93.0
Grande Ronde River	16.0		10.0	2.5	3.5	27.5
Salmon River	128.0	60.2		44.5		192.9
Imnaha River	5.7		3.0			4.3
Totals - Selected Species	212.7	110.2	83.3	47.0	17.5	236.2

Source: Columbia River Intertribal Fish Commission, 1995. **Wy-Kan-Ush-Mi Wa-Kish-Wit: Spirit of the Salmon**. **The Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes**. Volume II - Subbasin Plans.

Each project alternative will be evaluated with respect to its contribution to these treaty-based recovery goals. This evaluation will include assessment of impacts respecting tribal harvest, associated opportunities for treaty fishing activities – and implications for tribal material wellbeing, health, and culture. An assessment by the tribes concerning the "significance" of impact gains or losses incurred is also presented.

[494] At Note 493.

10.2.2.2 Contribution to Diminishing Risk of Treaty Fisheries Extinction

Snake River salmon stocks are in adverse condition, and several have been "listed" as threatened and/or endangered. Such listing reemphasizes the need for strong remedial action before these stocks become extinct. Work by Nehlsen, Williams and Lichatowich (1991)[495] , and present listing actions, indicate that such endangerment of Pacific salmonids is continuing.

This extreme level of risk to subject Snake River stocks is the joint product of "their present threatened and endangered condition", and "the length of time over which this condition is projected to continue". Tribal leaders and experts conclude that **the continuation of Snake River salmonid stocks as "listed species" perpetuates the likelihood that, given normal variations in abundance, these stocks may eventually become extinct. Conversely, if Snake River salmon stocks can be "delisted" quickly, risk of extinction will be lessened.** This provides an important risk-adverse distinction between lower Snake River project alternatives. Consequently, **rapidity of delisting** will be considered as an additional measure to distinguish between the risks that alternative project actions pose for salmon and for the tribes.

10.2.3 Criteria for Assessing Impacts on Usual and Accustomed Tribal Living Areas and Sites Within the Boundaries of the Four Reservoirs

Project impacts on the tribes in the area of the dams and reservoirs themselves will be direct. Principally, they will entail destruction, inundation and/or restoration of areas and sites where peoples from the study tribes lived; fished, hunted, and gathered roots, berries and plants; conducted important ceremonies; died and were buried. In some instances, construction of the dams entailed the taking of allotted lands from Indian peoples living along the river.

The effects of each project alternative on the material and cultural circumstances of the tribes within this "project area" will be generally discussed. Little in the way of specific assessment of impacts has been done, and significantly more work on "project area tribal impacts" will be required once a preferred project alternative has been selected. A preliminary outline of the scope and potential cost of such work is included in this report.

10.2.4 Reduction of the Pain and Suffering of Tribal Peoples

This report has documented the unacceptably high rates of poverty, unemployment and death presently suffered by peoples of the study tribes – and the cumulative linkage between these conditions and destruction of the salmon and other Treaty-protected resources. Tribal leaders point out that **tribal suffering is continuing in each future year that salmon recovery does not occur.** Their conclusion, and that of this report, is that if the federal government continues to "study" recovery, but

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[495]Nehlsen, Willa, J.E. Williams and J.A. Lichatowich, 1991. "Pacific Salmon at the Crossroads: Stocks at Risk from California, Oregon, Idaho and Washington", in, **Fisheries** 16:2. pp. 4-21.

does not immediately institute actual measures that have a strong probability of facilitating substantial salmon recovery in the Snake River, **tribal suffering and death will continue**. In this context, the Tribes assert that they have no interest in NMFS salmon recovery benchmarks that are set 100 years into the future – and no such benchmarks are utilized in this report.

10.3 Estimates of Salmon Run Sizes and Tribal Harvests Under Each Alternative

PATH-based effects of each alternative action on total Snake River wild salmon run size are presented in Table 46. Initially, the A-Fish Team developed estimates for spring/summer chinook based on evaluation of PATH results by eminent Independent Experts. Subsequently, the National Marine Fisheries Service (NMFS) directed its economic consultants to revise their analysis, and base estimates on PATH results prior to Independent Expert evaluation. This NMFS directive does not change the rank order of Alternative actions at lower Snake, but makes A1 and A2 look somewhat better, compared to Independent Expert conclusions.

CRITFC biologists conclude that this NMFS directive represents a "retreat from best science". Consequently, the estimates in Table 46 are based on the Independent Expert assessment of PATH findings. Alternative A3 estimates are based on a three year implementation period – and differ little from data based on an eight year implementation period.

The recovery forecasts in Table 46 are from Radke and Davis (1999), consultants to the A-Fish Team, not from CRITFC. Should further peer review identify required adjustments, the estimates presented here will change. These data may overestimate for two reasons. First, PATH analysis was built from a present-day status quo – which failed to incorporate any relevent long term negative trends in Columbia/Snake stock sizes[496]. Second, the Radke and Davis analysis uses "Year 0" stock starting point assumptions that likely exceed PATH's "present conditions" by approximately 34 percent for spring/summer chinook, and 43 percent for fall chinook.

Table 46

Estimates of Snake River Wild Salmon Recovery – Lower Snake River Dam Alternatives

Project	Spring/Summer Chinook			Fall Chinook			Summer Steelhead		
Year	A1	A2	A3	A1	A2	A3	A1	A2	A3
	recovery run size in thousands of wild adult salmon								
0	11.7	11.7	11.7	2.0	2.0	2.0	21.2	21.2	21.2
5	15.4	14.9	15.2	3.6	3.6	2.2	23.6	23.3	23.5
10	21.7	20.3	21.3	5.5	5.5	8.0	27.2	26.4	27.0

[496] For a discussion of adverse trends potentially leading to extinction for some Snake River stocks, see for example, Monday, Phillip R., 1999. **Status and Expected Time to Extinction for Snake River Spring and Summer Chinook Stocks: The Doomsday Clock and Salmon Recovery Index Models Applied to the Snake River Basin.** A Report to Trout Unlimited. Portland, Oregon.

15	27.5	26.0	31.8	6.4	6.4	26.7	29.9	29.2	31.9
20	31.6	30.5	42.6	7.0	7.0	39.3	31.5	31.0	35.9
25	30.2	28.5	47.2	7.2	7.2	42.0	31.0	30.3	37.4
30	31.3	29.0	49.5	7.2	7.2	43.3	31.5	30.5	38.0
50	32.3	29.2	54.5	7.1	7.1	43.5	31.9	30.6	39.5

Source: DREW Anadromous Fish Team, September 24, 1999.

The Anadromous Fish Team also calculated total salmon stock size for each alternative under a scenario that incorporated estimated hatchery operations. Total stock estimates, for both wild and hatchery fish are displayed in Table 47.

Table 47

Estimates of Snake River Wild Salmon Stock Recovery with Hatchery Supplementation
-Three Lower Snake River Dam Alternatives-

Project	Spring/Summer Chinook			Fall Chinook			Summer Steelhead		
Year	A1	A2	A3	A1	A2	A3	A1	A2	A3
	------recovery run size in thousands of wild and hatchery adult salmon------								
0	19.7	19.7	19.7	7.9	7.9	7.9	126.8	126.8	126.8
5	20.0	19.6	21.1	6.9	6.9	8.0	107.5	108.0	113.7
10	28.3	26.7	33.7	13.5	13.5	28.7	126.6	125.1	159.4
15	46.3	43.8	62.0	16.7	16.7	152.2	197.7	188.4	246.3
20	55.6	54.1	87.5	18.4	18.4	200.7	215.4	207.9	303.0
25	53.9	51.4	96.6	19.1	19.1	206.9	214.2	205.3	315.1
30	55.5	51.8	100.8	19.0	19.0	211.6	214.8	203.8	319.8
50	57.3	52.4	110.8	21.4	21.4	217.3	222.1	207.8	332.9

Source: DREW Anadromous Fish Team, September 24, 1999.

Estimates of tribal harvest under each alternative have also been provided by the DREW Anadromous Fish Team. These estimates are displayed, by alternative, for wild salmon in Table 48, and for wild and hatchery salmon combined in Table 49.

Table 48

Estimates of Tribal Wild Salmon Harvest of Snake River Stocks After Salmon Restoration Actions at the Four Lower Snake River Dams

Project	Spring/Summer Chinook			Fall Chinook			Summer Steelhead		
Year.	A1	A2	A3	A1	A2	A3	A1	A2	A3
	numbers of wild adult salmon								
0	533	533	533	466	466	466	1,529	1,529	1,529
5	721	723	667	571	571	353	1,821	1,799	1,811
10	1,401	1,332	1,359	880	880	1,289	2,235	2,169	2,218
15	2,166	1,921	2,854	1,026	1,026	4,288	2,603	2,539	2,778
20	2,703	2,500	5,689	1,118	1,118	6,323	2,903	2,857	3,308
25	2,593	2,285	6,851	1,158	1,158	6,769	10,867	10,595	13,082
30	2,721	2,296	7,429	1,149	1,149	6,970	11,009	10,671	13,310
50	3,102	2,400	8,689	1,126	1,126	6,994	11,151	10,720	13,836

Source: DREW Anadromous Fish Team, September 24, 1999.

Table 49

Estimates of Tribal Wild and Hatchery Salmon Harvest of Snake River Stocks After Salmon Restoration Actions at the Four Lower Snake River Dams

Project	Spring/Summer Chinook			Fall Chinook			Summer Steelhead		
Year.	A1	A2	A3	A1	A2	A3	A1	A2	A3
	numbers of wild and hatchery adult salmon								
0	1,026	1,026	1,026	1,893	1,893	1,893	30,087	30,087	30,087

5	940	951	929	1,094	1,094	1,265	25,386	25,573	27,160
10	1,826	1,757	2,144	2,158	2,158	4,604	32,040	31,758	41,920
15	3,647	3,242	5,570	2,662	2,662	24,417	53,398	50,729	67,648
20	4,759	4,432	11,682	2,946	2,946	32,332	62,106	59,789	89,296
25	4,623	4,125	14,009	3,062	3,062	33,311	74,979	71,858	110,373
30	4,825	4,101	15,138	3,045	3,045	34,066	75,186	71,321	111,940
50	5,511	4,297	17,662	3,408	3,408	34,976	77,723	72,740	116,518

Source: DREW Anadromous Fish Team, September 24, 1999.

Finally, PATH-based tribal harvest recovery estimates are converted into pounds, assuming average weights of 20.1 pounds per salmon for spring and summer Chinook, 19.1 pounds per salmon for fall Chinook, and 8.5 pounds per fish for Steelhead. Results for the 30 year and 50 year benchmarks are displayed in Tables 50 and 51.

Table 50

Estimated Tribal Harvest of Snake River Stocks in Pounds Following Restorative Action At the Four Lower Snake Dams, By Species

Project	Spring/Summer Chinook.			Fall Chinook			Summer Steelhead		
Year	A1	A2	A3	A1	A2	A3	A1	A2	A3
	thousands of pounds of salmon								
Wild Salmon and Steelhead Only:									
0	10.7	10.7	10.7	8.9	8.9	8.9	13.0	13.0	13.0
10	28.2	26.8	27.2	16.8	16.8	24.6	19.0	18.4	18.9
30	54.7	46.1	149.3	21.9	21.9	133.1	93.6	90.7	113.1
50	62.4	48.2	174.6	21.5	21.5	133.6	94.8	91.1	117.6
Wild + Hatchery Salmon and Steelhead:									
0	20.6	20.6	20.6	36.2	36.2	36.2	255.7	255.7	255.7
10	36.7	35.3	43.1	41.2	41.2	87.9	272.3	269.9	356.3

30	97.0	82.4	304.2	58.2	58.2	650.7	639.1	606.2	951.5
50	110.8	86.4	355.0	65.1	65.1	668.0	660.6	618.3	990.4

*Developed from data provided by PATH and the DREW Anadromous Fish Team.

Table 51

Estimated Tribal Harvest of Snake River Stocks in Pounds Following Restorative Action At the Four Lower Snake Dams – All Species Taken Together

Project Year	Wild Salmon			Wild + Hatchery Salmon		
	A1	A2	A3	A1	A2	A3
	----------in thousands of pounds----------					
30	170.2	158.7	395.5	794.3	746.8	1,906.4
50	178.7	160.8	425.8	836.5	769.8	2,013.4

*Developed from data provided by PATH and the DREW Anadromous Fish Team.

Considering these data, several conclusions are apparent.

1. A2, the alternative that maximizes retrofiting of lower Snake River dams, is the poorest of the three alternatives considered. It offers lower salmon and steelhead stock levels than even A1, the approximate status quo alternative. From a biological perspective, it is unlikely to meet salmon recovery objectives within any reasonable timeframe. A2 provides only marginal recovery of tribal harvest, and offers little relief to the long term damages and associated suffering incurred by tribal peoples.

2. A1, the “status quo” NMFS Biological Opinion option, is little better. As with A2, it offers limited hope of salmon recovery within a timeframe that reasonably addresses the

ongoing suffering of the Treaty tribes. At the 30 year benchmark, it would support only 7 percent more tribal harvest on wild Snake River stocks than would A2, and about 6 percent more tribal harvest on hatchery and wild stocks taken together. These are very small improvements from presently impaired harvest levels.

3. A3, the drawdown alternative, would produce 2.4 times more tribal harvest of Snake River wild salmon and steelhead stocks, compared to Alternative A1 (2.6 times more harvest compared to A2). A3 is also significantly more likely to reach biological recovery goals for salmon within a reasonable time period. By Year 50, estimated A3 tribal Snake River harvests increase by 1.7 million pounds – increasing current diminished tribal harvests from all Columbia/Snake system steelhead stocks (Table 40) by 2.3 times.

   Given the recovery estimates of PATH and DREW's Anadromous Fish Team, the A3 alternative falls significantly short of meeting either CRITFC's total recovery goals for Snake River stocks, or the estimated damages done to Treaty-protected tribal salmon by the Snake River dams in prior years.

   However, of the alternatives considered in this Corps of Engineers process, A3 is the only Action that would signal a substantive change in the cumulative destruction of Snake River salmon, and redirect river actions toward significant improvement of the cultural and material circumstances of the tribes – with attendant reductions in the pain, suffering and mortalities suffered by tribal peoples.

10.4 Assessment of Tribal Impacts Associated with Tribally Important Riverside Areas from Lower Snake River Project Alternatives

The lower Snake River corridor - from Ice Harbor Dam upstream to slightly above Lewiston, Idaho on the Snake River, and for approximately four miles upriver on the Clearwater River from its confluence with the Snake - represents approximately 150 miles of ceded tribal river-bottom lands. Here, the ancestors of the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation and the Yakama Indian Nation lived, and conducted the full range of harvest, social and spiritual activities associated with their lifeways. The Nez Perce Tribe consider that upper riverside sections inundated by Lower Granite reservoir were alienated from the Nez Perce by actions of the United States and some Indians leading to the "steal treaty" of 1863 - and that this area should, in fact, be considered as part of the Nez Perce Reservation.

Tribal members continued to live along these river sections, practice their Treaty- protected fishing, hunting and gathering activities, conduct cultural and spiritual ceremonies, and bury their dead at usual and accustomed places, until construction of the four lower Snake dams and filling of their reservoirs progressively eliminated living tribal peoples from these areas, starting in the mid 1950's. Villages important to the tribes existed, particularly at the mouth of tributary rivers, such as the Tucannon, and the Palouse. Preliminary work has identified between 600 and 700 important tribal cultural sites in the

areas affected by the four dams and reservoirs - and this is considered by the tribes to be an underestimate, for the tribes lived and traveled throughout the referent river corridor.

Tribal members coexist with their rivers and streams, with the lands that surround them, with the other creatures who share them, and with their ancestors who rest in the lands. The rivers and streams are considered part of the land, and part of the people who live there. Many tribal commentators have described the river waters as "the blood that flows through the veins of our mother the Earth to give us life". Tribal peoples view the waters of the river and certain important resources such as the salmon as important elements of their religion - and hold them sacred. These relationships have been described as "pillars of tribal culture", which provide substantial comfort to tribal members, particularly during the adverse impacts that tribes have endured from contact times to the present.

10.4.1 Alternative A1 - Present Operations with 1995 Biological Opinion

The A1 Project Alternative maintains Lower Granite, Lower Monumental, Little Goose and Ice Harbor dams in place, and operates them within fish constraints established by NMFS's 1995 Biological Opinion. This alternative continues the separation of some members of the Nez Perce, CTUIR and Yakama Reservations from the grounds in which their ancestors are buried along the lower Snake River stream-sides - and renders it impossible to care for their graves[497]. The four reservoirs preempt 150 miles of Treaty-protected tribal fishing, hunting, and harvesting of roots, plants and berries at usual and accustomed stream-side locations. They prevent the subject tribes from holding religious and cultural ceremonies along these 150 miles of stream-side in the places the tribes were accustomed to hold them - and filter the spiritual relationship between the tribes, their ancestors and their spiritual places through many feet of reservoir waters. Effectively, the dams and reservoirs inundate most substantial aspects of cultural, material and spiritual life along the lower Snake River for affected tribal peoples - and separate the tribal peoples from them – impairing the close bond between these people and their lands.

The four lower Snake River dams were some of the last constructed in the Columbia/Snake system. It is possible to gain some insight into the magnitude of these inundations for tribal peoples by identifying that the four dams have a combined estimated surface area of about 33,890 acres[498], and comparing this acreage to the total areas still retained by the Nez Perce, CTUIR and Yakama, from Table 39. Results are displayed in Table 52.

Table 52

A Comparison of Area Inundated by the Four Lower Snake Dams with

[497]Some graves were relocated outside the influence of the reservoirs when the dams were built. Tribal cultural protection experts report that many tribal graves remain under reservoir waters.

[498]US Army Corps of Engineers, 1994. **Columbia River Salmon Mitigation Analysis System Configuration Study, Phase 1: Lower Snake Reservoir Drawdown Draft Technical Report**. Appendix A. Walla Walla.

Remaining Tribal Ownership of Lands by the Nez Perce, CTUIR and Yakama

Tribe	Tribally Owned*	4 Reservoir Acreage	Ratio of Reservoir Surface Area to Tribal Acreage .
	--------in acres------		-in percent-
Nez Perce	108,000	33,890	31.4
CTUIR	158,000	33,890	21.4
Yakama	1,126,000	33,890	3.0

*Owned by the tribe and/or by individual tribal members.

We conclude that continued inundation of reservoir areas under A1 has a significant land-related adverse impact on tribal peoples of the Nez Perce, CTUIR and Yakama Reservations.

10.4.2 Alternative A2: Maintenance of the Four Lower Snake Dams at the A1 Standard, with Added Facilities to Transport Salmon by the Dams

Operation of the four lower Snake River dams under A2 will have the same inundation effects as for A1. We consequently conclude that Alternative A2 inundates lands that are significant for the peoples of the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation and the Yakama Indian Nation. The nature of these losses of land for tribal peoples are discussed in the preceding section and in other parts of this report - and are incorporated here by reference.

10.4.3 Alternative A3: Permanent Drawdown of the lower Snake River Dams

Alternative A3 would permanently drain the four Lower Snake Reservoirs, returning flows to "near natural" conditions. This action would create substantial land-based benefits for the peoples of the Nez Perce Tribe and the Confederated Tribes of the Umatilla Reservation - and would also significantly benefit members of the Yakama Indian Nation. It would allow these tribal peoples to renew their close religious/spiritual connection with 33,890 acres of lands where their ancestors lived and are buried - and allow them to properly care for their grave sites. They could return to more than 600-700 locations where they are accustomed to live; fish; hunt; harvest plants, roots and berries; conduct cultural and religious activities and ceremonies; and pursue other aspects of their normal traditional lives. The area that would be unflooded is almost one-third as large as all lands that remain under Nez Perce ownership - and fully one-fifth as large as lands remaining under CTUIR ownership. So A3 offers substantial opportunity to improve the ongoing cultural and material lives of these tribal peoples.

Save for the disputed area under Lower Granite reservoir, these inundated lands lie outside formal Reservation boundaries. The magnitude of benefits associated with renewed tribal access under A3 would be principally conditioned by four factors:

1. **Treaty-based required tribal access to Usual and Accustomed fishing places**.

   This requirement has been discussed extensively in the foregoing document. No further elaboration is provided here.

2. **Treaty rights of the tribes to hunt and gather on off-Reservation ceded public lands**.

   Tribal treaty rights to hunt and to gather roots, plants and berries off-reservation are conditioned by the availability of public lands. If "uncovered lands" of the lower Snake River remain in the public domain, benefits for the tribes will be extensive. If uncovered lands are converted to non-Indian private ownership benefits to tribal peoples will be diminished.

3. **Taking of tribal lands prior to construction of lower Snake River dams and reservoirs.**

   In order to construct the dams and reservoirs of the lower Snake River, the federal government obtained a number of individual allotments held by tribal peoples. Authority for such Indian allotments originated with the Dawes Act of 1887. If the lower Snake lands are uncovered, and these lands returned to individual tribal allottees, or to the tribes in general, tribal benefits will be significant. If these lands are utilized for other federal or non-tribal private purposes, potential tribal benefits would be reduced or eliminated. Further, action to convert lands taken from tribal allotees during the dam construction process to private non-tribal ownership might represent an inappropriate "conversion by process" of tribal lands.

4. **Deed Uncovered Lands to the Tribes as Compensation for Treaty-related damages.**

   Tribal leaders assert that the federal government should deed lower Snake River lands uncovered under A3-Drawdown to the tribes – as in-part compensation for tribal losses incurred due to these dams over the approximately 40-year period of their operation - and/or as compensation for some of the other adverse actions detailed in this report. Such a deed of uncovered reservoir lands would substantially increase tribal benefits associated with drawdown, and assist tribal cultural and material recovery.

Impacts associated with land-based effects on study tribes from the A1, A2 and A3 lower Snake River alternatives are summarized in Table 53

Table 53

Tribal Flooding Impacts from Lower Snake River A1, A2 and A3 Project Alternatives

	A1	**A2**	**A3**
Impact	Dams Remain+Biop.	Dams+Added Fish Passage	Reservoirs Gone/Breach Dams
Fishing	Access to many salmon		Would reestablish usual and

sites.	fishing sites preempted. Some alternative sites available (principally, non-salmon).	Same as A1.	accustomed fishing locations along 150 miles of river.
Hunting/ gathering areas.	33,890 acres flooded.	33,890 acres flooded.	Up to 33,890 acres restored for tribal Treaty-based hunting and gathering of roots, berries and plants.
Tribal land base.	Eliminated 33,890 acres from tribal use.	Same as A1.	Would add land-based tribal opportunities up to one-third the size of present Nez Perce land holdings, or, up to one-fifth the size of present CTUIR land holdings.
Cultural activities.	Floods more than 600-700 locations where cultural activities occurred.	Same as A1.	Would enable tribal peoples to to reestablish contact and use of over 600-700 usual and accustomed locations.
Religious/ Spiritual.	Floods numerous tribal graves. Involved violation and stealing of the bodies of some ancestors. Separates tribal peoples from their land, their rivers, and their sacred and ceremonial places.	Same as A1.	Would reunite tribal peoples with the land, the river and the creatures of the lower Snake. Would allow tribes to care for the graves of loved ones. Would recover sacred and ceremonial places.

10.5 Cumulative Impacts from Lower Snake River Project Alternatives

This section summarizes the trend over time of federal and other non-Indian actions and policies identified in this report, the cumulative effects of such actions and policies on the study tribes, and the role that each Project Alternative for the four lower Snake River dams would play with respect to such actions, policies and cumulative effects. Working from the information supplied in this report, we pay particular attention to four indicator areas: **cumulative effects on distribution of wealth between tribal and non-tribal peoples**; **effects on material wellbeing and health; effects on tribal culture and spiritual wellbeing;** and **cumulative effects on tribal self-sufficiency, self-control and self-empowerment**.

10.5.1 Cumulative Effects on Distribution of Wealth

The cumulative effects on distribution of wealth from dominant policies and actions in the Snake and mid-Columbia river regions are clear cut. Put simply, from treaty times to the present, non-Indians have followed a steady policy of appropriating for themselves virtually every tribal asset that was perceived to be of value - including assets reserved by the tribes in their treaties with the United States.

In the mid and late 1800's, these appropriations were achieved by application of force and violence: by non-Indians coming onto tribal Reservation lands and resisting any attempts to remove them; by harassing, threatening and exerting physical injury and outrage upon Indians who attempted to leave the Reservations to visit their Treaty-guaranteed off-reservation harvest locations; and by building weirs downstream of tribal harvest sites, that blocked passage of the salmon to these further upriver tribal locations. As the twentieth century progressed, harassing actions have diminished - although they have not disappeared in the present day[499].

Following enactment of the Treaties in the mid-1800's, transfer of wealth from tribal to non-tribal hands was further facilitated by "laws (and agreements) of convenience". These "laws of convenience" took advantage of the disempowered status of treaty tribes, or ignored the tribes altogether. Some of these initiatives, such as the "steal treaty" with some Nez Perces in 1863, retroactively legalized previous "land grabs" of tribal treaty assets. Other actions, such as "tribal land surplusing" provisions in the Dawes Act of 1887, taking of tribal lands for railways and other right-of-ways, and substantial "surveying errors" in determining reservation boundaries (always with the effect of transferring tribal lands to non-Indians), acted to strip further valuable tribal Treaty assets away from the study tribes.

The Dawes Act also established and "legalized" a procedure which, whatever its intent, has over the years facilitated conversion of vast acreages of tribal Treaty land and its associated wealth to non-Indian ownership.

Only the peoples of the Warm Springs Reservation have been able to effectively resist these efforts to take tribal lands.
The four dams of the lower Snake River were built in the mid-twentieth century, and played no direct part in the actions cited above. However, these (largely) prior actions initiated and maintained a conversion of wealth from tribal into non-tribal hands by federal and associated dominant entities, which continues to the present day. **Construction and operation of the four lower Snake River dams <u>have</u> played a significant role in continuing this cumulative taking of tribal treaty assets from the tribes, and in converting them to non-tribal hands, from the mid-twentieth century to the present**.

A principal manner in which tribal treaty wealth has been taken in the twentieth century is by **transforming the production function of the river**. From construction of the earliest dams in the Columbia and Snake system through to the present, dams have changed what the lands and waters of the Columbia/Snake basin produce. This transformation has substantially increased production of

[499] Greenfeld and Smith (1999, p.iii) identifies that violence against Native Americans occurs at more than twice the rate affecting other Americans – and that the violator is more likely to be of a different race, than for other ethnic subgroups.

hydroelectric energy, irrigated crops and associated infrastructures - but substantially reduced, and sometimes eliminated treaty-protected salmon resources; and inundated tribal sacred and ceremonial places and usual and accustomed harvesting and gathering locations, that have been at the core of tribal existence since earliest times.

Early actions by non-Indians to secure tribal lands and other assets, construction of hydroelectric facilities other actions in the first half of the twentieth century, and subsequent construction of the lower Snake River dams, have each played their role in sustaining this policy, cumulatively stripping Tribal assets from tribal hands, and in consequence, reducing tribal wealth.

Tribal and non-tribal peoples usually do not agree on exactly how to describe or measure the value of a salmon, or of other treaty-protected resources. However, Indians and non-Indians do agree that **the wealth that can be produced from the river and stream-side lands of the Snake River corridor is of high value**. From an economic perspective, it is the struggle over what should be produced by the resources of the Snake River, and over how this production should be shared, that has characterized conflict between the tribes and other entities on the river.

In this debate, the Treaty tribes have suffered substantial net losses - and the sustaining guarantees provided by the United States in the Treaties, and affirmed in subsequent court decisions, have usually been ignored and/or overridden. This has resulted, over time, in a cumulative injustice - the conversion of Treaty and other legally protected assets away from the tribes, to benefit non-Tribal peoples of the region.

Prior evidence in this report, by the PATH Scientific Review Panel (1998)[500], and from DREW's Anadromous Fish Team, identify that selection of Project Alternative A1 (Status Quo with Biop.) will continue the cumulative trends and policies that have impoverished the tribes - through continued inundation of tribal Usual and Accustomed areas along the river – and by offering low probabilities of salmon recovery and delisting for at least another 48 years.

Selection of A2 (Status Quo + Added Fish Passage Facilities) also fails to remedy inundation of tribal lands and resources along the lower Snake River corridor, and indicates salmon recovery results which are inferior to A1. Consequently, A2 will also continue cumulative policies

detrimental to the tribes - for at least another half century with respect to salmon, and indefinitely with respect to flooding of tribal stream side areas and resources.

Exacerbating these conclusions is the fact that the "salmon recovery" estimates presented in PATH Scientific Review Panel (1998) refer to "delisting" of spring/summer chinook, **not to reestablishment of significant salmon harvests for the Treaty tribes**. In fact, examination of data from PATH and DREW suggests that reestablishment of substantial tribal fisheries is unlikely under either A1 or A2 on any schedule that will provide meaningful relief for the tribes.

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[500]PATH Scientific Review Panel, 1998. **Supra.**

Consequently, under either of these two alternatives, one can expect continued cumulative net transfers of wealth potentially associated with the study area, from tribal to non-tribal hands.

Selection of Alternative A3 (Dam Breaching and Reservoir Drawdown to Natural River) would have an opposite cumulative effects impact from A1 and A2. It would remove the reservoirs presently covering important tribal usual and accustomed locations along approximately 150 miles of lower Snake riverside, and which currently prevent tribal fishing, hunting and gathering at traditional locations. Data from PATH Scientific Review Panel (1998) indicate that under A3, the probability of delisting salmon approaches 80 percent by the 48 year benchmark. DREW analysis of that PATH data also suggests an enhanced level of tribal fishing. From a cumulative impacts perspective, selection of A3 would reverse an almost century and one-half long trend to cumulatively strip tribes of their valued assets, even where such assets were treaty-protected - and move toward "rebalancing" of wealth distributions between the tribes and non-tribal peoples of the study area.

10.5.2 Cumulative Effects on Tribal Health and Material Wellbeing

Summary comparison of the cumulative effects of project alternatives on tribal health and material wellbeing is foreshadowed in the previous report section. Data on pre-treaty health and material circumstances of the subject tribes in the early to mid 1800's is limited - and their lifestyle, and that of non-Indian neighbors, did not much resemble lifestyles of today. But we do know that the tribes generally had ample resources for sustenance and trading - that for the most part, they lived stable peaceful lives - and that their command over the material and spiritual elements that secured their lifeways left them satisfied at family, societal and individual levels.
Epidemics of "white man's diseases" cut a huge swathe through the lives of tribal members - yet those who survived were still in control of their lands and other resources, and the ability to access and utilize them. Hence, they controlled the basic elements of their lifestyle.

While the tribes ceded vast amounts of land to the United States in their treaties, they were careful to retain for themselves the key elements by which they had always survived - the salmon, and the waters that sustained them; access to the lands over which they hunted; and the lands where they gathered roots, plants and berries. Tribal off-reservation hunting and gathering was to be limited to public lands, which could arguably have been expected to diminish in scope over time. No such limitation was agreed to in the Treaties, or in other discussions between the tribes and non-Indians, with respect to tribal fishing rights - and consequently, over time, fishing rights, always a central element of survival for the tribes, has come to have greater and greater relative importance.
Our report documents the cumulative erosion of tribal control of and access to key land elements required for their survival - and of the salmon and other food resources upon which they have always depended. Loss of salmon is also severe because today's tribes are isolated on distant reservations, where fishing provides one of the few potential activities where tribes posses a measure of comparative advantage in the modern highly competitive world.

Today, as a result of these losses, tribal families endure poverty at between two and four times the rates reported for non-tribal neighbors. Unemployment reaches as high as 80 percent in winter months. Tribal peoples have life expectancies far lower than for residents of Idaho, Washington and Oregon as a whole, and are dying at rates that are between 20 percent and 130 percent higher than for non-tribal neighbors, depending on the tribe considered. Deaths associated with risky behavior and poor diet are particularly noticeable. For example, tribal rates of accidental death in motor vehicles exceed those for non-tribal neighbors by 4 times or more. In general, the death profile for the tribes is consistent with socio-psychological predictors where peoples are progressively deprived of their basic means for providing their own foods, assuring their safety, and maintaining sufficient control over their own lives.

As we have noted earlier, much of this cumulative decline occurred before construction and operation of the four lower Snake River dams - and should not be directly related to them. But the four lower Snake dams represent important recent elements in this long line of actions - the cumulative effect of which has been extreme impoverishment and elevated levels of death for tribal peoples.

It follows from the information and discussion in this report that Alternative A1 (Status Quo with Biop) will continue the policies of the past. The four dams will continue to flood important tribal usual and accustomed activity areas and deny the tribes Treaty-protected harvests of salmon. In so doing, they will also continue to play a significant role in exerting the adverse pressures that cumulatively and increasingly threaten tribal subsistence, economic wellbeing and health.

As also noted earlier, Alternative A2 (Status Quo + Added Fish Passage Facilities) is reportedly more adverse for the tribes than A1. It also continues the inundation of 33,890 acres of tribal Usual and Accustomed area, and is more adverse for salmon. Its selection would therefore somewhat increase the adverse cumulative pressures resulting in tribal poverty, unemployment, ill health and death, over those to be expected if A1 is selected.

Selection of Alternative A3 (Dam Breaching with Drawdown to Natural River) would signal a directional change in the cumulative actions that have adversely affected the tribes over the past 140 years. It would restore access and opportunity for tribal members to their usual and accustomed locations throughout the 150 miles of inundated stream-side. It would also begin to restore the salmon - and eventually enable significant harvesting for tribal subsistence and/or economic purposes. Such actions may not result in immediate improvements to tribal material wellbeing and health - but over future years, as the salmon stocks became stronger, so to would the health and economic wellbeing of tribal members. These improvements would occur cumulatively over time, just as the prior string of adverse effects imposed on the tribes and on the river occurred cumulatively. Evidence cited in this report also indicates that these improvements would be broadly distributed among tribal peoples.

10.5.3 Cumulative Effects on Tribal Culture and Spiritual Wellbeing

When tribal respondents are asked about their survival, if the salmon is lost, they inevitably answer first in spiritual or religious terms. They tell us that the spirit of the salmon and the spirit of the tribal peoples are one. Sometimes they describe the river water and the salmon as *sacrament*. They are

careful to always place spiritual concerns first, before even material subsistence, in discussing the salmon.

This report provides extensive information on loss of tribal resources and activity opportunities. It also provides information concerning inundation of cultural sites along the lower Snake River. It is impossible to reduce religion or spirituality to an equation, or a numeric table. Yet, as noted, this spiritual/religious linkage with the salmon is evident in many statements from tribal respondents.

It is our perception that the linkage between tribal spirituality/religion and the salmon may not be much affected when salmon stocks are healthy and considered changes to stock size are relatively discreet. When the existence of salmon stocks are *threatened* or *endangered*, however, tribal commentary indicates that this threatens and endangers the spiritual and religious base of the peoples of the referent tribes as well.

Cumulatively over time, adverse impacts have reduced salmon abundances in the Snake River, until today, several key species are *endangered*. In this way, it may be fairly concluded that, today, a core element of tribal spiritual/religious belief and practice is also *endangered*.

While the four lower Snake dams contributed only their own discrete share of the total decline of Snake River salmon stocks, their impact on *endangerment* of salmon stocks, and on tribal religious practices and beliefs may be far more significant. Occurring relatively recently in the chain of events adverse to salmon and the tribes, both tribal perspective and review of PATH Scientific Review Panel (1998) suggests that these four dams may be the "straws that are breaking the salmon's back" for Snake River anadromous stocks – and in so doing, beaking the tribes' backs as well..

There is a probability of between 50% and 65% that selection of Alternative A1 will not result in recovery of Snake River salmon to "delisting" levels for at least 48 years. It is therefore concluded that selection of A1 continues the significant endangerment of these stocks - and **significantly endangers a central element of spiritual/religious practice and belief for the Snake River tribes**.

As noted previously, selection of Alternative A2 will result in more adverse impacts on salmon than for A1. Consequently, A2 is also more threatening to tribal spiritual/religious practices and beliefs than is A1.

Selection of Alternative A3 poses an almost 80% probability of recovery of referent salmon stocks to delisting levels within 48 years. Such removal of the stocks from endangered status would also remove the danger of substantial adverse impacts on religion and culture of the Snake River tribes - and restore to health one of their essential religious materials - the salmon.

10.5.4 Cumulative Effects on Tribal Self-Sufficiency, Self-Control and Self-Empowerment

Economic commentators have identified tribal self-sufficiency as a key required element to enhance tribal wellbeing[501]. Bachtold (cited in prior sections of this report) has identified an adequate level of control over one's economic, social and psychological environment as essential for individual and communal health. Representatives of the Columbia/Snake study tribes have been consistent over the past several decades in reporting that Columbia Basin dams were killing salmon - and in opposing the progressive eradication of the salmon resources of the Snake and Columbia rivers and their tributaries. **At no time, from construction of earliest dams to the present, has their advice been sufficiently credited and acted upon by dominant hydroelectric authorities**. This disempowerment of the tribes is of continuing concern. Tribal commentators, in talking about tribal benefits from renewal of the salmon, again and again emphasize the need for greater consideration of tribal knowledge and recommendations in regional decision-making affecting survival of the salmon.

Throughout the process of examining alternatives at the four lower Snake River dams, the study tribes have been consistent in advising that only Alternative A3 (breaching of the dams and permanent drawdown to natural river) offers a substantial step toward salmon recovery. More recently, the findings of PATH Scientific Review Panel (1998) concur. Viewing the cumulative process of decision-making with respect to dams and salmon in the basin, selection of Alternatives A1 and A2 would continue to disregard tribal knowledge and advice concerning survival of the salmon – and with them, the Tribal Treaties. Conversely, selection of Alternative A3 would mark a rebalancing in favor of significant consideration of knowledge and recommendations provided by the tribes - and a feeling of re-empowerment regarding conservation and management of salmon among the tribes themselves.

10.5.5 A Summary of Cumulative Impacts of Lower Snake Dams on the Study Tribes

Our findings with respect to cumulative impacts on the study tribes from project alternatives considered for the four lower Snake River dams are displayed in Table 54.

Table 54

[501]For example, see: Task Force Seven, 1976. **Report on Reservation and Resource Development and Protection.** Final Report to the American Indian Policy Review Commission, Washington, D.C. , p. 128; and; White, Robert H., 1990. **Tribal Assets: The Rebirth of Native America**. New York: Henry Holt & Company.

Summary of Cumulative Tribal Impacts from Lower Snake River A1, A2 and A3 Alternatives

Impact	**A1** Dams Remain+Biop.	**A2** Dams+Added Fish Passage	**A3** Reservoirs Gone/Breach Dams
Wealth distribution.	Non-tribal interests continue to accumulate wealth. Tribes continue to lose valuable assets - particularly Treaty assets associated with the salmon.	-Same as A1, but slightly more adverse. -	Begins rebalancing of the river's production function. Some wealth transfers from non-Indian interests back to the tribes begin, as stream sides are unflooded and salmon harvests increase by 1.7 million pounds.
Tribal health and material wellbeing.	Will continue to preempt tribal subsistence and economic activity. Will continue adverse effects on tribal nutrition, self-perceptions and health.	-Same as A1, but slightly more adverse. -	Will begin to reverse cumulative conditions with respect to tribal nutrition and health. Will have a positive effect, over time, on tribal poverty. Will improve, on a broad basis, tribal subsistence, and where appropriate, tribal economies.
Spiritual/ religious wellbeing.	Continues to endanger the salmon, one of the key elements that provide religious, spiritual and cultural definition for the peoples of the study tribes.	-Same as A1, but slightly more adverse. -	Will restore salmon to the point where they are no longer endangered. This will generate major benefits for key elements of tribal religion and spirituality - which will be removed from endangerment as well.
Tribal empower-ment.	Continues to ignore the Treaties – and the knowledge and recommendations of tribal peoples concerning survival of Snake River salmon. Disempowers the tribes.	- Same as A1. -	Credits tribal Treaties and knowledge. Would encourage feelings of empowerment and self-worth among tribal peoples.

10.6 Overall Summary Assessment of Lower Snake River Project Alternatives

Finally, we apply our findings from previous sections of this report to answer two overriding questions.

- Does each alternative, A1, A2 and A3 comply with tribal Treaty and tribal trust obligations?

- Does each alternative, A1, A2 and A3 comply with EPA's environmental justice criteria?

10.6.1 Tribal Treaty and Trust Obligations

Extensive discussion in this report identifies that the salmon are "pillars of the tribal world". Salmon stand at the center of tribal culture, have strong linkage to tribal subsistence capabilities and health, and have significant spiritual meaning for the tribes. To this end, the study tribes each carefully preserved their right to fish for salmon in perpetuity – and the United States guaranteed those rights – in the treaties made between them in the mid-1800's.

Table 43 identifies that, today, despite Treaty guarantees, the salmon that were to provide the cornerstone for tribal material and cultural survival are almost eliminated. In the farthermost upriver areas salmon now reach, tribal harvests approximate one tenth of one percent of harvests in treaty times. Immediately above the four lower Snake River dams, Nez Perce salmon harvests stand at only one percent of treaty levels. Below the lower Snake River dams, in Zone 6 on the Columbia River, tribal harvests of all salmonid stocks today amount to less than ten percent of tribal needs.

Initially, these losses of tribal salmon harvests were most often associated with direct action by non-Indian interests competing with tribal fishers or denying tribal access to the usual and accustomed fishing locations guaranteed in the tribal Treaties. Over the past three quarters of a century, the primary cause of loss of tribal salmon has been transformation of the production function of the river – to produce substantial amounts of electricity, to irrigate agriculture, to facilitate water-borne commercial transportation, to better enable harvesting of forests, and to receive increasing amounts of waste.

Construction of dams has played the leading role in this transformation. In virtually all cases, tribal opposition to dam construction, and tribal concern over adverse effects on Treaty salmon, was ignored, or given negligible weight. Some proponents of dam construction recognized that effects on Treaty salmon were uncertain, but assured the tribes that modern technology would be able to effectively mitigate against adverse effects. The Treaty harvest information presented in this report identifies that such mitigation efforts have failed.

The four lower Snake River dams do not have sole responsibility for the devastation of tribal Treaty harvests. But they have played a significant role, and this role continues through inundation of spawning areas and via passage losses in each present year. Beaty, Yuen, Meyer and Matylewich (1999)

estimate the contribution of these four dams to losses of tribal Treaty salmon harvest at between 8.4 and 14.3 million pounds annually, benchmarked to their period of construction.
PATH, and its panel of independent experts, estimate that most of the beneficial effects on salmon from the three lower Snake River alternatives considered here (A1: Status Quo/ A2: Status Quo + Improved Transportation/ A3: Dam Breaching) will occur within 30 years (Table 51). Expected impacts on tribal harvests of salmon and steelhead are summarized by alternative at the 30 year benchmark in Table 55. Probability of removing wild spring/summer chinook salmon from the Endangered Species List is at the 48 year benchmark. Estimates of increased tribal harvests relate to present-day catch estimates from Table 40.

Table 55

Summary of Impacts on Total Treaty Harvests of Salmon and Steelhead from Alternative Actions Affecting Lower Snake River – After 30 Years

Project Alternative	Improved Total Tribal Harvest --'000 lbs.--	Probability of Delisting Wild Spring/Summer Chinook -in percent-
A1: Status Quo	482	35-42
A2: Status Quo + Transportation	434	30-40
A3: Dam Breaching	1,594	80

The historical record indicates that agencies have been too optimistic concerning their ability to protect and recover Columbia/Snake system salmon. Considering that historic tendency, PATH's failure to specifically incorporate adverse stock trend data under status quo conditions in their model, and the small improvements forecast by PATH for A1 and A2 relative to A3, there also appears to be a significant risk that, over time, tribal Treaty-protected salmon stocks could become extinct if either A1 or A2 are selected as the preferred action.

We conclude that only selection Alternative A3 – breaching the lower Snake River dams – offers the Treaty tribes a reasonable prospect for significant reversal of losses to Treaty-guaranteed salmon and steelhead harvests, and for substantial relief from the risk of extinction of Treaty-protected stocks.

10.6.2 Environmental Justice for the Tribes

EPA's Environmental Justice (EJ) criteria require assessment of whether project actions, and associated cumulative effects, have impacted tribes and other identifiable groups of citizens more or less equally, when compared to affected citizens as a whole (Section 2.1.1.5). The EPA guidance poses two key questions to be addressed in Environmental Justice assessments[502].

- Does the potentially affected community include minority or low-income populations?
-
- Are the environmental impacts likely to fall disproportionately on minority and/or low income members of the community and/or tribal resources?

The response to EPA's first question is self-evident. **The five study tribes, by definition, include cultural minorities**.

To assess whether the study tribes have/would be disproportionately affected by impacts from lower Snake River project alternatives, we select four generalized Environmental Justice (EJ) assessment factors relevant to tribal analysis, and identified by EPA[503]. We then utilize findings from this report to assess alternative effects for each factor (Table 56). Since impacts from Alternatives A1 and A2 are little different, we summarize their impacts together, and then summarize impacts from Alternative A3.

[502] US Environmental Protection Agency, 1998. **Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses**. Washington, D.C. April, pp. 28-29.
[503] **Supra** at pp. 21-24.

Table 56

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.	**:**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 substantial effect in remedying these cumulative adverse conditions – and if recovery estimates are too optimistic, could make them worse.
Life-support Resources.	**:** 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.	**:** 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. **:** 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.

Cont'd. on p. 234…….

Table 56 Cont'd.

Summary of Environmental Justice Effects for the Tribes
From Lower Snake River Project Alternatives

EJ Factors	Relative Effects on the Tribes

Alternative A3 (Dam Breaching):

Income Level/ Health **:** A3 will not be sufficient to fully restore tribal harvests to the levels obtained before the lower Snake River dams were built. But A3 is the only option that will **substantially** improve opportunities for tribal fishing – adding 1.6 million pounds to tribal harvests within 30 years. Tribal spokespersons and experts cited in this report inform us that as salmon recovery occurs, tribal health would improve, tribal incomes would increase, and the cultures of the five tribes would be strengthened.

: Cumulatively, as salmon recovery progressed, A3 could be expected to significantly reduce the differences between tribal and non-Indian material wellbeing, cited in Table 41, and elsewhere in this report.

Life-support Resources. **:** Despite severe damage to most stocks, salmon and water remain the central elements of tribal cultural, spiritual and material survival. Today, beset by a narrow on-Reservation resource base, and still coping with racial prejudice and limited opportunity off-Reservation, the tribes continue to first look to the salmon as they seek to build a more secure future.

: Selection of A3 would significantly reverse a 144 year post-Treaty cumulative trend that, to date, has resulted in endangerment of the salmon, and consequently, endangerment of tribal peoples - while peoples as a whole in the region have prospered.

Economic base. **:** Selection of A3 would provide significant restoration for salmon. The tribes have harvested and processed salmon from pre-contact times, and possess an economic comparative advantage respecting such activities. A3 would allow

significantly more tribal harvesting and processing; would facilitate extended distribution of salmon as food through extended families and to elders; and would expand the fundamental economic base for tribal wellbeing.

: The positive economic effects discussed here would be expected, over time, to significantly reduce the differentials in poverty and unemployment levels between tribal members and their non-Indian neighbors.

Inconsistent Standards. : Selection of A3 would reverse more than a century of cumulative regional takings of the Treaty-protected resources of the tribes – and provide a step toward more equitable sharing of potential wealth from the Columbia/Snake river basin between tribal and non-tribal peoples.

This report concludes that the study tribes have been unduly and adversely affected as hydroelectric construction and operation, including that at the four Lower Snake dams, has proceeded. Further, tribal peoples they have not benefited commensurately with citizens of the region as a whole, as new wealth from the transformed river have been produced and distributed. Selection of either Alternative A1 or A2 would do little or nothing to correct these cumulative inequities. Alternatively, **selection of Alternative A3 would provide a significant start to remedy of the Environmental Injustices that the four lower Snake River dams have vested on the tribes.**

10.6.3 Final Conclusions Concerning Treaty/Trust Obligations and Environmental Justice

Conclusions from the preceding two sections are summarized in Table 57.

Table 57

Comparison of Lower Snake River Project Alternatives with Respect to Tribal Treaty Obligations and Environmental Justice

Evaluative Criteria	**A1** Dams Retained + Biological Opinion	**A2** A1 + Added Fish Passage	**A3** Dams Breached/ Reservoirs Gone
Meets tribal Treaty & trust responsibilities.	No	No	Yes
Meets Environmental Justice criteria.	No	No	Yes

10.7 Mitigation Associated with the Four Lower Snake Dams

The study tribes identify that **complete restoration of their salmon runs is the single most necessary step in mitigating the cumulative damages they have suffered**. Of the project alternatives considered here, only Alternative A3, which would breach the four Lower Snake River dams, offers such potential.

10.7.1 Mitigation Under Alternatives A1 and A2

As already identified, PATH results identify that neither Alternative A1 nor A2, both of which involve continued operation of the lower Snake River dams, can provide adequate mitigation of tribal salmon losses. This said, there are (at least) three elements of unfinished business with respect to the dams which need to be addressed.

* Some tribal respondents complain that they were subjected to "inappropriate practices" and "broken promises" by persons acting on behalf of the United States, during and subsequent to land acquisition and construction associated with the four lower Snake River dams and their reservoirs.

  An independent audit of these complaints should be conducted - and if they are found to be substantive, appropriate mitigative action should be initiated.

* Construction of the four lower Snake River reservoirs has enabled temperature-related adverse discharge into section(s) of the Snake "River" that would not have been permitted, had the river section retained its undammed status. Preliminary findings from cooperative study by EPA and the CRITFC tribes also suggest that discharges of toxins may be resulting in deleterious effects on the health of tribal members and other fish eaters.

  A careful assessment of these emerging data, and the effect that discharges into lower Snake River reservoir pools may have on such pollutant loadings, is required. Should such assessment identify risks for tribal health - appropriate remedial mitigation, both with respect to pollution pretreatment and control, and regarding water quality standards for receiving waters, should be undertaken.

* Present operating conditions at the four lower Snake River dams are creating adverse water quality conditions for the survival of anadromous fish. These adverse conditions have been identified by CRITFC and other scientists. CRITFC staff have developed a mitigative proposal in this regard, and it is presently under review by EPA.

  Following EPA review, and concurrence with the Treaty tribes, these mitigative measures should be implemented under either Alternative A1 or A2.

10.7.2 Mitigation Under Alternative A3 - Breach of the Lower Snake River Dams

Alternative A3 represents a substantial step toward recovery of Snake River salmon stocks. At the same time, uncovering a substantial area that has been under flood waters for four decades will require careful mitigative efforts to protect and assist in the recovery of this streamside system. In this respect, we recommend the following.

* The United States should convey the river side lands uncovered under Alternative A3 to tribal ownership and control.

  This would provide in-part mitigation/compensation for the extensive and cumulative damages to tribal treaty and trust resources, and the takings of wealth from tribal peoples, caused by the four dams in earlier years. It would also maximize protection of ongoing tribal Treaty rights, and of tribal spiritual and cultural areas along the lower Snake River.

* There are at least 600 to 700 sites of particular spiritual, religious and material importance to the tribes of the present-day Nez Perce, Umatilla and Yakama Reservations, that are presently flooded by the four lower Snake River dams. Uncovering this area would provide substantial opportunity for these tribes - but would also require particular care, so that burial sites, other sacred areas and areas important to the tribes material and cultural wellbeing would not be damaged or violated.

  Action to manage, protect and restore these important Treaty and cultural properties should by led by the tribes. (See also the preceding recommendation concerning disposition of unflooded lands.) Such mitigation should involve two stages.

  : Development of a Tribal Management and Protection Plan with respect to uncovered tribal cultural properties along the river. The elements of such a Plan are identified in two appendices to this report, starting on page 250 - one developed by Nez Perce staff for the upper segment of the affected streamside, and one developed by CTUIR staff for the lower streamside segment. These appendices envision a five year planning period, during which tribal cultural properties in the subject area would be more fully identified - and a related implementation plan to protect and restore them developed. Estimated budget requirements for these tribally led planning activities are also provided in the two appendices.

  : Implementation of tribally-led action for the long term management, protection and restoration of tribal cultural properties along the lower Snake River streamside would follow, when the Tribal Management and Protection Plan was completed.

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