

TECHNICAL EXHIBITS
EXHIBIT I
SPOKANE TRIBE OF INDIANS



Spokane Tribe of Indians

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CENTURY OF SURVIVAL

1881 - 1981

App. Action: CKC

cc: A-2, AC, CK, E, M, John Smith-CK, Darrell Eastman-CK, L, Phil Thor-MGC
CKP (Comments)

September 26, 1995

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Commander and Division Engineer
U.S. Army Engineer Division, North Pacific
P.O. Box 2870
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RE: Comments on SOR EIS

Dear Sirs:

Attached are comments from the Spokane Tribe of Indians on the Columbia River System Operation Review Final Environmental Impact Statement (EIS) (Advance Copy), Appendix D: Cultural Resources. These comments are provided for your serious consideration before entering your Record of Decision on the SOR process.

Please note that the site names of recorded Spokane archaeological and historic sites which lie within Spokane Reservation boundaries are listed in these comments. These names have been provided to the decision-makers as a courtesy for your consideration, so that the managers may understand that these sites are not just numbers but are real places, real homes, real burials and cemeteries, sacred places to the Spokane people. These are places on our reservation - where we were forced to retreat - which the United States government promised we

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could keep forever. We remember many of these names as the homes and resting places of our grandparents, great-grandparents, and so on, back for thousands of years. These are names which are sacred to our Tribe, and which define our culture. Just as you would preserve and protect your family's home or farm, the Vatican or the White House, or the resting place of Thomas Jefferson or John F. Kennedy or your mother, so we would preserve and protect these places, our heritage.

The present SOR EIS Appendix D does not use the best available data to consider the effects of system operations on cultural resources. The effects on Spokane cultural resources have not been sufficiently or realistically considered. Effective government-to-government consultation has not as yet been accomplished during this SOR EIS process. Attempts to draft a Programmatic Agreement with the tribes were feeble, limited to a few meetings, and not on a government-go-government basis. The federal agencies are required to accomplish these things before the Record of Decision is made. We highly recommend that your staff address these issues and consider them before formally confirming your chosen alternative.

The Spokane Tribe of Indians holds the United States government, including the involved federal agencies, responsible for preservation, protection, and mitigation of impacts on Spokane Tribal cultural resources which are affected by federal undertakings. We request that you consider your federal cultural resource management and trust responsibilities, these comments and those submitted in the past, before making a decision on the Columbia River System Operation Review. The Spokane Tribe of Indians does not approve any plan that has not addressed these concerns.

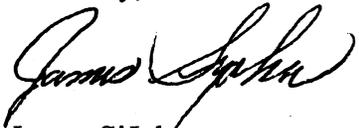
We will continue to provide you with comments concerning the effects of systems operations on Spokane cultural resources as long as that is feasible. Because of the special and often sacred relationship of these cultural resources to the Spokane people, the Tribe chooses to perform its own cultural resource management activities. This ability to perform such activities does not imply that other agencies' responsibilities as set forth in federal mandates are in any way relieved, but the Spokane Tribe will be the agency to perform any actions concerning Spokane cultural resources.

The attached comments pertain only to the review of the Cultural Resource appendix. It must be understood that these comments were made within a limited amount of time, with very limited staff and funding to meet the federal agencies' deadline. We cannot meet your unreasonable requirement to review and comment on the 22 volumes of the preliminary SOR EIS between August 26th and September 25th. We cannot meet your unreasonable requirement to review and comment on Appendix T (Comments and Responses) or your draft letter to the Advisory Council, between September 19th and September 25th. We have not had an opportunity to review your responses to our previous comments, so we do not know if they have been understood. And the agencies should be reminded that government-to-government meetings during the EIS process have been very limited. Most Spokane Tribal participation has been at the staff level, discussing fisheries and cultural resources. We have been unable to

participate meaningfully in analyses of the other appendices, although those other system operations issues also affect our Tribe. Meaningful Tribal participation has not occurred as required under NEPA.

Please direct any response or questions about these comments to my attention.

Sincerely,

A handwritten signature in black ink, appearing to read "James SiJohn", written in a cursive style.

James SiJohn
Spokane Tribal Business Council

cc: Ms. Linda Burbach

THE SPOKANE TRIBE OF INDIANS COMMENTS ON
THE COLUMBIA RIVER SYSTEM OPERATION REVIEW
DRAFT ENVIRONMENTAL IMPACT STATEMENT,
APPENDIX D: CULTURAL RESOURCES

The Spokane Tribe of Indians
Wellpinit, Washington

September 22, 1995

SPOKANE TRIBE OF INDIANS
REVIEW OF SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

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SPOKANE TRIBE OF INDIANS
REVIEW OF SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

I. INTRODUCTION

The Columbia River Systems Operation Review

The (Columbia River) System Operation Review (SOR) is both a study and an environmental compliance process used by the three Federal agencies to analyze future operations of the system and river use issues. The goal of the SOR is to achieve a coordinated system operation strategy for the river that better meets the needs of all river users. (Appendix D:i)

As part of the Environmental Impact Statement (EIS) process for the Columbia River Systems Operation (SOR), the responsible federal agencies (the Bureau of Reclamation (BOR), U.S. Army Corps of Engineers (COE), and Bonneville Power Administration (BPA), must solicit and consider public opinion in addition to performing consultation with the appropriate Native American peoples on the impact of the project on significant cultural resources. Specifically, these agencies have solicited opinions and concerns over the contents of the Columbia River System Operation Review, Draft Environmental Impact Statement, Appendix D: Cultural Resources. Full consideration must be given to the opinions and concerns they receive, enforceable under the Administrative Procedure Act (5 U.S.C. §706 (1982))¹

The Spokane Tribe of Indians is a Native American tribe whose traditional lands and cultural resources are directly and indirectly affected by this project. As part of the EIS process, the tribe submits the following concerns about the SOR as related to cultural resources. These express some, but not all, of the tribe's concerns, and is not final or exhaustive.

The Spokane Tribe of Indians and the Spokane Reservation

The Spokane Indians are the Interior Salish group and has inhabited northeastern Washington, northern Idaho, and western Montana for centuries. The native language spoken by the Spokanes is common to other Salish tribes with only a slight variation in dialect. Generally speaking, the Spokanes can converse easily in their native tongue with the Kalispels, Coeur d' Alenes, Colvilles, and Flatheads.

The aboriginal lands occupied by the Spokanes laid in eastern Washington along the Spokane River and surrounding area encompassing some three million acres. The vast domain began on the Columbia River near the present town of Hunters; thence easterly along Hunters Creek to Deer Lake; thence to Mount Spokane and southerly through Peone Prairie and the present

town of Opportunity to a point near Rosalia; thence west and slightly south to Ritzville and thence north to the old townsite of Peach, and up the Columbia River to the point of beginning.

The tribe originally [ed: at the time of Euro-American settlement] consisted of three bands: Upper, Middle and Lower. These terms were used by whites in reference to their location along the Spokane River. The Lower band usually occupied an area along the Spokane River from its mouth to the present site of Tumtum; the Middle band occupied the area from Tumtum to the mouth of Hangman Creek; and the Upper band lived in the Hangman Creek region and through the Spokane Valley as far as the present town of Post Falls, Idaho. (Wynecoop 1969:7)

Under extreme pressure from the U.S. military and Euro-American settlement, the Spokane Indians ceded most of their traditional lands, and on January 18, 1881, an Executive order established the Spokane Reservation.

It is hereby ordered that the following tract of land, situated in Washington Territory, be, and the same is hereby, set aside and reserved for the use and occupancy of the Spokane Indians, namely:

Commencing at a point where Chemekane Creek crosses the forty-eighth parallel of latitude; thence down the east bank of said creek to where it enters the Spokane River; thence across said Spokane River westwardly along the southern bank thereof to a point where it enters the Columbia River; thence across the Columbia River northwardly along its western bank to a point where said river crosses the said forty-eight parallel of latitude; thence east along said parallel to the place of beginning. (Executive Order of President R.B. Hayes, 1881)

Area of Impact

With the establishment of Grand Coulee Dam, the reservoir waters known as "Lake Roosevelt" inundated the lands bordering the Columbia and the Spokane Rivers. This includes the traditional lands of the Spokane Indians on the east bank of the Columbia River beginning at the mouth of Hunters Creek southward to the old townsite of Peach, and on both banks of the Spokane River, from the confluence with the Columbia River eastward to the Little Falls Dam Bridge.

The area of physical impact by the reservoir operations includes not only those areas that are periodically or permanently inundated, but a much larger area which is steadily increasing because of erosion, landslides, increased visitation, etc. Areas not inundated but affected by reservoir operations include, for

example, a stream that was traditionally used for fishing salmon, but that is now dysfunctional because of Coulee Dam. Another example of non-reservoir resources affected by reservoir action includes a site located on a high bluff or terrace threatened by water-induced erosion at its base. Yet another example is a spiritual site that is now dysfunctional because of its functional or spiritual link to an inaccessible (inundated) or site. The reservoir has a major negative effect on the integrity of setting for any cultural resource on adjacent landforms, so that the effects of systems operations must include consideration of cultural resources anywhere within that visual catchment. Furthermore, the erosion process continues, so that system operations directly or indirectly affect a larger and larger area through time. A comparison of diachronic topographic maps and photographs, and studies of erosion of the rivers' bank substantiate this claim.

The indirect effects of Columbia River systems operations under the federal agencies in fact impact even more cultural resources. Before the construction of Coulee Dam, the Spokane people were dependent upon and interwoven with an annual cycle. The removal of any part of this cycle destroys all opportunity of continuing that cycle. Removal of the salmon and related cultural components by the construction of the dam destroyed traditional Spokane culture. They could no longer carry out a traditional way of life with a significant portion of their economy, diet, and spirituality missing. Those elements of language, religion and custom that dealt with river resources are in danger or destroyed. For example, much of Spokane Indian Language technology and technological jargon of fishing has disappeared; the reservoir has destroyed all the critical religious rituals relying on the river or its resources. Children as well as young adults have forgotten stories and the traditional names of places they have never seen. Furthermore, modern Spokanes must deal with a culture rendered dysfunctional by the dam. They must deal with the guilt of losing aspects of their traditional culture, and of not protecting the lands and remains of their ancestors. The operation of Coulee Dam directly and indirectly affects these less tangible cultural resources at least as much as it does archeological artifacts.

II. SPOKANE TRIBAL CULTURAL RESOURCES

Spokane Tribal cultural resources affected by the Columbia River systems operations include every "type" now recognized as potentially eligible for National Register status by the Advisory Council on Historic Preservation. They include but are not limited to archeological and historic sites, traditional cultural properties, historic (and prehistoric) landscapes, and the locations significant in the lives of important persons. The Spokane Tribe also recognizes other types of cultural resources, such as culture-specific memories associated with specific sites, activities, language, cemetery and burial sites as very significant.

Because of the special and often sacred relationship of these cultural resources to the Spokane people, the tribe must perform its own cultural resource management activities. Management of our own resources does not imply that other agencies' mandated responsibilities to cultural resources are in any way relieved; but the tribe should be the lead agency in planning and implementing any actions forthwith affecting Spokane cultural resources. The Spokane Tribe will be responsible for seeking expertise from professional outside sources when expertise is needed .

Spokane cultural resources affected by the operation of Coulee Dam includes historic buildings and structures; historic and archeological sites; groups of buildings, structures, and sites forming historic districts; cultural landscapes; individual objects; properties associated with significant persons; mining properties; and traditional cultural properties that meet the criteria specified in the National Register's Criteria for Evaluation (36 CFR 60.4). There are also religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past fifty years that may be considered for inclusion in the National Register. Listing all these properties is neither possible nor desirable; instead we present a small sample. We will attempt to list an incomplete but representative sample of site and material types that are recorded within this area.

Archeological and Historic Resources

Spokane archeological and historic sites include prehistoric, proto-historic, and historic materials. Prehistoric site types include but are not limited to campsites, fisheries, plant and animal procurement and processing sites, burials and cemeteries, vision quest sites, petroglyphs, pictographs, village sites, trading and meeting places, battle sites, and river crossings. Prehistoric features include but are not limited to storage features (such as talus caches); stone, plant and animal procurement and processing features (for example stone ovens, shell

middens, hunting blinds, stone weir sites, and lithic scatters); and sacred and religious features (such as burials, vision quest structures, and special stone gatherings). Prehistoric material types include but are not limited to faunal remains (for example, rawhide, antler, bone, hair, claw, horn, teeth, and shell), floral remains (for example, seeds, pollen, bark, and roots), and artifacts of stone (for example, mauls, manos and metates, scrapers, spear and arrow points, crystals used for religious purposes, and fire-cracked rock). Many of these material types represent both man-made or modified artifacts, as well as evidence of paleo-environment, diet, and economy.

Proto-historic and historic sites include all the above-mentioned prehistoric site and material types, plus European or Euro-American site and material types. Historic site types include but are not limited to those listed above plus schools, churches, stores, farms, and ranches. Several homes of tribal members located in the reservoir were left standing at the time of inundation. One church building, important to the Spokane people as one of their earliest church structures, was moved to higher ground immediately before inundation. Its original foundation remains in the reservoir. Material types include but are not limited to those listed above plus items of modern manufacture, such as glass, ceramic and brick, metals, and textiles of natural and synthetic materials.

The very early and continual occupation represented in these archeological and historical sites offers scientists a unique opportunity to study many critical areas. These realms include but are not limited to: first human occupation of what is now the United States; adaptation to climatic, geomorphological, faunal and floral changes during the Pleistocene-Holocene boundary; expansion of prehistoric population; evolution of Plateau Prehistoric social, political, economic, and religious life; the relationships between this centrally located group with Plains, Great Basin, other Plateau, Montaine, and Pacific Coast peoples; Prehistoric Period syncretism; changing Prehistoric gender roles; the relationship between humans and Holocene environment; the effects of devastation from European disease; the Proto-historic; contact with early trappers, traders, and missionaries; Historic Period syncretism; topics in conquest and conquering; processes in taking and destruction of tribal lands by early settlers and the government; effects of overcrowding; and forced and non-forced assimilation practices; culture of poverty; deterioration and change of a language through destruction of environment; change in economic, social, political, and religious life because of forced change in the environment; and culture survival. Proto-historic sites are especially interesting in their mix of traditional and modern goods and practices. They offer the unique opportunity to investigate syncretism and the evolution of use of modern materials in a traditional society.

These questions do not, of course, address the importance of these

archeological and historical sites to the Spokane people and culture. Many of these archeological and historic sites, particularly cemeteries, but also vision quest sites, pictographs and petroglyphs, fisheries, plant procurement sites, churches, and others, carry special cultural and religious significance to the Spokane people and culture. Prehistoric sites represent their ancestors, a value which cannot be put on paper or underestimated. Spokane ancestors are an integral and unforgettable part of the Spokane people today. They must be respected. Prehistoric sites are a key feature in legitimizing their culture as a complete, valid entity. They represent a time when the Spokane peoples and lands (including natural resources) were whole, and existed in balance, as essential parts of each other. Proto-historic sites represent the initial and devastating impact of Euro-American culture on their society. Historic sites are significant to the Spokane people because they represent the horrific period of European settlement and forced assimilation into Euro-American society, and the memories of living tribal members. The Proto-historic and Historic Period sites represent conquest, division, and suppression to the Spokanes, but also their ability to survive.

No diachronic studies have been performed to describe or quantify damage to these resources, but past archeological work (for example, Hartzell 1994; Masten 1988 and 1990; and Spokane Tribe of Indians 1994) and Bureau of Reclamation monitoring of slide areas, sheds some light on the amount of damage that is occurring. Erosion at many sites is several meters per year, often in mass wasting. Spokane cultural resources affected by Coulee Dam operations are almost exclusively located on the non-consolidatable Spokane flood deposits.

Further discussion of the effects of systems operations on Spokane archaeological and historic resources can be found in Chapter VI, The Proposes SOS Alternatives.

The Columbia and Spokane Rivers

The Columbia River system or district includes many archeological and historical sites, traditional cultural properties, and is a (pre)historic cultural landscape. Within this district, there is a significant concentration, linkage, and continuity of features associated with the lifeways of the distinct and unique Inland Northwest Native American, tied together through both cultural, temporal, ecological, and physical connections. These properties have integrity as a whole.

The Columbia River, the Spokane River, and the Snake River are eligible though not yet nominated National Register properties. The Spokane Tribe of Indians is rooted in the Columbia and the Spokane Rivers: we are concerned about their present condition and future under reservoir waters. Their nomination to the National Register is not possible under the scope of this study, but they

are immediately recognizable as eligible properties through several categories: archeological district, (pre)historic landscape, and as a traditional cultural property.

This Columbia River system, or "district," should be protected as a potentially eligible National Register property under Criterion (a): Association with events that have made a significant contribution to the broad patterns of our history, including those properties with significance in a community's historically rooted beliefs, customs, and practices; Criterion (b): Association with the lives of persons significant in our past; Criterion (c) (1): Embodiment of the distinctive characteristics of a type, period, or method of construction; Criterion (c) (2): Representation of the work of a master; Criterion (c) (3): Possession of high artistic values; Criterion (c) (4): Representative of a significant and distinguishable entity whose components may lack individual distinction; and Criterion (d): History of yielding, or potential to yield, information important in prehistory or history. In National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, an example given as an eligible property under Criterion A is "a hilltop associated in oral historical accounts with founding of an Indian tribe or society is eligible" (13). This describes the Spokane River for the Spokane Tribe, substituting 'river' for 'hilltop', as the river plays the key role in the origin of the Spokane Tribe. Oral accounts describing this role have been recorded many time (e.g., Ross 1984; also the appendices of the Spokane Centennial Trail Report). Previously recorded traditional Spokane stories about the rivers include "How the Spokane River was Formed," "Salmon and Rattlesnake," "The Flood and Salmon and Spilye," "How the Sun Disc Came to Spokane Falls," and many others (e.g., Ross 1991-1993).

The historic properties within the Columbia River district convey the sense of time and place and historical development of the people native and non-native to this area. These natives represent the oldest, most geographically-continuous cultural group in the United States. No where else in America is there evidence for an identifiable cultural group developing in a singular region from pre-Holocene times to the present. Few places than this offer the rich opportunity to follow the development of a pre-Holocene people into Holocene survival and adaptation, through an identifiable Proto-historic Period, through conquest and settlement by Euro-American, through the Assimilation Period, through the Civil Rights Movement, and into the Republican Period. As such, the Columbia River district is significant not only to the Spokanes and the people of the Northwest, but is significant on a national and even international level.

These rivers are traditional culturally significant properties, playing an essential and irreplaceable role in Native Americans' historically rooted beliefs, customs, and practices. These rivers are a critical part of cultural practices and beliefs of living

Native Americans, including the Spokane Tribe of Indians among many others, that (a) are rooted in our community's history, and (b) are important in maintaining the continuing cultural identity of the community. Native American elders of this region gave testimonies identifying the significance of these rivers to their people many times during meetings of the SOR EIS Cultural Resource Work Group staff and full work group meetings. We have included a sample of these testimonies given at one such meeting in Appendix Spokane-A.

These rivers fall into many of the categories outlined in the guidelines for evaluating and documenting traditional cultural properties in the National Register Bulletin 38; specifically including but not limited to:

- * a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;

- * a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and

- * a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historical identity.

Other Traditional Cultural Properties

Systems operations have negative impacts on other Spokane traditional cultural properties that include but are not limited to vision quest sites, plant gathering areas, social/political gathering areas, sites associated with traditional oral stories (such as the story of creation) and traditions. Types of sites that are traditional cultural properties because of their sacred and central nature to Spokane culture, but that also may be eligible under other National Register categories include but are not limited to pictographs and petroglyphs, camp sites, battle sites, churches, fisheries and procurement sites.

Most of the vision quest sites used traditionally by the Spokane peoples are inaccessible because of inundation, or they have lost their traditional context and feeling because of inundation of the surrounding landscape. Many of these vision quest sites could be restored if the land were no longer inundated, if elders remain to identify their location.

The reservoir has inundated social and political gathering areas which were often located at river fords; though some of these sites are seasonally accessible within the zone of fluctuation. Again, inundation removes traditional context and feeling for many of

these sites. Some of these areas were the sites of important battles, or landmark peace agreements between warring tribes. Some of these sites were the locations of sacred and religious ceremonies. Others are important because of their association with famous or outstanding individuals.

Sites associated with traditional oral stories often include particular and sometimes spectacular landforms. Today those sites that are affected by reservoir operations include those that are inundated and those which are not inundated but eroding or threatened with erosion from reservoir action. The ecological landscape is often key to understanding these sites; changes in the surrounding landscape has negative effect on the context, feeling, and interpretation of the landform even if the landform itself is not destroyed. Because of their often unusual appearance, shape or composition, these sites often attract recreational use which further contributes to their deterioration.

Another type of Spokane cultural resource is the natural environment. Both physically and spiritually, natural resources are an essential and inseparable part of Spokane culture. The salmon, eels, and other riverine resources are more important cultural resources to archeological and historical sites, and play an essential role in Spokane cultural identity. Traditional Spokane stories record the importance of these resources to Spokane culture, belief, spirituality, and religion. Stories which express this relationship include "Salmon and Rattlesnake," "The Flood and Salmon and Spilye," "Son of Beaver Populated Big and Small Bullheads," "How Coyote Dug a Ditch for the Salmon," and many others (e.g., Ross 1991-1993).

The land itself is another cultural resource. One's homeland is inseparable from the individual. One cannot be laid to rest in a strange land, yet Spokane ancestors must be moved from their original resting place because of erosion and looting, and Spokane tribal elders cannot be laid to rest in their place of birth.

Procurement sites that should be assessed in reviewing systems operations strategies include but are not limited to plant gathering and processing areas, mammal hunting and processing areas, and riverine resource gathering, fishing, and processing areas. Those plants traditionally gathered by the Spokanes and that are still in use today include many different species in and near Lake Roosevelt. Some examples include blackberries, blueberries; wild raspberries; pinenuts; and many camas roots species, to name just a few. Spokanes gather other plants for making baskets, hats, matting, etc. (See Ross (1991-1993) for a more inclusive list of plant and animal species important to the Spokane.) Most of the remaining gathering areas are barely being maintained, as the environment they developed in has been so drastically changed with the creation of Lake Roosevelt. Furthermore, they were part of an annual round which through destruction of the riverine environment by the reservoir, has also

been destroyed. These plants and the gathering areas from which they come are significant not only economically, but are essential to the cultural, linguistic, and religious life of the Spokanes.

Fishing areas, as with plant gathering area, are important to the Spokanes not only as archeological sites with crucial information on paleo-environment, social processes, technological change, and diet, but are critical to the cultural, linguistic, and religious life of the Spokanes. Fishing areas included not only the sites of net and spear fishing, but for the gathering of eels, crawfish, mussels, and other riverine resources. The fate of individual men, families, tribes, and regions were made at these fishing sites. Fishing techniques and technology were an integral part of Spokane culture: fishing jargon and analogies were woven in daily dialogue, in personal and tribal identity, in placing humankind in nature, and especially in the teaching of children. Sacred landscapes or landforms often surround fishing sites. They were often focal points for camps and social gathering areas. Spokanes grew up with fishing areas being not only part of the annual cycle, but part of the individual and family as well. Burial grounds often overlook these areas, emphasizing the sacred nature of fishing areas.

Spokanes often hunted game on higher ground, but the use of hunting blinds located in natural avenues down to the rivers were key. Since the creation of the reservoir, game more seldom use these avenues so that the economic and spiritual use of these traditional hunting blinds are strongly impacted. The negative impacts on Spokane hunting are many. For example, the wolf, buffalo, and antelope were primary religious and economic sources before whites came, but no longer live here. Elk, golden and bald eagles, and beaver were nearly eliminated from our area, though through positive actions they are attempting to come back. The presence of the reservoir has removed the salmon, the eels, some snakes, and riverine mammals such as otter of important economic and religious status to the Spokane people.

These plant and animal resources were an integral part of Spokane physical and spiritual life. Without their riverine resources, the "land" resources were not enough to sustain the Spokane physically or spiritually through the winter. The Spokane were thus robbed (and continue to be robbed) of their self-sufficiency, traditions, and religious practices by the construction and operation of Coulee Dam.

The most sacred cultural resource to the Spokane people negatively impacted by the operation of Coulee Dam is not eligible for National Register status. These are the graves and cemeteries of Spokane Indian ancestors. As stated before, the respect, admiration, and dedication for the ancestors by the Spokane people cannot be written on paper, nor can it be underestimated. The Ball and Dodd project moved many graves in the 1930's, but many more were left behind. Ball and Dodd workers missed and left a few

graves behind at some sites. Other cemeteries were not included in that project at all, especially on the Spokane River. Ball and Dodd did not attempt to move any graves upstream of the Detillion Bridge area on the Spokane River, leaving the largest part of the inundated portion of that river unprotected. The Bureau of Reclamation has funded an irregular "annual" monitoring of known burial erosion sites by hired university staffs (see for example Masten 1988 and 1990; Stevens and Keller 1992a and 1992b), and has funded one portion of a burial movement project at one site (Spokane Tribe of Indians 1994) in recent years. The frequency of exposure of burials requires more effort than the federal agencies irregular annual burial monitoring program. Concerned locals perform much more monitoring, but do not have the training to properly identify, handle, or report burials.

The Spokane Tribe of Indians is extremely concerned about the protection of their ancestral remains. Reservoir erosion frequently exposes these remains. Stable conditions are impossible with continually fluctuating water levels. Burial sites and cemeteries with exposed remains or goods attract looters, who then excavate even more material. These looters often finish the destruction to graves and cemeteries, and destroy areas inland of the exposed erosional front.

III. GENERAL COMMENTS CONCERNING THE THE SOR DRAFT EIS

We first question the lack of specific procedure used to consult with Native American tribes during this EIS process. There are no specific guidelines, no specific points of contact, and no attempt at government-to-government relations until four months before the Record of Decision; and that limited to a singular meeting between the SOR decision-makers and the Spokane Tribal Council. The federal agents in the Cultural Resource Work Group have been told to accomplish consultation with Native American tribes: but they admit not knowing what the proper procedure is for government-to-government relations nor proper consultation procedures. They did not contact the tribes until 1993, two years after the EIS process began. They did not - and do not have clear guidelines on how to begin or proceed. They only began to contact tribes at a government-to-government level in 1995. Decision-makers from the federal agencies met with Spokane tribal leaders for the first time on March 30, 1995. At that time, and in a follow-up letter, the tribe requested a copy of consultation plans or procedures, even in draft form, from all three agency heads. Though promised at the time of the meeting, we have not received a response to this request.

We question the effectiveness of this procedure used to consider comments from tribes during the EIS process. Both written and oral comments by the tribes were to be considered in the EIS process. A Cultural Resource Work Group member chopped these written comments into separate paragraphs or sentences (in a manner chosen by the receiving federal employee), then sent these separated blurbs to the concerned federal agent (designated by geographic area, again chosen by the federal employee). The concerned federal agent then reviewed these comments, supposedly before writing their own comments. The contents of these comments is at the discretion of the concerned federal agent. The federal agent's comments were then forwarded to the appropriate work group manager or technician for their review, and incorporated (or not) in whatever way that reviewer felt was appropriate. However, the Cultural Resource Work Group Manager had received all the federal agents' comments (excluding one) by January 1995, eight months before the contract for Spokane Tribal comments would end. In summary, this SOR EIS process does not allow for the tribes' written comments to be reviewed intact by the considering official: the comments were chopped into indiscriminate pieces, re-written and excerpted, winnowed down and interpreted, sometimes just dropped, before they ever reach the Work Group Leader who then makes the decision whether this (whatever the comments have now become) is worthy to effect the contents of the final draft. An example symptomatic of this process, just three weeks before the deadline for EIS publication, the Cultural Resource Work Group staff contacted Spokane Tribal staff with the requirement that previous submissions would have to be resubmitted in computer format in order to appear

in the published document. While we complied with this change, it demonstrates the total lack of organizational planning in carrying out consultation.

This method for reviewing written comments is unacceptable; it is arbitrary and capricious. Comments cannot be taken apart into sentences and paragraphs and have the whole of their message understood. If comments had to be written in sentences or paragraphs which could stand alone, this should have been a stated requirement before the tribe began writing the comments. Furthermore, the federal employee has no way of having a holistic understanding of the tribes' comments, nor of their intentions with each sentence and paragraph.

Each member of the working group and all technicians should have received complete copies of tribal comments. This would not have created any great expense. Without reviewing the comments in their entirety, these individuals have not been able to fully appreciate, consider, or incorporate them into their models and analyses. By having the receiving federal employee decide which manager or technician shall receive which piece of information, you have placed that employee in the position of decision-maker, deciding which comments are worthy of consideration by whom. The managers, technicians, and decision-makers then do not have the best data available, nor complete information from which to work.

No federal agent should summarize or interpret the tribes' comments for them. The tribes wrote their comments for decision-makers, and their designated representatives. Tribal comments stand on their own, and their contents can be reviewed so that the SOR EIS Cultural Resource work group can re-write the draft appendix to include and address tribal concerns, and for decision-makers to consider before making the Record of Decision. These comments were not written so that several layers of federal employees could decide which parts are worthy of consideration, and which parts were not, nor for federal agents to rewrite and reinterpret those parts. These employees should not - and are not authorized to be - the decision-makers on the worthiness of tribal comments. The Spokane Tribe of Indians has taken the initiative to send the letters on to the agency decision-makers, in hopes that their comments would be considered in whole by these leaders.

Oral comments during the SOR EIS Cultural Resource meetings have received inadequate consideration, even though federal staff members were told many times that tribes may be hesitant to write down information because they carried on in oral tradition. The meetings were inadequately recorded, so that consideration of oral comments was limited to whatever parts caught the fancy of the federal agents present. No professional secretary or recorder was ever present, and written comments were limited to short excerpts chosen and recorded by a federal agency work group member (an archeologist). This federal agent's intentions were good, but he

is not capable of having an immediate and total holistic understanding of all tribal comments, and hence should not be authorized to decide which are worthy of recording and which are not. Spokane and other tribes' representatives have made many, many oral comments at these meetings that have never received any consideration whatsoever, simply because those federal agents present did not realize or understand the content or importance of those spoken words. Without adequate records, agency decision-makers cannot consider these comments.

The deadlines set by federal agencies has been entirely unrealistic if they had truly intended to gather the best available information and to consult with the tribes. For example, as mentioned before, federal agents were pressured to submit their summary and review of tribal comments before they had even received those comments. Several tribal contracts for comments and study of the Cultural Resource Appendix run through to the next year, but the Cultural Resource Work Group periodically announced deadlines for their comments before then. The work group announced deadlines including in February, March, and May, 1995 in order for tribal comments to be considered in the EIS process. For example, they announced at the February 9th meeting in Portland, Oregon, a deadline for comments on several chapters by March 6, 1995, if those comments were to be considered. At that meeting, the Cultural Resource work group manager, Willingham, directly asked Mr. Jaren as SOR manager, "the tribes have a legitimate problem with contracts (for commenting on the EIS Cultural Resource appendix) that extend as far as next year, but with the present schedule, how can these comments be considered? Can we get an extension?" Jaren answered, "The schedule stands." Another Cultural Resource work group member, Ms. Burbach, then asked, "How can we do that?" Jaren answered, "I won't micro-manage." When Burbach repeated, "But how can we do that?" Jaren finally admitted, "I don't know. You'll have to do the best you can. When the time comes, we'll see." This obviously is not a procedure to gather best available information; it is not adequately providing consultation with Native American tribes; nor are tribal comments receiving full consideration.

Agency decision-makers, Mr. Randy Hardy of Bonneville Power Administration, Gen. Ernest Harrell of U.S. Army Corp of Engineers, and Assistant Regional Director Pedde (representing the absent Mr. John Keys) of the Bureau of Reclamation, met for the first time with Spokane Tribal officials in Wellpinit on March 30, 1995. This meeting was an excellent opportunity for these officials to hear tribal concerns, and to explain the SOR process and purposes. This type of consultation, by their own admission, should have been held since the very beginning of the SOR EIS process. They each promised that they would review and consider tribal comments up to the time of the Record of Decision. It is too late for the Spokane Tribe's comments to be considered in the development of the alternatives, the methods and means of analysis, and interpretation

of analysis results. True government-to-government relations and consultation with the Spokane Tribe of Indians require such meetings be held regularly.

It is also a matter of concern that throughout the EIS document, reference is made to "Indian tribes" as active participants in particular phases of the EIS, or as performing a specific action, or as withholding specific information. Sometimes this phrase appears to be used as a mask when task group members meant to involve the tribes, but were never successful. Probably more often, one tribe made a statement or action, and it was interpreted as representing "Indian tribes". Each tribe and non-tribal group has their own identities and concerns. While we agree on many issues, but there is also disagreement. It is inaccurate and misrepresentative, therefore, to speak of "Indian tribes" performing an action or holding an opinion unless it is an action or opinion all the tribes are unilaterally involved in and agree upon. When you speak of tribal involvement, identify the tribe involved by name.

Different Indian tribes participated in the SOR process to many different degrees, and with many similar and dissimilar comments. These comments (attached as appendixes) speak for themselves. Do not depend on someone else to read and summarize "Indian" comments for you. The SOR EIS affects many tribes (and non-tribes) that have not participated in any stage in this review, but whose resources and concerns should be considered as part of the SOR process.

We acknowledge that consultation and the development of rapport with the tribes is very difficult because of the historical relationship between federal agencies and the tribes. It is also difficult to quantify the effects of various alternatives on cultural resources that have never been surveyed. These difficulties do not relieve federal agencies from their responsibilities to carry out that consultation, and to consider the impacts of systems operations on cultural resources that they have not yet inventoried.

IV. GENERAL COMMENTS
CONCERNING THE SOR DRAFT EIS APPENDIX D:
CULTURAL RESOURCES

The individuals responsible for this EIS and how they can be contacted should be listed up front, at the beginning of the appendix (and all other volumes). Their names and addresses should be on page i. This should include, at a minimum, the heads of BPA, BOR, and COE, as well as a statement of their responsibilities. The names of all SOR managers and their responsibilities also should be included.

The Spokane Tribe was not part of any of the screening, scoping, or analyses included in the Cultural Resources appendix. The Cultural Resource Work Group presented the models and analyses to the tribes after the models and analyses were largely completed, and then only for the tribes to provide comment. The federal agencies have not acknowledged nor used tribal staff technical expertise, data, or experience, or traditional tribal knowledge in the development of alternatives, modeling, analyses, or interpretation of results. It is not possible, after you have completed most of the analysis, for the tribes to begin and be included in a meaningful or significant way in the SOR process. By proceeding this way, the federal agencies have opted not to use tribal information, or have acknowledge their belief that the tribes have nothing to offer to "scientific" analyses. By excluding the tribes from the screening, scoping, and analysis, they did not use all available knowledge, nor could this knowledge be considered in the decision-making process. Knowledge and data held by tribes was excluded from meaningful use and consideration in the SOR EIS process.

Section 102(c)(v) of the National Environmental Policy Act of 1969 requires that an EIS shall have a detailed statement on "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." The relationship between local short-term and "long-term productivity" is not adequately addressed in this document. Addressing just the limited issue of cultural resources, "local short-term use" including Euro-American recreational and industrial use of the reservoirs and the dams, addresses use for less than a century. Native Americans' activities have been long-term, permanently inhabiting this same area for a minimum of 12,000 years, perhaps much longer.

Long-term productivity includes protection of the environment, of which plants, animals, and human activities are a part. In national, continental, hemispheric, or world-wide perspective, the damming of the rivers and creation of reservoirs has destroyed an ecosystem. It can be in no way construed as long-term productivity, but rather addresses local short-term use at the expense of the largest part of an entire region. The Native American's culture has been consciously degenerated for the sake of

this local short-term use. You have destroyed their traditional way of life, the human activities adapted for and compatible with long-term productivity, for the sake of local short-term use.

The dams have permanently removed critical segments of this region, - its key waterways, from native plants, animal, and man. These waterways were the lifeline for the Inland Northwest. Loss of these waterways has had drastic negative impact on the environment for plants, animals, and man throughout the Columbia watershed. Addressing cultural resources alone, the Native Americans can no longer carry on their traditional economy, maintain their social groups, or have access to their most spiritual areas. They are only able to keep a small, unsatisfactory portion of their traditional character and practices because of the loss of these areas. From any perspective except "local short-term," the damming of the rivers, the construction of reservoirs, and the operation of the dams has resulted in continuous degradation of the "long-term productivity" of this region.

Section 102(c)(v) of the National Environmental Policy Act of 1969 requires that an EIS shall have a detailed statement on "any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented." The appendix does not address this issue. In order to meet this mandate, you must first inventory of all cultural and natural resources that are inaccessible because of reservoirs. This is a task that must be accomplished before completion of the EIS process.

The draft appendix also does not cover in detail the magnanimity of resources destroyed through inundation. It is just as important to note now, however, that the operation of the hydro-regulating dams also negatively affects resources that are not inundated. This has been recognized this in several major Corp studies.

When a freshwater lentic ecosystem is superimposed on a terrestrial and riverine ecosystem, the result is a mass mortality or migration of terrestrial plants and animals and the destruction of important environmental data from an entire catchment basin. Significantly, these changes are not necessarily limited to the permanent pool zone of the reservoir, but may extend to the backshore and downstream zones as well. (Lenihan et al. 1981, cited in Ware 1989:7)

This destruction has negative impacts on all aspects of native culture for the Spokanes and on scientific research potential.

Destruction of an ecosystem has far-reaching implications for the interpretation of cultural resources. Accurate paleoenvironmental reconstruction in archeology relies on the ability to reconstruct contemporary environmental

patterns (Butzer 1971). Since the present is so often the key to the past in paleoenvironmental studies, the destruction of modern environments and landscapes may make it impossible to understand past culture-environmental relationships. (Ware 1989:7)

We are unable at this time to assess the chemical and biochemical effects of inundation on Spokane cultural resources, other than to repeat that the effect of their exposure to reservoir waters and chemicals therein, and the effects of the repeated cycle of inundation and exposure to air, and the effects of burial under accumulated deposits, are all impacts which would not have existed if Coulee Dam had not been constructed. Chemical and biochemical conditions effect different material and site types differently: we cannot possibly test these within the scope of this study. We can say that some important cultural resources, such as bones and textiles (from graves and cemeteries) and pictographs, are known to be most negatively impacted by these changed chemical and biochemical conditions. Furthermore, these chemical and biochemical effects on the resources are dependent upon the operations of the federal dams, including the decisions reached as a result of this EIS, including the chosen SOS.

It states repeatedly in this document that information on TCP's is withheld by the Indian tribes. This is not true. The development of inventory and evaluation of TCP's is the responsibility of the federal agencies of the National Historic Preservation Act. Furthermore, since there has been no inventory of TCP's within the Lake Roosevelt area to this point, there is no information for the tribes to withhold. TCP's exist in the reservoirs, of course, but the information on their character, condition, and location has never been gathered. If the Spokane Tribe had a complete inventory of TCP's, there certainly would be some information withheld on these resources, especially specific locations; but most information (such as material types and elevations) such as needed for consideration of effects in this document would have been released. These repeated comments about Indian tribe's "withholding" information is exaggerated and appear to imply that the tribes are deliberately obstructive, which is definitely not true.

The primary mistake in the analyses reported in this document, besides lack of consultation, is the repeated use of greatly incomplete or inadequate data as if it were complete and adequate, and accepted use of false assumptions with the result: "Garbage in, garbage out." The authors, while acknowledging this problem, go ahead without correcting it. The entire volume runs on the supposition that if you acknowledge that your assumptions are false, you can go ahead and operate under them. Likewise, they state that their data is incomplete and oftentimes inaccurate, but do not attempt to compensate for or correct this problem. The descriptions and analyses in this document not constitute serious

consideration, they are not using best available knowledge, and they do not allow decision-makers to perform their NEPA, NHPA and trust responsibilities.

For one repeated example, while acknowledging traditional cultural properties exist, they address only effects to previously recorded archeological and historical sites ("stones and bones"). Traditional cultural properties (TCP's) and cultural landscapes, and unrecorded archeological and historical sites are not considered in the analyses. According to the Advisory Council on Historic Preservation, these types of resources are National Register eligible, and so your consideration of effects to these resources by system operations is required under the National Historic Preservation Act. Consideration of impacts on uninventoried resources is more difficult than dealing with previously recorded sites, but it is not impossible. It is quite common for archeologists to predict how many and of what type sites occur in unsurveyed areas based on information they do know. There is no excuse why the researchers did not find out the actual amount of land surveyed, and extrapolate for the unsurveyed areas. Similarly, it would be more accurate to base estimates of TCP's and cultural landscapes based on surveys in other similar areas, than to ignore consideration of these resources altogether.

Another repeated example is the false assumption that inundation is a benign impact on cultural resources. The authors and researchers explicitly accept that this assumption is false, yet continue to work and analyze data (which appear to be the "hard facts") without any attempt at correction or compensation for the falsehood. Accepting the false assumption that inundation is a benign impact to cultural resources will result in incredible devastation of resources, without their preservation or destruction even being considered. Lack of accessibility to sites, most permanently, is also never even considered as a negative impact. This is not giving consideration to the effects of system operations on these cultural resources, as required by law.

Some avenues for studying the effects of inundation on cultural resources directly related to systems operation include but not by way of limitation: difference of impacts by inundation in shallow versus deep water conditions; faster versus slower flow conditions on inundated resources; effects of inundation in the different chemical environments found in reservoirs; effects of lack of access to cultural resources located in permanently inundated area; the possibility and cost of recovering materials which have been inundated for long periods of time; effects of deep deposits on top of cultural resources; and the possibility and cost of recovering materials which have deep deposits on top of them. All of these topics need to be addressed in a serious consideration of the effects of systems operations and the various alternative on cultural resources.

In numerous places in this document it is stated, rather matter-of-factly, but falsely, that operating reservoirs at natural river levels would cause maximum erosion and greatest destruction of cultural resources. This statement is short-sighted at best, and an outright lie at worst. The cultural resources of the Columbia River and its tributaries existed there for many thousands of years in or on the ground, while the river ran its natural course. This was because they were protected by the natural soil conditions and vegetation. The tribes had access to their burial grounds, sacred and special places, and the lands and resources of their ancestors. Recalling the thousands of years many cultural resources have survived with the natural run-of-river conditions, now realize how many of these resources have been exposed or destroyed or permanently taken from access by the denuding of the landscape, repeated wetting and drying, erosion and deposition caused by the reservoirs in far less than a single century.

Natural river operations can never cause the horrendous destruction to cultural resources that regular reservoir operations have in such an incredibly short time. If the reservoirs were to resume natural river flows and the shores were left denuded, certainly there would be a time of great erosion, but in the long run the shores could eventually reach stability, which would never be possible with regular reservoir operations. It would be the federal agencies' responsibility to re-vegetate the currently denuded landscape, which would greatly speed recovery of the landscape. Only under natural river flow would cultural resources have a chance of permanent preservation and protection, and only under these conditions does anyone have access to the multitude of currently inundated resources.

Throughout this document as well, serious attention and analysis in only given to the impacts of exposure of archeological resources in the drawdown zone, and exposure of archeological resources to wave impact. These are certainly critical impacts to cultural resources, but who decided that these were the only impacts worthy of serious consideration? Why are all other impacts to sites ignored, only noted, but not considered?

The exposure of archeological resources to wave impact, furthermore, is most definitely not equatable to "shoreline erosion," though this false equation is repeated over and over again in this document. Exposure in the fluctuation zone and to wave impact are very important impacts to cultural resources and require serious consideration, but they are not equatable to shoreline erosion. The analyses on "shoreline erosion" were produced by plugging the raw number (count) of previously recorded sites, by previously recorded elevations, and comparing it to the fluctuation zone for monthly average reservoir levels. All previous comments concerning the lack of adequate and/or accurate data, lack of consideration of site size or type, lack of consideration for unsurveyed areas and resource types, lack of

consideration of real-time fluctuations (as opposed to monthly averages for reservoir levels) apply here. The researches acknowledge that surveys are extremely biased to particular elevations (especially those involved in the fluctuation zone), but continue without correction or compensation or correction of this problem, is a particularly critical flaw in these analyses. The numbers produced, and the interpretation of these numbers, in these analyses are meaningless, and in no way reflect shoreline erosion or impact of waves to cultural resources. This type of description and analysis is not acceptable either in scientific or tribal terms, and does not meet federal responsibilities to manage and consider effects to cultural resources in these reservoirs.

Shoreline erosion is a separate and equally (if not more) important factor to consider in the effects of reservoir operation on cultural resources. Shoreline erosion is not actually addressed at any point in this document. The destruction of cultural resources by shoreline erosion, retreat of the shoreline, and the subsequent and continuous decrease in landbase for the Spokane Tribe as well as others is a serious issue which must be fully considered in the decision of systems operations.

It would have been most interesting and productive to see an analysis developed to determine the impact of true fluctuation of the reservoirs, based on realized fluctuation, not monthly averages. Use of monthly averages does not reflect the greatest amount of fluctuations that affect cultural resources. As long as the Cultural Resource Work Group was "plugging in" numbers into the computer, they could have used real-time fluctuations as opposed to monthly averages. The fluctuations that occur on hourly and daily basis are completely ignored in this document, and in consideration of effects on cultural resources, even though it is these hourly and daily fluctuations that actually impact these resources.

The effects on cultural resources above high pool are never considered in this document, though these sites are directly and indirectly effected by reservoir operations. A direct analysis of shoreline erosion and view-/audio-sheds would help to address the effects operations on "higher" resources. There is no way at this point for decision-makers to take the effects of systems operations or the different alternatives on these cultural resources.

There has been no discussion of confidentiality of information. What information will be kept confidential? How will it be kept confidential? Are you going to release this information for inquired addressed through the Freedom of Information Act? How are you going to consider confidential information if the tribes will not release it, if you cannot protect it?

Discussion has been made of constructing a Columbia River Forum, but will this forum have decision-making power? Tribal representatives have been promised a place on this forum, but will

they have the power to make decisions, or simply make recommendations to others? Is the fate of Spokane Tribal cultural resources still left to the whim of those in power at BPA, COE, and BOR? Who will be responsible for these decisions?

There has been no account, procedure, or planning for curation of materials recovered during this project, though this too should be a factor in considering alternatives. Curation of Federally Owned and Administered Archeological Collections (36 CFR Part 79) mandates planning and funding for the curation of these materials recovered in the past and the future.

The Cultural Resource Work Group did not adequately bring out the costs for mitigation and treatment of cultural resources which are the responsibility of the federal agencies. These costs will be very considerable for any chosen alternative. If such dollar figures were included in this document as they should have been, decision-makers would be more inclined to give the necessary serious consideration to negative impacts of the various alternatives on cultural resources.

It is perhaps most disheartening in this process to know that the members of the Cultural Resource Work Group themselves did not consider their work worthy of real consideration in the decision-making process. They repeated in numerous meetings that the cultural resources nor effects upon cultural resources would receive any consideration by decision-makers; some were understanding in the tribes' disgust and frustration in cooperating under these conditions. They stated very matter-of-factly that the Biological Opinion forced the agencies' hands, that the final decision would be based on this opinion, and that the activities of the Cultural Resource Work Group was only to meet NEPA requirements. "We are just stuck with whatever decision is made, which will be based on requirements for fish, and that what we do for cultural resources will only take place in the mitigation phase of the project." This, of course, does not meet federal requirements for consideration of cultural resources under NEPA or NHPA. While at the March 30th meeting with decision-makers, we were assured that effects to cultural resources would be considered; but we weigh these repeated statements in the Cultural Resources Work Group to the contrary.

It must also go on record that while it is repeatedly stated in this document that Programmatic Agreements (PA's) will be developed between the responsible Federal agencies and the effected tribes for cultural resource management, no such PA has been developed at this point. A couple draft PA's were handed out to some tribal representatives present in Cultural Resource Work Group meetings, but was found unacceptable by all tribal members present. A decision was made by the Cultural Resource Work Group to instead follow up on a draft PA between the federal agencies and the Advisory Council without the tribes' concurrence. The work group

members announced that they were only required to deal with the Advisory Council, and to present a draft PA for tribal involvement (even one unacceptable to the tribes) to the Advisory Council to show they were trying to deal with the tribes. They said that PA's with the tribes concerning cultural resource management would come "some time after the Record of Decision." No draft PA has been presented to the Spokane Tribe as a sovereign nation during any of the SOR process.

Because of lack of consultation, and useless analyses based inadequate data and false assumptions which are explicitly accepted as such without correction or compensation, among other problems, the requirements of NEPA and NHPA for serious consideration of effects of operations on cultural resources, using the best knowledge available, has not been met by this document. As this document stands, ARPA, NAGPRA, AIRFA and other requirements are not addressed, described, or analyzed for how they will be effected by systems operations or different alternatives.

V. COMMENTS ADDRESSING SPECIFIC PARTS
OF THE SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

Preface: Setting the Stage for the System Operation Review

Pg i, 1st para. Along with Federal, state, and local agencies, tribes should also be listed as active participants in managing river uses, especially cultural resource management.

Pg i, 2d column, 3d para. It is stated that representatives of Indian tribes and members of the public were part of the 10 work groups during the three stages of the SOR process (scoping, screening, and full-scale analysis). This is not true. While public meetings were held during the scoping process, there was no tribal involvement. Cultural Resource Work Group members decided the Tribes and the public could not be included in the screening process. It was only after the full-scale analysis was nearly complete that the Tribes were invited to "comment" on their results; and there were no members of the "public" included on the Cultural Resources Work Group.

Pg ii, 2d para. You state, "After holding public meetings in 14 cities around the region, and coordinating with local, state, and Federal agencies and Indian tribes, . . ." This is not true. There was no coordination with the Spokane Tribe, and perhaps any other tribe, at any point in the scoping process.

Chapter 1: Introduction

Pg 1-1, 1st para. The second sentence reads "archeological and historic properties meeting the criteria of the National Register". This statement should include other cultural resource types, such as cultural landscapes, mining properties, properties associated with significant persons, aids to navigation, cemeteries, historic vessels and shipwrecks, and traditional cultural properties. It should also be expanded to read "eligible or potentially eligible for inclusion on the National Register" in order to be truly accurate.

Pg 1-1, 1st para. This paragraph also states, "This study attempts to determine and compare the impacts . . . on traditional values, properties or practices as identified by tribal governments;" yet at no time are these identified in the appendix. This goal is stated in the first paragraph of the document, but is never further addressed, of course because these values, properties, and practices have not been identified. Because obtaining an actual inventory is not possible within the scope of this study, you should take this statement out, or limit it by stating, "We would like to determine and compare the impacts on traditional values, properties, or practices as identified by tribal governments, yet obtaining such an inventory is not possible within the scope of this study."

Pg 1-1, 2d para. After the phrase "State Historic Preservation Officers (SHPOs)" should read "Tribal Historic Preservation Officers (THPOs).

Pg 1-1, 2d para. Creating "action plans, research design, and coordination" suggest that the federal agencies involved are going to plan for cultural resource management. However, there is no mention of cultural resource management actions: implementation of preservation, protection, and mitigation. Are the agencies just planning for planning? Or are they truly preparing for the required preservation, protection, and mitigation actions, or are the plans just to address required paperwork? Do these federal agencies actually intend to follow the plans with action?

Pg 1-1, 2d column, 2d para. In this paragraph, you suggest that study of cultural resources helps to understand people themselves (human interaction) and environment (subsistence); however this statement does injustice to the study of cultural resources. Also to be included should be technology, economy, ecology, evolution, human development, social development, and medical science, to name just a few.

Pg 1-1, 2d column, 3d para. Understanding the definition of the term "culture" is critical in understanding what "cultural resources" are. The statement "The academic and legal definitions tend to focus on tangible evidence such as sites and artifacts," is false. Academic definitions of culture (at least in the past 100 years) places most weight on the intangible aspects of culture. For example, in a popular anthropology text, Brian Fagan (1992:13) (an archeologist) defines culture as:

Culture can be called a people's (or a society's) traditional systems of belief and behavior, as understood (or adapted) by individuals and the members of social groups, and manifest in individual or collective behavior. It is also part of our way of adapting to our environment.

The flurry of activity by cultural anthropologists and linguists at the beginning of this century to record those cultures in danger of extinction - Native American tribes - recognized and was motivated by the need to protect and preserve the intangible aspects of culture as a unique, nonrenewable resource. There have been legal definitions of "cultural objects" in federal mandates, such as in NAGPRA: inclusion of the word "objects" in these documents implies that the word "culture" alone does not denote material objects.

The National Park Service (NPS-28), as the lead resource protection agency in the Department of Interior, defines culture as:

Culture (is) a system of behaviors, values, ideologies, and social arrangements. These features, in addition to

tools and expressive elements such as graphic arts, help humans interpret their universe as well as deal with features of their environments, natural and social. Culture is learned, transmitted in a social context, and modifiable. Synonyms for culture include 'lifeways,' 'customs,' 'traditions,' 'social practices,' and 'folkways.' The terms 'folk culture' and 'folklife' might be used to describe some aspects of the system that are unwritten, learned without formal instruction, and deal with expressive elements such as dance, song, music and graphic arts as well as storytelling.

This definition is cited and reinforced as the working definition for the National Register programs in National Register Bulletin 38 (1):

There are many definitions of the word "culture," but in the National Register programs the word is understood 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.

Therefore, when discussing the effect of dam and reservoir operations on cultural resources, we must give at least equal weight to their effects on the intangible aspects of culture as to the tangible ones. The need for determining the effects of operations on intangible cultural resources is acknowledged in the second sentence of the SOR EIS appendix (pg 1-1), but is then not applied in the rest of the document.

Pg 1-1, 2d column, 3d para. You state that "The Cultural Resources Work Group (CRWG) has attempted to incorporate the tribes' views in the impact analysis . . ." This statement is a good goal, but inappropriately stated as a completed task ("has attempted"). As previously states, the work groups "attempt" at considering tribal views has been arbitrary and capricious. To this point, the tribes' views have not been incorporated at all. Until they have been, this statement should be removed, or changed to state, "One goal of the CRWG is to incorporate the tribes' views in the impact analysis."

Pg 1-2, 1st column. This list of issues is presented here, at the beginning of the volume, and yet many of these issues are not addressed anywhere else. (For example: Where is the need to fully assume responsibility for burial protection and NAGPRA provisions for exposed human remains and grave goods addressed? Where is the need for public interpretation and education addressed? Where is the need to better define tribal involvement in the entire SOR process addressed? for just a few.) Are the decision-makers going to receive information addressing these issues in a separate volume? If not, how are they going to consider them?

Acknowledgment of the issues is the beginning, but these issues must be actually addressed if the federal agencies are going to meet their NEPA and NHPA responsibilities. Also to this list should be added: (n). need for government-to-government relations with tribes; and (o). need for empowerment of tribes in management of their traditional resources, especially cultural resources.

Pg 1-2, 2d column, 1st para. The statement: "the evaluation of alternatives took into account tribal concerns for traditional cultural properties," is not true. TCP's were mentioned as existing within the reservoirs, but they are not considered in any analyses reported in this document, nor are differences of impact on TCP's between alternatives considered.

Pg 1-3 through 1-4, Technical Scope. The first sentence in this section states that "In addition to addressing the requirements of NEPA, the SOR takes into account several Federal laws relating to cultural resources." That is a false statement. Several federal mandates are then listed, such as ARPA, NAGPRA, RFRA, and AIRFA, Are mentioned in this section, but there is no further text "taking into account" or addressing their requirements in this document (accept that the need for a resource management plan is acknowledge in Appendix A of the document). Your management responsibilities under these federal mandates will be affected by the chosen alternative. The means of meeting these mandates, and how they are affected by the different alternatives, must be discussed before they can receive consideration in decision-making. Because of inadequate data and false assumptions which are explicitly accepted as such without correction or compensation, the requirements of NEPA and NHPA for serious consideration of effects of operations on cultural resources, using the best knowledge available, has not been met. As this document stands, ARPA, NAGPRA, RFRA, and AIRFA requirements are not presented or addressed, nor plans made for how they will be effected by systems operations or different alternatives. This section leads the reader, including decision-makers, to believe that provisions have been made for meeting these requirements, and that the effects of the alternatives on these requirements have been considered. That is false, and may lead decision-makers into a false sense of security when in fact they are in direct violation of these mandates.

Pg 1-3, 2d column, 2d para. When you state: "Other legislation of importance to the treaty tribes," you must also realize that these mandates should also be of importance to the responsible federal agencies.

P 1-4, 2d column, 2d para. You describe types of Indian lands affected by SOR, but you do not at any time in this volume discuss the impacts upon these lands. How can you consider them if they are not even discussed?

Pg 1-4, 2d column, 3d para. You state "Specifically, the tribes would like all SOR work groups to acknowledge and act on this broader understanding of cultural resources." Specifically, the tribes understand that natural and cultural resources are inseparable, and that impacts to one also impacts the other. They must be considered together. The tribes understand that impacts to these inseparable resources have a direct impact on people here and now, and direct impact on our children's futures. It is this inseparableness, and the magnanimity of effects from the decisions in this SOR on us and on our future, that we want the SOR work groups and decision-makers not only to understand, but to apply in the SOR process.

Pg 1-5, "Public Involvement". There should also be a separate section addressing Tribal Involvement. At some point, this document should recognize which tribes have participated and to what extent.

Pg 1-5, 3d para. It was foreboding that the Cultural Resource Work Group did identify a specific alternative for analysis, since this was the stated goal (pg i, 2d column, 4th para.); decision-makers should have been alerted that the Cultural Resource Work Group did not consider their efforts worth of consideration in the choice of alternatives in the SOR process. At this early stage, the work group had already decided that their role was simply to develop a record, not to have an effect on the decision-making process. This position meant that Culture Resource Work Group members did not exert all possible energy to determine the effects during the pre-decision period, a sentiment echoed in the last sentence: "The CRWG agreed that other factors affecting specific cultural sites would be taken into account in determining appropriate management or treatment measures once the operating strategy was chosen."

Pg 1-6, 2d para. "These two reservoirs (Dworshak and John Day) are generally representative of the physical and operational conditions present at storage and run-of-river dams, respectively, in the Columbia and Snake River systems." Who made this decision? What was it based on? If they are representative of the other dams, in what way are they physically representative, and to what extent?

Pg 1-6, 2d column, 2d para. In what way has the CRWG initiated compliance with NHPA requirements for mitigating impacts to significant cultural resources?

Pg 1-6, 2d column, 3d para. The statement "This draft appendix takes into account legal requirements under NHPA, ARPA, and NAGPRA, as well as NEPA," is not true. This may be a goal of the Cultural Resource Work Group, but most of the mandates under these legislative actions are not addressed in this document. There is an unsuccessful attempt at meeting NEPA and part of NHPA requirements, but other than mentioning that they exist, all other of these requirements are not accounted for in any way in this

document.

Pg 1-6, 2d column, 3d para. The final impact analysis in this document cannot be used as a basis for recommended treatment in mitigation actions. It is based on incomplete and inaccurate data, and without any tribal consultation. Any plans for effective treatment and mitigation actions must be based on a more realistic assessment of real resources, and must be developed in cooperation with the effected tribes.

Pg 1-6, 1st para. The statement that tribes will be part of a joint team in identifying, evaluating, and managing cultural resources is false to this point in time. As stated numerous times, the Spokane Tribe was not allowed to participate until after scoping, screening, and most analyses was complete, and then in the limited capacity of providing comments. To be part of a joint team, tribes will have to participate on equal standing with the federal agencies.

Chapter 2: Cultural Resources in the Columbia Basin

Pg 2-1, 1st para. In the statement, "Most of the identified cultural resources in the Columbia Basin are archeological in character," while this statement may actually be literally true, you are implying that archeology is equated with the prehistoric. It would be better to say, "date from the prehistoric." In the next sentence you equate "historic" with Euro-American and Asian history; however, the Native Americans, Hispanics, and other culture groups also have important historic sites. It would be better not to equate time periods with ethnic groups. You also forget to mention or list examples for traditional cultural properties and cultural landscapes, though these are also well-defined cultural resource types recognized by the Advisory Council.

Pg 2-1, 2d para. The purpose of this paragraph is to point out that there are types of cultural resources that Native Americans recognize as significant that are not eligible for National Register listing. This is true, but the statements in this paragraph are incomplete and misleading. First, the Advisory Council recognizes traditional cultural properties as a significant cultural resource type, and so they belong in the previous paragraph. Second, while it is true that "Native Americans recognize . . . a much broader range of features from the natural environment and the sacred world as cultural resources," you then go on to equate these with Traditional Cultural Properties (TCP's). (Refer also to comment on Pg. 2-3, 2d column, 2d para.) TCP's do not include all other types of cultural resources that Native Americans recognize. TCP's are a subset of these. Tribes that have developed inventories of TCP's are often disheartened to find that there are many more cultural resources which do not fit into the definitions set forth by the Advisory Council. Third, as has

been stated many times, the natural world is part of the cultural world, and we do want impacts to these considered together. Fourth, the most important cultural resource which does not fit as a TCP or in other categories defined by the Advisory Council, is the burials and cemeteries of our ancestors. Impacts on these resources, though not eligible for National Register, deserve as much attention and consideration as all other resources and river uses.

Pg 2-1, 2d column, 1st para. Saying "the people left them behind," when discussing prehistoric resources implies that these people are no longer here, that they abandoned the area. This is not true on either count. It would be better to say "the people that occupied these sites."

Pg 2-3, 2d column, 2d para. This paragraph is incredibly important, and should receive greater consideration than being stuck inconspicuously, buried in the heap of "data" in this volume. Therefore, we repeat it here.

Cultural resources have significant meanings to Native Americans which go beyond the strict legal definitions cited above. The tribes have expressed to the CRWG their view that the Columbia River itself is a sacred traditional resources, as well as the lands and natural resources in, around or associated with the river. For example, the Yakama Indian Nation submittal noted in Chapter 1 explained that the full scope of cultural resources included water, air, rock, streams, plants, animals, and birds, as well as the people and their sacred objects and traditions, including the graves of their ancestors. Rather than viewing particular components of their lives, heritage or natural environment as more or less "significant" than other components, traditional Yakama people prefer to recognize and protect all these things equally: "The cultural and spiritual components of resources cannot be separated from other aspects of the resources. The proper balance must be nourished and renewed between the People and the continuing creation of the Earth."

Pg. 2-4, 2d para. When looking at Chinese history in the Pacific Northwest, it is particularly enlightening as a dynamic photograph of the history of inter-ethnic relationships in this region.

Pg 2-4, after section on Euro-Americans and Asian-Americans. Other ethnic groups, such as Hispanics and those of Russian descent to name just two, should also receive recognition as having significant cultural contributions in this region.

Pg 2-6, 3d para. It is interesting that here you recognize that very little is known of the prehistory of Lake Roosevelt other than the investigations at Kettle Falls, yet throughout the analyses, the currently recorded sites are assumed to be representative and inclusive of the entire lake.

Pg 2-9, 2d column, 3d para. Grand Coulee Dam and Libby Dam, while receiving brief mention, did not contribute greatly nor were the focus of the reservoir inundation study, as you imply here.

Pg 2-11, 1st para. In regards to the situation at Lake Roosevelt The National Park Service gave up management of cultural resources to the Bureau of Reclamation in 1978. This confusion is typical of an area that has too many players (BOR, BPA, BIA, CCT, and STI), so that the federal agencies can keep claiming or passing responsibility (depending on their own needs) for cultural resources between agencies, and between regional and local offices.

Pg 2-11, 3d para. We object to the statement "The National Park Service will act as the lead agency in implementing the investigations, with the involvement of the Colville Confederated Tribes, The Spokane Tribe and the Bureau of Indian Affairs." Since they took over management in 1965, the National Park Service has had a history of, upon notice of deterioration of cultural resources, hiring experts to study the problem, then waiting several years until someone else complains, then hiring another expert to study the problem, then waiting several years, etc., until the problem is solved with complete destruction of the resource. Recently, the National Park Service has added another layer of bureaucracy (following their reorganization), so that the Tribes must receive approval of the local Coulee Dam NPS Resource Manager (a biologist), and then the Coulee Dam NPS Superintendent, and then must receive the approval of the NPS Satellite Office Archeologists, before any or action can be considered by the "Lake Roosevelt Cultural Resources Advisory Group," which supposedly is the "cooperative management" between these various agencies. One example of this was the hiring of a "Park Archeologist" for the Coulee Dam NPS. This position was set up at the request of the CCT and STI for archeological assistance, and who were promised this staff position would be to help them run tribal historic preservation programs. When the position came into being, however, the Park Archeologist duties were to care for Coulee Dam NPS needs "first," leaving the tribes with no assistance, help or advice from this position, nor has this staff been able to participate in any form of planning, management, or advice concerning cultural resources which fall within reservation boundaries of Lake Roosevelt. Several times in the recent months, the NPS Satellite Office Archeologists have mentioned off-handedly that they had set up this or that project in the next years budget, even though such projects had never been discussed with the tribes, nor brought up in the Lake Roosevelt Cultural Resources Advisory Group. In effect, the National Park Service has complete and inappropriate control over the 1991 Programmatic Agreement funds, and are using it to further their own agendas rather than preserving and protecting cultural resources.

Chapter 3: Study Methods

Pg 3-2, 2d column, 3d para. The statement that "Under consistent operating conditions, reservoir shorelines will reach a state under which further erosion and sedimentation are stable or nearly stable," is not true. Even keeping their operation conditions consistent, the fluctuations (even consistent fluctuation) continue to foster processes of erosion and deposition. In reservoirs that fluctuate such as Lake Roosevelt will never get to a point of stability (Lenihan et al. 1981; Ware 1989). Lands continue to be lost off the banks of Lake Roosevelt, shorelines continue to recede, and the reservoir bottom to be filled in with the eroded soils, at an alarming rate even 55 years after the reservoir was created. This can in no way be described as "shoreline equilibrium".

Pg 3-2, 2d column, 4th para. If you wait for the soils to erode to bedrock to create shoreline equilibrium, all cultural resources will be destroyed or out of context, making them almost worthless. You must also understand that erosion to heavier and less transportable rock to armor the shoreline will also destroy the cultural resources within, and may only occur in a very limited number of places under very special and specific conditions. These arguments for depending on erosion to develop shoreline equilibrium are not acceptable means of preserving and protecting the cultural resources located therein.

Pg 3-3, 1st para. The statement "Shorelines also reach a point of equilibrium due to the completion of slope failure cycles," is not true. Your use of the word "cycles" in itself describes the never-ending nature of this process along reservoirs. As soon as there is a slope failure along a reservoir, by nature of the soils involved in slope failure, the erosion and de-stabilization cycle begins anew.

Pg 3-2 through 3-3: On discussions of shoreline equilibrium, erosion, and deposition. For the information of the non-archeologist, it is extremely important to note that after artifacts have been moved from their original position, or the soil around them has moved, their scientific value (and sometimes their tribal value) has been almost completely destroyed. Archeologists must know where, how, and with what an artifact was originally deposited in order to redeem the artifact's full value. Likewise, the Spokane Tribe will care for burials and associated items after they have eroded, but these graves have been shamelessly desecrated by that point.

Pg 3-3, 2d column, 4th para. The statement "The final comparison of alternatives involved . . . an assessment of the erosional susceptibility of soils and landforms at the reservoirs," is false. There was no study of soils and landforms at any but two reservoirs (Dworshak and John Day); these were presumptuously assumed to

represent all other reservoirs in cultural resources, soils, landforms, and reservoir-induced processes.

Pg 3-3, 2d column, 5th para. It is important to note that the areas of greatest disturbance by flow augmentation, mouths of streams that flow into the reservoir, are also one of the areas of highest cultural site density, often with the most complex cultural resources.

Pg 3-4, 2d para. The statement, "As long as the reservoir operates consistently, filling and releasing to the same elevations seasonally and year-to-year, shoreline erosion occurs at a uniform rate," is false. Even if it were true, accepting a uniform rate of erosion is not preserving and protecting resources; erosion must be minimized.

Pg 3-5, 5th para. Again, you are going to focus on exposure of cultural resources in the drawdown zone, and on the wave-impact area. These two are certainly important impacts to cultural resources, but who made the decision that these were the only impacts that deserved serious consideration?

Pg 3-5, 2d column, Section 3.2.1 In order to determine what percentage of cultural alternatives the alternatives would affect, the Cultural Resources Work Group used the recorded elevations for recorded archeological sites in the reservoirs. First, this then only considers impacts to recorded sites, which is a minute portion of actual sites, without any attempt to predict how many more resources there are unrecorded. Second, they made no attempt to predict how many, where, or how other types of cultural resources would be affected. Third, they used elevations that most often are inaccurate (from eye-balling in the field, or guessing after the fact), and often recorded as a single elevation for a site that may cover a mile of ground surface. Fourth, sites that do have highest and lowest elevations recorded (and these are in the minority) which extend below the reservoir level on the day of recording have recorded lower elevations that reflect only the reservoir level of that particular day, not the actual lowest elevation of the site. Fifth, recorded sites are all counted as "one incident," whether that site be 1 meter in diameter, or a mile long. Sixth, the recorded surveys are admittedly biased toward areas of interest for federal development. There is no way that an analysis based on this data can have meaningful results to compare impacts on cultural resources.

Pg 3-9, 2d column, 3d para. Pictograph, textiles, human bones, and other organic materials are particularly vulnerable to chemical and mechanical weathering of wet-dry cycles. The effects of inundation in the chemical environment found in these reservoirs has not been considered here.

Pg 3-10, Table 3-1. This table is simply deceiving. The number of

recorded sites would be more meaningful if compared to the area which has received systematic survey. Comparison to the reservoir surface area is meaningless, as sites do not occur on the reservoir surface, but on the land surface below, which is obviously much different. If the reader does not spend a great deal of time comparing the textual comments below with the table, the table leads the reader to believe that there are actually 4.22 cultural resources sites per 1,000 acres in Lake Roosevelt. That is outrageous for an area known to contain rich archeological material: recorded archeological site densities in areas systematically surveyed in reservoirs in this region average 28 sites per 1,000 acres, up to 120 sites per 1,000 acres, without counting any other types of cultural resources!

Pg 3-10, Text below Table 3-1. If the reader carefully examines the text under this table, he or she is told that the table actually reflects "the completeness of cultural resources inventories within the reservoirs." It would be fairly easy and much more accurate to actually determine the completeness of the cultural resource inventories. List what type of cultural resources have been subject to survey (example: archeological and historical; not cultural landscapes, resources associated with important persons or events, or traditional cultural properties) at each reservoir; and the percent of area which has been systematically surveyed for these cultural resources compared to the entire area affected at that reservoir (example: 36 acres of 90,000 acres, or 0.04% of the total effected area has received systematic survey).

It is also extremely frustrating and ineffectual for the Cultural Resources Work Group who are stating that this table provides an estimate of the completeness of cultural resources inventories within the reservoirs, do not then use this information in the analyses to follow.

Pg. 3-11, Section 3.3 This section deserves a closer look, as the validity of your analyses is based on these assumptions and limitations. Assumptions must certainly be made in the course of any study, and all projects are subject to limitations. However, those involved in your study are such as to render any conclusions questionable at the least and probably completely invalid.

Pg 3-11, 2d para. "This analysis is limited in scope to areas downstream of Brownlee Reservoir, as is the SOR analysis in general." Is this implying that reservoirs have no impact on upstream cultural resources? Or you don't know, so you're not going to check it out? Or are you just not going to be responsible for these areas, even though you're federally mandated to do so? Perhaps you are assuming the downstream effects of reservoirs are the same as upstream, and so aren't considering them in your modeling. This really needs some explaining.

Pg 3-11, 3d para. "The analysis assumes that cultural resources sites are equally susceptible to erosion and processes of landform change as are non-sites." This is a false assumption. Cultural resources (landscapes, archeological sites, cemeteries, sacred areas) are rarely of the same material as the soil and rock matrix they are associated with. Therefore these cultural resources are most often drastically unequal to landforms in terms of susceptibility to erosion and change. Even though a landform does not show substantial change (say, an inundated terrace of sand and gravel), its matrix and those materials therein are not necessarily (and in fact rarely) in a static state. One very common example of such a process occurs to lithic scatters on low terraces: the terrace may be fairly stable because seasonal erosion and deposition may be about equal, but the lithic scatter will be subject to vertical sorting and horizontal scattering from water action, as well as visitor "pickup" if it is exposed for part of the year. Furthermore, losing a couple of feet of a landform per year may be insignificant to the landform, but devastating to a cultural resource.

Pg 3-11, 4th para.

Some kinds of sites, such as archeological sites, however, occur at higher density in places such as river terraces that may be less susceptible to erosion, landsliding, and slumping than some other locations. Steep slopes that are more subject to geomorphic processes, such as land slumping and sliding, may have fewer cultural resources.

Cultural resources probably do have differential distribution, but there are three faults to the statement above. First, it is based on studies which have mainly been federally-funded projects around reservoir waters, which creates a strong bias toward sites in that area. The original Columbia River bed under Lake Roosevelt nor much of the area above the 1310 line, for example, has never been surveyed. Second, making such statements is dangerous without testing. Without equal sampling above and below, we cannot know how archeological sites are distributed; with adequate information, this hypothesis could be tested. Finally, the ~~in~~explicit assumption is that river terraces are not as subject to erosion and landsliding. River terraces have fronts, often with steep slopes, and these are subject to erosion if located at reservoir level. Even more importantly, because they are often composed of unconsolidated sands and gravel, river terraces not only erode, but then often continue to erode without reaching a point of stabilization. As stated before, Spokane cultural resources affected by Coulee Dam operations are located almost exclusively on Spokane flood deposits which are inherently unstable in reservoir conditions.

Pg 3-11, 5th para. "The analysis assumes that the known cultural resources are representative in type and location of all the

cultural resources, known and unknown, at the reservoirs." As addressed in the previous paragraph, the surveyed area is small, and very biased toward the upstream end of the "bathtub ring" and fluctuation zone. Surveys have been of vastly different quality. Traditional cultural properties and historic (and prehistoric) landscapes have only recently been recognized, and none have been recorded as yet in the Lake Roosevelt area. Native American groups have not been consulted concerning their knowledge of cultural resources. Therefore, this statement is false: we know that the "known" cultural resources definitely do not represent all cultural resources in type or location.

Pg 3-11, 5th para. "It is not clear from existing data what percentage of the reservoirs has been surveyed." This information is necessary before modeling or planning can occur. Percentage of area surveyed is required information in any quantitative study, as Davy's purportedly is. One calculates the percentage of the reservoirs subject to survey by dividing the amount of land which has been subject to survey by the amount of ground (not water surface) area affected by the reservoir. Not including the surveys currently underway (for which, of course, there are no reports as yet), the portion of Lake Roosevelt which has been systematically surveyed for archeological and historical sites includes roughly 3% of the area directly impacted by systems operations, and does not even begin to address indirectly impacted areas. (This number is derive by dividing the area around Kettle Falls (the only portion of the lake which had previous systematic survey) by the size of the lake. This number is only a rough estimate, because we estimated the amount of land under the lake.) Even within this surveyed area (the 3%), the conditions and exact location of sites will need to be revisited since they were recorded in the 1970's. All other cultural resource types, such as traditional cultural properties and cultural landscapes, have never received any survey, identification, or treatment. For all cultural resource types other than archeological and historical sites, the portion of Lake Roosevelt which has been surveyed in 0%. Three per cent (for archeological and historical resources) and zero per cent (for all other cultural resource types) are not sufficient samples on which to build a model.

Pg 3-11, 2d column, 4th para. "The hydroregulation models assume a constant rate of reservoir change from month to month with no interim fluctuation, which is not necessarily accurate." While this statement is true, it assumes away a critical variable to cultural resources that require greater consideration.

First, actual fluctuation may vary considerably from the monthly averages constructed. While decades of inundation studies have recognized the destructive forces within the fluctuation zone, this factor is only grossly considered in the "days exposed" field of this study. There is no consideration of the quantity of variation that may actually occur from the monthly average. Dealing with

monthly averages greatly underestimates the impacts caused by actual fluctuation.

A site may be exposed and inundated many more times than suggested by "monthly averages" due to daily fluctuations. Negative impacts by mechanical processes are maximized in quickly fluctuating zones. Both common sense and field experience show that sites that are exposed and re-inundated quickly and frequently receive a great amount of erosional impact caused by fluctuation of reservoir levels. Common sense and field observations tell us that sites which are inundated and exposed once per month receive less mechanical impact caused by fluctuation than do sites which are inundated and exposed ten times per month.

Types of materials are not considered. Some materials deteriorate much more quickly (so much more quickly it cannot be overstated here) in an environment of repeated wetting and drying. These biochemical and chemical deterioration are greatly increased in a fluctuating wet-dry environment. Bones and textiles are examples of materials more greatly effected by fluctuating reservoir levels, as opposed to stone artifacts. These same materials most often appear in burials, and include the most sacred cultural resources.

Fluctuation also strongly influences other impacts on cultural resources, especially recreation-related impacts. Low water levels are periods of high off-road vehicle use (be it unauthorized) in the fluctuation zone. Quickly fluctuating water is a favorite time for looting. Locals all know that this is a great time to find exposed artifacts and burials.

Pg 3-11, 2d column, 6th para. "The hydroregulation models assume no significant daily or weekly fluctuation in reservoir operations. . . . These fluctuations would not necessarily differ among SOS alternatives, however." It is not impossible to quantify the amount of actual fluctuation which occurs in and between the different systems operations strategies. We believe that the statement "These fluctuations would not necessarily differ among SOS alternatives" is an assumption itself. Daily or weekly fluctuations would differ between alternatives, and these differences should receive consideration; this would be one avenue to explore in order to minimize damage to resources. The chosen alternative should minimize this impact.

Pg 3-11, 2d column, 7th para. "The analysis assumes that all reservoirs are equally susceptible to vandalism and artifact theft." This assumption is false as well as unnecessary. Some areas and some site types have more active looting, intentional and unintentional, than others. Lake Roosevelt has a high level of unauthorized recreational vehicle use during draw-downs. Because recreational vehicle use is popular here, many locals own such vehicles, and because there is a general lack of respect for federal regulations here ("after all, it is a recreation area, not

a park"), damage caused to cultural resources within Lake Roosevelt is higher than in some other reservoirs.

Likewise, looting is a popular and common activity around Lake Roosevelt by both professional black-marketers and avocational "Sunday" collectors. Because fluctuating reservoir levels repeatedly expose new sets of artifacts and burials, Lake Roosevelt serves as the "shopping mall" for artifact collection. While many are content to pick up only those artifacts exposed by the reservoir, others use these surface finds to locate rich subsurface deposits; screens abandoned by looters at local sites attest to their thoroughness. Many families in this area see artifact collection and looting as a family activity; it is a popular "sport". Professional artifact collectors realize, of course, the Columbia River's rich prehistoric and historic wealth, and regularly visit sites in this area.

Lake Roosevelt serves to increase the relative amount of negative impact by recreational vehicles, vandalism and looting on cultural resources, not only through its fluctuating levels, but through its sheer size. The National Park Service has estimated over 660 miles of shoreline along Lake Roosevelt; there is no personnel or funding set aside to patrol the cultural resources there. National Park Service and tribal rangers are understaffed and under-funded, and can only patrol high use areas. No one is available to patrol low use area, where looters (professional and avocational) know they can surface collect and dig unnoticed. The Spokane Tribe requested funding from the Bureau of Reclamation to patrol exposed cultural resources during the Spring 1995 drawdown. The Bureau refused to fund the patrol, so the Spokanes have funded the project themselves in order to protect these non-renewable resources. Though this patrol cannot reduce the number and extent of exposed resources, it has been very successful in reducing the impact of looting and off-road vehicle use. The rest of the year, cultural resources are exposed through erosion and other mechanical impacts along Lake Roosevelt, and left unguarded for the taking.

Implicitly, your work assumes that all sites are equally susceptible to vandalism and artifact theft as well. It is precisely those most sacred cultural resources - burials - which are most often sought by looters. Most locals know where burial sites are eroding (ask at a local restaurant or bar) and many patrol these areas, some with good and some with bad intentions, but all to collect bones and artifacts as they erode. Assuming away this factor - as all of your assumptions - does not erase responsibility for damage which has and will occur. In assessing the effect of systems operations on cultural resources, a more serious look must be given to differences in cultural resource types and impact levels.

Pg 3-11, 2d column, 8th para. "The analysis treats all site types equally, even though some may be more or less susceptible to damage

because of exposure and erosion." Again, different material types are differentially susceptible to weathering, to the effects of inundation, to vandalism, etc. Pictographs, bones, and textiles are more susceptible to biochemical chemical impacts; burials and cemeteries are most greatly impacted by looting. Sites on exposed terraces in the drawdown are most frequently impacted by recreational vehicles. Some sites are over one mile long, while others only cover 1 square meter, so that the amount of impact they receive from a singular factor (such as wave impact) is quantitatively not the same. It is not impossible to consider these factors, and how they would be altered between systems operating strategies. Sites could be assigned a code expressing material and site types, and this factor included in impact modeling. Site size could easily be entered as a factor in assessing impacts. Admitting false assumptions and insufficient data do not release the involved federal agencies from the responsibility to consider the impact of operations on these resources.

Pg 3-11, 2d column, 9th para. "The analysis assumes that inundation is a relatively benign impact, since it prevents most kinds of erosion and site exposure." First, this assumption though common is a false one (see for example Ware 1989). Processes of erosion and deposition do occur within conservation pools, and these processes do effect cultural resources. Archeologists have noted the effect of erosion and the mixing of matrixes on archeological sites at many reservoirs. The destruction of a significant portion of the Kettle Falls Archeological District, for example, occurred during long-term inundation. Sites which have been excavated after long-term inundation have provided evidence that many forces, such as eddy pools, do exist in reservoirs which actively destroy sites. We simply do not understand the effects of long-term inundation, though we do know they include forces of deposition as well as mixing and erosion.

Second, even if a site is subject only to deposition, not erosion, we do not know that site is not being destroyed.

Man-made lakes are essentially closed systems in which sediment input greatly exceeds sediment output. . . .

Cultural resources buried under tens of meters of unconsolidated sediments are clearly not accessible for research, and very little is known about the long-term impacts of deep sediment burial. (Ware 1989:25-26)

There have been no studies conducted on the effects of large amounts of sediment being deposited on archeological materials. Common sense tells us that there must be some effects, at least a crushing weight on often times fragile materials.

Third, there are many materials which are subject to greater deterioration in water. Pictographs and bones, for example, deteriorate much more quickly in the acidic environment provided by

Lake Roosevelt than the arid conditions in which they had been originally part. Most of the cultural resources along Lake Roosevelt would never have been subject to a wet environment. Furthermore, assuming an anaerobic environment through inundation by Lake Roosevelt is just that: an untested assumption. The chemical composition of Lake Roosevelt, especially in the deeper areas, is much different from a "natural" environment; we have not considered this changed chemical environment on cultural resources. Many cultural resources have probably already been destroyed, and many others are being more quickly destroyed, through the biochemical and chemical changes during inundation.

Finally, and most importantly, a site that is permanently inundated is useless to the people who need it: scientists cannot obtain information from it, the public cannot enjoy nor appreciate it, and Native Americans cannot use or protect it. Therefore, even if the site is not physically deteriorated, its usefulness is destroyed. This factor - lack of access to inundated sites - was identified by federal agency studies decades ago.

This (preservation of inundated archeological resources) could prove meaningless if accessibility to the resource is severely compromised. (Lenihan et al. 1981).

In addition, the question of future accessibility has never been honestly addressed by the "reservoir data bank" advocates. The notion of an archeological and historical data bank is untenable unless one can demonstrate the feasibility and practicality of future data withdrawals. (Ware 1989:31)

. . . if cultural materials are preserved in reservoir conservation pools throughout the country, it is perhaps legitimate to ask why and for what purpose. (Ware 1989: 25).

Are you going to take the dams down within the foreseeable future? Are federal agencies willing to commit to a particular shelf-life for Coulee Dam, after which it will be removed and no other dam constructed to replace it? Even if this was committed in writing, would we be able to find cultural resources afterward? How much would be destroyed or lost forever?

Inundation permanently removes cultural resources from scientific, educational, and cultural use, and should be considered as a destructive force. Therefore, in reviewing systems operations strategies, the federal agencies must consider the quantity of cultural resources which will be removed - destroyed - by each alternative.

Pg 3-11, Assumptions and Limitations. There are a number of inexplicit assumptions that should be made explicit in this section, as well as corrections or compensation made for them. Not

listed explicitly in this analysis, but critical assumptions nevertheless, are that (1) recorded elevations are correct and that (2) all sites are equal in priority. Most site elevations are estimates at best, and vary greatly in accuracy. All sites are not equal, and some receive much higher priority by the Spokane tribe (such as burial sites) or by the National Register criteria.

In summary, many of the assumptions on which your analysis was based are false, are unnecessary, or both. Though you recognize this in the text, you do not make any corrections for them. These assumptions render the results completely invalid. Any valid analysis must be based on a more realistic, specific, complete set of data as well as a more critical look at the impacts involved in reservoir operations.

Chapter 4: Alternatives and Their Impacts

Pg 4-1, 3d para. All of the analyses in this (and assumably throughout the SOR studies) are based "on the hydrological data for a 50-year period of record from 1928 through 1978". Is this 50 year period representative of the next 50 years, as far as best knowledge can be applied? Did no outstanding climatic events take place in this 50 year period, and if so, have they been predicted to regularly occur every 50 years? Is the climate predicted to remain the same over the next 50 years, and the next, or have climatologists predicted some changes or trends predicted for the future? Do the models address the possibly of outstanding and long-lasting climatic events, such as the "Little Ice Age," which produced outstanding differences in rain and snow-fall (among others) between 700 and 150 years ago?

Pg 4-4 through 4-13, Table 4-1, SOS Alternatives. This table may list the important aspects of the alternatives for the dam operators, but most of the information in this table has little to do with assessing impacts to cultural resources. For Grand Coulee (pg. 4-8 and 4-9), for example, under SOS 1a the table states, "Operate to meet Water Budget target flows of 134 kcfs at Priest Rapids in May. Meet minimum elevation of 1,240 feet in May." What does that mean for cultural resources at Lake Roosevelt? What does this target flow for Priest Rapids mean at Lake Roosevelt? How does this alternative vary from others in terms of hourly and daily fluctuations? What parts of the year will the reservoir be up? When will it come down? Saying that the reservoir will be over 1,240 feet in May doesn't mean anything - the reservoir rarely gets down that far anyway, and we still don't know what level it will be, how fast it will flow, or how much it will fluctuate, either in terms of real fluctuations or monthly averages.

This table should compare the alternatives in terms that concern cultural resources (actual range of possible levels, flow, fluctuation) for each reservoir (not in terms of another

reservoir), and without the Cultural Resources Work Group's interpretation (as involved in their choice to use inadequate data, false assumptions, and that wave impact and site erosion are the only impacts worth analyzing). Without this information, not the reader nor the decision-makers can form their own interpretation or opinions, nor assess the validity of the Cultural Resource Work Group's analyses and interpretations.

Pg 4-15, 3d para. "Impacts within the reservoir pool occur most often to archeological deposits," is a completely untested assumption. Other cultural resource types have not been inventoried, nor has reservoir impacts on them been studied. Cultural resources, other than archeological ones, are not addressed in this section, nor any analyses reported in this volume.

Pg 4-15, 4th para. Archeological deposits are also highly subject to chemical impacts in the littoral and biological impacts in the littoral zone.

Pg 4-15, 3d para. This paragraph addresses some of the impacts of inundation. The information in this paragraph is extremely important, and yet after listing it here, the Cultural Resource Work Group did not incorporate this information anywhere else in the report. To remind the reader and decision-makers of this important topic (disregarded everywhere else in the SOR process in assessing impacts to cultural resources), we repeat it here:

Direct impacts on archeological deposits that occur in the inundation zone include underwater erosion, chemical change, and accelerated decomposition (Lenihan et al., 1981). Underwater currents can cause slumping, or displace materials and artifacts already brought to the surface by wind- and water-caused erosion. Reservoir water dissolves organic materials and ceramics, and changes chemical attributes, such as pH, phosphate, and nitrogen levels of deposits. Aquatic organisms, such as burrowing clams, can churn archeological deposits by moving artifacts within them. An accumulation of organic acids accelerates the decomposition of organic materials and ceramics. Underwater siltation prevents access to archeological sites, although it can protect them from accelerated decomposition and vandalism.

We emphasize the lack of access to all cultural resources because of inundation as a critical impact which deserves analyses and full consideration during the SOR process.

Pg 4-15, 2d column, 5th para. The problem with vandalism and artifact theft is that it is not just arithmetically related to the amount of exposure of cultural sites and artifacts due to reservoir levels and their fluctuations. Exposure does not promote vandalism and artifact theft just by allowing an individual person on the

beach to see exposed artifacts, and hence be tempted to pick them up; exposure excites both professional and avocational to actively seek out more sites and steal more artifacts, past those merely casually observed. A local newspaper in Kettle Falls, in fact, announced this Spring that the drawdown was the best time to hunt for artifacts. Vandalism and artifact theft, then, are promoted geometrically by this exposure, as more people see or hear about these exposures, more people become increasingly involved, activities become more intensified and deliberate.

Pg 4-17, 1st para. In response to the statements: "Decisions to develop or permit camping, summer homes, hiking trails, or off-road vehicle uses, for example, may all lead to increased impacts on cultural resources from human-caused erosion, vandalism, and artifact theft. Cumulative impact analysis of operational effects must, therefore, also consider land management actions that affect projects in the SOR study area," the unstated assumption is that management decisions are the controlling factor for these activities. This is false. While management decisions controlling off-road vehicle use certainly control those who (1) know about that decision, and (2) choose to obey it; these decisions are not in any way an effective management option. At Lake Roosevelt, the National Park Service has policy which bans camping, summer homes, off-road vehicle use, vandalism and artifact theft, yet all of these activities occur on a regular, sustained basis at Lake Roosevelt. First, the National Park Service policy is ineffectual because they do not have the staff or funds to patrol the entire shoreline of this huge lake. Second, the National Park Service policy is impotent because the legal process sanctioning violations is ineffectual. ARPA violations are rarely brought to court for this reason, as they are a great expense for NPS if they do not succeed. Furthermore, ARPA violations are not a high priority according to the opinion of the district courts, so that the waiting period between filing and court could take years. Third, For locals and tribes interested and active in cultural resources management, mismanagement and negligence in the preservation and protection of cultural resources by the National Park Service has created well-based cynicism about the sincerity of their policies. Policy which is not enforced is useless. Therefore, discussion of "policy" - while required - must be realized as having minimum affect on cultural resources management at this time.

Pg 4-18, Table 4-2. Strong objection must be again made to the descriptions of effects of Natural River Operations. The exposure, erosion, and damage to cultural resources which here is described as "maximum" of any operations option, is (1) exaggerated, as re-vegetation of exposed surfaces would be required, and would greatly modify all of these effects; and (2) is a short-term perspective, describing only the temporary effects of return to natural conditions. Only in long-term natural river conditions can stability, preservation, protection, and access to cultural resources be reached.

Pg 4-19, Description of Alternatives. Again, the description of alternatives is given in terms which are useless to those considering effects on cultural resources. For example, in the description of SOS 3 (3d para), it states, "storage reservoirs at Dworshak and Grand Coulee providing water to meet flow targets downstream." What does that mean in terms of flow, reservoir levels, and real-time fluctuations?

The statements made in these descriptions falsely lead the reader and decision-makers to believe that their opinions and assumptions are fact, when in fact these statements have not been tested, and are sometimes false. It is presented as if the authors really understood and considered the alternatives' effects at each reservoir, when in fact they have only over-generalized, and based their descriptions of "effects" completely on their own guess-work and opinions. Two examples follow, but the similar comments could be made for most of this section.

Pg 4-19, 3d para. The statement "Grand Coulee and Dworshak would experience accelerated erosion due to the increased exposure of drawdown zone soils," is a assumption that may or may not be true. The assumption is that the greatest amount of erosion occurs due to exposure in the drawdown zone of these reservoirs: this assumption has not been tested, and may not at all be true. At Grand Coulee, bank erosion is tremendous and extreme, and no one has any idea about the effects of erosion in the inundated zone at this reservoir.

Later in this same paragraph, the statement is made "Increased exposure of the shoreline to reservoir wave action would probably not be significant unless pools were held at levels where they are not customarily held for long periods." This again is an un-tested opinion of the author, leading the reader and decision-makers to believe that they know more about the difference in effects of alternatives than they actually do. Wave action is a known negative impact on cultural resources, not only through erosion, but through movement of materials along the surface of the reservoir. Every archeological surveyor at Lake Roosevelt has noted that waves and fluctuating reservoir levels not only expose sites, but move materials up and down the beach, and even around corners. The statement that wave-action is probably insignificant except when levels are held is false. Furthermore, the decision as to what level of destruction is "significant" or "not significant" should not be based on the authors opinion.

Pg 4-21 through 4-4-26, Site-Specific Analysis. The title of this section is misleading, because the authors do no analysis for any specific site, but rather run previously recorded numbers through a computer to spit out raw number that reflect how many (raw count) previously recorded sites, for previously recorded elevations, are exposed according to monthly averages for reservoirs. All previous comments concerning the lack of adequate and/or accurate data, lack

of consideration of site size or type, lack of consideration for unsurveyed areas and resource types, lack of consideration of real-time fluctuations (as opposed to monthly averages for reservoir levels) apply here. This type of description and analysis is not acceptable either in scientific or tribal terms, and does not meet federal responsibilities to manage and consider effects to cultural resources in these reservoirs.

It is a critical mistake throughout this section (especially subsection 4.4.1) that "shoreline erosion" is equated with percentage of previously recorded sites (with all the problems listed above) located in the monthly averages' fluctuation zone. This is not only false, it is ridiculous. Shoreline erosion is never actually addressed in this analysis.

Pg 4-22 through 4-24, Tables 4-3, 4-4, and 4-5. These tables are presented as "hard evidence" or "scientific observations," when they are not, in fact they are based on incomplete, inaccurate, and inadequate data, opinions, and numerous false assumptions. Again, all previous comments concerning the lack of adequate and/or accurate data, lack of consideration of site size or type, lack of consideration for unsurveyed areas and resource types, lack of consideration of real-time fluctuations (as opposed to monthly averages for reservoir levels) apply here. These tables do not constitute serious consideration, they are not using best available knowledge, and they do not allow decision-makers the opportunity to perform their NHPA and trust responsibilities.

Pg 4-26, 3d para. Traditional Cultural resources have never been surveyed for the reservoir areas. The tribes may be able to provide qualitative remarks (see Chapter 2) on known effects on known resource types, but they cannot provide neither complete comments, nor a detailed analysis between alternatives since they have no inventory to work with. Though the authors state that "Project effects on traditional cultural resources would be the same as or similar to those on archeological and historic sites," this is just an assumption, and no conclusion can really be made at this time.

Two Traditional Cultural resources we know for certain are the Columbia and Spokane Rivers they have been permanently taken from access from traditional users. What is happening to these resources during inundation is not known.

Pg 4-26, 5th para. Grand Coulee Dam is not on the National Register.

Pg 4-27 and 4-28, Figures 4-2 and 4-3. The comments on Pg 4-22 through 4-24, Tables 4-3, 4-4, and 4-5 apply here also.

Chapter 5: Comparison of Alternatives

Pg. 5-1 through 5-12. The assumptions throughout Chapter 5 that current operations constitute stable conditions and that a sustained operation strategy creates stability are false. Damage and destruction not only occur, but escalate under most operation strategies, even if the operations themselves remain the same. (For example, pg 5-1, 4th para. "New reservoir levels could cause a significant increase in damage to archeological sites" implies that current reservoir levels create less or at worse case equal damage to any new reservoir levels. Another example, pg 5-1, 2d column, 4th para. "SOSs 1 and 2 would probably cause the least operational changes, and therefore would accelerate the rate of impacts to cultural resources the least" again is based on the assumption that current operations is equated with stability. While these may be true for some reservoirs, it certainly is not true at Lake Roosevelt. The authors opinions and assumptions are stated as fact.) Continuation of current operations has not created stable conditions at Lake Roosevelt; continuation of any operation cannot be automatically assumed to create a stable environment for cultural resources. This chapter is flawed by acceptance of false assumptions, inadequate data, over-generalizations, the stating of opinions as if they were fact, and lack of meaningful analysis. These flaws do not constitute real consideration of impacts on cultural resources, do not make best use of available data, and do not allow decision-makers to consider the impacts of different alternatives on cultural resources.

Pg 5-2 through 5-6, Site-Specific Analysis. The title of this section (as in Chapter 4) is misleading, because the authors do no analysis for any specific site, but rather run previously recorded numbers through a computer to spit out raw number that reflect how many (raw count) previously recorded sites, for previously recorded elevations, are exposed according to monthly averages for reservoirs. All previous comments concerning the lack of adequate and/or accurate data, lack of consideration of site size or type, lack of consideration for unsurveyed areas and resource types, lack of consideration of real-time fluctuations (as opposed to monthly averages for reservoir levels) apply here. This type of description and analysis is not acceptable either in scientific or tribal terms, and does not meet federal responsibilities to manage and consider effects to cultural resources in these reservoirs.

It is a critical mistake throughout this section (as in Chapter 4) that "shoreline erosion" is equated with percentage of previously recorded sites (with all the problems listed above) located in the monthly averages' fluctuation zone. This is not only false, it is ridiculous. Shoreline erosion is never addressed in this analysis.

This section begins, and continues to develop, on the statement that "Analysis of the known sites shows that shoreline erosion and site exposure vary inversely at these sites". The authors then

struggle with this problem and have great difficulty in making recommendations based on this statement, since it doesn't make any sense. If the results of an analysis appear to greatly conflict with common sense, the first thing would have been to make sure that the results really reflect what you think you are testing. In this case, they do not. As stated numerous times in this document, "shoreline erosion" is not quantified during this analysis, but rather the production of meaningless number.

Pg 5-3 through 5-5, Tables 5-1, Figure 5-1, and Table 5-2. These tables and figure are a perfect example of "Garbage In, Garbage Out". These tables and figures are presented as "hard evidence" or "scientific observations," when they are, in fact, based on incomplete, inaccurate, and inadequate data, opinions, and many false assumptions. Again, all previous comments concerning the lack of adequate and/or accurate data, lack of consideration of site size or type, lack of consideration for unsurveyed areas and resource types, lack of consideration of real-time fluctuations (as opposed to monthly averages for reservoir levels) apply here. These tables do not constitute serious consideration, they are not using best available knowledge, and they do not allow decision-makers the opportunity to perform their NHPA and trust responsibilities.

Pg 5-7, 2d column, 3d para. Traditional Cultural resources have never been surveyed for the reservoir areas. The tribes may be able to provide qualitative remarks (see Chapter 2) on known effects on known resource types, but they cannot provide neither complete comments, nor a detailed analysis between alternatives since they have no inventory to work with. Though the authors state that "Project effects on traditional cultural resources would be the same as or similar to those on archeological and historic sites," this is just an assumption, and no conclusion can really be made at this time.

Pg 5-8, 1st para. We repeat the following section of the document, because of its importance:

As system operation eventually destroys a large percentage of the cultural resources at these reservoirs, the cumulative effect will be the loss of heritage sites and scientific resources from the river mainstem in an entire region. This is important because the cultural resources along the mainstem are not duplicated or replaced at other locations. Because most cultural resources are non-renewable, this would be a significant cumulative impact.

This statement should be applied to the other descriptions and analyses in this document, particularly on "shoreline stability" and in acceptance of false assumptions about the benign impact of inundation.

Pg 5-8, 2d column, 1st para. We also repeat the following because of its importance:

The cumulative effects of reservoir erosion are dramatically illustrated in the rate of discovery of new archeological sites following the construction of Libby Dam. Archeologists identified about 25 archeological sites in the uncleared reservoir pool area there before reservoir construction. In the first five years following reservoir filling, a sampling study identified 100 additional archeological sites and estimated that a total of 300 sites might be present. After 10 years, inventory surveys in the drawdown area actually disclosed more than 300 archeological sites. The same erosive processes that revealed these formerly hidden sites will continue to erode the site deposits destructively. At older reservoirs, preservation efforts may be too late; many sites in their pools may have been destroyed.

This statement should be applied to the other descriptions and analyses in this document, particularly on "shoreline stability" and in acceptance of false assumptions about the benign impact of inundation.

Chapter 6: Management Responsibilities

Tribal participation in this chapter is presented as consisting of required consultation under AIRFA and NAGPRA, but should be expanded and included into all aspects of this chapter. Tribal participation in cultural resource management should be meaningful: this requires participation of tribes as lead team members, during all aspects of planning and action, including decisions concerning or affecting their cultural resources. Presentation of completed plans, analyses, or informing the tribes of what you have already decided to do is not meaningful participation in the management of tribal cultural resources.

Pg 6-1, 2d column, 1st para. Two sentences in this paragraph require clarification:

The adverse effects of alternatives proposed in the SOR EIS are increments beyond those occurring as a result of the current authorized operating limits at each Federal dam facility. The comparison of effects for different SOR alternatives in Chapter 5 indicates that most of the proposed alternatives fall within existing authorized limits for most Federal dams.

What do these sentences mean? The first sentence says that the alternatives exceed limits for adverse effects, and the second says that they fall within these limits. It may appear that either the writer doesn't know what he or she is talking about, or trying to mislead and confuse the reader. Are there really authorized limits on adverse effects on cultural resources? What are they? The

adverse effects of alternatives have never been meaningfully analyzed or quantified in this document. If they have been quantified elsewhere, why has that quantification not appeared in this document? Why do you not present the effects of the alternatives in terms of the "authorized limits" for adverse effect for the reader and decision-makers? Who made the decision that the adverse effects of the alternatives "fit" into authorized limits, and are the authors of this document the ones to make such a decision?

Pg 6-1 and 6-2, Mitigation or Treatment of Affected Cultural Resources. A few methods of site treatment or mitigation are listed in this section. Why was there no attempt to quantify any mitigation or treatment? The decision-makers should be made aware of the considerable cost of mitigation and treatment that will be required under the various alternatives. The federal agencies have performed enough mitigation and treatment projects on cultural resources in order to estimate the costs of such projects. The authors of this report frequently used information on past-recorded archeological site records in their analyses; it is curious that they did not use the information contained in those records on site condition and negative impacts to give an estimate of mitigation and treatment costs for each alternative. Such a number could have been multiplied by the areas which have not received systematic survey in order to extrapolate a dollar figure for mitigation and treatment for the various reservoirs. The requirements for mitigation and treatment of cultural resources affected by systems operations will be a considerable cost in any chosen alternative. If such dollar figures were included in this document, decision-makers would be more inclined to give the necessary serious consideration of impacts of the various alternatives to cultural resources.

Pg 6-2, 2d para. Under the discussion of protection, the authors mention public education and law enforcement efforts. These two may be the most important and effective long-term methods of protecting cultural resources, yet are often overlooked. Public education includes such efforts as dissemination of cultural resource information sources to public schools, public Cultural Resource Weeks, opportunities for in-depth study in cultural resource issues, television programming, cultural resource training for business, industry and government, cultural resource projects which include public participation, and much more. These methods, though on the surface they may seem an indirect protection measure, have where applied proved incredibly effective. As it happens, most cultural resources are destroyed out of ignorance; once the public (especially children) understand the value of these resources, they become active protectors. Public education may provide the most "bang for the buck" of any cultural resource protection method.

Active support of law enforcement should be part of cultural

resource management as well. Often these managers assume that because ARPA and law enforcement agencies exist, they should protect cultural resources. This is a naive picture and does not meet federal agency requirements to protect significant cultural resources. Law enforcement agencies are always short of staff, equipment, training in cultural resources, and funds to carry out all their duties to protect the public; cultural resources can not be their highest priority in expenditures. They often do not have the time and funds to pursue the long court procedures required to pursue ARPA convictions. Decision-makers need to be aware that they need to provide funding, training and legal-support for law enforcement to address cultural resource protection issues. Both public education and law enforcement methods deserve serious attention and weight in management decisions affecting cultural resources.

Pg 6-2, 3d para. Reservoir monitoring is one means by which agencies can manage cultural resources. Monitoring is not limited to observation of erosional impacts and vandalism, but many other effects to cultural resources, such as visitor impacts (such as picnic areas and boat-launch use), effects of livestock, effectiveness of stabilization efforts, law-enforcement, etc.

Pg 6-3, Figure 6-1. There are a few problems in this flow-chart describing Section 106 procedures. In the box describing the application of criteria of significance, a third category, properties having tribal significance (such as burials), should be added. A glaring mistake is that consultation is listed as taking place only near the end of the process, only in cases where adverse effect has been determined and approved by the Advisory Council. That does not describe real cooperation or participation with the tribes, nor is it real consultation; it is merely asking the tribes for comments which are meaningless after the resources have already been negatively affected. Consultation must take place from the very beginning, at cultural resource inventory, and continue throughout the entire process, in order to meaningfully consider tribal cultural resources, as required by law.

It is also questionable in this figure why, after adverse effects have already been identified, and after consultation has not been effective ("failure to agree"), and after meeting with the Advisory Council, the final step is "Proceed with Report to Advisory Council". Does this mean the project is then stopped? Does this mean the project can continue, with just the report generated, and no modification to the project to protect significant resources? There needs to be included in this Section 106 procedure, procedures by which "Modify Project to Meet Cultural Resource Needs" and "Stop Project" are also possible outcomes. Without these options, the Section 106 procedure is a sham where all projects will proceed regardless of impacts to cultural resources as long as they generate a report; this does not meet Section 106 requirements for the responsible federal agencies.

Pg 6-4, Table 6-1. Free flow requires revegetation of slopes as part of the operating procedure, as protection of cultural and natural resources. Under free flow conditions, extreme erosion would only occur short-term, until re-vegetation was successful. It is only under natural flow conditions that cultural resources can be permanently protected.

List of Preparers

In your "List of Preparers" are some individuals (and/or agencies) that were not part of the preparation of this document. Some may not even be aware of their being listed in this chapter. Certainly not all of them would like to be responsible for or associated with its outcome.

It is also unclear what the different categories of participation actually mean. "Reviewer," for example, could mean anything from a quick one-time editorial job providing comments, to intense full-time participation throughout the project. What does "Lake Roosevelt site record inventory" mean as far as participation in preparation of or approval of this document? How has Chuck James, for example, coordinated Indians?

It appears that many of these people did little more than provide data, which means they shouldn't be listed as "preparers," and which also means many other people could have been listed as well. Most of all, it appears that each of these individuals listed in this chapter had a hand in writing this cultural resources appendix, which is not true at all.

The SOR Cultural Resources Team attempted to revise this chapter by asking the team members what they would change. In order to revise this chapter, as we have stated before, you must: (1) Notification of those individuals listed in this chapter, to make sure that they approve of being so listed; and (2) Indicate the level and type of participation that these individuals have had in the preparation of this document.

Chapter 9: References

The authors seemed to have missed a critical reference in their study of impacts of systems operation on cultural resources: Verne Ray's Ethnic Impact of the Events Incident to Federal Power Development on the Colville and Spokane Indian Reservations, a report sent to the Corps of Engineers on September 28, 1977. We strongly recommend the decision-makers read this document, as it contains much information on the impacts of systems operations which because of time limitations could not be repeated in this report.

Appendix A: Development of an Analytical Geomorphic Procedure for the Management of Cultural Resources

Pg A-2, 2d column, 2d para. Geographic Information System (GIS) are indeed useful in the management of cultural resources, but there are some substantial decisions that have to be considered and made before such a system is put into use. Who would operate this system? Who would be responsible for the constant up-dating required to keep such a system effective? Where would it be located? Who can obtain information from it and how? And perhaps the most difficult problem, how can the security of confidential sites and information be maintained?

One consideration in constructing a GIS system (which requires pinpoint location) is that most sites are not mapped using the accuracy that this methodology implies. Sites have often been assigned UTM coordinates (at least at Lake Roosevelt) based on where someone had much earlier plotted a site number on a 1:24,000 topographic map, which had never been intended to be as accurate to 10 meters, and rarely ever is. Sites are frequently mis-mapped on 1:24,000 topographic maps by 200-500 meters. Sites are usually re-located using descriptive information.

Site boundaries must be defined for a GIS system, but there has been no uniform definition for archeological sites. One archeologist records an area as having many small sites close together, while another archeologist records the same area as one large site. Some archeologist draw site boundaries at the edge of artifact scatters; others include a "safety zone" within the site boundary. Other technical problems exist. Will a raster system be used to deal with this, or are you going to use a vector system? What effect does this have on your model?

Pg A-3, Development of Data Bases. The geologic, soil, and topographic data is obtained for this study came from 1:500,000 and 1:24,000 scale maps. These scales are absurdly too general to address their role on cultural resources. Factors affecting site stability occur and must be considered on a local scale: erosional and depositional processes, while describable in general terms, are very site-specific. For example, while a site may appear to be located on a glacial terrace underlaid by granite as seen on a 1:24,000 scale map, the site may actually lie on or within very different matrices, such as glacial till, sand dunes, clay, or on bedrock, which would not appear in your data base, but which would most greatly affect that site's stability. The site may be located in a small gully, on the edge of an eroding bank face, or on the back of a flat river terrace. Resource management prediction or planning based on information from the sources cited above has no validity.

Vegetation and hydrology are not considered in your model, though they are critical factors in the effects of systems operations on

cultural resources. Use of aerial photographs will not be sufficiently specific for cultural resource management (see discussion above on map scales).

Pg A-3, 2d column, 4th para. Depositional processes "may" as you say have favorable impact on cultural resources, but that is an untested hypothesis based on lack of access to these sites. However, it seems only logical that the incredible pressure under large amounts of deposited soil would have negative effect, especially on fragile materials. Depositional processes in reservoirs are also rarely purely "depositional," as reservoir waters move, and are not still; these processes actually include mixing and churning. Other processes involved with inundation are known to have negative impacts (see pg. 4-15). Lack of access and the possibility of ever recovering cultural resources after deposition are also incredibly important considerations in determining the impact of systems operations on cultural resources. Pg A-1 through A-5, Development of an Analytical Geomorphic Procedure for the Management of Cultural Resources in the Columbia River System. Your development of description, method, and procedure in this study repeats those which have been previously done across the country, though not as effectively. Why was this geomorphic study carried out? Your discussion of geomorphic processes is very general, it has no time depth, no quantification; there is no discussion of where or why each process occurs, and it is not predictive in nature. The desired information has been more adequately addressed in many other studies and volumes. Excerpts from, or references to, the Corp of Engineer's Inundation Study (Lenihan, et al. 1981) would discuss the effects of reservoirs on cultural resources more directly and specifically.

Your study of geomorphic processes is based on an assumption on stability: BUT RESERVOIRS SUBJECT TO POOL-LEVEL FLUCTUATIONS CAN NEVER REACH A POINT OF STABILITY!

The average reservoir shoreline will achieve an equilibrium profile if the reservoir water level remains relatively stable. . . . Unfortunately, the self-limiting process of nearshore shoal formation is affected by pool level fluctuations. As reservoir pool levels draw down, offshore shoals are eroded, and wave action in the nearshore begins anew. Consequently, reservoirs subjected to large annual pool-level fluctuations may never achieve stable shoreline profiles. (Ware 1989:11)

Each time the "reservoir pool levels draw down, offshore shoals are eroded, and wave action in the nearshore begins anew." The Bureau of Reclamation has recognized these continuous geomorphological changes through projects addressing mass-wasting at Lake Roosevelt. The Corp of Engineers has recognized in numerous inundation studies that fluctuating reservoirs do not reach stability until the reservoir has completely silted up.

A more adequate analytical geomorphic procedure for the management

of cultural resources must first include a total inventory of sites (as much as that is possible). Barring adequate data, we must attempt to then assess how adequate the data is. Was the information pertinent to site management recorded, e.g. elevation, soils, landform, material types; and if recorded, is the data reliable? Has half of the area been surveyed? Twenty-five percent? Is reliable data available in the necessary fields (elevation, soils, landform, material type) for ten percent of the reservoir-affected lands? When we look at this information, we will see a different picture from that used in the current modeling technique. Furthermore, it must be acknowledged that the existing data UNDER-REPRESENTS the actual number and types of cultural resources which are presently effected.

A study of geomorphic processes must include visits at intervals throughout the annual cycle to a large sample of actual cultural resource sites in each area. Both quantitative (example: volume disturbed per month) and qualitative (example: geomorphic setting and processes (such as those identified in Appendix A)) data must be recorded at each visit. The static information based on one visit per site is inadequate for realizing the processes at work. Time depth and the ability to accurately predict are two key elements in a good model. With quantitative and qualitative diachronic information from multiple visits to a large sample of actual sites, a valid statistical model based could be created.

Many other items remain unquestioned or unanswered. There has been no account in this appendix for inventory where there exists inadequate data. Indirect impacts have not been addressed and are only mentioned, though the distinction of direct and indirect impacts does not matter in the destruction of cultural resources.

Only mechanical impacts are discussed in this appendix. Mechanical impacts are a very large and important impact on cultural resources. Biochemical, human and other impacts are not even considered in this appendix, though the federal agencies have been aware of the importance of these impacts for many decades. Definitions of these impacts can be found elsewhere (e.g. Ware 1989) but their relative importance on the cultural resources at these specific reservoirs needs to be addressed.

Pg A-6 and A-7, Development of a Cultural Resource Monitoring Plan. This section is so brief that it does not adequately cover issues that need to be addressed. The authors do not address who, how, or where monitoring will occur. Are you going to monitor all cultural resource sites forever? Who is going to decide which sites are monitored, and on what basis? What will be the priorities in monitoring? How is monitoring specifically going to be used in the management of cultural resources?

Critical for this document (SOR EIS) is the consideration of how the different alternatives will effect cultural resource monitoring

needs. This has not been addressed. Decision-makers also need to have an estimated cost for effective monitoring, and how this would be affected by the different alternatives.

Pg A-8 and A-9, Development of Cultural Resources Protection Plan. This section seems to confuse protection and mitigation. Mitigation should be considered only when protection has or will fail; it should include activities compensating for not only those resources which will be destroyed in the future, but to compensate for those destroyed in the past. Mitigation will be a very significant cost for any chosen alternative, and estimates for mitigation costs should be generated for the decision-makers to consider. Protection and mitigation are separate though related issues which deserve separate and complete discussion, consideration, planning and action.

At Lake Roosevelt, Spokane (and other) cultural resources are heavily impacted by looting and recreational vehicles as a direct result of exposure caused by the reservoir. Before construction of Coulee Dam, this area was largely covered in Ponderosa pine forest, with some areas in low brush and some in farmland. Most of the prehistoric, sacred and burial sites were unknown to non-Indians at that time. With the construction of Coulee Dam, Indian lands were condemned, almost everything was razed to the ground, and existing buildings were burned. Basically, the entire landscape was denuded before inundation. This exposed many previously unexposed sites. Ball and Dodd's burial moving project brought local attention to the Spokane's most sacred cultural resource: ancestral remains and grave goods. Not only did many items disappear from graves during Ball and Dodd's project, the project itself spurred interest and activity in illegal pot-hunting aimed at stealing "goodies" from Spokane ancestral graves.

This local interest in pot-hunting graves is still active in the Lake Roosevelt. Non-Indians can be heard in restaurants and bars about their grave-good collections (though the word 'grave' is often replaced with 'Indian', which to them makes it less wrong to steal). Conversations are easily struck in discussing which areas are the best to obtain 'Indian goods' from. Draw-downs are well known as a terrific collecting time for looters. This looting is a direct effect of the activities associated with the construction of Coulee Dam. The operations of the federal dams, including the decisions reached as a result of this EIS, including the chosen Systems Operation Strategy, will directly effect the level of looting and other impacts which destroy Spokane cultural resources.

After requesting funds from the Bureau of Reclamation, and after they refused to provide such funds, the Spokane Tribe has funded and run its own Spokane River Patrol for the protection of cultural resource within and along Lake Roosevelt, within Spokane Reservation boundaries. This patrol has been very effective in deterring intentional looting, as well as stopping unintentionally

damaging activities.

Monitoring, then, should be a primary method of cultural resource protection. Development of a "presence" increases public awareness and deters vandalism. Public education and law enforcement should also be considered primary methods of site protection. (See comments on pg. 6-2, 2d para.)

Critical for this document (SOR EIS) is the consideration of how the different alternatives will effect cultural resource protection and mitigation needs. These have not been addressed. Decision-makers also need to have an estimated cost for effective protection and mitigation, and how these would be affected by the different alternatives.

Pg A-8, 1st para. Shoreline erosion is but one form of erosion to be considered in protection of cultural resources. Other impacts to cultural resources, such as off-road vehicle use, visitor impacts, and inundation, must also be considered in a cultural resources protection plan.

Pg A-8, 2d para. Besides stabilization and excavations, there are many ways to mitigate loss of resources. Cultural sustainment programs, investment in other cultural resources for protection and preservation, and public education programs are some examples.

Appendix B: Cultural Resource Site Inventories

This appendix adds nothing to the consideration of alternatives, and should be removed. It is inappropriate to list sites without tribal consent. It draws the attention of potential looters to the wealth of sites in this area, as well as what to look for. Though locations are not listed, the list of site numbers and site types will help potential looters research these sites.

The Spokane Tribe especially does not want sites with burials listed for public review, as in this document. These sites are sacred, and they should be handled with confidentiality. It would be acceptable and sufficient to list "6 burial sites" rather than to list specific site numbers and their contents.

Pg B-1, Table B-1. This is not a comprehensive list of cultural resource site kinds, as the title states. It does not include "kinds" of Traditional Cultural Properties, cultural landscapes, and a variety of others, such as battlefields, and properties associated with important persons and events.

Pg B-4 through B-58, Table B-2. For use only in impact assessment analysis, this data list still has some apparent problems. The column listing "Period" is completely useless in addressing the effect of dam operations on cultural resources.

A very useful category which should be included in cultural resource management planning as well as impact assessment is "Material Types"; i.e. Heavy Lithics-Small Lithics-Textile-Bone-Antler-Shell-Hair-Ceramics-Manufactured Glass-Metal, etc. Material types are differentially affected by processes of weathering, so this information would be helpful in prioritizing site management actions. Note must be made, though, that this the material types listed are a minimum of materials at each site, as more may yet be undiscovered.

What is the "Current Condition Estimate" based on? There is an unacceptable lack of qualitative and quantitative data in this field on which to base any impact assessment and subsequent decision-making. Obviously there is a tremendous variance between recorders as to what is "good," "fair" or "poor" condition: one person may rate a site as in "good" condition if they see artifacts on the surface; another may rate a site as "poor" if some of the features are disturbed. Furthermore, an estimate made four years ago probably has nothing to do with the current condition of a site; in fact, the condition of a site may vary greatly in the course of one month. With no standard given for the "conditions," no date of when the estimate was made or by whom, this column is useless, and is potentially dangerous if decisions are made based on this meaningless data.

The list of sites in this inventory is not complete, and it inexplicitly and incorrectly implies that the cultural resources have all been recorded and their current condition known. The list also implies a higher quality of information that is actually present; there are many mistakes and out-of-date information contained therein. If you are compelled to list specific sites in the EIS, it must be noted that this list is incomplete, under-represents actual resources, that some areas have not been surveyed, and that the "Current Condition Estimate" may not reflect current conditions.

Appendix C: Technical Exhibit C: Existing Programmatic Agreement.
The inclusion of a copy of this programmatic agreement suggests: (1) that it satisfies all federal requirements for cultural resource management, and (2) that the signatory parties agree with what has been put forth in the SOR EIS documents. Neither of these suggestions are true. This programmatic agreement does not belong in the SOR EIS document; it is a separate issue, and does not take the place of adequate consideration of effects of systems operations on cultural resources. The Spokane Tribe does not agree with or support the SOR EIS process as it now stands in quality or quantity in the consideration of these precious, irreplaceable resources. The Spokane Tribe does not agree that the existing Programmatic Agreement satisfies all federal agency requirements for cultural resources management.

VI. THE PROPOSED SOS ALTERNATIVES

It is beyond the scop of this work to perform the same statistical analysis as performed by the federal agencies' contractor (Doug Davies) for accessing the number of site-days exposure, etc., for each of the set alternatives. Such an attempt could be made if the Spokane Tribe were provided the time and money required for such a study, but does not seem worthwhile at this point, as the federal agency staffs have already announced that the alternative based on the NIMFS Biological Opinion will be chosen regardless of its effect on cultural resources.

We deem it wise, however, to inform the decision makers in the Columbia River Systems Operation Review of an estimated dollar cost that they will be facing after their decision. After reviewing the gargantuan cost they face in complying with the National Historic Preservation Act and other mandates concerned with cultural resource management, decision-makers may find a more thorough and accurate assessment of effects of systems operations on cultural resources than has been presented so far in Appendix D would be in their best interest.

The following estimates are based on the preliminary results of the 1995 Spokane Archeological and Historic Survey. The survey was limited in scope for a number of reasons. It included only archeological and historic resources; no traditional cultural properties were included in this survey. It included only the area between 1260' elevation and 1310' in elevation; no sites above or below these elevations were included in the 1995 survey. Previously recorded sites below 1260' have been included below, though their present condition is not known. This survey, as with any survey, cannot have found all sites within the survey area. No sub-surface testing was performed outside recorded site boundaries, so no sub-surface sites were located or recorded. Finally, the survey only included archeological and historic sites within the Spokane Reservation boundaries, which includes only about one-third of the Spokane aboriginal lands directly affected by Lake Roosevelt and its operations. No sites above 1310' in elevation were included in the survey due to contractual limitations, although there are sites above 1310' known to be affected by the reservoir and its operations.

The site names of recorded Spokane archeological and historic sites which lie within the Spokane Reservation boundaries and within Lake Roosevelt are listed in Appendix Spokane-B. Their names have been provided to the decision-makers as a courtesy for their consideration, so that they may understand that these sites are not just numbers, but are real places, real homes, real burials, sacred places to the Spokane people. We remember many of these names as the homes and resting places of our grandparents, great-grandparents, and so on, back for thousands of years. These are names which are sacred to our tribe, and which define our culture.

Just as you would preserve and protect your families home or farm, the Vatican or the White House, or the resting place of Thomas Jefferson or John F. Kennedy or your mother, so we would preserve and protect these places, our heritage.

The elevations and area for each of those sites are listed in Appendix Spokane-C, though their order has been changed to protect the confidentiality of site locations. These numbers are provided to give witness to the possibilities of data obtained from systematic survey, and for your consideration of another (more thorough and accurate) assessment of the effects of Columbia River systems operations on cultural resources. They are also provided so that you can confirm the numbers we have provided in Table 1.

Table 1

Number and Area of Recorded Spokane
Archeological and Historic Sites
Within Lake Roosevelt

Below 1260' elevation	21 sites	2,675,300 sq. meters
Between 1260-1290' elevation	88 sites	5,442,628 sq. meters
Total Recorded	109 sites	8,117,928 sq. meters

As the figures in Table 1 only includes those recorded Spokane archeological and historical sites below 1310' within the boundaries of the Spokane Reservation, we must estimate the number of other site types and for all the Spokane aboriginal lands affected by your systems operations. To include Spokane traditional cultural properties, Spokane cultural landscapes, Spokane archeological and historical resources outside the boundaries of the Spokane Reservation, and Spokane archeological and historical resources above 1310' which are affected by systems operations, we have multiplied the above data by two, four, and six to create a range within which we feel the total of Spokane archeological and historical resources, traditional cultural properties, and cultural landscapes will fall when they have all been inventoried. The results are presented in Table 2.

Table 2

Number and Area of Estimated Total
Spokane Cultural Resources (Physical)
Within Lake Roosevelt

Low: (Twice Recorded)	218 sites	16,235,856 sq. meters
Middle: (Four Times Recorded)	436 sites	32,471,712 sq. meters
High: (Six Times Recorded)	654 sites	48,707,568 sq. meters

These estimates are conservative: only have the half the site-types discussed have been inventoried, covering roughly only one third of the Spokane aboriginal territory affected by Lake Roosevelt. We feel that after all Spokane cultural resource inventories are completed, the total will probably be between the middle and upper figures. While these are estimates only, they are based on more complete data than was available or used for your SOR EIS Appendix D.

We know that all of these cultural resources are adversely affected by systems operations: that has been established in your cultural resources study here, by this review, and in numerous other federal studies of the effects of reservoir operations on cultural resources. Many of these sites are being destroyed now; most of them have been permanently taken from access by our people. Eventually all of the sites will be negatively impacted to the point they, or their significant characteristics, are destroyed. Therefore, we have created an estimate based on the long-term, one which addresses eventual mitigation of all sites affected by reservoir operations.

When restitution is reached for site destruction under the Archeological Resource Protection Act (ARPA), it includes the normal cost of scientific excavation, plus restoration. Using a low cost figure of \$1512.00 (1995 dollars) and a normal cost figure of \$2268 (1995 dollars) per cubic meter of excavation¹, and conservatively assuming an average site depth of 1 meter, we estimate the cost of scientific excavation of Spokane archeological and historic sites, traditional cultural properties, and cultural landscapes which have been or will be destroyed by your systems operations at between \$24 billion to \$111 billion, as presented in Table 3.

We are not suggesting that this is the cost to be borne in 1995 for preservation, protection, and mitigation of Spokane cultural

¹This figure is based on the following costs for excavation of 1 cubic meter: 2 crew members (\$15/hr, including taxes and benefits) for 1 field day; 1 professional archaeologist (\$25/hr, including taxes and benefits) for 1 field days and 2 report-writing days; 1 elder advisor (\$15/hr, including taxes and benefits) for 1 field day; 1 crew member (\$15/hr) for 1/2 day lab and 1/2 day computer data input; 10% for equipment and supplies; and 30% overhead, for a total of \$1512.00. All of these costs are conservative in a competitive market, based on charges by the Spokane Archaeological Crew (part of the Spokane Culture Office), and based on the 1995 dollar. A higher range figure which is often charged by universities in Washington, and is still be acceptable in the competitive market (often winning federal contracts by your agencies) is roughly one and a half times higher salaries, and 100% overhead, which equals a total of \$2268.00 (1995 dollars).

Table 3

Cost Estimates for Scientific Excavation
of Spokane Archeological and Historic Sites,
Traditional Cultural Properties and Cultural Landscapes
Which Have Been or Will Be Destroyed by Systems Operations
(in 1995 dollars)

<u>Based on \$1512 per unit</u>	<u>Based on \$2268 per unit</u>
Low: \$24,548,614,272	Low: \$36,822,921,408
Middle: \$49,097,228,544	Middle: \$73,645,842,816
High: \$73,645,842,816	High: \$110,468,764,224

resources by your federal agencies. This is a reasonable estimate of the eventual costs of mitigation, not including restoration², for those Spokane sites directly affected by system operations.

There has been no attempt here to enumerate or estimate the value of non-physical cultural resources, such as Spokane language, values, economic independence, cultural pride and integrity. The Spokane cultural resources which include what Euro-Americans define as "natural resources", such as salmon, eels, and other riverine resources, are also not addressed in this section, but only because of the lack of time and funding by our staff. Those Spokane cultural resources which are non-physical and those which are by Euro-Americans define as "natural resources" will be addressed in future works of the Spokane, and but decision-makers should be aware that they must consider the effects of systems operations on these resources as traditional Spokane cultural resources as well.

Decision-makers should also be aware that these are estimates of the dollar value of only part of their cultural resource management and trust responsibilities before they make a decision which does not include adequate consideration of impacts on cultural resources. These estimates do not include costs involved in the responsibilities included in such mandates as ARPA, government-to-government consultation, and NAGPRA.

The only alternative in systems operations which would avoid eventual destruction of all sites involved would be the destruction of the dams and subsequent revegetation. With this alternative, less drastic assessment could be made; some sites could be saved from eventual destruction, and perhaps preserved and protected. The Spokane Tribe of Indians recommends that this alternative receive full consideration.

²It is beyond the scope of this report to determine the cost of restoration.

VII. SUMMARY AND CONCLUSIONS

After reviewing the Columbia River System Operation Review Draft Environmental Impact Statement, Appendix D: Cultural Resources, the Spokane Tribe of Indians is positive that the present SOR EIS Appendix D does not use the best available data to consider the effects of systems operations on cultural resources. The models and plans set forth in this document are based on assumptions which render them invalid, and on data which is inadequate and incomplete. A model and plan must be constructed separately for each area along the Columbia River.

The effects of each alternative on costs and methods of preservation, protection and mitigation has not been considered. These costs will be astonishing (see Chapter VI: The Proposed SOS Alternatives). Requirement set forth in federal mandates such as but not limited to ARPA, NAGPRA, and costs of curation, which will be affected by the choice of systems operation, have never been considered.

Effective government-to-government consultation have not as yet been accomplished during this SOR EIS process. Attempts to draft a Programmatic Agreement with the tribes were feeble, limited to a few meetings, and not on a government-to-government basis. The federal agencies are required to accomplish all of these things before the Record of Decision is made.

The effects of systems operations on Spokane cultural resources has not been sufficiently or realistically considered in the SOR EIS Appendix D. Because of the special and often sacred relationship of these cultural resources to the Spokane people, the tribe chooses to perform its own cultural resource management activities. This ability to perform such activities does not imply that other agencies' responsibilities as set forth in federal mandates are in any way relieved; but the tribe will be the agency to perform any actions implemented forthwith concerning Spokane cultural resources.

The Spokane Tribe of Indians holds the United States government, including the involved federal agencies, responsible for preservation, protection and when mitigation of Spokane cultural resources which are affected by federal undertakings.

BIBLIOGRAPHY

- BUTZER, KARL W.
1971 Environment and Archeology: An Ecological Approach to Prehistory. New York: Aldine-Atherton Press.
- FAGAN, BRIAN M.
1992 People of the Earth, 7th edition. New York: Harper Collins Publishers.
- HARTZELL, PAULA L.
1994 Report on the History and Status of the Slawntehus Site (45-ST-201) and on the Impacts of the Proposed Marina Project on Cultural Resources at Colville Flats, Coulee Dam Recreation Area, Stevens County, Washington. Report to the Pacific Northwest Region, National Park Service, Seattle.
- LENIHAN, DANIEL J., T.L. CARRELL, S. FOSBERG, L. MURPHY, S.L. RAYL, AND J.A. WARE
1981 The Final Report of the National Reservoir Inundation Study, Volumes I and II. Prepared for the National Park Service, Southwest Regional Office. Santa Fe, New Mexico.
- MASTEN, RUTH A., ed.
1988 A Report on the Spring 1988 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Short Report Number SR-158. Archeological and Historical Services, Eastern Washington University. Cheney.

1990 A Report on the Spring 1989 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Eastern Washington University Reports in Archeology and History 100-72. Archeological and Historical Services, Eastern Washington University. Cheney.
- ROSS, JOHN ALAN
1991-1993 An Ethnoarcheological Cultural Resource Survey of the Spokane Indian Reservation: Phase I-III. Eastern Washington University, Cheney.
- SPOKANE TRIBE OF INDIANS
1994 Coyote Spit: Phases I and II. A Protection Project. Spokane Tribe of Indians, Wellpinit.

STEVENS, REBECCA A. AND S.A.C. KELLER

1992a A Report on the Spring 1991 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Eastern Washington University Reports in Archeology and History 100-77. Archeological and Historical Services, Eastern Washington University. Cheney.

1992b A Report on the Spring 1992 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Short Report 340. Archeological and Historical Services, Eastern Washington University. Cheney.

WARE, JOHN A.

1989 Archeological Inundation Studies: Manual for Reservoir Managers. Environmental Impact Research Program, Contract Report EL-89-4. Prepared for the Department of the Army, U.S. Army Corps of Engineers. Washington, D.C.

APPENDIX SPOKANE-A

A SAMPLE OF TESTIMONIES OF THE SIGNIFICANCE
OF THE COLUMBIA, SPOKANE, AND SNAKE RIVERS
TO THE NATIVE AMERICAN PEOPLE OF THIS REGION

GIVEN AT STAFF AND FULL WORK GROUP MEETINGS
OF THE SYSTEM OPERATIONS REVIEW
ENVIRONMENTAL IMPACT STATEMENT
CULTURAL RESOURCE WORK GROUP

January 31, 1995

When asked to begin to describe how they view the natural resources of the Columbia River system as a cultural resource, the tribal representatives gave the following as responses. (All responses are not included here; these are a representative sample.)

Mr. Henry SiJohn of the Coeur de Alene Tribe says, "To me, all I have is common sense. You know that's where the gap exists between the American Indian culture and what you folks here in the bureaucracy represent. The Indian looks at the water and looks at the fish, and the effects on that natural resource, and he has only his five senses: he can see the effects, he can feel the effect of the water, and he can listen to the anguished cries of the natural resources - the wildlife in their anguish of contaminating themselves and dying - and as a result, he can hear that. So that all of these things are entirely opposite entirely from what you are involved in. And the Indian is only interested in the species, to preserve that species, and that is what I think originally was the intent of SOR, Systems Operations Review. . . ."

Mr. Jackson Meninick of the Yakama Nation says, "The issue in totality, as you look at the mountains, and as you look at the flow of streams, to us when the Great Creator created that, there was a reason for that. That body lies, as you'll notice my hair, my arms, my legs, my body, that as you look at the East and you look at the West, and you will notice that timber stands are my hair. Well, when the Great Creator laid that out, he wiped out everything and it became water. Out of that came an island, such a place sticks out, the highest peak in the water. It was right above what is called Mount Hallowishram. And the animals washed out there, logs, everything. But when the Great Creator created that water and the land. So then there had to be something to occupy the water, he created the fish. This is how he counted, enumerated these things. Then in the land, the wildlife; in the land, the roots; in the mountains, the berries. All these are enumerated, just like you'd say them, what you would call (?), and that is how we read these things. There are also plants related to these.

"Now there is a certain season, you'll notice a plant that will grow, and they'll mature, that means the fish are coming up the river. There are certain plants that will change formation,

like if you have a beef, so you'd make a feeder out of it, you feed it like chickens. When it's ready for butchering, that's the way the deer. You'll notice, certain plants will reflect those things. So this is the way we respect the resources. So we don't need a biologist; we are the biologists. The resource doesn't belong to us: we belong to the resource. With that, if we take care of the resource, that takes care of our life. Now we take care of the people and our pocketbooks, that doesn't take care of the needy people. So this is why we have to attend to express our feelings."

Mr. Meninick continues, "There is one thing that we do ask. I hope your ears are working. And if it is, if you'd listen to it carefully, it will get to your heart, and that is how we learn. We don't have any papers at our house. We talk to our children, what is called wisdom by the words of mouth. When you listen to that, it gets to the heart. That's what we grew up with. When we become mature, you understand nature. So before we can have a fish, or wildlife, roots, or berries, we have to thank the Great Creator. But we have to have peace before that. When we do that, that regenerates by nature. We have to use it properly. That regenerates the water, more plentiful water; regenerates the fish, more fish; regenerates the wildlife. Each time we have that peace, we have to respect it. Today it's a little bit different. It's biological and scientific. Biological and scientific, we have to learn on rats and mice in order to understand what internals are. Biological school, but it doesn't tell you nothing about the nature. All it tells you about is the little piece of item you are working with. But it doesn't tell you about the connection of life, or its nature of how fish have to live, their survival.

". . . But there's one thing that wasn't mentioned this morning. There's also another enemy. It's what's called - and I believe the Bureau of Reclamation is involved in this one - it's called divergent. And those divergent, I think they call them flip-flops, a lot of these divergent of yesteryear didn't have these, these flip-flops. So the fish would . . . on these canals, these divergent, ditches. And I heard farmers that I knew, I worked for, say, 'Oh, I go out there with my pitchfork, jab the salmon, give it to my cat.' And I heard the sportsman here in Portland, 'So I go out and catch a fish, and we take a picture of it, then throw it in the trash.'

"Now that's not highest, best use of fish. We respect the fish. Every particle in that fish means something to us. We don't just eat the fillet. We eat the fish, how we use the juice out of fins, how we use the head, and how we use the tail, and how we use the bone. There's also a little chief, the sucker that comes up. Everybody laughs at suckers, but they are the leaders. People laugh at eels; they are the supporters. All these other species of fish have a different meaning each season. So the way that we cure it, we didn't have no refrigerators, we didn't have any jars, but we had way of curing fish that could be preserved for years and years. As a matter of fact, there's still some up in the hills up here. If you open up those places where they left them generations ago, I bet you they're still edible. That's how we cured the fish.

So there's a way to take care of things and doing things. . . .

"There are things that are called cultural resources. There are things called - there's another word for it. There's cultural resources and natural resources, and then we get into human resources. We're going to have to deal with all these. Biological may be good, and scientific may be good, but it's not the answer. You want to know something, you'd better ask us. We live it. We don't learn it, we live it. It's a lot different than all the papers you got on that table. You have to read it to find out something. You ask us, we'll tell you directly how we live this, and how our ancestors have lived it. And I have grandchildren, and maybe their grandchildren. It's an inherent thing to us. . . ."

Mr. Fred Ike, Sr. of the Yakama Nation began to describe the song he sang at the Pasco meeting, about the creation and the salmon. " . . . river was given to us from the Creator. And the law that is given to the salmon as a key resource in the Columbia River. And that song explains the whole law, the creation of the salmon and the other species of fish. Although you can not understand the song, the meaning, the words, when I sang it, it can only be interpreted by traditional native people. But I just made a short statement, kind of an outline, that tells you we came from the Creator, and the people's Law, Unwritten Law, that we should exercise each year around resources. The first salmon that arrives in the Columbia River, the spring salmon, the King Chinook salmon; that fish, the chief, that fish is our culture, our religion. The first part of that song expresses what I tell you." Mr. Henry SiJohn adds, "I think what Carl is trying to get to is the fact, to talk about the idiom of respect. The American Indian proclaims that the greatest translation of a word from Indian to English is the word respect. The Indian looks upon the earth as its mother, because we look upon and depend upon our mother, all of us, for the nurturing and the for the feeding and to sustain our lives during the infancy part, so that when we grow up and mature, we grow up to become independent. And when we become independent, we then exercise our individual freedom. Psychologically, that is correct from the standpoint of individual freedom.

"However, the individual freedom does not mean that you do anything you want. You must do it with prudence, with respect to the things of the things of the earth. You don't dare hoard all of the game. You don't dare pick all of the berries, and deprive others. You share, and that is I think one of the greatest virtues that the American Indian possess, is that they shared their food, they shared their lodging. They shared many things, and (?) things, and knowing each other. The door was always open and welcome, and they did not ask you how long you were going to stay, or what are you doing here? 'Have you eaten anything?' was the first thing they asked you. 'Sit down and make yourself comfortable. Have you had supper? Have you had lunch?' So food was being prepared for you immediately, so that the door was always open.

"But it has to do with intellectual ethnic perceptibility. How much can the non-Indian grasp of the ethnicity of the American

Indian, and how much of it will they consider as valid? Very definitely as pertaining to the way of life in which we live, and everything.

"We depend very heavily, as I stated before, on our mother for sustenance and we live, grew up. And as we became individuals we did not think that we were big enough or sure enough of ourselves to do things on our own, we depended a great deal on the guidance of our aunts and uncles, grandmothers, grandfathers, our cousins. So that all of the family was close-knit. So spiritually it was one unit, one family unit to help a young person develop into a respectable and brave individual.

"The other point to that I would like to make is that science and technology do not have all the answers. They do not. We can look upon science, and their data and statistics, and when it comes right down to when nature kicks up its heels - an eruption of Mt. Saint Helen, the floods, the rain, thunder and lightening - the scientists and technology people have to just stand by and watch it happen. They can't control that. And as a result, it comes down to the animals.

"People wonder today why the process of spawning of the salmon is inevitable. It happens. For salmon, that's their way of life. That's the destiny, ultimate destiny of a fish, to return to its spawning bed where it was born. That is why the American Indian today, if he goes overseas, ultimately the returns to his homeland that he was born in, very tenaciously, and he would like to - if nothing else - die on his homeland. I had a grandfather that participated in the Septo wars. And he was wounded to the point where it was a very critical situation, but he did not want to die in Palus the country. He wanted to be returned back to Cataldo Mission where he lived. And that's where he died. He's buried in the Cataldo cemetery. And so it is with all the American Indian, just like the salmon. It returns to hits origination, to where he was born. And fending for himself, or itself, out there in the wild blue ocean is definitely a challenge of life, just as we face the challenges today.

"As we do not look at life as being immaterial, we judge it upon the aspect of instinct. That's what the salmon has: instinct; that's what the animal has: instinct. Fear, hunger. And very definitely it survives because of that fear. And so we respect the salmon fears because the instinct of animals is a God-given resource. Without instinct, they would not survive. And the instincts of animals allows us to survive. And so we respect the animals in that way.

"So that it's up to the individual non-Indians to perceive that ethnically, and sometimes its very difficult. Only if you live out there, and you understand it, and your people tell you, and you become imbued with that totally, and you begin to understand just where you are. How big you are and how brave you are can depend on how well you can withstand cold and nature. That is why the proof of the pudding of a man was definitely his vision quest. He went to an isolated place to gain strength and procure his vision, his shaman, his omen, his guardian angel if you please.

And for that quest is only to help him survive, and to become a stronger and a better man. If he failed in that, it wasn't given to him that time, well, he accepted that. But he did not give up, he continued his quest, time and time again.

"Regardless of how many times he went out, or how many visions he had, he still went out to gain more strength and durability to survive. And he didn't have any data or statistics which enabled him to pass judgement on whether he should do this again, or whether it should be feasible for him to try it. He did it because in his heart he knew that he had to do it in order to survive in his element, and with the help of the Creator which enabled him to be able to survive with the plan of the natural resources available to him.

"And he couldn't survive without overcoming the deficit of competing with the natural resources, the deer, and the antelope, and the elk. He had to be able to procure this and become an excellent hunter. And so he sought a vision to give him that strength, and to give him that capability. And if he got it, he was a great man, and as a result of his greatness, he was given a privilege sometimes to become the leader of a hunting expedition or a group that was going out to procure food or maybe going to the prairie to hunt buffalo or go on a horse-stealing expedition. Regardless of what it was, it was an item of necessity. And the item of necessity was ultimately and the bottom line was to improve your well-being, individually and tribally. So that this aspect, living with nature, they were living with nature and understood nature, but above all they respected nature.

"And as a result there are some things that science and technology can't produce. And they find out about things but they can't solve everything. Science and technology is limited in its aspect of conquest. You can conquer and harness certain things, but very definitely when nature kicks up its heels, science and technology just have take a back seat and stand by and let things happen, because they can do nothing about it. And so the association we have regarding Mother Earth and the natural order of things, wildlife, fish, all were God-given, Creator-given to us, and we respected that because it enabled us to survive.

"And we did not keep certain things to ourselves, we always shared in it, and we shared willingly. I remember even in my young days, in the early 20's, I had a man that was married to my aunt, and he had a good fishing place. As we would go huckleberrying in the mountains, he would take his horse in the morning and leave the camp. But in the late afternoon, about 4 or 5 o'clock in the afternoon, he would come back with a good dozen trout that were about that long that were spawning in the stream that he took. He didn't keep the fish for himself. He'd call on my brother, Ike, and he'd tell him, "Ike, give a fish to each camp." And there would five or six camps in one spot up on the mountains, mostly our family, our extended family. So everyone shared in the fish profits. And so it was with the killing of a deer or an elk or a grouse, and making and baking of manic bread. And to make that was not specifically for the family. We enjoyed it, but if some family

was short on bread or flour, it was shared willingly. And we don't do that anymore. We can live next door to each other and not know the neighbor living over the fence. So that things are different.

"And now we are very appreciative for the chance to show the appreciation to the Creator of the bounty that has been given to us by Mother Earth and which enables us to live to this day. And that this is something that we can share with you, but it'll depend a great deal on the perceptibility and acceptability of that knowledge by the non-Indians."

Mr. Meninick noted that if federal agency representatives attend ceremonies, they should be aware that they should notify the tribe ahead of time. They do not have to pay, as it is a religious ceremony. Don't bring cameras or recording equipment. Much of the ceremony is enumeration, the counting of the foods.

Another elder tribal representative points out to the feds how lucky they are that these tribal people have shared their feelings so openly. He points out that it is not easy, that many people cannot share their feelings so openly, or express them so well. He is grateful that these men have shared how they live, survive, believe, respect one another, respect the animals and environment. He hopes the feds will listen, remember, and think about these men who are speaking from their hearts. He admonishes the feds to listen, listen with their hearts to what has been said. He hopes the feds can help them retain what is special about their people. He thanks Mother Earth for what she has given. He is thankful that we can share what she has given us. He hopes that all will think about what has been said. Respect the earth, and respect one another.

Mr. Minthorn of the Umatilla Tribe says its good to hear these people speak. He points out that the construction of the dams not only destroyed a culture, but also destroyed an ecosystem. He points out that the dams destroyed the economy based on salmon, and destroyed the life-cycle of the salmon which had existed for time immemorial before the dams. We talk about gravels, but there is no gravel-to-gravel anymore. The Columbia River at the Dalles was one of the greatest fisheries in North America, including trading across the Great Plains, Great Basin, Coast.

Mr. Minthorn reads from a manuscript his tribe has prepared on the prehistory/history of the Dalles, emphasizing the importance of this area to fishing, culture, economic, religion, transportation and access. In 1864 first salmon canned on San Francisco River, and since not successful there, they moved to the Columbia River. In 1883 there were 40 packing plants on the Columbia River. Super-canneries destroy many of our resources. "They filleted the fish. The rest of the stuff came out on troughs. It came out on troughs and the tribes used to go down there. Because like the elders say, we used every part of the fish. And when the eggs and the heads and everything were coming out, then the tribes would get them, because that was our resource. And what we didn't get, just went right back into the river again. And we thought that a big loss of our traditional foods. We felt the impact of the modern day

activities.

"People used to live along the river in some places all year round, all the way from Lewiston, Idaho, all the way to Bonneville Dam. All they did was fish. We talk a lot about these fishing areas, but a lot of us have witnessed. Mr. Sampson has seen the Lawula fishery go under water my parents. My parents used to go up into there and fish. Nowadays they say we're re-establishing the fishery on the Umatilla River by using the dip-nets. When we were kids there was a fishery already there. Once the dams came back in and changed the current of the water, then we lost our fishery, of using our dip-nets and stuff in there."

Mr. Carl Sampson of the Umatilla Tribes said it was an honor to hear these people speak from their hearts. He tells the feds that these are some of our unwritten laws. He tells them that some of these things you can't explain here at a table, but you have to go out and appreciate them, such as the value of the salmon and the huckleberry.

Mr. Jeff VanPelt with the Umatilla Tribes points out that challenge in cultural work group is that anthropologists and archeologists and tribal people have a history of not getting along. He tells us how he is a young boy, and how you are for most of your life; we have much to learn from the elders. The world view of the Indian people is completely different from the non-Indian. He feels this is not sinking in. Again, as Indians we are taught if you speak and listen from your heart, it will tell you the truth, but with the non-Indian the opposite is true: you are taught not to speak from your heart.

Mr. VanPelt continued: Indians tribes have adapted to their environment for many generations. Tribal interactions, introduction of the horse, were some factors on this adaptations.

"We have adapted to this area according to archeologists for 13,000; from time immemorial according to some people here. In these 13,000 years of living here on the land, living together, there was one thing that we always had that was calming. That was an understanding of who we were. We didn't look at animals, and we didn't look the fish, and we didn't look at the wildlife habitat. We didn't look at all of the different winged ones who fly the air, all of the four-legged ones walking on the ground, those who crawl on the ground or under the ground. We didn't look at them the way you're looking at them right now and your analysts who study them. We looked at ourselves being of lesser importance the animals in that natural world. In fact we were the most ignorant of the natural world. Because we needed someone to tell us where to go eat, tell us how to prepare that food. We needed to tell us what we needed to do to survive in life. The natural world doesn't need that. The natural world knows itself on how to survive.

"And the natural world wasn't as afraid of people as they are today. You can even read in the historical literature about the Oregon Trail coming over. And literally, if you wanted a deer or an elk, you didn't go up into the mountains to hunt for them, you just hunted them right in your camp. . . . There wasn't the separation between the natural world and the world as it is now,

2000 years ago or 300 years ago. There was a connection; there was an understanding; there was a way of teaching and learning. There was a way to be able to look at the natural world around you, whether it be an eagle or a hawk or a salmon or a coyote or a wolf.

"And there was a way to extract education and teaching out of that. In our way of understanding, teaching, that was those who had been there before. That was directly tied to you, trying to communicate with you, trying to guide you, trying to teach you, trying to help you to become that man. Mr. SiJohn was talking about looking and searching for that one animal that can help guide you, to find an honorable place to sit in the tribe. It was very important.

"Much of the people, and even our own children on the reservation today, are taught that success is something that has to do with money and power. And much of our people are caught up in that. But it couldn't be farther away from the truth. That's what assimilation has done; that's what the melting pot has done; that's what your manifest destiny has done. It has separated us from those very teachers that teach us who we are. There's a very big impact in that. . . .

"As I was sitting in the back of the room, I'm really frustrated because we have a lot of intelligent people here. Many of you know I'm just an educated boy from the reservation trying to learn from watching the elders around. I can watch you work, and I can understand how you work, and I can understand how you think. But it is their knowledge, that way of speaking from the heart, is one of the few ways we have expressing those whose been here before and their needs.

"Archeology is the study of remnants of something that was left behind by a culture, but that's not true. Archeology was there to always remind us of who we were and where we came from. Even back when we do our oral histories, we listen to the elders talk and how they interpret an archeological site. It was always used as an educational tool. It was always used to teach our children about who they are and where they came from. Maybe it was about a battle, maybe it was about a specific use of the area, maybe it was about a sacred area you only go to during a certain time - you didn't go there just to play, to talk. Everything had a specific purpose.

"It was the very discipline that we had in our tribal structure that we're trying to assimilate somewhat today in our tribal government. The elders have been separated from our children, so we depend on much of your society to train them. It's very uncomfortable." . . . "Our true spirit can't grow because we're not looking at the truth. . . . We're not looking at the animals and the impacts. What happens when you take away the salmon? When you take away the salmon, the eagles, the hawks, the coyotes, the wolves, the bears, everything that survives off that one carcass of that salmon goes with it.

"Now if your very teachings of who you are and where you find your place within a tribal system or the system that we live in, is

taken away one at a time, and another, and another, and all your teachers are gone, and you're fighting for that one fish. A lot of people can't comprehend why the fish is so important to the Indian. Heck, they're growing them down in (?) down in California, that's why the prices are so cheap on them. An ecological way of looking at the environment, what impacts that we have on that environment, the very disrespectful way: the Creator knows whose been here before and watches us to protect them. We're responsible for future generations have. We're being very selfish. . . .

"So I've been sitting back there trying to figure out how to best utilize this opportunity to educate the different people and the different working groups about tribal involvement. I don't think a lot of people realize that the tribes have a very lot to offer you. . . . look at what you've done to our world in the last 150 years. Look what's happened to the dams, the pollution, the water; the very resources that we lived with for 15,000 years.

. . . .
"Very, very rich, one of the richest cultures in North America, lived right here on this Columbia River. It was the Mecca; it was the Mecca when it comes to talking about people coming together in large, large numbers. Savage: we replace it with . . . savage, very savage, . . .

"But I kind of really wonder if we need as much electricity as those dams are generating. I kind of wonder if we need that hundred-and-something year old technology out there. I don't think that people realize that the fish aren't just fish; the fish are life. They have a cycle of life that must be completed. I was talking that Indian people, too, have a cycle of life that needs to be completed.

"So a lot of the anger that you hear from these meetings, is that you're not allowing that. And when that is forced upon our people and on our way of life, assimilation over the last hundred and something years in your society has worked. The only way to survive is to try to go back before that confusion came. And that's what you brought here; you brought confusion. Don't get me wrong: I like driving in my car, I like getting a cold pop out of the refrigerator. But the confusion that you have brought is such a monster, such an animal - how do we deal with that on a specific kind of a deal like this systems operation review. Getting this group together is the best that I think that I can offer.

"You've got to remember, that when you're dealing with an ecosystem, you're dealing with a spirit. You cannot analyze that spirit. You cannot understand that spirit. Our shamans, our medicine people, they'll take you in; and you'll tell them about a dream or about something you have thought about. And they'll interpret that and they'll help you. But now we get back into what the teaching was, and a lot of that is gone. So we have to depend on ourselves. We learned this, we've proved this in different ways, in trying to do restoration.

"So when you talk about recreation, look at the impact that we definitely know recreation is having on our culture, on our cultural resources. Look at what it's doing to access to the

rivers for us, to access the fish, our very way of life. . . .
What is barging? What is transportation? . . . What is the
environment of the river? What is it doing to water quality?
Restoration, wildlife habitat - not hydro-power . . .

"Many of you think that you're men and women, but in the eyes
of the elders will tell you you're still young kids. You're still
young kids playing on the playground fighting over the ball. You
don't understand. You don't understand that this ain't a game.
It's a way of life that you have to learn. We're all put here for
a purpose and a reason. If you think your doctorate degree is
going to get you to the other side, right on! I hope it does it
for you. But from the way I learned, I don't think so."

APPENDIX SPOKANE-B

RECORDED SPOKANE ARCHEOLOGICAL AND HISTORIC SITES
WITHIN THE SPOKANE RESERVATION AND LAKE ROOSEVELT³
(1995 Spokane Survey)

Abraham Cove Historic Road
Abraham Cove 3/13-2, 3/13-3, 3/14-1, and 3/14-2
Ayasi'ken
Btwn PC and Henry Martin
Big Rock
Big Spring Cemetery
Buck Chil-Quim-Shin-Na Homestead Clay Bed
Buck Chil-Quim-Shin-Na Homestead Mussel Bed
Buck Chil-Quim-Shin-Na Homestead 3/23-3, 3/24-1, 3/28-1, 3/28-2
Casino Boat Light Site
Ch'chiw'e
Collier Hudson & Ford's Site 8
Collier Hudson & Ford's Site 50
Columbia Pits
Columbia Talus Storage Pit
Columbia Hunting Blind
Columbia 5/4-1 and 5/4-2
Confluence Site
Detillion Bridge
Dock 5/2-1 and 5/2-2
Edward Wha-La-Whit-Sa
Elizabeth Am-Pok-En Homestead
Fort Spokane Bridge Burial
Hazel Defreese Homestead
Hazel Flett 9/21-20
Hazel Flett 9/21-22
Henry Martin Homestead
HB Burials
HB Camp
Indian Allotment 83
Isabel Edward's Homestead
Jackson Creek
Lebret Mussel Bed
Lebret 3/30-1, 3/30-2, 3/30-3, 3/31-1, 3/31-2, 3/17-1, 4/3-2,
4/3-3, 4/3-4, 4/4-1, 4/4-2, 4/4-3, 9/21-29
Jim Sil-Pimpt-Kin Rapids
Keye'me'us
Laame'kene'seen
Mary Joshua's Homestead
Mattie Boyd Homesite
Mile 4 Fish Weir
Mill Hill Burials

³Some of the site names have been changed to protect the location of these sites.

Mouth of Smith Creek
Nelly Flett Homestead
Nkwikwia'tqw
nlultinalch
North Fort Spokane Firing Backstop
Npia'xem
Old Coyote Spit Road
Pit at Smith Creek
Ross' BL3-354, BL4-393, FS4-31A, MC3-74, and MC4-105
Smith Creek Quarry Site
Schmep
Slide Area #2
Spilye Sptaxw Cemetery
Spilye Sptaxw 3/28-3, 3/28-4, 3/28-5, 3/28-6, 3/29-1, 3/29-2,
3/29-3, 3/29-4, 4/3-1, 4/3-2
Spokane Burial 9/21-27
Spw'xst
Sqasi'lni
Suzie Sil-Pimpt-Kin Allotment
Suzie Sil-Pimpt-Kin Mussel Bed
Sw'wdle'kweten
Table Rock Site
Tcuwi'cast
Te'la'q'a
Telmedl'me'dlmen
Three Mountain Homestead
Turtle Rock
Wynecoop Flats Historic Ferry
Wynecoop Flats River Site 9/21-31, 9/21-32, 9/21-33
Wynecoop Landing Trail
Wynecoop Shell Midden Site

APPENDIX SPOKANE-C

ELEVATIONS AND AREA OF
RECORDED SPOKANE ARCHEOLOGICAL AND HISTORIC SITES
WITHIN THE SPOKANE RESERVATION AND LAKE ROOSEVELT⁴
(1995 Spokane Survey)

Low Elevation High Elevation Area (in square meters)

⁴The elevations and areas in this appendix have been deliberately in a different order than the previous appendix in order to protect the confidentiality of locations for these sites.

Low Elevation High Elevation Area (in square meters)

Low Elevation High Elevation Area (in square meters)

1. See National Trust for Historic Preservation v. United States Army Corps of Engineers, 552 F. Supp. 784 (S.D. Ohio 1982).



Spokane Tribe of Indians

P.O. Box 100 • Wellpinit, WA 99040 • (509) 258-4581 • Fax 258-9243

CENTURY OF SURVIVAL
1881 - 1981

April 10, 1995

RECEIVED BY SOR PUBLIC INVOLVEMENT LOG #. <i>SOR-10-12</i>
RECEIPT DATE <i>APR 1</i> © 1995

TO: Ernest J. Harrell, Major General
Commander and Division Engineer
U.S. Army Engineer Division, North Pacific
P.O. Box 2870
Portland, OR 97208-2870

John Keys, Regional Director
U.S. Department of Interior
Bureau of Reclamation
1150 North Curtis Road
Boise, ID 83706-1234

Randy Hardy, Regional Director
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208--3621

Dear Gen. Harrell, Mr. Keys, and Mr. Hardy:

Attached are comments from the Spokane Tribe of Indians on the Columbia River System Operation Review Draft Environmental Impact Statement, Appendix D: Cultural Resources. We are providing this for your information, pending completion of an in-depth look at the document by the Tribe. These comments are not the final comments, concerns, or statement by the Spokane Tribe of Indians on said document.

We request that these comments, as well as those submitted in the past and the future, be seriously considered in the development of the Columbia River System Operation Review. The Spokane Tribe of Indians does not approve any plan which has not addressed these concerns.

Thank you for your timely review of these materials. Please direct any response or questions to James SiJohn, Spokane Tribe Business Council, Spokane Tribe of Indians, 509-258-4581.

Sincerely,

A handwritten signature in black ink, appearing to read "James SiJohn", written in a cursive style.

James SiJohn
Spokane Tribal Business Council

cc:

Ms. Linda Burbach, Systems Operation Review Interagency Team
Columbia River System Operation Review
United States Department of Energy
Bonneville Power Administration
P.O. Box 2988
Portland, OR 97208-2988

REVIEW OF SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

- I. Introduction
- II. Spokane Tribal Cultural Resources
- III. Comments Concerning the SOR Draft EIS, Main Volume
- IV. General Comments Concerning the SOR Draft EIS, Appendix D
- V. Comments Addressing Chapters and Appendices of the SOR Draft EIS, Appendix D
- VI. The Seven Proposed SOS Alternatives
- VII. Summary and Conclusions

REVIEW OF SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

I. INTRODUCTION

The Columbia River Systems Operation Review

The (Columbia River) System Operation Review (SOR) is both a study and an environmental compliance process being used by the three Federal agencies to analyze future operations of the system and river use issues. The goal of the SOR is to achieve a coordinated system operation strategy for the river that better meets the needs of all river users. (Appendix D:i)

As part of the Environmental Impact Statement (EIS) process for the Columbia River Systems Operation (SOR), the responsible federal agencies (the Bureau of Reclamation (BOR), U.S. Army Corps of Engineers (COE), and Bonneville Power Administration (BPA), must solicit and consider public opinion as well as consult with the appropriate Native American peoples on the impact of the project on significant cultural resources. Specifically, these agencies have solicited opinions and concerns over the contents of the Columbia River System Operation Review, Draft Environmental Impact Statement, Appendix D: Cultural Resources. Full consideration must be given to the opinions and concerns they receive, enforceable under the Administrative Procedure Act (5 U.S.C. §706 (1982))¹

The Spokane Tribe of Indians is a Native American tribe whose traditional lands and cultural resources are directly and indirectly affected by this project. As part of the EIS process, the tribe submits the following concerns about the SOR as related to cultural resources. These express some, but not all, of the tribe's concerns, and should not be considered final or exhaustive.

The Spokane Tribe of Indians and the Spokane Reservation

The Spokane Indians are the Interior Salish group which has inhabited northeastern Washington, northern Idaho, and western Montana for centuries. The native language spoken by the Spokanes is common to other Salish tribes with only a slight variation in dialect. Generally speaking, the Spokanes can converse easily in their native tongue with the Kalispels, Coeur d' Alenes, Colvilles, and Flatheads.

The aboriginal lands occupied by the Spokanes laid in eastern Washington along the Spokane River and surrounding area encompassing some three million acres. The vast domain began on the Columbia River near the present town of Hunters; thence easterly along Hunters Creek to Deer Lake; thence to Mount Spokane and southerly through Peone Prairie and the present town of Opportunity to a point near Rosalia; thence west and

slightly south to Ritzville and thence north to the old townsite of Peach, and up the Columbia River to the point of beginning.

The tribe originally [ed: at the time of Euro-American settlement] consisted of three bands: Upper, Middle and Lower. These terms were apparently applied by the white man to the three bands according to their location on the Spokane River. The Lower band usually occupied an area along the Spokane River from its mouth to the present site of Tumtum; the Middle band occupied the area from Tumtum to the mouth of Hangman Creek; and the Upper band lived in the Hangman Creek region and through the Spokane Valley as far as the present town of Post Falls, Idaho. (Wynecoop 1969:7)

Under extreme pressure from the U.S. military and Euro-American settlement, the Spokane Indians ceded most of their traditional lands, and on January 18, 1881, the Spokane Reservation was established by Executive Order.

It is hereby ordered that the following tract of land, situated in Washington Territory, be, and the same is hereby, set aside and reserved for the use and occupancy of the Spokane Indians, namely:

Commencing at a point where Chemekane Creek crosses the forty-eighth parallel of latitude; thence down the east bank of said creek to where it enters the Spokane River; thence across said Spokane River westwardly along the southern bank thereof to a point where it enters the Columbia River; thence across the Columbia River northwardly along its western bank to a point where said river crosses the said forty-eight parallel of latitude; thence east along said parallel to the place of beginning. (Executive Order of President R.B. Hayes, 1881)

Area of Impact

With the establishment of Grand Coulee Dam, the reservoir waters which are known as "Lake Roosevelt" inundated the lands bordering the Columbia and the Spokane Rivers. This includes the traditional lands of the Spokane Indians on the east bank of the Columbia River beginning at the mouth of Hunters Creek southward to the old townsite of Peach, and on both banks of the Spokane River, from the confluence with the Columbia River eastward to the Little Falls Dam Bridge.

The area of physical impact by the reservoir operations includes not only those areas which are inundated, but a much larger area which is steadily increasing due to erosion, landslides, higher visitation, etc. Areas not inundated but affected by reservoir operations include, for example, a stream which traditionally was used for fishing salmon, but which is now dysfunctional due to the

construction of Coulee Dam. Another example includes a site located on a high bluff or terrace, but which is affected by water-induced erosion at its base. Yet another example is a spiritual site which is now dysfunctional due to its tie with an inaccessible (inundated) or site. There is a major impact on the integrity of setting for any cultural resource on adjacent landforms, so that cultural resources anywhere within that visual catchment are negatively impacted. Furthermore, the erosion process continues, so that a larger and larger area is impacted directly or indirectly by the reservoir operations through time. A comparison of diachronic topographic maps and photographs, as well as studies of erosion of the rivers' bank substantiate this claim.

The indirect effects of Columbia River systems operations under the federal agencies in fact impact even more cultural resources. Before the construction of Coulee Dam, the Spokane people were dependent upon and interwoven with an annual cycle. The removal of any part of this cycle destroys all opportunity of continuing that cycle. Removal of the salmon and related cultural components by the construction of the dam destroyed traditional Spokane culture. They could no longer carry out a traditional way of life with a significant portion of their economy, diet, and spirituality missing. Those elements of language, religion and custom that dealt with riverine resources are in danger or destroyed. For example, much of the technology and technological jargon of fishing has disappeared; all of the critical religious rituals relying on the river or its resources have been destroyed. Stories and traditional names of places never seen by children are forgotten. Furthermore, modern Spokanes must deal with a culture rendered dysfunctional by the dam. They must deal with the guilt of losing aspects of their traditional culture, and of not protecting the lands and remains of their ancestors. The operation of Coulee Dam directly and indirectly effects these less tangible cultural resources at least as much as it does archaeological artifacts.

To be completed.

II. SPOKANE TRIBAL CULTURAL RESOURCES

Spokane Tribal cultural resources affected by the Columbia River systems operations include every "type" currently recognized as potentially eligible for National Register status by the Advisory Council on Historic Preservation, and include but are not limited to archaeological and historic sites, traditional cultural properties, historic (and prehistoric) landscapes, and the locations significant in the lives of important persons. Other types of cultural resources, such as culture-specific memories, activities, language, cemetery and burial sites are also recognized by the Spokane Tribe as significant.

Because of the special and often sacred relationship of these cultural resources to the Spokane people, the tribe chooses to perform its own cultural resource management activities. This ability to perform such activities does not imply that other agencies' responsibilities as set forth in federal mandates are in any way relieved; but the tribe will be the agency to perform any actions implemented forthwith concerning Spokane cultural resources. When expertise is needed which tribal members do not currently hold, they will be responsible for seeking that expertise from outside sources.

Spokane cultural resources affected by the operation of Coulee Dam includes historic buildings and structures; historic and archaeological sites; groups of buildings, structures, and sites forming historic districts; cultural landscapes; individual objects; properties associated with significant persons; mining properties; and traditional cultural properties which meet the criteria specified in the National Register's Criteria for Evaluation (36 CFR 60.4). There are also religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past fifty years which may be considered for inclusion in the National Register. Listing all of these properties is neither possible nor desirable; a small sample will instead be presented. We will attempt to list an incomplete but representative sample of site and material types which have been recorded within this area.

ARCHAEOLOGICAL AND HISTORIC SITES

Spokane archaeological and historic sites include prehistoric, protohistoric, and historic materials. Prehistoric site types include but are not limited to campsites, fisheries, plant and animal procurement and processing sites, burials and cemeteries, vision quest sites, petroglyphs, pictographs, village sites, trading and meeting places, battle sites, and river crossings. Prehistoric features include but are not limited to storage features (such as talus caches); stone, plant and animal procurement and processing features (for example stone ovens, shell

middens, hunting blinds, stone weir sites, and lithic scatters); and sacred and religious features (such as burials, vision quest structures, and special stone gatherings). Prehistoric material types include but are not limited to faunal remains (for example, rawhide, antler, bone, hair, claw, horn, teeth, and shell), floral remains (for example, seeds, pollen, bark, and roots), and artifacts of stone (for example, mauls, manos and metates, scrapers, spear and arrow points, crystals used for religious purposes, and fire-cracked rock). Many of these material types represent both man-made or modified artifacts, as well as evidence of paleo-environment, diet, and economy.

Protohistoric and historic sites include all of the above-mentioned prehistoric site and material types, plus European or Euro-American site and material types. Historic site types include but are not limited to those listed above plus schools, churches, stores, farms, and ranches. Several homes of tribal members located in the reservoir were left standing at the time of inundation. One church building, important to the Spokane people as one of their earliest church structures, was moved to higher ground immediately before inundation. Its original foundation remains in the reservoir. Material types include but are not limited to those listed above plus items of modern manufacture, such as glass, ceramic and brick, metals, and textiles of natural and synthetic materials.

The very early and continuous occupation represented in these archaeological and historical sites offers scientists a unique opportunity to study many critical areas. These realms include but not limited to: first human occupation of what is now the United States; adaptation to climatic, geomorphological, faunal and floral changes during the Pleistocene-Holocene boundary; expansion of prehistoric population; evolution of Plateau Prehistoric social, political, economic, and religious life; the relationships between this centrally located group with Plains, Great Basin, other Plateau, Montaine, and Pacific Coast peoples; Prehistoric Period syncretism; changing Prehistoric gender roles; the relationship between humans and Holocene environment; the effects of devastation from European disease; the Protohistoric; contact with early trappers, traders, and missionaries; Historic Period syncretism; topics in conquest and conquering; processes in taking and destruction of tribal lands by early settlers and the government; effects of overcrowding; forced and non-forced assimilation practices; the culture of poverty; deterioration and change of a language through destruction of environment; change in economic, social, political, and religious life due to forced change in the environment; and culture survival. Protohistoric sites are especially interesting in their mix of traditional and modern goods and practices; they offer the unique opportunity to investigate syncretism and the evolution of use of modern materials in a traditional society.

These questions do not, of course, address the importance of these

archaeological and historical sites to the Spokane people and culture. Many of these archaeological and historic sites, particularly cemeteries, but also vision quest sites, pictographs and petroglyphs, fisheries, plant procurement sites, churches, and others, carry special cultural and religious significance to the Spokane people and culture. Prehistoric sites represent their ancestors, a value which cannot be put on paper or underestimated. Spokane ancestors are an integral and unforgettable part of the Spokane people today. They must be respected. Prehistoric sites are a key feature in legitimizing their culture as a complete, valid entity. They represent a time when the Spokane peoples and lands (including natural resources) were whole, and existed in balance, as essential parts of each other. Protohistoric sites represent the initial and devastating impact of Euro-American culture on their society. Historic sites are significant to the Spokane people because they represent the horrific period of European settlement and forced assimilation into Euro-American society, as well as the memories of living tribal members. The Protohistoric and Historic Period sites represent conquest, division, and suppression to the Spokanes, but also their ability to survive.

The project area which includes Spokane lands affected by Coulee Dam operations is currently being systematically surveyed for archaeological and historical sites by the Spokane Tribe. We estimate the total number of archaeological and historical sites using site densities derived from the current survey as far as it has been completed, though this estimate may be low since it includes only the back portion of high river terraces (largely between 1265' and 1290' elevation), which often have lower site densities than riverine (now inundated) environments. The present survey has found thus far an average of 9.1 sites per square kilometer. If landslide and highly eroded areas are taken into consideration, this number jumps to between 12.1 and 13.8 sites per square kilometer. We estimate, then, that approximately 483 Spokane archaeological and historical sites are directly impacted by the operation of Lake Roosevelt. This quantity does not include sites indirectly impacted.

No diachronic studies have been performed to describe or quantify damage to these resources, but past archaeological work (for example, Hartzell 1994; Masten 1988 and 1990; and Spokane Tribe of Indians 1994) as well as Bureau of Reclamation monitoring of slide areas, sheds some light on the amount of damage which is occurring. Erosion at many sites is several meters per year, often in mass wasting. Spokane cultural resources affected by Coulee Dam operations are almost exclusively located on the unconsolidatable Spokane flood deposits.

THE COLUMBIA AND SPOKANE RIVERS

The Columbia River system or district includes many archaeological and historical sites, traditional cultural properties, and is an (pre)historic cultural landscape. Within this district, there is a significant concentration, linkage, and continuity of features associated with the lifeways of the distinct and unique Inland Northwest Native American, tied together through both cultural, temporal, ecological, and physical connections. These properties possess integrity as a whole.

The Columbia River, the Spokane River, and the Snake River are eligible though not yet nominated National Register properties. The Spokane Tribe of Indians is specifically interested and rooted in the Columbia and the Spokane Rivers. Their eligibility as National Register properties shall later be established through the National Register process, but these are immediately recognizable as eligible properties through a number of categories: archaeological district, (pre)historic landscape, and as a traditional cultural property.

This Columbia River system, or "district", is protected as a potentially eligible National Register property under Criterion (a): Association with events that have made a significant contribution to the broad patterns of our history, including those properties with significance in a community's historically rooted beliefs, customs, and practices; Criterion (b): Association with the lives of persons significant in our past; Criterion (c) (1): Embodiment of the distinctive characteristics of a type, period, or method of construction; Criterion (c) (2): Representation of the work of a master; Criterion (c) (3): Possession of high artistic values; Criterion (c) (4): Representative of a significant and distinguishable entity whose components may lack individual distinction; and Criterion (d): History of yielding, or potential to yield, information important in prehistory or history. In National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, an example given as an eligible property under Criterion A is "a hilltop associated in oral historical accounts with founding of an Indian tribe or society is eligible" (13). This describes the Spokane River for the Spokane Tribe, substituting 'river' for 'hilltop', as the river plays the key role in the origin of the Spokane Tribe. Oral accounts describing this role have been recorded many time (e.g. Ross 1984; also the appendices of the Spokane Centennial Trail Report). Traditional Spokane stories about the rivers which have been recorded include "How the Spokane River was Formed", "Salmon and Rattlesnake", "The Flood and Salmon and Spilye", "How the Sun Disc Came to Spokane Falls", and many others (e.g. Ross 1991-1993).

The historic properties within the Columbia River district convey the sense of time and place and historical development of the people native and non-native to this area. These natives represent

the oldest, most continuous cultural group in the United States. No where else in America is there evidence for an identifiable cultural group developing in a region from pre-Holocene times to the present. Few places than this offer the rich opportunity to follow the development of a pre-Holocene people into Holocene survival and adaptation, through an identifiable Protohistoric Period, through conquest and settlement by Euro-American, through the Assimilation Period, through the Civil Rights Movement, and into the Republican Period. As such, the Columbia River district is significant not only to the Spokanes and the people of the Northwest, but is significant on a national and even international level.

These rivers are traditional culturally significant properties, playing an essential and irreplaceable role in Native Americans' historically rooted beliefs, customs, and practices. These rivers are associated with cultural practices and beliefs of living Native Americans, including the Spokane Tribe of Indians among many others, that (a) are rooted in our community's history, and (b) are important in maintaining the continuing cultural identity of the community. Testimonies identifying the significance of these rivers to the Native American peoples of this region were given many times during meetings of the SOR EIS Cultural Resource Work Group staff and full work group meetings. Some of the testimonies given at one such meeting are included in Appendix Spokane-A.

These rivers fall into many of the categories outlined in the guidelines for evaluating and documenting traditional cultural properties in the National Register Bulletin 38; specifically including but not limited to:

- * a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- * a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- * a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historical identity.

OTHER TRADITIONAL CULTURAL PROPERTIES

Other Spokane traditional cultural properties which are effected by systems operations include but are not limited to vision quest sites, plant gathering areas, social/political gathering areas, sites associated with traditional oral stories (such as the story of creation) and traditions. Types of sites which are traditional

cultural properties because of their sacred and central nature to Spokane culture, but which may also be included in other National Register categories include but are not limited to pictographs and petroglyphs, camp sites, battle sites, churches, fisheries and procurement sites.

Most of the vision quest sites used traditionally by the Spokane peoples have been taken from access by inundation, or taken from context due to inundation of the surrounding landscape. Many of these vision quest sites could be restored if the land were no longer inundated, if elders remain to identify their location.

Social and political gathering areas, often located at river fords, are now inundated, though some are within the zone of fluctuation. Some of these areas were the sites of important battles, or landmark peace agreements between warring tribes. Some of these sites were the locations of sacred and religious ceremonies. Others are important because of their association with famous or outstanding individuals.

Sites associated with traditional oral stories include particular landforms, some of which are inundated, others of which are not inundated but eroding or threatened with erosion from reservoir action. The ecological landscape is often key to understanding these sites; changes in the surrounding landscape has negative effect on the interpretation of the landform even if the landform itself is not destroyed. Because of their often unusual appearance, shape or composition, these sites often attract recreational use which further contributes to their deterioration.

Another type of Spokane cultural resource is the natural environment. Both physically and spiritually, natural resources are an essential and inseparable part of Spokane culture. The salmon, eels, and other riverine resources are more important cultural resources to archaeological and historical sites, and play an essential role in Spokane cultural identity. Traditional Spokane stories record the importance of these resources to Spokane culture, belief, spirituality, and religion. Stories which express this relationship include "Salmon and Rattlesnake", "The Flood and Salmon and Spilye", "Son of Beaver Populated Big and Small Bullheads", "How Coyote Dug a Ditch for the Salmon", and many others (e.g. Ross 1991-1993).

The land itself is another cultural resource. One's homeland is inseparable from the individual. One cannot be laid to rest in a strange land, yet Spokane ancestors must be moved from their original resting place due to erosion and looting, and Spokane tribal elders cannot be laid to rest in their place of birth.

Procurement sites which should be assessed in reviewing systems operations strategies include, in general, plant gathering areas

and fishing areas. Those plants which were gathered traditionally by the Spokanes and which are still in use today include many different species in and near Lake Roosevelt. Some examples include blackberries, blueberries; wild raspberries; pinenuts; and many camas roots species, to name just a few. Other plants are gathered for making baskets, hats, matting, etc. (See Ross (1991-1993) for a more inclusive list of plant and animal species important to the Spokane.) Most of the remaining gathering areas are barely being maintained, as the environment they developed in has been so drastically changed with the creation of Lake Roosevelt. Furthermore, they were part of an annual round which through destruction of the riverine environment, has been destroyed. These plants and the gathering areas from which they come are significant not only economically, but are essential to the cultural, linguistic, and religious life of the Spokanes.

Fishing areas, as with plant gathering area, are important to the Spokanes not only as archaeological sites with crucial information on paleo-environment, social processes, technological change, and diet, but are critical to the cultural, linguistic, and religious life of the Spokanes. Fishing areas included not only the sites of net and spear fishing, but for the gathering of eels, crawfish, mussels, and other riverine resources. The fate of individual men, families, tribes, and regions were made at these fishing sites. Fishing techniques and technology were an integral part of Spokane culture: fishing jargon and analogies were woven in daily dialogue, in personal and tribal identity, in placing humankind in the context of nature, and especially in the teaching of children. Sacred landscapes or landforms often surround fishing sites. Camps or social gathering areas were often located nearby. Spokanes grew up with fishing areas being not only part of the annual cycle, but part of the individual and family as well. The sacred nature of fishing areas is emphasized by the fact that burial grounds are often located overlooking these areas.

While hunting is also very important to the Spokane people, hunting is usually done on higher ground, so is less directly effected by different systems operations strategies. The negative impacts on Spokane hunting are numerous. For example, the wolf, buffalo, and antelope were primary religious and economic sources before whites came, but no longer live here. Elk, golden and bald eagles, and beaver were have been nearly eliminated from our area, though through positive actions they are attempting to come back. The salmon, the eels, some snakes, and riverine mammals such as otter of important economic and religious status have all been wiped out of our area by the destruction of their environment by the reservoir: but these are not now effected differently by different systems operations.

All of these plant and animal resources were an integral part of Spokane physical and spiritual life. Without their riverine resources, the "land" resources were not enough to sustain the

Spokane physically or spiritually through the winter. The Spokane were thus robbed (and continue to be robbed) of their self-sufficiency, traditions, and religious practices by the construction and operation of Coulee Dam.

The most sacred cultural resource to the Spokane people negatively impacted by the operation of Coulee Dam is not currently eligible for National Register status. These are the graves and cemeteries of Spokane ancestors. As stated before, the respect, admiration, and dedication for the ancestors by the Spokane people cannot be written on paper, nor can it be underestimated. While many of their graves were moved in the 1930's by the Ball and Dodd project, many were left behind. Some of these sites include only a few individuals which were missed during the Ball and Dodd project. Others include entire cemeteries which were not included in that project. Ball and Dodd did not attempt to move any graves upstream of the Detillion Bridge area on the Spokane River, leaving the largest part of that river which is inundated by Lake Roosevelt unprotected. The Bureau of Reclamation has funded an irregular "annual" monitoring of known burial erosion sites by hired university staffs (see for example Masten 1988 and 1990; Stevens and Keller 1992a and 1992b), and has funded one portion of a burial movement project at one site (Spokane Tribe of Indians 1994) in recent years. The frequency of exposure of burials requires more effort than the federal agencies irregular annual burial monitoring program; most of this monitoring is done now by concerned locals who do not have the training to properly identify or handle burials.

The Spokane Tribe of Indians is extremely concerned about the protection of their ancestral remains. These remains are frequently exposed due to reservoir erosion. Stable conditions are impossible with continually fluctuating water levels. Looters are attracted to burial sites and cemeteries as ancestral remains and burial goods are exposed. These looters often finish the destruction to graves and cemeteries, and destroy areas inland of the exposed erosional front.

To be completed.

III. GENERAL COMMENTS CONCERNING THE THE SOR DRAFT EIS

We first question the lack of specific procedure used to consult with Native American tribes during this EIS process. There are no specific guidelines, no specific points of contact, and no attempt at government-to-government relations. The process of consultation has been left to the federal agents in the Cultural Resource Work Group, who self-admittedly do not know what the proper procedure is for government-to-government relations nor proper consultation procedures. They did not contact the tribes until 1993, two years after the EIS process began. They did not - and do not - possess clear guidelines on how to begin or proceed. They only began to contact tribes at a government-to-government level in 1995. Decision-makers from the federal agencies met with Spokane tribal leaders for the first time on March 30, 1995.

We question the effectiveness of procedure used to consider comments from tribes during this EIS process. Both written and oral comments by the tribes were to be considered in the EIS process. As we understand it, written comments were chopped into separate paragraphs or sentences (in a manner chosen by the receiving federal employee), then these separated blurbs were sent to the concerned federal agent (designated by geographic area, again chosen by the federal employee), who then reviewed these comments, supposedly before writing their own comments (whose contents is again chosen by the federal agent). The federal agent's comments were then forwarded to the appropriate work group manager or technician for their review, and these comments were then incorporated (or not) in whatever way that reviewer felt was appropriate. However, all the federal agents' comments (excluding one) had been received by the work group manager (Bill Willingham) by January 1995, eight months before the contract for Spokane Tribal comments would end. In summary, the tribes' written comments were not reviewed by the considering official: they are chopped into indiscriminate pieces, re-written and excerpted, winnowed down and interpreted, sometimes just dropped, before they ever reach the Work Group Leader who then makes the decision whether this (whatever the comments have now become) is worthy for consideration in the final draft.

This method for reviewing written comments is unacceptable; it is arbitrary and capricious. Comments cannot be taken apart into sentences and paragraphs and have the whole of their message understood. If comments had to be written in sentences or paragraphs which stand alone, this should have been made known to the tribes before they began writing the comments, so that they could construct them in that way. Furthermore, the federal employee has no way of having a holistic understanding of the tribes comments, nor of their intentions with each sentence and paragraph. This editorial process is analogous to the historic injustice done by federal agents' misrepresentation of tribal

leaders' words when negotiating treaties or executive orders.

Each member of the working group and all technicians should have received complete copies of tribal comments. This would not have created any great expense, and would have allowed these individuals access to tribal comments so that they could be incorporated into the appendix. By having the receiving federal employee decide which manager or technician shall receive which piece of information, that employee is placed in the position of decision-maker as to which comments are deemed important to whom. The managers, technicians, and decision-makers then do not have the best data available, nor complete information from which to work.

The tribes' comments should not be summarized nor interpreted by any federal agent. The tribes' comments were written for decision-makers, and their designated representatives. These comments were not written so that they could be interpreted. They stand on their own, and their contents can be reviewed so that the SOR EIS Cultural Resource work group can re-write the draft appendix to include and address tribal concerns. These comments were not written so that several layers of federal employees can decide which parts are worthy of consideration, and which parts are not, nor for federal agents to rewrite and reinterpret those parts. These employees should not - and are not authorized to be - the decision-makers on the worthiness of tribal comments.

Oral comments during the SOR EIS Cultural Resource meetings have also been inadequately considered. They received inadequate recording, so that consideration of oral comments is limited to whatever parts caught the fancy of the federal agents present. No professional secretary or recorder has been present, and written comments were limited to short excerpts chosen and recorded by a federal agency work group member. This federal agent's intentions were good, but he is not capable of having an immediate and total holistic understanding of all tribal comments, and hence should not be authorized to decide which are worthy of recording and which are not. Many, many oral comments have been made by tribal representatives, Spokane and others, at these meetings which have never received any consideration whatsoever, simply because those federal agents present did not realize or understand the content and/or import of those spoken words. Without adequate records, agency decision-makers cannot consider these comments.

Finally, the deadlines set by federal agencies has been unrealistic if they truly intend to gather best available information and to consult with the tribes. For example, as mentioned before, federal agents were pressed to submit their summary and review of tribal comments before they had even received those comments. A March 6, 1995, deadline for comments on several chapters was announced at the February 9th meeting in Portland, Oregon. At that meeting, the Cultural Resource work group manager, Willingham, directly asked Mr. Jaren as SOR manager, "the tribes have a legitimate problem

with contracts (for commenting on the EIS Cultural Resource appendix) that extend as far as next year, but with the present schedule, how can their comments be considered? Can we get an extension?" Jaren answered, "The schedule stands." Another Cultural Resource work group member, Ms. Burbach, then asked, "How can we do that?" Jaren answered, "I won't micro-manage." When Burbach repeated, "But how can we do that?" Jaren finally admitted, "I don't know. You'll have to do the best you can. When the time comes, we'll see." This clearly is not a procedure to gather best available information; it is not adequately providing consultation with Native American tribes; nor are tribal comments receiving full consideration.

Agency decision-makers, Mr. Randy Hardy of Bonneville Power Administration, Gen. Ernest Harrell of U.S. Army Corp of Engineers, and Assistant Regional Director Pedde (representing the absent Mr. John Keys) of the Bureau of Reclamation, met for the first time with Spokane Tribe officials in Wellpinit on March 30, 1995. This meeting was an excellent opportunity for these officials to hear tribal concerns, as well as to explain the SOR process and purposes. This type of consultation, by their own admission, should have been held since the very beginning of the SOR EIS process. More of such contact is required for true government-to-government relations and consultation with the Spokane Tribe of Indians.

To be completed.

IV. GENERAL COMMENTS
CONCERNING THE SOR DRAFT EIS APPENDIX D:
CULTURAL RESOURCES

The parties in charge and/or responsible for this EIS should be listed up front, at the beginning of the appendix (and all other volumes). Their names and addresses should be on page i. This should include, at a minimum, the heads of BPA, BOR, and COE, and a statement of their responsibilities. The names of all SOR managers and/or high staff and their responsibilities should also be included.

Section 102(c)(v) of the National Environmental Policy Act of 1969 requires that an EIS shall have a detailed statement on "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." The relationship between local short-term and "long-term productivity" is not adequately addressed in this document. Addressing just the limited issue of cultural resources, "local, short-term use" includes Euro-American recreational and industrial use of the reservoirs, as well as the dams themselves, for less than a century. Native Americans' activities have been long-term, permanently inhabiting this same area for a minimum of 12,000 years, perhaps much longer.

Long-term productivity includes protection of the environment, of which plants, animals, and human activities are a part. In national, continental, hemispheric, or world-wide perspective, the damming of the rivers and creation of reservoirs has destroyed an ecosystem. It can be in no way construed as long-term productivity, but rather addresses local short-term use at the expense of the largest part of an entire region. The Native American's culture has been knowingly degenerated for the sake of this local short-term use. Their traditional way of life, the human activities adapted for and compatible with long-term productivity, has been destroyed for the sake of local short-term use.

Key portions of this region - its key waterways - have been permanently taken away from native plants, animal, and man. These waterways were the lifeline for the Inland Northwest; loss of these waterways has had drastic negative impact on the environment for plants, animals, and man throughout the entire Columbia watershed. Addressing cultural resources alone, the Native Americans can no longer carry on their traditional economy, maintain their social groups, or have access to their most spiritual areas. They are only able to keep a small, unsatisfactory portion of their traditional character and practices because of the loss of these areas. From any perspective except "local short-term", the damming of the rivers, the construction of reservoirs, and the continued operation of the dams has resulted in degradation of and continues

to destroy the "long-term productivity" of this region.

Section 102(c)(v) of the National Environmental Policy Act of 1969 requires that an EIS shall have a detailed statement on "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." This issue is not addressed in the draft appendix. In order to meet this mandate, you must first inventory of all cultural and natural resources which have been removed from access because of reservoirs. This is a task which must be accomplished before completion of the EIS process.

The draft appendix also does not cover in detail the magnanimity of resource destroyed through inundation. It is just as important to note now, however, that the operation of the hydro-regulating dams also negatively effects not-inundated resources. The Corps of Engineers has recognized this in a number of studies.

When a freshwater lentic ecosystem is superimposed on a terrestrial and riverine ecosystem, the result is a mass mortality or migration of terrestrial plants and animals and the destruction of important environmental data from an entire catchment basin. Significantly, these changes are not necessarily limited to the permanent pool zone of the reservoir, but may extend to the backshore and downstream zones as well. (Lenihan et al. 1981, cited in Ware 1989:7)

This destruction has negative impacts on all aspects of native culture for the Spokanes, as well as negative impacts on scientific research potential.

Destruction of an ecosystem has far-reaching implications for the interpretation of cultural resources. Accurate paleoenvironmental reconstruction in archeology relies on the ability to reconstruct contemporary environmental patterns (Butzer 1971). Since the present is so often the key to the past in paleoenvironmental studies, the destruction of modern environments and landscapes may make it impossible to understand past culture-environmental relationships. (Ware 1989:7)

To be completed.

V. COMMENTS ADDRESSING SPECIFIC PARTS
OF THE SOR DRAFT EIS APPENDIX D: CULTURAL RESOURCES

Preface: Setting the Stage for the System Operation Review

To be completed.

Chapter 1: Introduction

Pg 1-1, 1st para. The second sentence reads "archaeological and historic properties meeting the criteria of the National Register". This statement should include other cultural resource types, such as cultural landscapes, mining properties, properties associated with significant persons, aids to navigation, cemeteries, historic vessels and shipwrecks, and traditional cultural properties. It should also be expanded to read "eligible or potential eligible for inclusion on the National Register" in order to be truly accurate.

Pg 1-1, 1st para. This paragraph also states, "This study attempts to determine and compare the impacts . . . on traditional values, properties or practices as identified by tribal governments;" yet at no time are these identified in the appendix. This goal is stated in the first paragraph of the document, but never further addressed, of course because these values, properties, and practices have not been identified. Because obtaining an actual inventory is not possible within the scope of this study, you should take this statement out, or limit it by stating, "We would like to determine and compare the impacts on traditional values, properties, or practices as identified by tribal governments, yet obtaining such an inventory is not possible within the scope of this study."

Pg 1-1, 2d para. After the phrase "State Historic Preservation Officers (SHPOs)" should read "Tribal Historic Preservation Officers (THPOs).

Pg 1-1, 2d para. Creating "action plans, research design, and coordination" suggest that the federal agencies involved are going to plan for cultural resource management. However, there is no mention of cultural resource management actions: implementation of preservation, protection, and mitigation. Are the agencies just planning for planning? Are they truly preparing for the required preservation, protection, and mitigation actions, or are the plans just to address required paperwork? Do these federal agencies actually intend to follow the plans with action?

Pg 1-1, 2d column, 2d para. In this paragraph, you suggest that study of cultural resources helps to understand people themselves (human interaction) and environment (subsistence); however this statement does injustice to the study of cultural resources. Also

to be included should be technology, economy, ecology, evolution, human development, social development, and medical science, to name just a few.

Pg 1-1, 2d column, 3d para. Understanding the definition of the term "culture" is critical in understanding what "cultural resources" are. The statement "The academic and legal definitions tend to focus on tangible evidence such as sites and artifacts," is false. Academic definitions of culture (at least in the past 100 years) places most weight on the intangible aspects of culture. For example, in a popular anthropology text, Brian Fagan (1992:13) (an archeologist) defines culture as:

Culture can be called a people's (or a society's) traditional systems of belief and behavior, as understood (or adapted) by individuals and the members of social groups, and manifest in individual or collective behavior. It is also part of our way of adapting to our environment.

The flurry of activity by cultural anthropologists and linguists at the beginning of this century to record those cultures in danger of extinction - Native American tribes - recognized and was motivated by the need to protect and preserve the intangible aspects of culture as a unique, nonrenewable resource. There have been legal definitions of "cultural objects" in federal mandates, such as in NAGPRA: inclusion of the word "objects" in these documents implies that the word "culture" alone does not denote material objects.

The National Park Service (NPS-28), as the lead resource protection agency in the Department of Interior, defines culture as:

Culture (is) a system of behaviors, values, ideologies, and social arrangements. These features, in addition to tools and expressive elements such as graphic arts, help humans interpret their universe as well as deal with features of their environments, natural and social. Culture is learned, transmitted in a social context, and modifiable. Synonyms for culture include 'lifeways,' 'customs,' 'traditions,' 'social practices,' and 'folkways.' The terms 'folk culture' and 'folklife' might be used to describe some aspects of the system that are unwritten, learned without formal instruction, and deal with expressive elements such as dance, song, music and graphic arts as well as storytelling.

This definition is cited and reinforced as the working definition for the National Register programs in National Register Bulletin 38 (1):

There are many definitions of the word "culture," but in the National Register programs the word is understood 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.

Therefore, when discussing the effect of dam and reservoir operations on cultural resources, we must give at least equal weight to their effects on the intangible aspects of culture as to the tangible ones. The need for determining the effects of operations on intangible cultural resources is acknowledged in the second sentence of the SOR EIS appendix (pg 1-1), but is then not applied in the rest of the document.

Pg 1-1, 2d column, 3d para. You state that "The Cultural Resources Work Group (CRWG) has attempted to incorporate the tribes' views in the impact analysis . . ." This statement is a good goal, but is inappropriately stated as a completed task ("has attempted"). As previously states, the work groups "attempt" at considering tribal views has been arbitrary and capricious. To this point, the tribes' views have not been incorporated at all. Until they have been, this statement should be removed, or changed to state, "One goal of the CRWG is to incorporate the tribes' views in the impact analysis."

To be completed.

Chapter 2: Cultural Resources in the Columbia Basin

To be completed.

Chapter 3: Study Methods

Section 3.3, deserves a closer look, as the validity of your analyses is based on these assumptions and limitations. Assumptions must certainly be made in the course of any study, and all projects are subject to limitations. However, those involved in your study are such as to render any conclusions questionable at the least and probably completely invalid.

3.3.1 "This analysis is limited in scope to areas downstream of Brownlee Reservoir, as is the SOR analysis in general." Is this implying that reservoirs have no impact on upstream cultural resources? Or you don't know, so you're not going to check it out? Or are you just not going to be responsible for these areas, even though you're federally mandated to do so? Perhaps you are assuming the downstream effects of reservoirs are the same as upstream, and so aren't considering them in your modeling. This really needs some explaining.

3.3.2 "The analysis assumes that cultural resources sites are equally susceptible to erosion and processes of landform change as

are non-sites." This is a false assumption. Cultural resources (landscapes, archaeological sites, cemeteries, sacred areas) are rarely of the same material as the soil and rock matrix they are associated with. Therefore these cultural resources are most often drastically unequal to landforms in terms of susceptibility to erosion and change. Even though a landform does not show substantial change (say, an inundated terrace of sand and gravel), its matrix and those materials therein are not necessarily (and in fact rarely) in a static state. One very common example of such a process occurs to lithic scatters on low terraces: the terrace may be fairly stable because seasonal erosion and deposition may be about equal, but the lithic scatter will be subject to vertical sorting and horizontal scattering from water action, as well as visitor "pickup" if it is exposed for part of the year. Furthermore, losing a couple of feet of a landform per year may be insignificant to the landform, but devastating to a cultural resource.

3.3.2 continued

Some kinds of sites, such as archeological sites, however, occur at higher density in places such as river terraces that may be less susceptible to erosion, landsliding, and slumping than some other locations. Steep slopes that are more subject to geomorphic processes, such as land slumping and sliding, may have fewer cultural resources.

Cultural resources probably do have differential distribution, but there are three faults to the statement above. First, it is based on studies which have mainly been federally-funded projects around reservoir waters, which creates a strong bias toward sites in that area. The original Columbia River bed under Lake Roosevelt nor much of the area above the 1310 line, for example, has never been surveyed. Second, making such statements is dangerous without testing. Without equal sampling above and below, we cannot know how archaeological sites are distributed; with adequate information, this hypothesis could be tested. Finally, the inexplicit assumption is that river terraces are not as subject to erosion and landsliding. River terraces have fronts, often with steep slopes, and these are subject to erosion if located at reservoir level. Even more importantly, because they are often composed of unconsolidated sands and gravel, river terraces not only erode, but then often continue to erode without reaching a point of stabilization. As stated before, Spokane cultural resources affected by Coulee Dam operations are located almost exclusively on Spokane flood deposits which are inherently unstable in reservoir conditions.

3.3.3 "The analysis assumes that the known cultural resources are representative in type and location of all the cultural resources, known and unknown, at the reservoirs." As addressed in the previous paragraph, the surveyed area is small, and very biased toward the upstream end of the "bathtub ring" and fluctuation zone.

Surveys have been of vastly different quality. Traditional cultural properties and historic (and prehistoric) landscapes have only recently been recognized, and none have been recorded as yet in the Lake Roosevelt area. Native American groups have not been consulted concerning their knowledge of cultural resources. Therefore, this statement is false: we know that the "known" cultural resources definitely do not represent all cultural resources in type or location.

3.3.3 continued

"It is not clear from existing data what percentage of the reservoirs has been surveyed." This information is necessary before modeling or planning can occur. Percentage of area surveyed is required information in any quantitative study, as Davy's purportedly is. The actual area receiving systematic survey around Lake Roosevelt includes only the area within the Kettle Falls Archaeological District; no other part of Kettle Falls has received systematic survey. The portion of Lake Roosevelt which has been systematically surveyed for archaeological and historical sites includes, then, roughly 3% of the area directly impacted by systems operations, and does not even begin to address indirectly impacted areas. (Please note, however, that the sites in this area were recorded in the 1970's, and have not been formally revisited since. Informal visits suggest that the condition of the sites within this area has drastically changed, and the location and elevation data recorded on the 1970 site forms is sometimes erroneous. Therefore, even within this surveyed area, the conditions and exact location of sites will need to be re-addressed.) All other cultural resource types, such as traditional cultural properties and cultural landscapes, have never received any survey, identification, or treatment. For all cultural resource types other than archaeological and historical sites, the portion of Lake Roosevelt which has been surveyed is 0%. Three per cent (for archaeological and historical resources) and zero per cent (for all other cultural resource types) are not sufficient samples on which to build a model.

3.3.3 continued

"The hydroregulation models assume a constant rate of reservoir change from month to month with no interim fluctuation, which is not necessarily accurate." While this statement is true, it assumes away a critical variable to cultural resources that requires great consideration.

First, actual fluctuation may vary considerably from the monthly averages constructed. While decades of inundation studies have recognized the destructive forces within the fluctuation zone, this factor is only grossly considered in the "days exposed" field of this study. There is no consideration of the quantity of variation that may actually occur from the monthly average. Dealing with monthly averages greatly underestimates the impacts caused by actual fluctuation.

A site may be exposed and inundated many more times than suggested by "monthly averages" due to daily fluctuations. Negative impacts by mechanical processes are maximized in quickly fluctuating zones. Both common sense and field experience show that sites that are exposed and re-inundated quickly and frequently receive a great amount of erosional impact caused by fluctuation of reservoir levels. Common sense and field observations tell us that sites which are inundated and exposed once per month receive less mechanical impact caused by fluctuation than do sites which are inundated and exposed ten times per month.

Types of materials are not considered. Some materials deteriorate much more quickly (so much more quickly it cannot be overstated here) in an environment of repeated wetting and drying. These biochemical and chemical deterioration are greatly increased in a fluctuating wet-dry environment. Bones and textiles are examples of materials more greatly effected by fluctuating reservoir levels, as opposed to stone artifacts. These same materials most often appear in burials, and include the most sacred cultural resources.

Fluctuation also strongly influences other impacts on cultural resources, especially recreation-related impacts. Low water levels are periods of high off-road vehicle use (be it unauthorized) in the fluctuation zone. Quickly fluctuating water is a favorite time for looting. Locals all know that this is a great time to find exposed artifacts and burials.

3.3.3 continued

"The hydroregulation models assume no significant daily or weekly fluctuation in reservoir operations. . . . These fluctuations would not necessarily differ among SOS alternatives, however." It is not impossible to quantify the amount of actual fluctuation which occurs in and between the different systems operations strategies. We believe that the statement "These fluctuations would not necessarily differ among SOS alternatives" is an assumption itself. Daily or weekly fluctuations would differ between alternatives, and these differences should receive consideration; this would be one avenue to explore in order to minimize damage to resources. The chosen alternative should minimize this impact.

3.3.3 continued

"The analysis assumes that all reservoirs are equally susceptible to vandalism and artifact theft." This assumption is false as well as unnecessary. Some areas and some site types have more active looting, intentional and unintentional, than others. Lake Roosevelt has a high level of unauthorized recreational vehicle use during draw-downs. Because recreational vehicle use is popular here, many locals own such vehicles, and because there is a general lack of respect for federal regulations here ("after all, it is a recreation area, not a park"), damage caused to cultural resources within Lake Roosevelt is higher than in some other reservoirs.

Likewise, looting is a popular and common activity around Lake Roosevelt by both professional black-marketers and avocational "Sunday" collectors. Because fluctuating reservoir levels repeatedly expose new sets of artifacts and burials, Lake Roosevelt serves as the "shopping mall" for artifact collection. While many are content to pick up only those artifacts exposed by the reservoir, others use these surface finds to locate rich subsurface deposits; screens abandoned by looters at local sites attest to their thoroughness. Many families in this area see artifact collection and looting as a family activity; it is a popular "sport". Professional artifact collectors realize, of course, the Columbia River's rich prehistoric and historic wealth, and regularly visit sites in this area.

Lake Roosevelt serves to increase the relative amount of negative impact by recreational vehicles, vandalism and looting on cultural resources, not only through its fluctuating levels, but through its sheer size. The National Park Service has estimated over 660 miles of shoreline along Lake Roosevelt; there is no personnel or funding set aside to patrol the cultural resources there. National Park Service and tribal rangers are understaffed and under-funded, and can only patrol high use areas. No one is available to patrol low use area, where looters (professional and avocational) know they can surface collect and dig unbothered. The Spokane Tribe requested funding from the Bureau of Reclamation to patrol exposed cultural resources during the Spring 1995 drawdown. The Bureau refused to fund the patrol, so the Spokanes have funded the project themselves in order to protect these non-renewable resources. Though this patrol cannot reduce the number and extent of exposed resources, it has been very successful in reducing the impact of looting and off-road vehicle use. The rest of the year, cultural resources are exposed through erosion and other mechanical impacts along Lake Roosevelt, and left unguarded for the taking.

Implicitly, your work assumes that all sites are equally susceptible to vandalism and artifact theft as well. It is precisely those most sacred cultural resources - burials - which are most often sought by looters. Most locals know where burial sites are eroding (ask at a local restaurant or bar) and many patrol these areas, some with good and some with bad intentions, but all to collect bones and artifacts as they erode. Assuming away this factor - as all of your assumptions - does not erase responsibility for damage which has and will occur. In assessing the effect of systems operations on cultural resources, a more serious look must be given to differences in cultural resource types and impact levels.

3.3.3 continued

"The analysis treats all site types equally, even though some may be more or less susceptible to damage because of exposure and erosion." Again, different material types are differentially susceptible to weathering, to the effects of inundation, to

vandalism, etc. Pictographs, bones, and textiles are more susceptible to biochemical chemical impacts; burials and cemeteries are most greatly impacted by looting. Sites on exposed terraces in the drawdown are most frequently impacted by recreational vehicles. It is not impossible to consider these factors, and how they would be altered between systems operating strategies. Sites could be assigned a code expressing material and site types, and this factor included in impact modeling. Assumptions do not release the involved federal agencies from the responsibility to consider the impact of operations on these resources.

3.3.3 continued

"The analysis assumes that inundation is a relatively benign impact, since it prevents most kinds of erosion and site exposure."

First, this assumption though common is a false one (see for example Ware 1989). Processes of erosion and deposition do occur within conservation pools, and these processes do effect cultural resources. Archaeologists have noted the effect of erosion and the mixing of matrixes on archaeological sites at many reservoirs. The destruction of a significant portion of the Kettle Falls Archaeological District, for example, occurred during long-term inundation. Sites which have been excavated after long-term inundation have provided evidence that many forces, such as eddy pools, do exist in reservoirs which actively destroy sites. We simply do not understand the effects of long-term inundation, though we do know they include forces of deposition as well as mixing and erosion.

Second, even if a site is subject only to deposition, not erosion, we do not know that site is not being destroyed.

Man-made lakes are essentially closed systems in which sediment input greatly exceeds sediment output. . . .

Cultural resources buried under tens of meters of unconsolidated sediments are clearly not accessible for research, and very little is known about the long-term impacts of deep sediment burial. (Ware 1989:25-26)

There have been no studies conducted on the effects of large amounts of sediment being deposited on archaeological materials. Common sense tells us that there must be some effects, at least a crushing weight on oftentimes fragile materials:

Third, there are many materials which are subject to greater deterioration in water. Pictographs and bones, for example, deteriorate much more quickly in the acidic environment provided by Lake Roosevelt than the arid conditions in which they had been originally part. Most of the cultural resources along Lake Roosevelt would never have been subject to a wet environment. Furthermore, assuming an anaerobic environment through inundation by Lake Roosevelt is just that: an untested assumption. The chemical composition of Lake Roosevelt, especially in the deeper areas, is much different from a "natural" environment; we have not considered this changed chemical environment on cultural resources.

Many cultural resources have probably already been destroyed, and many others are being more quickly destroyed, through the biochemical and chemical changes during inundation.

Finally, and most importantly, a site that is permanently inundated is useless to the people who need it: scientists cannot obtain information from it, the public cannot enjoy nor appreciate it, and Native Americans cannot use or protect it. Therefore, even if the site is not physically deteriorated, its usefulness is destroyed. This factor - lack of access to inundated sites - was identified by federal agency studies decades ago.

This (preservation of inundated archaeological resources) could prove meaningless if accessibility to the resource is severely compromised. (Lenihan et al. 1981).

In addition, the question of future accessibility has never been honestly addressed by the "reservoir data bank" advocates. The notion of an archeological and historical data bank is untenable unless one can demonstrate the feasibility and practicality of future data withdrawals. (Ware 1989:31)

. . . if cultural materials are preserved in reservoir conservation pools throughout the country, it is perhaps legitimate to ask why and for what purpose. (Ware 1989: 25).

Are you going to take the dams down within the foreseeable future? Are federal agencies willing to commit to a particular shelf-life for Coulee Dam, after which it will be removed and no other dam constructed to replace it? Even if this was committed in writing, would we be able to find cultural resources afterward? How much would be destroyed or lost forever?

Inundation permanently removes cultural resources from scientific, educational, and cultural use, and should be considered as a destructive force. Therefore, in reviewing systems operations strategies, the federal agencies must consider the quantity of cultural resources which will be removed - destroyed - by each alternative.

INEXPLICIT ASSUMPTIONS

Not listed explicitly in this analysis, but critical assumptions nevertheless, are that (1) recorded elevations are correct and that (2) all sites are equal in priority. Most site elevations are estimates at best, and vary greatly in accuracy. All sites are not equal, and some receive much higher priority by the Spokane tribe (such as burial sites) or by the National Register criteria.

In summary, many of the assumptions on which your analysis was based are false, are unnecessary, or both. Though you recognize this in the text, you do not make any corrections for them. These

assumptions render the results completely invalid. Any valid analysis must be based on a more realistic, specific, complete set of data as well as a more critical look at the impacts involved in reservoir operations.

To be completed.

Chapter 4: Alternatives and Their Impacts

To be completed.

Chapter 5: Comparison of Alternatives

To be completed.

Chapter 6: Management Responsibilities

To be completed.

List of Preparers

In your "List of Preparers" are some individuals (and/or agencies) that were not part of the preparation of this document. Some may not even be aware of their being listed in this chapter. Certainly not all of them would like to be responsible for or associated with its outcome.

It is also unclear what the different categories of participation actually mean. "Reviewer", for example, could mean anything from a quick one-time editorial job providing comments, to intense full-time participation throughout the project. What does "Lake Roosevelt site record inventory" mean as far as participation in preparation of or approval of this document? How has Chuck James, for example, coordinated Indians?

It appears that many of these people did little more than provide data, which means they shouldn't be listed as "preparers", and which also means many other people could have been listed as well. Most of all, it appears that each of these individuals listed in this chapter had a hand in writing this cultural resources appendix, which is not true at all.

You must revise this chapter, to include: (1) Notification of those individuals listed in this chapter, to make sure that they approve of being so listed; and (2) Indicate the level and type of participation that these individuals have had in the preparation of this document.

To be completed.

Appendix A: Development of an Analytical Geomorphic Procedure for the Management of Cultural Resources River System

In the introduction to this appendix (p. A-2), management of cultural resources calls for use of a Geographic Information System (GIS). Who would operate this system? Where would it be located? Who can obtain information from it? How is confidentiality of sacred sites maintained?

One problem which lies in using your suggested methodology with a GIS system (which requires pin-point location) is that most sites are not mapped using the accuracy that this methodology implies. Sites have often been assigned UTM coordinates (at least at Lake Roosevelt) based on where someone had much earlier plotted a site number on a 1:24,000 topographic map, which had never been intended to be as accurate to 10 meters, and rarely ever is. Sites are frequently mis-mapped on 1:24,000 topographic maps by 200-500 meters. Sites are usually re-located using descriptive information. If garbage data is plugged into a GIS system, garbage is the result.

Site boundaries must be defined for a GIS system, but there has been no uniform definition for archaeological sites. One archaeologist records an area as having many small sites close together, while another archaeologist records the same area as one large site. Some archaeologist draw site boundaries at the edge of artifact scatters; others include a "safety zone" within the site boundary. Other technical problems exist. Will a raster system be used to deal with this, or are you going to use a vector system? What effect does this have on your model?

In the section on the development of data bases for cultural resource management, it is stated that data is obtained from 1:500,000 and 1:24,000 scale maps. These scales are absurdly too general to address the geomorphological conditions at the site level. Those factors affecting site stability occur on a local scale: erosional and depositional processes, while describable in general terms, are very site-specific. For example, while a site may appear to be located on a glacial terrace underlaid by granite as seen on a 1:24,000 scale map, the site may actually lie on or within very different matrices, such as glacial till, sand dunes, clay, or on bedrock, which would not appear on that scale map, but which would most greatly affect that site's stability. The site may be located in a small gully, on the edge of an eroding bank face, or on the back of a flat river terrace. Resource management prediction or planning based on information from the sources cited above has no validity.

Your discussion of geomorphic processes is very general, it has no time depth, no quantification; there is no discussion of where or why each process occurs, and it is not predictive in nature. The desired information has been more adequately addressed in many

other studies and volumes. Excerpts from, or references to, the Corp of Engineer's Inundation Study (Lenihan, et al. 1981) would discuss the effects of reservoirs on cultural resources more directly and specifically.

Your study of geomorphic processes is based on an assumption on stability: BUT RESERVOIRS SUBJECT TO POOL-LEVEL FLUCTUATIONS CAN NEVER REACH A POINT OF STABILITY!

The average reservoir shoreline will achieve an equilibrium profile if the reservoir water level remains relatively stable. . . . Unfortunately, the self-limiting process of nearshore shoal formation is affected by pool level fluctuations. As reservoir pool levels draw down, offshore shoals are eroded, and wave action in the nearshore begins anew. Consequently, reservoirs subjected to large annual pool-level fluctuations may never achieve stable shoreline profiles. (Ware 1989:11)

Each time the "reservoir pool levels draw down, offshore shoals are eroded, and wave action in the nearshore begins anew." The Bureau of Reclamation has recognized these continuous geomorphological changes through projects addressing mass-wasting at Lake Roosevelt. The Corp of Engineers has recognized in numerous inundation studies that fluctuating reservoirs do not reach stability until the reservoir has completely silted up.

A more adequate analytical geomorphic procedure for the management of cultural resources must first include a total inventory of sites (as much as that is possible). Barring adequate data, we must attempt to then assess how adequate the data is. Was the information pertinent to site management recorded, e.g. elevation, soils, landform, material types; and if recorded, is the data reliable? Has half of the area been surveyed? A quarter? Is reliable data available in the necessary fields (elevation, soils, landform, material type) for ten percent of the reservoir-effected lands? When we look at this information, we will see a different picture from that used in the current modeling technique. Furthermore, it must be acknowledged that the existing data UNDER-REPRESENTS the actual number and types of cultural resources which are presently effected.

A study of geomorphic processes must include visits at intervals throughout the annual cycle to a large sample of actual cultural resource sites in each area. Both quantitative (example: volume disturbed per month) and qualitative (example: geomorphic setting and processes (such as those identified in Appendix A)) data must be recorded at each visit. The static information based on one visit per site is inadequate for realizing the processes at work. Time depth and the ability to accurately predict are two key elements in a good model. With quantitative and qualitative diachronic information from multiple visits to a large sample of actual sites, a valid statistical model based could be created.

In discussion of a cultural resource monitoring plan, there is an assumption of adequate data. You do not account for who or where monitoring will occur. Are you going to monitor all cultural resource sites forever? The most critical element in a discussion of monitoring is missing: how is monitoring specifically going to be used in the management of cultural resources?

Many other items remain unquestioned or unanswered. There has been no account in this appendix for inventory where there exists inadequate data. Indirect impacts have not been addressed, are only mentioned, though the distinction of direct and indirect impacts does not matter in the destruction of cultural resources.

Only mechanical impacts are discussed in this appendix. Mechanical impacts are a very large and important impact on cultural resources. Biochemical, human and other impacts are not even considered in this appendix, though the federal agencies have been aware of the importance of these impacts for many decades. Definitions of these impacts can be found elsewhere (e.g. Ware 1989) but their relative importance on the cultural resources at these specific reservoirs needs to be addressed.

At Lake Roosevelt, Spokane (and other) cultural resources are heavily impacted by looting and recreational vehicles as a direct result of exposure caused by the reservoir. Before construction of Coulee Dam, this area was largely covered in Ponderosa pine forest, with some areas in low brush and some in farmland. Most of the prehistoric, sacred and burial sites were unknown to non-Indians at that time. With the construction of Coulee Dam, Indian lands were condemned, almost everything was razed to the ground, and existing buildings were burned. Basically, the entire landscape was denuded before inundation. This exposed many previously unexposed sites. Ball and Dodd's burial moving project brought local attention to the Spokane's most sacred cultural resource: ancestral remains and grave goods. Not only did many items disappear from graves during Ball and Dodd's project, the project itself spurred interest and activity in illegal pot-hunting aimed at stealing "goodies" from Spokane ancestral graves.

This local interest in pot-hunting graves is still active in the Lake Roosevelt. Non-Indians can be heard in restaurants and bars about their grave-good collections (though the word 'grave' is often replaced with 'Indian', which to them makes it less wrong to steal). Conversations are easily struck in discussing which areas are the best to obtain 'Indian goods' from. Draw-downs are well known as a terrific collecting time for looters. This looting is a direct effect of the activities associated with the construction of Coulee Dam. The operations of the federal dams, including the decisions reached as a result of this EIS, including the chosen Systems Operation Strategy, will directly effect the level of looting and other impacts which destroy Spokane cultural resources.

We are unable at this time to assess the chemical and biochemical effects of inundation on Spokane cultural resources, other than to repeat that the effect of their exposure to reservoir waters and chemicals therein, and the effects of the repeated cycle of inundation and exposure to air, and the effects of burial under accumulated deposits, are all impacts which would not have existed if Coulee Dam had not been constructed. Chemical and biochemical conditions effect different material and site types differently: we cannot possibly test these within the scope of this study. We can say that some important cultural resources, such as bones and textiles (from graves and cemeteries) and pictographs, are known to be most negatively impacted by these changed chemical and biochemical conditions. Furthermore, these chemical and biochemical effects on the resources are dependent upon the operations of the federal dams, including the decisions reached as a result of this EIS, including the chosen SOS.

There has been no discussion of confidentiality of information. What information will be kept confidential? How will it be kept confidential? Are you going to release this information for inquired addressed through the Freedom of Information Act? How are you going to consider confidential information if the tribes cannot release it as you cannot protect it?

Discussion has been made of constructing a Columbia River Forum, but will this forum have decision-making power? Tribal representatives have been promised a place on this forum, but will they have the power to make decisions, or simply make recommendations to others? Is the fate of Spokane Tribal cultural resources still left to the whim of those in power at BPA, COE, and BOR? Who will be responsible for these decisions?

Mitigation is not discussed, though the decision-makers for the SOR process must surely want to compare the cost of mitigation between the different alternatives. How have you accounted for the differences in mitigation measures and costs between the different alternatives? This should be a critical factor in consideration of the alternatives, yet it is not even mentioned in the analyses.

There has been no account, procedure, or planning for curation of materials recovered during this project, though this too should be factor in considering alternatives. Curation of Federally Owned and Administered Archaeological Collections (36 CFR Part 79) mandates planning and funding for the curation of these materials recovered in the past and the future.

To be completed.

Appendix B: Cultural Resource Site Inventories

This appendix adds nothing to the consideration of alternatives, and should be removed. It is inappropriate to list sites without

tribal consent. It draws the attention of potential looters to the wealth of sites in this area, as well as what to look for. Though locations are not listed, the list of site numbers and site types will help potential looters research these sites.

The Spokane Tribe especially does not want sites with burials listed for public review, as in this document. These sites are sacred, and they should be handled with confidentiality. It would be acceptable and sufficient to list "6 burial sites" rather than to list specific site numbers and their contents.

For use only in impact assessment analysis, this data list still has some apparent problems. The column listing "Period" is completely useless in addressing the effect of dam operations on cultural resources.

A very useful category which should be included in cultural resource management planning as well as impact assessment is "Material Types"; i.e. Heavy Lithics-Small Lithics-Textile-Bone-Antler-Shell-Hair-Ceramics-Manufactured Glass-Metal, etc. Material types are differentially affected by processes of weathering, so this information would be helpful in prioritizing site management actions. Note must be made, though, that this the material types listed are a minimum of materials at each site, as more may yet be undiscovered.

What is the "Current Condition Estimate" based on? There is an unacceptable lack of qualitative and quantitative data in this field on which to base any impact assessment and subsequent decision-making. Obviously there is a tremendous variance between recorders as to what is "good", "fair" or "poor" condition: one person may rate a site as in "good" condition if they see artifacts on the surface; another may rate a site as "poor" if some of the features are disturbed. Furthermore, an estimate made four years ago probably has nothing to do with the current condition of a site; in fact, the condition of a site may vary greatly in the course of one month. With no standard given for the "conditions", no date of when the estimate was made or by whom, this column is useless, and is potentially dangerous if decisions are made based on this meaningless data.

The list of sites in this inventory is not complete, and it inexplicitly and incorrectly implies that the cultural resources have all been recorded and their current condition known. The list also implies a higher quality of information that is actually present; there are many mistakes and out-of-date information contained therein. If you are compelled to list specific sites in the EIS, it must be noted that this list is incomplete, under-represents actual resources, that some areas have not been surveyed, and that the "Current Condition Estimate" may not reflect current conditions.

To be completed.

VI. THE SEVEN PROPOSED SOS ALTERNATIVES

To be completed.

VII. SUMMARY AND CONCLUSIONS

After reviewing the Columbia River System Operation Review Draft Environmental Impact Statement, Appendix D: Cultural Resources, the Spokane Tribe of Indians is positive of the inadequacy of its evaluation of the impact on cultural resources. The models and plans set forth in this document are based on assumptions which render them invalid. A model and plan must be constructed separately for each area along the Columbia River. Consultation, mitigation, and curation have not even been addressed.

Planning must be preceded by a total inventory of cultural resources, then must include study of actual resources at each reservoir, to include a large sample of actual cultural resource sites, including multiple visits to the sites at intervals in the annual cycle. Modeling must be based on site-specific information, and take a more critical look at impacts to sites. Action must include inventory, evaluation, protection and preservation for all significant cultural resources affected by systems operations. Differences in these impacts beyond simple monthly fluctuation averages must be spelled out for each systems operation strategy alternative, in order for those impacts to be considered in the decision-making process.

Again, because of the special and often sacred relationship of these cultural resources to the Spokane people, the tribe chooses to perform its own cultural resource management activities. This ability to perform such activities does not imply that other agencies' responsibilities as set forth in federal mandates are in any way relieved; but the tribe will be the agency to perform any actions implemented forthwith concerning Spokane cultural resources. When expertise is needed which tribal members do not currently hold, they will be responsible for seeking that expertise from outside sources.

To be completed.

BIBLIOGRAPHY

BUTZER, KARL W.

1971 Environment and Archeology: An Ecological Approach to Prehistory. New York: Aldine-Atherton Press.

FAGAN, BRIAN M.

1992 People of the Earth, 7th edition. New York: Harper Collins Publishers.

HARTZELL, PAULA L.

1994 Report on the History and Status of the Slawntehus Site (45-ST-201) and on the Impacts of the Proposed Marina Project on Cultural Resources at Colville Flats, Coulee Dam Recreation Area, Stevens County, Washington. Report to the Pacific Northwest Region, National Park Service, Seattle.

LENIHAN, DANIEL J., T.L. CARRELL, S. FOSBERG, L. MURPHY, S.L. RAYL, AND J.A. WARE

1981 The Final Report of the National Reservoir Inundation Study, Volumes I and II. Prepared for the National Park Service, Southwest Regional Office. Santa Fe, New Mexico.

MASTEN, RUTH A., ed.

1988 A Report on the Spring 1988 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Short Report Number SR-158. Archaeological and Historical Services, Eastern Washington University. Cheney.

1990 A Report on the Spring 1989 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Eastern Washington University Reports in Archaeology and History 100-72. Archaeological and Historical Services, Eastern Washington University. Cheney.

ROSS, JOHN ALAN

1991-1993 An Ethnoarchaeological Cultural Resource Survey of the Spokane Indian Reservation: Phase I-III. Eastern Washington University, Cheney.

SPOKANE TRIBE OF INDIANS

1994 Coyote Spit: Phases I and II. A Protection Project. Spokane Tribe of Indians, Wellpinit.

STEVENS, REBECCA A. AND S.A.C. KELLER

1992a A Report on the Spring 1991 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Eastern Washington University Reports in Archaeology and History 100-77. Archaeological and Historical Services, Eastern Washington University. Cheney.

1992b A Report on the Spring 1992 Review of Burial Sites in Lake Roosevelt, Ferry, Lincoln, and Stevens Counties, Washington. Short Report 340. Archaeological and Historical Services, Eastern Washington University. Cheney.

WARE, JOHN A.

1989 Archeological Inundation Studies: Manual for Reservoir Managers. Environmental Impact Research Program, Contract Report EL-89-4. Prepared for the Department of the Army, U.S. Army Corps of Engineers. Washington, D.C.

APPENDIX SPOKANE-A

A SAMPLE OF TESTIMONIES OF THE SIGNIFICANCE
OF THE COLUMBIA, SPOKANE, AND SNAKE RIVERS
TO THE NATIVE AMERICAN PEOPLE OF THIS REGION

GIVEN AT STAFF AND FULL WORK GROUP MEETINGS
OF THE SYSTEM OPERATIONS REVIEW.
ENVIRONMENTAL IMPACT STATEMENT
CULTURAL RESOURCE WORK GROUP

January 31, 1995

When asked to begin to describe how they view the natural resources of the Columbia River system as a cultural resource, the tribal representatives gave the following as responses. (All responses are not included here; these are a representative sample.)

Mr. Henry SiJohn of the Coeur de Alene Tribe says, "To me, all I have is common sense. You know that's where the gap exists between the American Indian culture and what you folks here in the bureaucracy represent. The Indian looks at the water and looks at the fish, and the effects on that natural resource, and he has only his five senses: he can see the effects, he can feel the effect of the water, and he can listen to the anguished cries of the natural resources - the wildlife in their anguish of contaminating themselves and dying - and as a result, he can hear that. So that all of these things are entirely opposite entirely from what you are involved in. And the Indian is only interested in the species, to preserve that species, and that is what I think originally was the intent of SOR, Systems Operations Review. . . ."

Mr. Jackson Meninick of the Yakama Nation says, "The issue in totality, as you look at the mountains, and as you look at the flow of streams, to us when the Great Creator created that, there was a reason for that. That body lies, as you'll notice my hair, my arms, my legs, my body, that as you look at the East and you look at the West, and you will notice that timber stands are my hair. Well, when the Great Creator laid that out, he wiped out everything and it became water. Out of that came an island, such a place sticks out, the highest peak in the water. It was right above what is called Mount Hallowishram. And the animals washed out there, logs, everything. But when the Great Creator created that water and the land. So then there had to be something to occupy the water, he created the fish. This is how he counted, enumerated these things. Then in the land, the wildlife; in the land, the roots; in the mountains, the berries. All these are enumerated, just like you'd say them, what you would call (?), and that is how we read these things. There are also plants are related to these.

"Now there is a certain season, you'll notice a plant that will grow, and they'll mature, that means the fish are coming up the river. There are certain plants that will change formation,

like if you have a beef, so you'd make a feeder out of it, you feed it like chickens. When it's ready for butchering, that's the way the deer. You'll notice, certain plants will reflect those things. So this is the way we respect the resources. So we don't need a biologist; we are the biologists. The resource doesn't belong to us: we belong to the resource. With that, if we take care of the resource, that takes care of our life. Now we take care of the people and our pocketbooks, that doesn't take care of the needy people. So this is why we have to attend to express our feelings."

Mr. Meninick continues, "There is one thing that we do ask. I hope your ears are working. And if it is, if you'd listen to it carefully, it will get to your heart, and that is how we learn. We don't have any papers at our house. We talk to our children, what is called wisdom by the words of mouth. When you listen to that, it gets to the heart. That's what we grew up with. When we become mature, you understand nature. So before we can have a fish, or wildlife, roots, or berries, we have to thank the Great Creator. But we have to have peace before that. When we do that, that regenerates by nature. We have to use it properly. That regenerates the water, more plentiful water; regenerates the fish, more fish; regenerates the wildlife. Each time we have that peace, we have to respect it. Today it's a little bit different. It's biological and scientific. Biological and scientific, we have to learn on rats and mice in order to understand what internals are. Biological school, but it doesn't tell you nothing about the nature. All it tells you about is the little piece of item you are working with. But it doesn't tell you about the connection of life, or its nature of how fish have to live, their survival.

". . . But there's one thing that wasn't mentioned this morning. There's also another enemy. It's what's called - and I believe the Bureau of Reclamation is involved in this one - it's called divergent. And those divergent, I think they call them flip-flops, a lot of these divergent of yesteryear didn't have these, these flip-flops. So the fish would . . . on these canals, these divergent, ditches. And I heard farmers that I knew, I worked for, say, 'Oh, I go out there with my pitchfork, jab the salmon, give it to my cat.' And I heard the sportsman here in Portland, 'So I go out and catch a fish, and we take a picture of it, then throw it in the trash.'

"Now that's not highest, best use of fish. We respect the fish. Every particle in that fish means something to us. We don't just eat the fillet. We eat the fish, how we use the juice out of fins, how we use the head, and how we use the tail, and how we use the bone. There's also a little chief, the sucker that comes up. Everybody laughs at suckers, but they are the leaders. People laugh at eels; they are the supporters. All these other species of fish have a different meaning each season. So the way that we cure it, we didn't have no refrigerators, we didn't have any jars, but we had way of curing fish that could be preserved for years and years. As a matter of fact, there's still some up in the hills up here. If you open up those places where they left them generations ago, I bet you they're still edible. That's how we cured the fish.

So there's a way to take care of things and doing things. . . .

"There are things that are called cultural resources. There are things called - there's another word for it. There's cultural resources and natural resources, and then we get into human resources. We're going to have to deal with all these. Biological may be good, and scientific may be good, but it's not the answer. You want to know something, you'd better ask us. We live it. We don't learn it, we live it. It's a lot different than all the papers you got on that table. You have to read it to find out something. You ask us, we'll tell you directly how we live this, and how our ancestors have lived it. And I have grandchildren, and maybe their grandchildren. It's an inherent thing to us. . . ."

Mr. Fred Ike, Sr. of the Yakama Nation began to describe the song he sang at the Pasco meeting, about the creation and the salmon. " . . . river was given to us from the Creator. And the law that is given to the salmon as a key resource in the Columbia River. And that song explains the whole law, the creation of the salmon and the other species of fish. Although you can not understand the song, the meaning, the words, when I sang it, it can only be interpreted by traditional native people. But I just made a short statement, kind of an outline, that tells you we came from the Creator, and the people's Law, Unwritten Law, that we should exercise each year around resources. The first salmon that arrives in the Columbia River, the spring salmon, the King Chinook salmon; that fish, the chief, that fish is our culture, our religion. The first part of that song expresses what I tell you." Mr. Henry SiJohn adds, "I think what Carl is trying to get to is the fact, to talk about the idiom of respect. The American Indian proclaims that the greatest translation of a word from Indian to English is the word respect. The Indian looks upon the earth as its mother, because we look upon and depend upon our mother, all of us, for the nurturing and the for the feeding and to sustain our lives during the infancy part, so that when we grow up and mature, we grow up to become independent. And when we become independent, we then exercise our individual freedom. Psychologically, that is correct from the standpoint of individual freedom.

"However, the individual freedom does not mean that you do anything you want. You must do it with prudence, with respect to the things of the things of the earth. You don't dare hoard all of the game. You don't dare pick all of the berries, and deprive others. You share, and that is I think one of the greatest virtues that the American Indian possess, is that they shared their food, they shared their lodging. They shared many things, and (?) things, and knowing each other. The door was always open and welcome, and they did not ask you how long you were going to stay, or what are you doing here? 'Have you eaten anything?' was the first thing they asked you. 'Sit down and make yourself comfortable. Have you had supper? Have you had lunch?' So food was being prepared for you immediately, so that the door was always open.

"But it has to do with intellectual ethnic perceptibility. How much can the non-Indian grasp of the ethnicity of the American

Indian, and how much of it will they consider as valid? Very definitely as pertaining to the way of life in which we live, and everything.

"We depend very heavily, as I stated before, on our mother for sustenance and we live, grew up. And as we became individuals we did not think that we were big enough or sure enough of ourselves to do things on our own, we depended a great deal on the guidance of our aunts and uncles, grandmothers, grandfathers, our cousins. So that all of the family was close-knit. So spiritually it was one unit, one family unit to help a young person develop into a respectable and brave individual.

"The other point to that I would like to make is that science and technology do not have all the answers. They do not. We can look upon science, and their data and statistics, and when it comes right down to when nature kicks up its heels - an eruption of Mt. Saint Helen, the floods, the rain, thunder and lightning - the scientists and technology people have to just stand by and watch it happen. They can't control that. And as a result, it comes down to the animals.

"People wonder today why the process of spawning of the salmon is inevitable. It happens. For salmon, that's their way of life. That's the destiny, ultimate destiny of a fish, to return to its spawning bed where it was born. That is why the American Indian today, if he goes overseas, ultimately the returns to his homeland that he was born in, very tenaciously, and he would like to - if nothing else - die on his homeland. I had a grandfather that participated in the Septo wars. And he was wounded to the point where it was a very critical situation, but he did not want to die in Palus the country. He wanted to be returned back to Cataldo Mission where he lived. And that's where he died. He's buried in the Cataldo cemetery. And so it is with all the American Indian, just like the salmon. It returns to hits origination, to where he was born. And fending for himself, or itself, out there in the wild blue ocean is definitely a challenge of life, just as we face the challenges today.

"As we do not look at life as being immaterial, we judge it upon the aspect of instinct. That's what the salmon has: instinct; that's what the animal has: instinct. Fear, hunger. And very definitely it survives because of that fear. And so we respect the salmon fears because the instinct of animals is a God-given resource. Without instinct, they would not survive. And the instincts of animals allows us to survive. And so we respect the animals in that way.

"So that it's up to the individual non-Indians to perceive that ethnically, and sometimes its very difficult. Only if you live out there, and you understand it, and your people tell you, and you become imbued with that totally, and you begin to understand just where you are. How big you are and how brave you are can depend on how well you can withstand cold and nature. That is why the proof of the pudding of a man was definitely his vision quest. He went to an isolated place to gain strength and procure his vision, his shaman, his omen, his guardian angel if you please.

And for that quest is only to help him survive, and to become a stronger and a better man. If he failed in that, it wasn't given to him that time, well, he accepted that. But he did not give up, he continued his quest, time and time again.

"Regardless of how many times he went out, or how many visions he had, he still went out to gain more strength and durability to survive. And he didn't have any data or statistics which enabled him to pass judgement on whether he should do this again, or whether it should be feasible for him to try it. He did it because in his heart he knew that he had to do it in order to survive in his element, and with the help of the Creator which enabled him to be able to survive with the plan of the natural resources available to him.

"And he couldn't survive without overcoming the deficit of competing with the natural resources, the deer, and the antelope, and the elk. He had to be able to procure this and become an excellent hunter. And so he sought a vision to give him that strength, and to give him that capability. And if he got it, he was a great man, and as a result of his greatness, he was given a privilege sometimes to become the leader of a hunting expedition or a group that was going out to procure food or maybe going to the prairie to hunt buffalo or go on a horse-stealing expedition. Regardless of what it was, it was an item of necessity. And the item of necessity was ultimately and the bottom line was to improve your well-being, individually and tribally. So that this aspect, living with nature, they were living with nature and understood nature, but above all they respected nature.

"And as a result there are some things that science and technology can't produce. And they find out about things but they can't solve everything. Science and technology is limited in its aspect of conquest. You can conquer and harness certain things, but very definitely when nature kicks up its heels, science and technology just have take a back seat and stand by and let things happen, because they can do nothing about it. And so the association we have regarding Mother Earth and the natural order of things, wildlife, fish, all were God-given, Creator-given to us, and we respected that because it enabled us to survive.

"And we did not keep certain things to ourselves, we always shared in it, and we shared willingly. I remember even in my young days, in the early 20's, I had a man that was married to my aunt, and he had a good fishing place. As we would go huckleberrying in the mountains, he would take his horse in the morning and leave the camp. But in the late afternoon, about 4 or 5 o'clock in the afternoon, he would come back with a good dozen trout that about that long that were spawning in the stream that he took. He didn't keep the fish for himself. He'd call on my brother, Ike, and he'd tell him, "Ike, give a fish to each camp." And there would five or six camps in one spot up on the mountains, mostly our family, our extended family. So everyone shared in the fish profits. And so it was with the killing of a deer or an elk or a grouse, and making and baking of manic bread. And to make that was not specifically for the family. We enjoyed it, but if some family was short on

bread or flour, it was shared willingly. And we don't do that anymore. We can live next door to each other and not know the neighbor living over the fence. So that things are different.

"And now we are very appreciative for the chance to show the appreciation to the Creator of the bounty that has been given to us by Mother Earth and which enables us to live to this day. And that this is something that we can share with you, but it'll depend a great deal on the perceptibility and acceptability of that knowledge by the non-Indians."

Mr. Meninick noted that if federal agency representatives attend ceremonies, they should be aware that they should notify the tribe ahead of time. They do not have to pay, as it is a religious ceremony. Don't bring cameras or recording equipment. Much of the ceremony is enumeration, the counting of the foods.

Another elder tribal representative points out to the feds how lucky they are that these tribal people have shared their feelings so openly. He points out that it is not easy, that many people cannot share their feelings so openly, or express them so well. He is grateful that these men have shared how they live, survive, believe, respect one another, respect the animals and environment. He hopes the feds will listen, remember, and think about these men who are speaking from their hearts. He admonishes the feds to listen, listen with their hearts to what has been said. He hopes the feds can help them retain what is special about their people. He thanks Mother Earth for what she has given. He is thankful that we can share what she has given us. He hopes that all will think about what has been said. Respect the earth, and respect one another.

Mr. Minthorn of the Umatilla Tribe says its good to hear these people speak. He points out that the construction of the dams not only destroyed a culture, but also destroyed an ecosystem. He points out that the dams destroyed the economy based on salmon, and destroyed the life-cycle of the salmon which had existed for time immemorial before the dams. We talk about gravels, but there is no gravel-to-gravel anymore. The Columbia River at the Dalles was one of the greatest fisheries in North America, including trading across the Great Plains, Great Basin, Coast.

Mr. Minthorn reads from a manuscript his tribe has prepared on the prehistory/history of the Dalles, emphasizing the importance of this area to fishing, culture, economic, religion, transportation and access. In 1864 first salmon canned on San Francisco River, and since not successful there, they moved to the Columbia River. In 1883 there were 40 packing plants on the Columbia River. Super-canneries destroy many of our resources. "They filleted the fish. The rest of the stuff came out on troughs. It came out on troughs and the tribes used to go down there. Because like the elders say, we used every part of the fish. And when the eggs and the heads and everything were coming out, then the tribes would get them, because that was our resource. And what we didn't get, just went right back into the river again. And we thought that a big loss of our traditional foods. We felt the impact of the modern day activities.

"People used to live along the river in some places all year round, all the way from Lewiston, Idaho, all the way to Bonneville Dam. All they did was fish. We talk a lot about these fishing areas, but a lot of us have witnessed. Mr. Sampson has seen the Lawula fishery go under water my parents. My parents used to go up into there and fish. Nowadays they say we're re-establishing the fishery on the Umatilla River by using the dip-nets. When we were kids there was a fishery already there. Once the dams came back in and changed the current of the water, then we lost our fishery, of using our dip-nets and stuff in there."

Mr. Carl Sampson of the Umatilla Tribes said it was an honor to hear these people speak from their hearts. He tells the fed that these are some of our unwritten laws. He tells them that some of these things you can't explain here at a table, but you have to go out and appreciate them, such as the value of the salmon and the huckleberry.

Mr. Jeff VanPelt with the Umatilla Tribes points out that challenge in cultural work group is that anthropologists and archeologists and tribal people have a history of not getting along. He tells us how he is a young boy, and how you are for most of your life; we have much to learn from the elders. The world view of the Indian people is completely different from the non-Indian. He feels this is not sinking in. Again, as Indians we are taught if you speak and listen from your heart, it will tell you the truth, but with the non-Indian the opposite is true: you are taught not to speak from your heart.

Mr. VanPelt continued: Indians tribes have adapted to their environment for many generations. Tribal interactions, introduction of the horse, were some factors on this adaptations.

"We have adapted to this area according to archeologists for 13,000; from time immemorial according to some people here. In these 13,000 years of living here on the land, living together, there was one thing that we always had that was calming. That was an understanding of who we were. We didn't look at animals, and we didn't look the fish, and we didn't look at the wildlife habitat. We didn't look at all of the different winged ones who fly the air, all of the four-legged ones walking on the ground, those who crawl on the ground or under the ground. We didn't look at them the way you're looking at them right now and your analysts who study them. We looked at ourselves being of lesser importance the animals in that natural world. In fact we were the most ignorant of the natural world. Because we needed someone to tell us where to go eat, tell us how to prepare that food. We needed to tell us what we needed to do to survive in life. The natural world doesn't need that. The natural world knows itself on how to survive.

"And the natural world wasn't as afraid of people as they are today. You can even read in the historical literature about the Oregon Trail coming over. And literally, if you wanted a deer or an elk, you didn't go up into the mountains to hunt for them, you just hunted them right in your camp. . . . There wasn't the separation between the natural world and the world as it is now, 2000 years ago or 300 years ago. There was a connection; there was

an understanding; there was a way of teaching and learning. There was a way to be able to look at the natural world around you, whether it be an eagle or a hawk or a salmon or a coyote or a wolf.

"And there was a way to extract education and teaching out of that. In our way of understanding, teaching, that was those who had been there before. That was directly tied to you, trying to communicate with you, trying to guide you, trying to teach you, trying to help you to become that man. Mr. SiJohn was talking about looking and searching for that one animal that can help guide you, to find an honorable place to sit in the tribe. It was very important.

"Much of the people, and even our own children on the reservation today, are taught that success is something that has to do with money and power. And much of our people are caught up in that. But it couldn't be farther away from the truth. That's what assimilation has done; that's what the melting pot has done; that's what your manifest destiny has done. It has separated us from those very teachers that teach us who we are. There's a very big impact in that. . . .

"As I was sitting in the back of the room, I'm really frustrated because we have a lot of intelligent people here. Many of you know I'm just an educated boy from the reservation trying to learn from watching the elders around. I can watch you work, and I can understand how you work, and I can understand how you think. But it is their knowledge, that way of speaking from the heart, is one of the few ways we have expressing those whose been here before and their needs.

"Archeology is the study of remnants of something that was left behind by a culture, but that's not true. Archeology was there to always remind us of who we were and where we came from. Even back when we do our oral histories, we listen to the elders talk and how they interpret an archeological site. It was always used as an educational tool. It was always used to teach our children about who they are and where they came from. Maybe it was about a battle, maybe it was about a specific use of the area, maybe it was about a sacred area you only go to during a certain time - you didn't go there just to play, to talk. Everything had a specific purpose.

"It was the very discipline that we had in our tribal structure that we're trying to assimilate somewhat today in our tribal government. The elders have been separated from our children, so we depend on much of your society to train them. It's very uncomfortable." . . . "Our true spirit can't grow because we're not looking at the truth. . . . We're not looking at the animals and the impacts. What happens when you take away the salmon? When you take way the salmon, the eagles, the hawks, the coyotes, the wolves, the bears, everything that survives off that one carcass of that salmon goes with it.

"Now if your very teachings of who you are and where you find your place within a tribal system or the system that we live in, is taken away one at a time, and another, and another, and all your

teachers are gone, and you're fighting for that one fish. A lot of people can't comprehend why the fish is so important to the Indian. Heck, they're growing them down in (?) down in California, that's why the prices are so cheap on them. An ecological way of looking at the environment, what impacts that we have on that environment, the very disrespectful way: the Creator knows whose been here before and watches us to protect them. We're responsible for future generations have. We're being very selfish. . . .

"So I've been sitting back there trying to figure out how to best utilize this opportunity to educate the different people and the different working groups about tribal involvement. I don't think a lot of people realize that the tribes have a very lot to offer you. . . . look at what you've done to our world in the last 150 years. Look what's happened to the dams, the pollution, the water; the very resources that we lived with for 15,000 years.

. . . .
"Very, very rich, one of the richest cultures in North America, lived right here on this Columbia River. It was the Mecca; it was the Mecca when it comes to talking about people coming together in large, large numbers. Savage: we replace it with . . . savage, very savage, . . .

"But I kind of really wonder if we need as much electricity as those dams are generating. I kind of wonder if we need that hundred-and-something year old technology out there. I don't think that people realize that the fish aren't just fish; the fish are life. They have a cycle of life that must be completed. I was talking that Indian people, too, have a cycle of life that needs to be completed.

"So a lot of the anger that you hear from these meetings, is that you're not allowing that. And when that is forced upon our people and on our way of life, assimilation over the last hundred and something years in your society has worked. The only way to survive is to try to go back before that confusion came. And that's what you brought here; you brought confusion. Don't get me wrong: I like driving in my car, I like getting a cold pop out of the refrigerator. But the confusion that you have brought is such a monster, such an animal - how do we deal with that on a specific kind of a deal like this systems operation review. Getting this group together is the best that I think that I can offer.

"You've got to remember, that when you're dealing with an ecosystem, you're dealing with a spirit. You cannot analyze that spirit. You cannot understand that spirit. Our shamans, our medicine people, they'll take you in; and you'll tell them about a dream or about something you have thought about. And they'll interpret that and they'll help you. But now we get back into what the teaching was, and a lot of that is gone. So we have to depend on ourselves. We learned this, we've proved this in different ways, in trying to do restoration.

"So when you talk about recreation, look at the impact that we definitely know recreation is having on our culture, on our cultural resources. Look at what it's doing to access to the rivers for us, to access the fish, our very way of life. . . .

What is barging? What is transportation? . . . What is the environment of the river? What is it doing to water quality? Restoration, wildlife habitat - not hydro-power . . .

"Many of you think that you're men and women, but in the eyes of the elders will tell you you're still young kids. You're still young kids playing on the playground fighting over the ball. You don't understand. You don't understand that this ain't a game. It's a way of life that you have to learn. We're all put here for a purpose and a reason. If you think your doctorate degree is going to get you to the other side, right on! I hope it does it for you. But from the way I learned, I don't think so."

1. See National Trust for Historic Preservation v. United States Army Corps of Engineers, 552 F. Supp. 784 (S.D. Ohio 1982).

TECHNICAL EXHIBITS

EXHIBIT J

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

CTUIR's Draft Supplemental Comments
on the System Operation Review
Draft Environmental Impact Statement

Appendix 1: Federal Indian Law
and Other Applicable Constraints
on the System Operation Review and
the Federal Columbia River Power System

- I. Aboriginal Rights
- II. The Treaty of 1855 and Treaty Rights
- III. Trust Responsibility and Trust Assets
 - A. Salmon and Other Fish
 - B. Water and Indian Reserved Water Rights
 - C. Cultural Resources
- IV. Indian Policies
 - A. President Clinton's April 29, 1994, Memorandum
 - B. Department of Energy's Indian Policy
 - C. Bureau of Reclamation's Indian Trust Assets Policy
 - D. Department of the Interior's Order No. 3175
 - E. Other Indian Policies
 - 1. President Bush's Indian Policy
 - 2. President Reagan's Indian Policy
 - 3. Department of Agriculture's Indian Policy
 - 4. Forest Service's Indian Policy
 - 5. Environmental Protection Agency's Indian Policy
- V. Other Federal Laws and Statutes
 - A. Northwest Power Act
 - B. National Environmental Policy Act
 - C. Endangered Species Act
- VI. International Law

I. ABORIGINAL RIGHTS

Long before the construction of Bonneville Dam, before the expedition of Lewis and Clark, before the formation of the United States and the adoption of the U.S. Constitution, members of the Cayuse, Umatilla and Walla Walla Tribes used, occupied and enjoyed the lands and waters of what is now the Pacific Northwest. We fished, hunted, and gathered plants, roots and berries as integral parts of the seamless circle of life.

Much later, in a effort to legitimize the subsequent invasion of the North American continent by European powers, the United States Supreme Court adopted the doctrine of discovery in the case of Johnson v. M'Intosh.¹ In Johnson, Chief Justice John Marshall held that

¹21 U.S. (8 Wheat.) 543 (1823).

[D]iscovery gave title to the [European] government by whose . . . authority, it was made, **against all other European governments**, which title might be consummated by possession. . . . **Those relations which were to exist between the discoverer and the natives, were to be regulated by themselves.** The rights thus acquired being exclusive, no other power could interpose between them.²

While discovery gave the Europeans and the United States, as the discovering nations' successor, "ultimate dominion" over the land, reasoned Marshall, it remained "subject . . . to the Indian right of occupancy."³ Under this doctrine, Indians were recognized as the "rightful occupants" of the land, with a legal claim to possession.⁴ This right to use, occupy and enjoy the land--and waters--came to be known as "Indian title" or aboriginal title.⁵

The discovery doctrine acknowledges that our aboriginal title is a property interest "as sacred as the fee simple of the whites."⁶ The Indian right of use, occupancy and enjoyment can only be terminated by sovereign act.⁷ Congress can extinguish aboriginal title only by a "clear and plain indication" of such

²Id. at 573-74 (emphasis added).

³Id. at 574.

⁴21 U.S. at 574.

⁵See, e.g., Sac and Fox Tribe of Indians of Okla. v. United States, 383 F.2d 991 (Ct. Cl. 1967), cert. denied, 389 U.S. 900 (1967):

[T]he right of sovereignty over discovered [sic] land was always subject to the right of use and occupancy and enjoyment of the land by Indians living on the land. This right of use and occupancy by Indians came to be known as "Indian title." It is sometimes called "original title" or "aboriginal title."

Id. at 997.

⁶United States ex rel. Hualpai Indians v. Sante Fe Pacific R.R., 314 U.S. 339, 345 (1941) (citing Mitchel v. United States, 34 U.S. (9 Pet.) 711, 746 (1835)).

⁷See, e.g., Oneida Indian Nation of New York State v. County of Oneida, 414 U.S. 661, 667 (1974).

an intent.⁸ Only Congress, and not states, may do so.⁹ Similarly, and more to the point, federal administrative agencies have no power or authority to extinguish Indian title.

Aboriginal title encompasses aboriginal rights, such as the rights to fish and hunt.¹⁰ Aboriginal rights of the CTUIR and our members to fish, hunt, and gather plants, roots and berries have existed since time immemorial. They are based on our customs and practices over millennia.¹¹ They are independent of aboriginal title to land, a treaty, or an act of Congress.¹² They were not superseded nor replaced by the rights specifically reserved by the CTUIR in the Treaty of 1855 with the United States.¹³ Our aboriginal rights are separate and distinct from, and coexist with, our Treaty Rights.

Aboriginal rights retained by the CTUIR, our members, and other tribes and their members in the Columbia River Basin must be recognized and protected throughout the SOR process and all FCRPS activities and operations, pursuant to the federal

⁸Sante Fe, 314 U.S. at 353-54 ("extinguishment cannot be lightly implied in view of the avowed solicitude [sic] of the Federal Government for the welfare of its Indian wards.").

⁹See Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543, 586 (1823) (discussing "the exclusive right of the United States to extinguish" Indian title); United States ex rel. Hualpai Indians v. Sante Fe Pacific R.R., 314 U.S. 339, 347 (1941) ("The power of Congress [to extinguish Indian title] is supreme.").

¹⁰See, e.g., United States v. Minnesota, 466 F. Supp. 1382, 1385 (D. Minn. 1977), aff'd per curiam sub nom., Red Lake Band of Chippewa Indians v. Minnesota, 614 F.2d 1161 (8th Cir. 1980), cert. denied, 449 U.S. 905 (1980); State v. Coffee, 556 P.2d 1185 (Idaho 1976).

¹¹See F. Cohen, Handbook of Federal Indian Law 442 (1982).

¹²Sante Fe, 314 U.S. at 347. Tribes possess extra fishing and hunting rights even when they are not delineated by specific treaties because subsistence fishing, hunting and gathering are intimately connected with how Indian lands are held. Menominee Tribe v. United States, 391 U.S. 404, 406 (1968). Aboriginal rights to fish and hunt incidental to aboriginal title may survive even when aboriginal title to the land has been ceded by treaty. Reynolds, Indian Hunting and Fishing Rights: The Role of Tribal Sovereignty and Preemption, 62 N.C. L. Rev. 743, 746 (1984).

¹³Treaty of 1855, supra note 1.

government's Trust Responsibility.¹⁴ Furthermore, agency policies such as the Indian Trust Assets Policy of the Bureau of Reclamation (BOR) also require such protection.¹⁵

In the SOR DEIS, aboriginal rights were not properly considered in identifying Indian Trust Assets, in assessing potential impacts to them, or in developing the range and analyses of actions and alternatives. These omissions must be corrected, in consultation with the CTUIR and other affected Indian tribes.¹⁶

Aboriginal rights of the CTUIR and our members to fish, hunt, and gather plants, roots and berries, as part of our use, occupancy and enjoyment of the lands and waters of the Pacific Northwest, have not been legally extinguished by Congress. They have not--and cannot--be legally extinguished by any federal government agency. Our aboriginal rights, like our Treaty Rights, remain in full force and effect to this day, a fact that should given appropriate attention and due regard in the SOR DEIS and in operating the FCRPS.

II. THE TREATY OF 1855 AND TREATY RIGHTS

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"¹⁷ (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:

Provided, also, That the exclusive right of taking fish

¹⁴See infra notes 41-66 and accompanying text.

¹⁵See infra note 41-66 and accompanying text.

¹⁶See Bureau of Reclamation, NEPA Handbook for Implementing Indian Trust Assets Policy (describing the consultation process for identifying Indian Trust Assets and assessing impacts to them).

¹⁷Treaty of 1855 (preamble), supra note 1.

in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same; the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens, is also secured to them.¹⁸

Tribal rights secured¹⁹ by the Treaty of 1855 (and others),²⁰ including the right to 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.²¹ In United States v. Winans,²² the U.S. Supreme Court established and described the reserved rights doctrine:

The right to resort to the fishing places in controversy was a part of larger rights possessed by the Indians, upon the exercise of which there was not a

¹⁸Treaty of 1855, supra note 1 at 946.

¹⁹"Secure" is defined as, inter alia, "assured in opinion or expectation: having no doubt . . . free from risk of loss . . . affording safety: INVIOABLE . . . TRUSTWORTHY, DEPENDABLE . . . ASSURED, CERTAIN . . . to relieve from exposure to danger: act to make safe against adverse contingencies . . . to put beyond hazard of losing or of not receiving: GUARANTEE (['secure] the blessings of liberty[']--U.S. Constitution)." Webster's New Collegiate Dictionary 1037 (1979).

²⁰See Treaty with the Yakima, June 9, 1855, 12 Stat. 951; Treaty with the Nez Perce, June 11, 1855, 12 Stat. 957; Treaty with the Tribes of Middle Oregon, June 25, 1855, 12 Stat. 963; Treaty with the Nisqually, Puyallup, etc., Dec. 26, 1854, 10 Stat. 1132; Treaty with the Dwamish, Suquamish, etc., Jan. 22, 1855, 12 Stat. 927; Treaty with the Sklallam, Skokomish, etc., Jan. 26, 1855, 12 Stat. 933; Treaty with the Makah, Jan. 31, 1855, 12 Stat. 939; Treaty with the Quinaielt and Quillehute, July 1, 1855 and Jan. 25, 1856; 12 Stat. 971; Treaty with the Flathead, Kootenay, and Upper Pend d'Oreille, July 16, 1855, 12 Stat. 975.

²¹See, e.g., Worcester v. Georgia, 31 U.S. (6 Pet.) 515 (1832) (state law does not apply within reservation boundaries without express Congressional consent).

²²198 U.S. 371 (1905).

shadow of impediment, and which were not much less necessary to the existence of the Indians than the atmosphere they breathed. . . . **In other words, the treaty was not a grant of rights to the Indians, but a grant of rights from them--a reservation of those not granted.** . . . They imposed a servitude upon every piece of land as though described therein. There was an exclusive right of fishing reserved within certain boundaries. There was a right outside of those boundaries reserved "in common with citizens of the Territory." . . . [T]he Indians were secured in its enjoyment by a special provision of means for its exercise. . . . The contingency of the future ownership of the lands, therefore, was foreseen and provided for--in other words, the Indians were given [sic] a right in the land--the right of crossing it to the river--the right to occupy it to the extent and for the purpose mentioned. . . . And the right was intended to be continuing against the United States and its grantees as well as against the State and its grantees.²³

Treaty Rights--those of the CTUIR and other tribes--should be of paramount concern to the United States, its departments and agencies, and in the SOR DEIS:

Since rights granted pursuant to treaties are rights granted to the United States from the tribes and the tribes reserve all those rights not granted, . . . **treaty rights should be afforded the highest priority possible.**²⁴

The U.S. Constitution proclaims that "**all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land;** and the Judges in every State shall be bound thereby, any Thing in the Constitution or

²³Id. at 381-82 (emphasis added).

²⁴Memorandum from Michael J. Anderson, Associate Solicitor, Division of Indian Affairs, Office of the Solicitor, U.S. Department of the Interior, to Solicitor and Assistant Secretary for Indian Affairs, U.S. Department of the Interior, re: "Indian Treaty Hunting and Fishing Rights and the Endangered Species Act," at 7 (Nov. 8, 1994) (citing United States v. Winans, 198 U.S. 371, 381 (1905) (emphasis added)).

Laws of any State to the Contrary notwithstanding."²⁵ Treaties with Indian tribes are contemplated by this constitutional provision.²⁶ Tribal rights secured by treaty are superior to the rights other citizens enjoy.²⁷ Furthermore, "[t]he preservation of treaty rights is the responsibility of the entire federal government."²⁸ Thus, the SOR agencies--the Bonneville Power Administration (BPA), the Army Corps of Engineers (ACOE), and the BOR--have an affirmative legal duty to protect the CTUIR's Treaty Rights.²⁹

Nevertheless, the SOR DEIS does not fully and effectively incorporate this solemn obligation, nor does it address its implications for FCRPS System Operating Strategies (SOSs) and the other proposed SOR decisions. For example, discussions of Indian treaties and the rights and responsibilities arising from them in the SOR DEIS warrant additional exposition and clarification.

²⁵U.S. Const. art. VI, cl. 2 (emphasis added). See United States v. Washington, 384 F. Supp. 312, 330 (W.D. Wash. 1974), aff'd, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976). The Treaty of 1855 was ratified on March 8, 1859. Treaty of 1855, supra note 1.

²⁶See, e.g., Worcester v. Georgia, 31 U.S. (6 Pet.) 515 (1832).

²⁷See generally F. Cohen, Handbook of Federal Indian Law 285-86, 335-36 (1942); S. Pevar, The Rights of Indians and Tribes 189-208 (1992).

²⁸Associate Solicitor's Opinion, supra note 26 at 7 (citing United States v. Eberhardt, 789 F.2d 1354, 1363-64 (9th Cir. 1986) (Beezer, J., concurring) ("Cooperation among all agencies of the government is essential to preserve those Indian fishing rights to the greatest extent possible.")); Nance v. EPA, 645 F.2d 701, 711 (9th Cir. 1981), cert. denied, 454 U.S. 1081 ("It is fairly clear that **any** federal government action is subject to the United States' fiduciary responsibilities toward the Indian Tribes." (emphasis added)).

²⁹Treaties with Indian Tribes are also binding on state governments, see Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658, 682 and n. 25 (1979), and private citizens, see, e.g., United States v. Winans, 198 U.S. 371 (1905). The right to take fish at all "usual and accustomed stations" must be respected by the federal government and its agencies, state governments and their agencies, and private parties.

The Stevens-Palmer Treaties are only briefly noted and described.³⁰

In addition, the SOR DEIS mentions that "[t]reaties are presumed [sic] to reserve to Tribes the right to fish and hunt on their reservations."³¹ This is incorrect--such rights are not "presumed" to have been reserved in the treaties. No presumption was or is involved; reserved rights were unambiguously delineated in explicit terms.³² Judicial opinions have affirmed the clear and unequivocal nature of this right.³³

Tribal rights to fish and hunt (and to regulate on- and off-reservation exercise of those rights by tribal members) are well-established.³⁴ Furthermore, the right of many Indian Tribes of the Pacific Northwest--including the CTUIR--to take fish at all "usual and accustomed stations" has also been affirmed by repeated court decisions.³⁵

The Stevens-Palmer Treaties' formalization of the off-reservation fishing right reflects the overriding aim of preserving our traditional way of life that was, and continues to

³⁰SOR Draft EIS, Main Report, at 2-25, 2-26, 2-27 (July 1994) (Chapter 2, The Columbia River Basin; Section 2.2.2, Native Americans).

³¹SOR Draft EIS, Main Report, at 2-26 (July 1994) (Chapter 2, The Columbia River Basin; Section 2.2.2, Native Americans).

³²See, e.g., Treaty of 1855, supra note 1 at 946 ("the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians.").

³³See New Mexico v. Mescalero Apache Tribe, 462 U.S. 324, 330 (1983); Leech Lake Band of Chippewa Indians v. Herbst, 334 F. Supp. 1001 (D. Minn. 1971); State v. McClure, 268 P.2d 629 (1954).

³⁴See also Letter from William F. Shake, Assistant Regional Director, U.S. Fish and Wildlife Service, to Don Sampson, Chairman, Board of Trustees, Confederated Tribes of the Umatilla Indian Reservation (June 24, 1994) ("The U.S. Fish and Wildlife Service . . . considers the Tribes . . . as co-managers of fishery resources.").

³⁵See, e.g., Sohappy v. Smith, 302 F. Supp. 899 (D. Or. 1969), aff'd, United States v. Oregon, 529 F.2d 570 (9th Cir. 1976); Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658, 99 S.Ct. 3055, 61 L.Ed.2d 823 (1979).

be, centered around the river and its myriad resources. The Treaty of 1855 did not presume to reserve the fishing right; it was **secured**--guaranteed--both on and off the reservation. The SOR agencies must be cognizant of this fact and conduct their analyses accordingly.

Finally, the CTUIR understand the significance of the FCRPS to the Pacific Northwest. We acknowledge the major role it plays with regard to hydroelectric power, flood control, irrigation, municipal and industrial water supply, navigation and recreation. The SOR agencies, their facilities and functions are subject to a number of statutory and regulatory authorities and constraints, such as those listed in Chapter 11 (Environmental Consultation, Review, and Permit Requirements) of the SOR DEIS Main Report.³⁶ However, conspicuously absent from this seemingly exhaustive list is any mention of the Treaty of 1855.³⁷

³⁶The list includes the National Environmental Policy Act; the Endangered Species Act; the Fish and Wildlife Conservation Act; the Fish and Wildlife Coordination Act; the National Wildlife Refuge System Administration Act; the Migratory Waterfowl Act; the Marine Protection, Research, and Sanctuaries Act; the Pacific Northwest Electric Power Planning and Conservation Act; the National Historic Preservation Act; Existing Programmatic Agreements; the Archeological Resources Protection Act; the Native American Graves Protection and Repatriation Act; the American Indian Religious Freedom Act; the Coastal Zone Management Act; Executive Order 11990 (wetlands protection); the Farmland Protection Policy Act; the CEQ Memorandum on Analysis of Impacts on Prime or Unique Agricultural Lands; the Wild and Scenic Rivers Act; the Columbia River Gorge National Scenic Area Act; the Water Resources Development Act; the Federal Water Project Recreation Act; the Land and Water Conservation Fund Act; the Clean Air Act; the Clean Water Act; the Safe Drinking Water Act; the Estuary Protection Act; and the Watershed Protection and Flood Protection Act.

³⁷The SOR DEIS also neglects to note the various federal Indian law doctrines and principles arising from numerous judicial decisions, and the many Indian Policies promulgated by the SOR agencies and others, to which they are bound. The minimal acknowledgement and recognition of the Treaty of 1855 in the SOR DEIS is particularly incongruous and inappropriate given that one of the driving forces propelling the entire SOR process is the upcoming expiration of the Canadian Entitlement Allocation Agreements, which are based on the Columbia River Treaty between the United States and **Canada**. Equivalent attention to and regard for other treaties, such as those with sovereign Indian Nations (which are, equally, "the supreme Law of the Land") is necessary, and would be a welcome departure from the traditional treatment

We find the evident disregard for Tribal Rights and Treaty-secured resources in the SOR DEIS deeply regrettable, and of questionable legality. Through meaningful consultation, we hope to rectify this situation and help develop a Final Environmental Impact Statement more attentive to the CTUIR's interests, rights and resources.

As Antone Minthorn, Chairman of the General Council and member of the Board of Trustees of the CTUIR, has stated,

As long as the Indians believe that the salmon are important and that they have the legal right that the treaties uphold, then the salmon will survive, but the white people must honor those treaties in order for that to happen, and when they honor the treaty, it is not only the Indians that benefit, but all people will benefit.

III. TRUST RESPONSIBILITY AND TRUST ASSETS

In addition to respecting our aboriginal rights and treaty-reserved rights, the United States must honor its Trust Responsibility to the CTUIR and other Indian Tribes. This doctrine arose through judicial interpretation and analysis, and has since been supplemented and reinforced by formal federal agency policy.

The Trust Responsibility doctrine can be traced to Cherokee Nation v. Georgia,³⁸ where the U.S. Supreme Court stated that Indian Tribes were not foreign nations, but constituted "distinct political" communities "that more correctly, perhaps, be denominated domestic . . . nations" whose "relation to the United States resembles that of a ward to his guardian."³⁹ This language first enunciated the doctrine of federal trusteeship in Indian affairs, a doctrine that continues to govern the relationship between Tribes and the United States today.⁴⁰

"[T]he undisputed existence of a general trust relationship

afforded Indian issues in this and similar circumstances.

³⁸30 U.S. (5 Pet.) 1 (1831).

³⁹Id..

⁴⁰See, e.g., United States v. Creek Nation, 295 U.S. 103, 109-10 (1935); United states v. Kagama, 118 U.S. 375, 383-84 (1886).

between the United States and the Indian people"⁴¹ has been confirmed by the U.S. Supreme Court, noting that it "has previously emphasized 'the distinctive obligation of trust incumbent upon the Government,'⁴² a "principle [that] has long dominated the Government's dealings with Indians."⁴³

Numerous court decisions have defined and described the Trust Responsibility as requiring the federal government to adhere to stringent fiduciary standards of conduct in matters related to Indian Tribes.⁴⁴ The Trust Responsibility applies to **all** federal agencies.⁴⁵ They must ensure that their actions do not breach their Trust Responsibility to Indian Tribes, including the CTUIR.

According to the principles of federal Trust Responsibility, government departments and agencies must utilize their authority to scrupulously safeguard that which is the subject matter of federal treaties with Indian Tribes--Indian Trust Assets.⁴⁶ Trust Assets are property in which Indians hold and maintain

⁴¹United States v. Mitchell, 463 U.S. 206, 225 (1983).

⁴²Id. (quoting Seminole Nation v. United States, 316 U.S. 286, 296 (1942)).

⁴³Id. (citing United States v. Mason, 412 U.S. 391, 398 (1973); Minnesota v. United States, 305 U.S. 382, 386 (1939); United States v. Shoshone Tribe, 304 U.S. 111, 117-118 (1938); United States v. Candelaria, 271 U.S. 432, 442 (1926); McKay v. Kalyton, 204 U.S. 458, 469 (1907); Minnesota v. Hitchcock, 185 U.S. 373, 396 (1902); United States v. Kagama, 118 U.S. 375, 382-384 (1886); Cherokee Nation v. Georgia, 5 Pet. 1, 17 (1831)).

⁴⁴See, e.g., Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942) (United States is charged "with moral obligations of the highest responsibility and trust"); United States v. Creek Nation, 295 U.S. 103 (1935). See also Northern Cheyenne Tribe v. Hodel, 12 Indian L.Rep. 3065, 3070-71 (D. Mont. 1985), modified on other grounds, 842 F.2d 222 (9th Cir. 1988).

⁴⁵Nance v. EPA, 645 F.2d 701, 711 (9th Cir. 1981), cert. denied, 454 U.S. 1081 (1980) (any federal government action is subject to the United States' fiduciary responsibility to Indians); White v. Califano, 581 F.2d 697 (8th Cir. 1978) (HEW is responsible for providing mental health care for Indians).

⁴⁶See United States v. Creek Nation, 295 U.S. 103 (1935). See also Northern Cheyenne Tribe v. Hodel, 12 Indian L.Rep. 3065, 3070-71 (D. Mont. 1985; modified on other grounds, 842 F.2d 222 (9th Cir. 1988)).

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.

The duty to consider and protect Trust Assets is broad and comprehensive. In Northern Cheyenne Tribe v. Hodel,⁴⁷ the court stated that "a federal agency's trust obligation to a tribe extends to actions it takes off a reservation that uniquely impact tribal members or property on the reservation."⁴⁸ Even where an agency asserts that other responsibilities conflict with its Trust Responsibility to Indian Tribes, the Trust Responsibility remains in effect:

[C]onflicting responsibilities and federal actions taken in the "national interest," however, do not relieve [the Secretary of the Interior] of his trust obligations. To the contrary, identifying and fulfilling the trust responsibility is even more important in situations such as the present case where an agency's conflicting goals and responsibilities combined with political pressure asserted by non-Indians can lead federal agencies to compromise or ignore Indian rights.⁴⁹

In Escondido Mut. Water Co. v. FERC,⁵⁰ the U.S. Court of Appeals for the Ninth Circuit stated that

There is no guarantee . . . that the tribal interests which the United States has a fiduciary duty to protect and defend will coincide with the interest of the public at large. A water and hydropower project might be vastly beneficial to the public in general, for instance, even though by inundating an entire reservation it might be utterly inimical to the interest of the Indians whose reservation is concerned. We find in the plain language of the FPA [Federal Power Act, 16 U.S.C. Sec. 791a et seq. (1976)] a policy to foster the development of water power projects in the public interest, **to the extent, and only to the extent,**

⁴⁷12 Indian L.Rep. 3065 (D. Mont. 1985), modified on other grounds, 842 F.2d 222 (9th Cir. 1988).

⁴⁸Id. at 3071.

⁴⁹Northern Cheyenne Tribe v. Hodel, 12 Indian L.Rep. at 3070-71 (citations omitted).

⁵⁰692 F.2d 1223 (1982).

that such can be done without abandoning the fiduciary duties owed by the United States to . . . Indian tribes.⁵¹

Consequently, the federal departments and agencies principally responsible for the disastrous decline in Northwest anadromous fish runs--the SOR agencies⁵²--cannot continue to permit their obligations to Indian Nations to be lost or compromised in their concern for outraged local citizens, influential special interest groups, or powerful economic lobbies.⁵³ Treaty-reserved Tribal Rights are legitimate property interests stemming from property rights which pre-date the formation of the United States.⁵⁴ One of their unique aspects is that they are not considered susceptible to balancing against other priorities.⁵⁵

Federal actions that interfere with the free exercise of Treaty Rights cannot be sanctioned by "accommodating" or

⁵¹Escondido Mut. Water Co. v. FERC, 692 F.2d 1223, 1236 (1982) (emphasis added).

⁵²See, e.g., Winninghoff, Where have all the salmon gone?, Forbes, Nov. 21, 1994, at 104.

⁵³See, e.g., Matsen, Barging Down the River, Pacific Northwest, December 1994, at 51:

[T]he smelting companies, which consume 47 percent of the power from the eight Corps of Engineers dams, are buying television and radio time to tell us that without aluminum we can't have airplanes and trips to visit loved ones and sick friends. Development boosters are reminding us that our society made a choice on the Columbia and Snake, it cost us the salmon, and jobs are more important than fish.

⁵⁴United States v. Truckee-Carson Irrigation Dist., 649 F.2d 1286, 1289, 1305 (9th Cir. 1981), modified, 666 F.2d 351 (9th Cir.), cert. granted, 103 S.Ct. 205 (1982); United States v. Ahtanum Irrigation Dist., 236 F.2d 321, 338-39 (9th Cir. 1956), cert. denied, 352 U.S. 988 (1957); Northern Paiute Nation v. United States, 30 Ind. Cl. Comm. 210 (1973); Whitefoot v. United States, 293 F.2d 658, 659 (Ct. Cl. 1961), cert. denied, 369 U.S. 818 (1962).

⁵⁵Muckleshoot Indian Tribe v. Hall, 698 F. Supp. 1504, 1515 (W.D. Wash. 1988).

"balancing" such rights with lesser competing interests.⁵⁶ Any such accommodation or balancing by federal agencies violates their Trust Responsibility to the CTUIR and would constitute a de facto abrogation of our Treaty Rights.⁵⁷ Courts have

⁵⁶See, e.g., Memorandum from Michael J. Anderson, Associate Solicitor, Division of Indian Affairs, Office of the Solicitor, U.S. Department of the Interior, to Solicitor and Assistant Secretary for Indian Affairs, U.S. Department of the Interior, re: "Indian Treaty Hunting and Fishing Rights and the Endangered Species Act," at 7 (Nov. 8, 1994) ("Acknowledgement that treaty rights are to receive the highest protection possible leads to the conclusion that non-treaty impacts on treaty resources must be minimized to permit the fulfillment of treaty promises.").

⁵⁷Our Treaty Rights are not for sale. Nevertheless, it has been suggested that any infringement on Indian Treaty Rights or degradation of Indian Trust Assets--temporary or permanent, partial or complete--may constitute a "taking" for which just compensation would be mandated under the Fifth Amendment to the U.S. Constitution. In his Memorandum to the Solicitor and Assistant Secretary for Indian Affairs, U.S. Department of the Interior, entitled "Indian Treaty Hunting and Fishing Rights and the Endangered Species Act" (Nov. 8, 1994), the Associate Solicitor, Division of Indian Affairs, Office of the Solicitor, U.S. Department of the Interior, stated:

Federal responsibility to preserve tribal wildlife resources is analogous to the federal responsibility for tribal trust land. Because of the responsibility to tribes for trust land, the United States may not unilaterally use Indian trust lands strictly for governmental purposes unless it adequately compensates the Indian owner. The United States cannot dispose of Indian trust lands as it can other federally owned lands. In addition, if trust lands are sold, the Government must ensure that the Indian landholder receives the best possible price for those lands. **Where the exercise of treaty rights is unduly limited . . . , compensation for those limitations may be warranted.** The Fifth Amendment obligates Congress to pay "just compensation" when private property rights are taken by the government for public use. Thus, while the Congress has the power to abrogate or limit the exercise of treaty rights, **this lost use of protected property rights may require compensation under the Fifth Amendment, even in the case of a temporary taking Equity demands that holders of treaty rights have at least as great an interest in receiving compensation as do non-Indian resource users**

consistently held that Indian treaty rights can only be abrogated by the U.S. Congress, and that "clear evidence" of an intent to do so must be shown.⁵⁸

Pursuant to the Trust Responsibility the SOR agencies have an affirmative duty to conduct their operations in a manner that preserves and protects all our treaty-secured resources-- including salmon. Furthermore, you are obligated to not merely "recover" anadromous fish runs listed under the Endangered Species Act (ESA)⁵⁹ to a level where de-listing can occur, but, in addition, to **restore** such runs beyond that point, to where they can provide for healthy, viable populations sufficient for sustainable Indian harvest. Full restoration of **all** anadromous fish runs (including those presently extirpated and those declining but not yet listed under the ESA) must be a primary purpose and goal of the SOR agencies, and a prominent guideline for all FCRPS operations.

By neglecting to pay adequate attention to Indian treaty rights and your Trust Responsibility to Indian tribes, the SOR DEIS allows government officials, employees, contractors and others to remain uneducated and uninformed about the nature and scope of the legal duties and obligations you owe to Indian tribes. The public will remain largely ignorant of the superior rights held by the CTUIR and other tribes, and will also erroneously equate assertion of those rights with just another conflicting demand from among the many competing user groups.

The SOR DEIS acknowledges that

The United States (including all of the SOR agencies) has a trust responsibility to protect and maintain such rights reserved by or granted to Indian Tribes or individuals by treaties, statutes, executive orders, and other agreements entered into by Reclamation or the

when access to treaty resources is curtailed.

Memorandum at 13-14 (emphasis added) (citations omitted).

⁵⁸United States v. Dion, 476 U.S. 734, 740 (1986) ("clear evidence that Congress actually considered the conflict between its intended action on the one hand and Indian treaty rights on the other, and chose to resolve that conflict by abrogating the treaty[,] is required"); Menominee Tribes v. United States, 391 U.S. 404, 413 (1968); Muckleshoot Indian Tribe v. Hall, 698 F. Supp. 1504 (W.D. Wash. 1988); Confederated Tribes of the Umatilla Indian Reservation v. Alexander, 440 F. Supp. 553 (D. Or. 1977).

⁵⁹16 U.S.C. §§ 1531-1543.

Department of the Interior.⁶⁰

Nevertheless, the SOR DEIS does little more to explore the nature, scope or ramifications of Trust Responsibility.

In the general overview of the "Affected Environment,"⁶¹ the SOR DEIS should include a section identifying Indian trust assets that could be impacted by the actions and alternatives. Identification of Trust Assets must be performed not only in the context of Treaty Rights, but also in terms of our aboriginal rights. Consultation with the CTUIR and other affected tribes would be required to accomplish this task.

The SOR DEIS Summary⁶² should include a brief description of the expected impacts of the proposed alternatives and actions on Indian Trust Assets. Significant adverse or beneficial impacts on Indian trust assets, and proposed mitigation, will need to be described in narrative and, when possible, quantitative terms. Where no impacts to Trust Assets are anticipated, a statement to this effect should be included.

The SOR DEIS Main Report also needs to identify potential impacts to Indian Trust Assets when describing the SOS alternatives, project features and mitigation measures.⁶³ Cumulative impacts to Trust Assets must be identified and analyzed as well. Reasonable measures that could eliminate or reduce adverse effects on Trust Assets should be identified.

A. SALMON AND OTHER FISH

The SOR DEIS does not sufficiently emphasize salmon and other fish as treaty-protected resources and Indian Trust Assets. Unfortunately, the underlying theme that seems to permeate the SOR DEIS is that salmon protection and enhancement measures are inevitably pitted against those for other "Indian" resources defined by the SOR agencies, such as "cultural resources" (e.g., burial sites) and resident fish. This is inappropriate and unacceptable. This approach must be corrected through serious consultation with the CTUIR.

⁶⁰SOR Draft EIS, Main Report, at 2-28 (July 1994) (Chapter 2, The Columbia River Basin; Section 2.2.2, Native Americans).

⁶¹Chapter 2. The Columbia River Basin, SOR Draft EIS, Main Report (July 1994).

⁶²System Operation Review: The Summary (July 1994).

⁶³SOR Draft EIS, Main Report (July 1994) (Chapter 4, Alternatives and Their Impacts).

B. WATER AND INDIAN RESERVED WATER RIGHTS

Water is the lifeblood of the Pacific Northwest. It is the lifeblood of all the resources upon which our religion, culture and economy are based. It is, like salmon, sturgeon and eels, an integral part of our existence as Indian people, here in the Columbia River Basin (and throughout North America).⁶⁴

When we ceded 6.4 million acres of land to the United States, we never gave away the water needed to support our religious, cultural and economic life. Our ancestors explicitly reserved the right to fish, hunt and gather plants roots and berries in all our usual and accustomed areas. Thus, they implicitly retained the water necessary to sustain these resources off-reservation, throughout our usual and accustomed areas.⁶⁵

Federal courts have consistently recognized this reservation of instream water rights to ensure our treaty fishing right.⁶⁶

⁶⁴See, e.g., American Indian Resources Institute, *Perspective on Indian Policy, History and Law: Selected Readings* (1983), quoting Frank Tenorio, a leader of the San Felipe Pueblo:

There has been a lot said about the sacredness of our land which is our body; and the values of our culture which is our soul; but water is the blood of our tribes, and if its life-giving flow is stopped, or it is polluted, all else will die and the many thousands of years of our communal existence will come to an end."

(quoted in Getches and Wilkinson, *Cases and Materials on Federal Indian Law* 20 (2nd ed. 1986)).

⁶⁵Winters v. United States, 207 U.S. 564 (1908) is a landmark case recognizing the implicit reservation of water rights by tribes in their treaties. One of the several reasons the U.S. Supreme Court cited for its decision is a canon of construction that states that "[b]y a rule of interpretation of agreements and treaties with the Indians, ambiguities occurring will be resolved from the standpoint of the Indians." Our ancestors did not anticipate at the time of the Treaty of 1855 that massive dams would be built throughout the region, disrupting the lifegiving flows of water so vital to our fish, wildlife and plants.

⁶⁶United States v. Adair, 478 F. Supp. 336 (D. Or. 1979), aff'd 723 F.2d 1394 (9th Cir. 1984); cert. denied sub nom., Oregon v. United States, 467 U.S. 1252 (1984); Colville Confederated Tribes v. Walton, 460 F. Supp. 1320 (E.D. Wash.

This reserved instream water right has a priority date of "time immemorial."⁶⁷ Under the prior appropriation doctrine, this water right is superior to any and all other water rights in the Columbia and Snake River Basins.

At this time, the CTUIR have not made a claim to minimum instream flows in the Columbia and Snake Rivers based on our time immemorial priority date treaty water right. Even when an instream water right has not been formally adjudicated, however, the federal government must honor a tribe's superior priority date to prevent impacts to treaty-protected fisheries.⁶⁸

The United States has a duty to uphold the promises and agreements it made to the CTUIR in the Treaty of 1855. Furthermore, the federal government has a Trust Responsibility to preserve and protect the resources our ancestors reserved for us in the Treaty when they are threatened by private individuals or by governmental agencies.

The deplorable condition of our treaty-reserved resources and our tribal economy based on them is largely the result of the federal government's failure in the past to protect our water rights. The United States and its agencies have a duty to restore the water rights wrongfully taken away from us in the past, as well as to safeguard them in the future.

In the Umatilla Basin, the BOR and the BPA have shown great leadership in working to fix the mistakes of the past and to restore our treaty water rights and fishery.⁶⁹ In this instance,

1978), aff'd, 647 F.2d 42 (9th Cir. 1980), cert. denied, 454 U.S. 1092 (1981); enforced, Colville Confederated Tribes v. Walton, 752 F.2d 397 (9th Cir. 1985); United States v. Anderson, 736 F.2d 1358 (9th Cir. 1984); Kittitas Reclamation District v. Sunnyside Valley Irrigation District, 763 F.2d 1032 (1985); Muckleshoot Indian Tribe v. Trans-Canada Enterprises, Ltd., 713 F.2d 455 (9th Cir. 1983), cert. denied, 465 U.S. 1049 (1984); Joint Board of Control of the Flathead, Mission and Jocko Irrigation District v. United States, 832 F.2d 1127 (9th Cir 1987); Washington Dept. of Ecology v. Yakima Res. Irr. Dist., 850 P.2d 1306 (Wash. 1993).

⁶⁷See e.g., United States v. Adair, supra note 68.

⁶⁸See Joint Board of Control of the Flathead, Mission and Jocko Irrigation District v. United States, supra note 68.

⁶⁹The Umatilla Basin Project has been hailed as a model for resolving the conflict created by the federal government's past failure to protect treaty-reserved instream water rights. The project was authorized by Congress in 1988. Pub. L. No. 100-557.

the agencies' assumption of responsibility for fixing the problems of the past has brought benefits to Indians and non-Indians alike. Such leadership in the entire Columbia-Snake system would go a long way towards protecting non-Indian interests as our Treaty Rights are restored to us.

The SOR DEIS must specifically address issues related to water, both as an Indian Trust Asset and as the basis of an impliedly-reserved, legally recognized right.

C. CULTURAL RESOURCES

The SOR DEIS Main Report and Cultural Resources Appendix D portray Cultural Resources as best protected by stable storage alternatives, and most affected by drawdown alternatives. Such a broad statement may not be an accurate assumption based upon the results of the actual data and analysis presented in Appendix D. Basically, with the smoke-and-mirror barrage of graphs and tables, there is not enough solid substantial data to make such a general statement. Simply stated, the information provided is insufficient to fully determine the effects to Cultural Resources from any of the proposed SOS alternatives.

Originally the SOR agencies indicated that navigation, irrigation, and hydroelectric concerns were the driving factor in decisions, and that Cultural Resource management issues would be entirely reactionary to the selected alternative. Therefore, it is shocking to the informed reader how Cultural Resources and other appendices are presented suggesting that stable storage alternatives are in the best interest of the resources within the Columbia River Basin. Current operations and stable storage alternatives in many ways just continue to hide the problem of Cultural Resource management. All of the SOS alternatives are really nothing but an elaborate prescription in which we will not realize the actual effects for several years to come.

Cultural Resource issues are presented in Appendix D near the beginning of a lengthy document very noticeably toward the front of the package. Cultural Resources are presented in a fashion that makes the reader believe it is a driving concern and force in the process. Although there are extensive tables and graphs, the information presented in the Main Report and Appendix D fail to provide substantial data to support the view that stable storage alternatives are best suited for Cultural Resources management.

The graphs and discussions of drawdown alternatives are presented such that the drawdown alternatives provide the worst-case scenarios regarding the protection of Cultural Resources. Information from the same analysis could be presented to suggest otherwise, further illustrating the subjective character of the

analysis. The analysis actually suggests that there are weaknesses and strengths of both stable storage and drawdown alternatives, however, the analysis does little to discuss the full spectrum. The authors of the document simply assume that stable storage is the best selection.

The analysis is based entirely upon models and theories using two different types of reservoirs (flow and storage) as examples. The results of this analysis will be used to make long-term management decisions about all 14 federal projects. Again we will not know the impacts of selected operating strategies for several years. The models are essentially a qualitative analysis based upon geomorphological factors and a quantitative analysis based upon time and exposure factors. While these models are useful, they are far from being tested to the point that a broad statement about stable storage alternatives can be presented in the SOR DEIS.

After reviewing the analysis in the Main Report and the Cultural Resources appendix it is apparent that there is insufficient baseline data to make such broad generalizations about the management of Cultural Resources. There are several variables described in the Main Report and Appendix D which illustrate the complexity of Cultural Resource management issues. The Columbia River Plateau is one of the most significant archaeological regions in the country, perhaps the world. Cultural Resources are irreplaceable, non-renewable resources that are essentially priceless; such considerations are not incorporated in any meaningful way.

The Cultural Resource analysis points out that most of the data was gathered prior to the inundation of the sites and properties. The data available from these surveys is often incomplete by today's standards and frequently outdated. In many cases these sites have not been revisited since they were originally recorded. The baseline data is very incomplete and inaccurate; as such, there is a desperate need to re-record these sites using new technologies such as site forms, cameras, video recorders and oral histories.

Appendix D also points out that many sites have been eroded and deflated leaving them with very little integrity and/or scientific significance. Other sights may have eroded away in their entirety; others have been buried by geomorphological processes. There is however, no way of estimating the degree that sites have been impacted and degraded. It may be necessary to actually conduct drawdowns to establish a credible baseline of data, in order to make the most accurate determinations.

Many previously unknown and unrecorded sites are currently being impacted and will be discovered during the implementation

of any of the selected alternatives. This concern is based in part upon observations of federal agency failure in the past to develop and implement adequate Cultural Resource inventory strategies as required under the National Historic Preservation Act (NHPA). Agencies have typically allocated resources (exclusively) to NHPA Section 106 **undertakings** and have not maintained programs that assess the effects of their actions on properties under their jurisdiction and control.

Modeling cannot assess the full range of qualities and values of Cultural Resource properties. Determining the value and integrity of Cultural Resource properties cannot be determined by a model. Scientific value/integrity and tribal/traditional significance of Cultural Resource properties also cannot be generated by a computer or models. The evaluation of Cultural Resources for significance is typically accomplished as part of the NHPA Section 106 process.⁷⁰ The SOR agencies must first identify the properties and then assess values such as integrity, and this cannot be completed without "ground truthing" or field testing the models.

The geomorphological model indicates that regardless of the SOS selected, there is an adverse effect on Cultural Resource properties. Depending upon the SOS alternative selected, 86-100% of known cultural properties are impacted. The data in the geomorphological model identifies the kinds of impacts and indicates that each of these kinds of impacts occurs on each alternative to one degree or another.

In the John Day pool alone there are over 200 known and previously recorded properties representing all ranges of site types with 13,000 years of proven occupation. The implementation of any of the SOS alternatives will result in future discoveries of new cultural properties. The implementation of any of the alternatives is an **undertaking**.

It is suggested that the drawdown scenarios may lead to increased access to cultural properties encouraging traffic, looting and vandalism, as well as making the site susceptible to wind erosion. The analysis implies that the adverse effects increase proportionally to the increase in exposure during drawdowns. Further, the analysis suggests that Cultural Resource properties will suffer increasing natural erosion due to greater exposure.

The reality is, the very same natural erosion factors will be present in all SOS alternatives and occur daily along pools where reservoir levels are stable. Wave erosion characteristics

⁷⁰See 36 C.F.R. § 800.

have actually buried Cultural Resource properties, preventing them from being exposed during drawdown. The analysis fails to recognize that vandalism and wind erosion occur on stable storage reservoirs as well as on drawn-down pools, and that the shorelines in stable storage pools fluctuate as much as six feet a day, causing impacts to cultural properties including vandalism and erosion.

The Cultural Resources analysis was conducted to simulate a 50-year time span; examination of wave erosion potential and site exposure suggests that stable storage may actually have the most dramatic effects on Cultural Resource properties. The results of the quantitative analysis as stated in the SOR DEIS indicate that

When reservoirs are high for longer periods of time such as under SOS 4 options, site exposure decreases, but shoreline erosion increases. Conversely, alternatives that involve large drawdowns such as the SOS 5 options, cause more site exposure but less shoreline erosion than other alternatives.⁷¹

This may suggest that, for the scientific integrity of the Cultural Resource properties, drawdowns may actually be the optimum alternative for the protection of cultural resources. This is because drawdowns provide the opportunity for site recordation and site stabilization efforts, and may actually minimize shoreline erosion on some sites. The Archaeological Resources Protection Act (ARPA) requires the SOR agencies to protect cultural properties during daily operations and during the implementation of the selected SOS. There has been very little done by these agencies in the way of public education as a measure to protect such resources.

The agencies failure to fully support programs to address ongoing historic and Cultural Resource preservation has left the agencies in a situation where they need to make recommendations about resources without the necessary baseline data to sufficiently portray the effects of the SOS alternatives. This past failure to properly invest in the management of Cultural Resources during facility operations is tantamount to outright neglect and malfeasance. There is no indication from the agencies that they will begin to implement their historic and cultural preservation responsibilities.

The Cultural Resource values portrayed in the SOR DEIS emphasize scientific/archaeological values. This emphasis does not reflect the importance of tribal members continuing to use those resources to enhance and restore aspects of living

⁷¹SOR DEIS, Main Report 4-119.

cultures. Drawdowns, for instance, may provide access to areas that are currently inundated and may allow tribal members to utilize these areas for traditional, cultural, religious or other uses even during brief drawdowns.

Almost nothing is discussed about the Columbia River as a traditional Cultural Property as described in Bulletin 38 prepared by the National Park Service. This deference to science is troubling to the CTUIR given the abundant comment we provided on the significance of the Columbia River to our way of life. The Cultural Resource analysis justifies the need for future Historic Preservation Plans and Programmatic Agreements (PAs). These plans and agreements will ostensibly address all concerns not addressed in detail in the study and bring the SOR agencies into compliance with historic preservation laws.

In summary, the Cultural Resource information in the SOR DEIS is misrepresented, implying that stable storage alternatives represent the best-case scenario for Cultural Resource management. In actuality there is not enough quality data to make this determination. Further, all the SOS alternatives will have an adverse effect on Cultural Resources and the agencies must **act** accordingly. The Cultural Resource modeling is an academic exercise and is useful to a degree, but these models need to be adequately tested before such broad statements can be made. The SOR agencies must begin to identify how Cultural Resource management will be funded, and also demonstrate to the CTUIR and the public that such funding will be used to implement historic and Cultural Resources planning.

IV. INDIAN POLICIES

Indian Nations are like no other legal, political or cultural entities in the United States. Their singular nature and character are derived from many sources, and exhibit many unique features shared by no other groups, organizations or governments.⁷² Indian Nations are sovereigns, their status founded in part on international law and its precept that only sovereign nations may negotiate and enter into treaties:

A basic principle of international law is that states possess sovereignty, which includes both the power to govern citizens and territory and the capacity to enter

⁷²See, e.g., Cherokee Nation v. Georgia, 30 U.S. (5 Pet.) 1 (1831) ("The condition of the Indians in relation to the United States is perhaps unlike that of any other two people in existence. . . . [T]he relation of the Indians to the United States is marked by peculiar and cardinal distinctions which exist no where else.").

into relations with other states.⁷³

This basic principle was recognized in the U.S. Constitution, which gave Congress the authority "[t]o regulate commerce with foreign Nations, and among the several States, and with the Indian Tribes."⁷⁴ The U.S. Constitution went on to approve "all treaties made"⁷⁵ (most of which were with Indian Tribes)⁷⁶ and declared all existing and future treaties to be "the supreme Law of the Land."⁷⁷

The U.S. Supreme Court has long recognized Indian sovereignty:

The Indian nations had always been considered as distinct, independent political communities, retaining their original natural rights, as the undisputed possessors of the soil, from time immemorial The very term "nation," so generally applied to them, means "a people distinct from others." The constitution, by declaring treaties already made, as well as those to be made, to be the supreme law of the land, has adopted and sanctioned the previous treaties with the Indian nations, and consequently admits their rank among those powers who are capable of making treaties. The words "treaty" and "nation" are words of our own language, selected in our diplomatic and legislative proceedings, by ourselves, having each a definite and well understood meaning. We have applied them to Indians, as we have applied them to the other nations of the earth. They are applied to all in the same sense.⁷⁸

⁷³Suagee, Self-Determination for Indigenous Peoples at the Dawn of the Solar Age, U. Mich. J.L. Ref. 671, 682 (1992) (citing Brownlie, Principles of Public International Law 287 (3d ed. 1979)).

⁷⁴U.S. Const. art. I, § 8, cl. 3.

⁷⁵U.S. Const. art. VI.

⁷⁶Getches and Wilkinson, Cases and Materials on Federal Indian Law 36-37 (2nd ed. 1986).

⁷⁷U.S. Const. art. VI.

⁷⁸Worcester v. Georgia, 31 U.S. (6 Pet.) 515 (1832) (holding that Indian Tribes, as sovereigns, are not subject to state law within reservation boundaries without express Congressional consent).

Nevertheless, Indian Nations are not entirely synonymous with foreign nations, but constitute "distinct political societ[ies]" that "may, more correctly, perhaps, be denominated domestic . . . nations" whose "relation to the United States resembles that of a ward to his guardian."⁷⁹ While Indian Tribes do not enjoy some of the benefits that come with the status of a foreign nation,⁸⁰ their relationship to the United States is one that confers upon them the rights of a beneficiary to a trustee, in addition to those specific rights guaranteed by treaty.⁸¹

Many federal departments and agencies have reinforced and elaborated on the basic Indian law principles of sovereignty, the treaty-making power, Trust Responsibility and protection of Indian Trust Assets by developing and adopting formal policies. These explicitly acknowledge their Trust Responsibility to Indian Tribes and their duty to consider and protect Indian Trust Assets in the course of agency decisionmaking. Furthermore, the United States has committed to dealing with Indian Tribes, tribal officials and representatives in the context of **government-to-government relationships**.

The importance of these policies cannot be understated. Failure to comply with administrative policies intended to protect Indian interests, including policies mandating consultation with Indians, has been held to be a breach of the trust responsibility:

[W]here the Bureau [of Indian Affairs] has established

⁷⁹Cherokee Nation v. Georgia, 30 U.S. (5 Pet.) 1 (1831).

⁸⁰See, e.g. Deloria, "The Era of Self-Determination: An Overview," in Indian Self-Rule: First-Hand Accounts of Indian-White Relations from Roosevelt to Reagan 191-94, 206-07 (K. Philip ed. 1985):

Indian governments are thus subjected to a different status than other governments. There are not constant reviews of the demographic status of all the little countries in Europe that are frequently compared in size and population with Indian tribes. No one asks whether Monaco and Liechtenstein are sufficiently culturally distinct from neighboring countries to justify their continued existence. Unlike that of Indian tribes, their political status is taken for granted.

⁸¹See, e.g., Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942) (United States is charged "with moral obligations of the highest responsibility and trust").

a policy requiring prior consultation with a tribe, and has thereby created a justified expectation on the part of the Indian people that they will be given a meaningful opportunity to express their views before Bureau policy is made, that opportunity must be afforded. Failure of the Bureau to make any real attempt to comply with its own policy of consultation not only violates those general principles which govern administrative decisionmaking, . . . but also violates "the distinctive obligation of trust incumbent upon the Government in its dealings with these dependent and sometimes exploited people." ⁸²

A. PRESIDENT'S CLINTON'S APRIL 29, 1994, MEMORANDUM

On April 29, 1994, at the historic meeting with tribal leaders in Washington, D.C., President Clinton reiterated the federal government's commitment to government-to-government relations with sovereign tribal governments. On this date he also issued a Memorandum, later published in the Federal Register, formalizing this commitment. ⁸³

In addition, at the "Native American Listening Conference" the following week, Attorney General Janet Reno stated that "I want to underscore the commitment of this administration to American Indian sovereignty and to the government-to-government relationship between all of our people." ⁸⁴ Secretary of the Interior Bruce Babbitt also stated that "[w]e need to get the problems out on the table and start down the pathway of a new day of sovereignty and government-to-government relations." ⁸⁵

B. DEPARTMENT OF ENERGY'S INDIAN POLICY

The Indian Policy established by the Department of Energy (DOE) states:

The Department recognizes and commits to a government-to-government relationship with American Indian Tribal governments....The Department recognizes that some

⁸²Oglala Sioux Tribe of Indians v. Andrus, 603 F.2d 707, 721 (8th Cir. 1979) (citations omitted).

⁸³Memorandum of April 29, 1994, re: "Government-to-Government Relations with Native American Tribal Governments," 59 Fed. Reg. 22,951-52 (May 4, 1994).

⁸⁴Indian Country Today, May 11, 1994, at A1-2.

⁸⁵Id. at A2.

Tribes have treaty-protected interests in resources outside reservation boundaries...In keeping with the trust relationship, the DOE will consult with Tribal governments regarding the impact of DOE activities on the energy, environmental and natural resources of American Indian Tribes when carrying out its responsibilities.⁸⁶

C. BUREAU OF RECLAMATION'S INDIAN TRUST ASSETS POLICY

The Bureau of Reclamation (BOR) established a similar Indian policy:

Indian trust assets are legal interests in property held in trust by the United States for Indian tribes or individuals. Examples of things that may be trust assets are lands, minerals, hunting and fishing rights, and water rights. The United States, with the Secretary of the Interior as the trustee, holds many assets in trust for Indian tribes. . . . The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian tribes . . . by treaties, statutes, and executive orders, which rights are sometimes further interpreted through court decisions and regulations. . . . Reclamation will carry out its activities in a manner which protects trust assets and avoids adverse impacts when possible. When Reclamation cannot avoid adverse impacts, it will provide appropriate mitigation or compensation.⁸⁷

To comply with this policy, BOR must identify and list all Indian Trust Assets and resources in the "Affected Environment," analyze the SOS alternatives and other proposed actions in terms of their impacts to them, and fully consult with the CTUIR on a

⁸⁶U.S. Department of Energy, Order No. 1230.2 (Apr. 8, 1992).

⁸⁷Bureau of Reclamation, Indian Trust Asset Policy (July 27, 1993). The BOR policy is contrary to existing, well-established case law. The BOR does **not** have the discretion to abrogate treaty rights as the policy implies--to provide appropriate mitigation or compensation when adverse impacts to treaty-protected resources occur as a result of its decisions or actions. Only Congress may abrogate treaty rights and must do so explicitly, according to current law. See, e.g. Menominee Tribes v. United States, 391 U.S. 404, 413 (1968); Confederated Tribes of the Umatilla Indian Reservation v. Alexander, 440 F. Supp. 553 (D. Or. 1977).

government-to-government basis in doing so.⁸⁸ The SOR DEIS has not fulfilled these obligations.

D. DEPARTMENT OF THE INTERIOR'S ORDER NO. 3175

The Department of the Interior (DOI) has declared that

[E]ach bureau and office [in the DOI] will operate within a government-to-government relationship with federally recognized Indian tribes Bureaus and offices are required to consult with the recognized tribal government with jurisdiction over the trust property that the proposal may affect. . . . All consultations with tribal governments are to be open and candid so that all interested parties may evaluate for themselves the potential impact of the proposal on trust resources.⁸⁹

E. OTHER INDIAN POLICIES

Acknowledgement of government-to-government relations between the United States and Indian Tribes, the existence of the Trust Responsibility and the duty to consider and protect Indian Trust Assets is not a new development.

1. PRESIDENT BUSH'S INDIAN POLICY

President George Bush issued an Indian Policy on June 14, 1991, "which reaffirmed the government-to-government relationship

⁸⁸See D. Beard, Commissioner, Bureau of Reclamation, National Environmental Policy Act (NEPA) Handbook Procedures to Implement Indian Trust Asset Policy (Nov. 29, 1993).

⁸⁹B. Babbitt, Secretary of the Interior, Department of the Interior, Order No. 3175 Departmental Responsibilities for Indian Trust Resources (Nov. 8, 1993). See also Letter from William F. Shake, Assistant Regional Director, U.S. Fish and Wildlife Service, to Don Sampson, Chairman, Board of Trustees, Confederated Tribes of the Umatilla Indian Reservation (June 24, 1994):

The U.S. Fish and Wildlife Service [an agency within DOI] considers the Tribes and states as co-managers of fishery resources. This makes fish production planning and the Section 7 BA [Biological Assessment] process a shared responsibility. It is imperative that we all commit to open communication and good faith negotiations in developing the BA, production plans, Section 10 permit applications, and in consulting with the National Marine Fisheries Service.

between Indian tribes and the Federal Government."⁹⁰ The Bush Policy sought to "move forward toward a permanent relationship of understanding and trust," asserted its proponents, and further stated that

[The government-to-government] relationship is the cornerstone of the Bush-Quayle Administration's policy of fostering tribal self-government and self-determination. This government-to-government relationship is the result of sovereign and independent tribal governments being incorporated into the fabric of our Nation, of Indian tribes becoming what our courts have come to refer to as quasi-sovereign domestic dependent nations.⁹¹

2. PRESIDENT REAGAN'S INDIAN POLICY

On January 24, 1983, President Reagan published an Indian Policy "supporting the primary role of Tribal Governments in matters affecting American Indian reservations."⁹² The Reagan Policy "stressed two related themes: (1) that the Federal Government will pursue the principle of Indian 'self-government' and (2) that it will work directly with Tribal Governments on a 'government-to-government' basis."⁹³

3. DEPARTMENT OF AGRICULTURE'S INDIAN POLICY

The U.S. Department of Agriculture (USDA) has a policy encompassing "interactions with Indians, Alaska Natives, tribal governments, and Alaska Native Corporations . . ."⁹⁴ "USDA

⁹⁰United States Department of the Interior, Bureau of Indian Affairs, American Indians Today: Answers to Your Questions 5 (3rd ed. 1991).

⁹¹Id.

⁹²Environmental Protection Agency, EPA Policy for the Administration of Environmental Programs on Indian Reservations 1 (Nov. 8, 1984).

⁹³Id. See also United States Department of the Interior Bureau of Indian Affairs American Indians Today: Answers to Your Questions 5 (3rd ed. 1991) ("On January 24, 1983, the Reagan-Bush Administration issued a statement on Indian policy recognizing and reaffirming a government-to-government relationship between Indian tribes and the Federal Government.").

⁹⁴USDA, Departmental Regulation Number 1020-6, Policies on American Indians and Alaska Natives 1 (Oct. 16, 1992).

policies are based on and are coextensive with Federal treaties and law."⁹⁵ As "background" to its policy, USDA notes that

The United States Government has a unique, legal and political relationship with Indians and their tribal governments as defined through treaties, statutes, court decisions, and the United States Constitution. The United States Government has obligations under treaties and statutes to protect and maintain the lands, resources, and traditional use areas of Indians.⁹⁶

USDA's policy includes the following:

Consistent with applicable law, USDA officials will consult with tribal governments . . . regarding the influence of USDA activities on water, land, forest, air, and other natural resources of tribal governments Consistent with applicable law, USDA officials will solicit input from tribal governments . . . on USDA policies and issues affecting tribes Consistent with applicable law or regulation, USDA managers will facilitate tribal . . . participation in USDA program planning and activities.⁹⁷

4. FOREST SERVICE'S INDIAN POLICY

The U.S. Forest Service (USFS) has expressed its commitment to (1) maintain governmental relationships with federally recognized tribal governments ("build and enhance a mutual partnership"), (2) implement programs and activities honoring Indian treaty rights and fulfill legally mandated trust responsibilities to the extent they are determined applicable to National Forest System lands, (3) administer programs and activities to address and be sensitive to traditional native religious beliefs and practices, and (4) provide research, technology transfer and technical assistance to Indian governments.⁹⁸

5. ENVIRONMENTAL PROTECTION AGENCY'S INDIAN POLICY

⁹⁵Id.

⁹⁶Id. at 2.

⁹⁷Id. at 2-3.

⁹⁸D. Robertson, Chief, U.S. Forest Service, Policy Statement (Feb., 1990).

The Environmental Protection Agency (EPA) adopted a formal Indian Policy in 1984, becoming the first federal agency to do so.⁹⁹ Carol Browner, current EPA Administrator, has stated that

[T]he core principle of the Policy, a commitment to working with Federally recognized tribes on a government-to-government basis to enhance environmental protection, has been reaffirmed by President Clinton and remains the cornerstone of EPA's Indian program. Accordingly, therefore, I formally reaffirm the EPA Indian Policy.¹⁰⁰

The EPA Indian Policy says that

EPA recognizes that a trust responsibility derives from the historical relationship between the Federal Government and Indian Tribes as expressed in certain treaties and Federal Indian Law.¹⁰¹

As one of its guiding principles, the EPA Indian Policy also asserts that

The Agency stands ready to work directly with Indian Tribal Governments on a one-to-one basis (the "government-to-government" relationship), rather than as subdivisions of other governments. EPA recognizes Tribal Governments as sovereign entities with primary authority and responsibility for the reservation populace. Accordingly, EPA will work directly with Tribal Governments as the independent authority for reservation affairs, and not as political subdivisions of States or other governmental units.¹⁰²

V. OTHER FEDERAL LAWS AND STATUTES

A. NORTHWEST POWER ACT

The Pacific Northwest Electric Power Planning and

⁹⁹Memorandum from Carol M. Browner, EPA Administrator, to Tribal Leaders (Mar. 14, 1994).

¹⁰⁰Id.

¹⁰¹Environmental Protection Agency, EPA Policy for the Administration of Environmental Programs on Indian Reservations 3 (Nov. 8, 1984).

¹⁰²Id.

Conservation Act (Northwest Power Act)¹⁰³ requires as one of the six criteria for evaluating its Fish and Wildlife Program measures that they "be consistent with the legal rights of Indian tribes."¹⁰⁴

B. NATIONAL ENVIRONMENTAL POLICY ACT¹⁰⁵

C. ENDANGERED SPECIES ACT¹⁰⁶

VI. INTERNATIONAL LAW

Various international laws, covenants and agreements may be implicated by tribal treaty rights and their potential infringement. For example, a memorandum from the U.S. Department of the Interior's Solicitor's Office notes that

International conventions seek to ensure that tribes manage treaty wildlife resources. The United States is a signatory to many international conventions and agreements that promote tribal sovereignty over tribal natural resources. One of the most recent of these conventions, the International Covenant on Civil and Political Rights, came into force in the United States on September 8, 1994, following ratification on June 8, 1994. The following language is instructive:

All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. **In no case may a people be deprived of its own means of subsistence.** [emphasis added]

Part I, Article 1, para. 2.

Nothing in the present Covenant shall be interpreted as impairing the inherent right

¹⁰³Pacific Northwest Electric Power Planning and Conservation Act of 1980 ("Northwest Power Planning Act" or "Northwest Power Act"), Pub. L. No. 96-501, 94 Stat. 2697 (1980) (codified at 16 U.S.C. Sec. 839-839h).

¹⁰⁴16 U.S.C. § 839(h)(6)(D).

¹⁰⁵43 U.S.C. Sec. 4321-4347.

¹⁰⁶16 U.S.C. Sec. 1531-1543.

of all peoples to enjoy and utilize fully and freely their natural wealth and resources.

Part V, Article 47.¹⁰⁷

The memorandum further states that "[a]cknowledgment that treaty rights are to receive the highest protection possible leads to the conclusion that non-treaty impacts on treaty resources must be minimized to permit the fulfillment of treaty promises."¹⁰⁸

¹⁰⁷Memorandum from Michael J. Anderson, Associate Solicitor, Division of Indian Affairs, Office of the Solicitor, U.S. Department of the Interior, to Solicitor and Assistant Secretary for Indian Affairs, U.S. Department of the Interior, re: "Indian Treaty Hunting and Fishing Rights and the Endangered Species Act," at 9 (Nov. 8, 1994).

¹⁰⁸Id. at 7.

**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**

Developed for:

The Confederated Tribes of the Umatilla Indian Reservation

Developed by:

Meyer Resources, Inc.

September, 1995

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In the Treaty of 1855, our ancestors specifically protected our economic base. We never gave up our right to fish, to hunt or to gather food and medicinal plants in the lands which we ceded. Instead we explicitly retained or reserved these rights and these resources in the Treaty. Despite the Treaty, these resources have been devastated, and as a result, our economy has been devastated as well.

Right now our tribal resources overall are in a horrible condition. For over one hundred years, they were mismanaged by the federal government, which favored extraction and exhaustion over sustainability. This failure of the federal government to honor its Trust Responsibility to this Tribe and to protect our resources has left our economic base in shambles. It is hard to have a thriving economy when the basis of your economy is listed as an Endangered Species.

(A. Minthorn, CTUIR, Presentation
to the President's Council on
Sustainable Development, 1994)

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 G. Sampson, Chairman, CTUIR
Board of Trustees. Letter to BPA,
CORPs, and USBR, December 15, 1994)

Executive Summary

This report compares the impacts on Trust Resources of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) from three alternative operating systems for Columbia and Snake River(s) Reservoirs.

Trust Resources are resources in which Indians hold and retain 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 a way of life.

Impacts from four alternative System Operating Strategies (SOS) are assessed here. These alternatives are:

No Action: Corresponding to system operations, pool elevations and flow releases as in 1991.

Biological Option: Involving 4 million acre feet of flow augmentation for fisheries from Snake River system reservoirs, operation of lower Snake reservoirs at minimum operating pool, and operation of John Day reservoir at minimum irrigation pool.

DFOP2 Option: System operation draws down lower four Snake River reservoirs to natural river elevation, and draws John Day reservoir down to spillway crest, to augment fish flows.

CTUIR Option: Calls for:

- * drawdown of lower four Snake reservoirs to natural river elevations by Year 2000.
- * drawdown of John Day reservoir to natural river elevations by Year 2005.
- * continued spill to meet 80% fish passage efficiency April 15 to June 15, and at least 90% efficiency, June 15 through September 15.
- * By Year 2000, development of a New Pacific Northwest Energy Plan, reducing the energy production burden for the Columbia and Snake Rivers, and facilitating restoration of Treaty-protected fishes to levels harvestable at pre-Treaty rates.

The Tribes of the CTUIR are presently impoverished. Incomes are less than half of those of Oregon residents generally. Unemployment rates are two and one half times

higher. The percentage of families living in poverty is three times higher than for Oregonians in general - reaching 37 percent. Levels of health are deficient, in some cases, alarmingly poor, relative to non-Tribal residents.

Cultural wellbeing is similarly distressed. Only about ten percent of CTUIR members now speak their original languages. The vast majority of places where CTUIR ancestors camped, fished, hunted, buried their dead and conducted spiritual ceremonies are inundated by reservoirs, ceiled off in ceded areas - or otherwise unavailable or destroyed. And so, CTUIR youth have little area or opportunity to "learn and practice" their culture - and to view it as meaningful in their present-day lives.

Salmon have played the key role for the people of the CTUIR since earliest remembered time. Every CTUIR leader and elder who speaks reminds us that salmon is at the core of their material and cultural wellbeing. They remind us it is not possible to destroy the salmon of the Columbia River without destroying the people of the Confederated Tribes of the Umatilla Indian Reservation.

Yet salmon are presently on the brink of extinction in the Columbia/Snake system. The people of the CTUIR are also materially and culturally imperiled - by the destruction of their Treaty salmon; by the inundation of traditional areas critical to fishing, spiritual practices and ceremonies; and by being cut off from Treaty resources such as game, plants, roots and berries on their ceded lands.

The decline in CTUIR fish, land and other natural wealth; the manner in which these were resources were taken from them and destroyed; and the details of their present circumstance - are presented in this report.

Of the four SOS alternatives we assessed, and based on the impact information available to us, only the CTUIR Option offers any hope of substantial recovery for the Trust Resources of the Confederated Tribes of the Umatilla Indian Reservation. A summary of our major conclusions follows.

1. Material Impacts on CTUIR Trust Spring Chinook

Under the No Action option, we simply assume that referent fish stocks will continue to yield negligible or zero harvests and are trending toward extinction.

The Columbia River Inter-Tribal Fish Commission has provided preliminary harvest estimates for spring chinook for the other three alternatives (Table S-1). The range of result for the Biological Opinion option depends on whether one assumes that escapement of mid-Columbia stocks would double under this option or not.

Table S-1

Projected Tribal Harvest of Upriver Spring Chinook Under Alternative Columbia/Snake Dam Operating Strategies

<u>System Option</u>	<u>Snake Harvest</u>			<u>Columbia</u>	<u>Total - Snake</u>
	<u>Zone 6</u>	<u>Tributary</u>	<u>Total</u>	<u>Zone 6</u>	<u>and Columbia</u>
	-----thousands of spring chinook-----				
No Action	neg.	neg.	neg.	neg.	neg.
Biological Opinion	12.2	2.1	14.3	8.2 to 16.3	22.5 to 30.6
DFOP2	57.2	12.0	69.2	25.7	94.9
CTUIR	57.7	12.2	69.9	25.8	95.7

These harvest estimates are for all mid-Columbia and lower Snake tribes - namely the Umatilla, Warm Springs, Yakima and Nez Perce.

We estimate the general magnitude of impacts on tribal members from alternative treatment of spring chinooks in Table S-2.

Table S-2

Estimated Annual Per Capita Impact of Alternative SOS Treatment of Spring Chinook Salmon of the Mid-Columbia/Snake System

<u>System Option</u>	<u>Total Harvest</u> '000 lbs.	<u>Added Benefit Per Tribal Person Harvest</u> -lbs-	<u>Harvest Value</u> -dollars-
No Action	neg.	neg.	neg.
Biological Opinion	478.0	39.8	139.30
DFOP2	1,708.2	142.4	498.40
CTUIR	1,722.6	143.6	502.60

It can be observed that either the CTUIR or the DFOP2 options have the capacity to significantly increase numeric and monetary returns from Columbia/Snake River spring salmon to CTUIR peoples. To the extent that a stable salmon supply allows the CTUIR to process as well as catch their fish, revenue associated with recovery of spring salmon could approach \$1,000 per capita under either the DFOP2 or CTUIR options.

Even under the most favorable recovery scenario, restoration of spring salmon alone will not bridge the substantial gap in material wellbeing which exists between CTUIR members and other non-Indians living in Oregon.

2. Impacts on Other Salmon Stocks

Similar estimates of the potential impact from SOS options for other Columbia/Snake anadromous stocks have not yet been developed. Overall CTUIR salmon recovery goals have been recently published (Table S-3).

Table S-3

Anadromous Fish Population Goals for CTUIR Ceded Area Sub-basins

<u>CTUIR Sub-basin</u>	<u>Species</u>	1989-93 Average	
		<u>Population</u>	<u>CTUIR Goal*</u>
		--thousands of fish--	
Umatilla	Spring Chinook	1.1	11.0
	Fall Chinook	0.6	21.0
	Coho	2.0	6.0
	Steelhead	2.0	9.7
Walla Walla	Spring Chinook	0	5.0
	Steelhead	2.0	11.0
Tucannon	Spring Chinook	0.6	3.0
	Fall Chinook	neg.	2.0
	Steelhead	0.5	2.5
John Day	Spring Chinook	2.1	7.0
	Steelhead	20.0	45.0
Grande Ronde	Spring Chinook	1.6	16.4
	Fall Chinook	neg.	10.0
	Coho	0	3.5
	Sockeye	0	2.5
	Steelhead	13.0	27.5
Imnaha	Spring Chinook	0.9	4.0
	Fall Chinook	neg.	2.0
	Steelhead	5.0	5.0

*CTUIR also intends to restore other anadromous and resident fish stocks not listed here.

Recognizing that these estimates are incomplete, we nevertheless note that spring chinook recovery accounts for about 78 percent of recovery by all salmon species - and for about 27 percent of recovery if steelhead are also considered under the CTUIR goals.

Such estimates are very rough, and require replacement with actual harvest modelling of the type completed for spring chinook at the earliest possible time. In general terms, however, they suggest, as a rough first cut estimate, that all-species dollar benefits from the CTUIR and DFOP2 options could approach \$1,500.00 per capita at the fishing level, and \$3,000.00 per capita if fish were also processed by the Tribes.

These all-species dollar returns would substantially narrow income and poverty gaps between CTUIR members and Oregon residents, but would not eliminate them.

3. Impacts on CTUIR Trust Lands

Creation of reservoirs at Bonneville, John Day, The Dalles, and McNary inundated more than 70,000 acres of productive canyon bottom land. Further bottom land was inundated by construction of the four lower Snake River dams - Ice Harbor, Lower Monumental, Little Goose and Lower Granite. This loss of productive land will continue under the No Action and Biological Opinion options. Loss of 27,000+ inundated acres under the John Day Pool will also continue under the DFOP2 Option. It is this continued loss of trust bottom lands that provides the main impact difference between the DFOP2 system option and the CTUIR option.

The range of tradeoff for wildlife associated with SOS action options is identified in Table S-4. Essential tradeoffs are between emergent riparian lands and alternative land uses along present reservoir rims - and between inundation and land use along original river elevations. Data is available for John Day only.

Table S-4

Land Use Tradeoffs Under Alternative SOS Options - John Day Pool

<u>System Option</u>	<u>Land Along John Day Reservoir Rim</u>	<u>Land Along Original River Bottom</u>
No Action	Maintains approx. 25,000 acres of riparian habitat.	Inundates 27,000+ acres of bottom land under John Day pool. Mostly riparian habitat.
Biological Option	Loses 2,800 acres of riparian wetland. That land available for other uses.	Inundates 27,000+ acres.
DFOP2	Loses 2,800 acres of riparian habitat. Land available for other use.	Inundates 27,000+ acres under John Day. Recovers bottomland along original river elevations at four lower Snake River dams.
CTUIR	Loses 2,800 acres of riparian habitat. Land available for other use.	Recovers 27,000+ acres of original river-side at John Day. Recovers original bottom land at four lower Snake dams.

4. Impact on CTUIR Trust Cultural Resources

We have identified that all Tribal trust resources have important cultural linkages for the CTUIR. In this analysis, the alternative options for Columbia/Snake systems management have particularly differing effects on CTUIR culture through their effect on fish resources and through their effects on lands of particular cultural significance. Effects on fish stocks have been outlined previously.

Almost 1,500 known sites of particular cultural significance to the CTUIR have been inundated by Bonneville, The Dalles, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose and Lower Granite reservoirs (Table S-5). These sites represent only a portion of the number that potentially exist.

Table S-5

Known Sites of Particular Cultural Importance to the CTUIR
- Inundated by Selected Columbia/Snake River Reservoirs -

<u>Reservoirs</u>	<u>Number of Cultural Sites</u>
Bonneville	21
The Dalles	99
John Day	509
McNary	168
Ice Harbor	73
Lower Monumental	77
Little Goose	199
Lower Granite	<u>314</u>
Total Known Sites	1,460

Source: CTUIR Cultural Resources staff.

Only with sufficient cultural resources, sites and opportunities can CTUIR members "grow their culture" - fishing where their ancestors did - fishing for the salmon, their historic survival resource - standing where their ancestors stood, in their villages and campsites, at their fishing places, in their burial and ceremonial places - communicating in their own language, about the knowledge learned from the past, and about its application to the contemporary circumstances of their life - and understanding that all these actions give them self-esteem, power and a healthy capability to deal with the challenges of contemporary society as CTUIR Indians.

Today, the people of the CTUIR are threatened, if not endangered. Their survival resource - the salmon- is threatened and endangered. Most of the key sites where they lived, fished and buried their ancestors are drowned. Access to other ceded lands, and to the diminished trust resources on them is severely impeded. And, as the opportunities to "practice their culture" diminish - own language capability, a key indicator of cultural wellbeing, has declined - until only 10 percent of CTUIR members can presently speak their own language.

Taking these circumstances together, the general effect of each SOS alternative on CTUIR cultural wellbeing is identified in Table S-6.

Table S-6

Impact on CTUIR Cultural Trust Resources and Wellbeing
- Alternative SOS Options on the Columbia and Snake Rivers -

<u>System Option</u>	<u>Impact on Cultural Wellbeing</u>
No Action	<ul style="list-style-type: none"> *Continues to destroy fishing opportunity. *Continues to flood CTUIR traditional villages, camps, fishing sites, burial and ceremonial sites. *Marginal remaining opportunity to practice CTUIR culture. *Threatens and endangers CTUIR culture.
Biological Opinion	<ul style="list-style-type: none"> *Significant, but limited improvement in fishing opportunity. *No improvement in flooding of CTUIR traditional villages, camps, fishing sites, burial and ceremonial areas. *Survival of CTUIR culture remains very difficult.
DFOP2	<ul style="list-style-type: none"> *Significant increase in CTUIR fishing opportunity. *Substantial recovery of cultural sites and opportunities flooded by four lower Snake River reservoirs. *Continued flooding of 509 cultural sites under John Day Pool continues to denigh cultural opportunities associated with this key area to CTUIR peoples.
CTUIR	<ul style="list-style-type: none"> *Significant increase in CTUIR fishing opportunity. *Substantial cultural recovery through access to key village, camp, fishing, burial and ceremonial areas presently flooded by John Day Reservoir. *Substantial cultural recovery through similar access to traditional areas presently flooded by the four lower Snake reservoirs.

Considering all effects, we conclude that the No Action alternative represents a policy of continued destruction of CTUIR Trust Resources, and of the ingredients necessary for the material and cultural survival of the CTUIR as a people.

Action under the Biological Opinion offer a measurable improvement for fisheries stocks. But this improvement, if obtained, would be insufficient to return Columbia/Snake stocks to levels of the historic past - and are also insufficient to significantly close the poverty gap between CTUIR members and non-Indians resident in the State of Oregon. The Biological Opinion also fails to restore any of the critically important traditional villages, camps, fishing sites, burial areas and ceremonial sites inundated by the reservoirs. We therefore conclude that the Biological Opinion does not sufficiently address responsibilities to CTUIR Trust Resources or CTUIR material or cultural wellbeing.

The DFOP2 Option does substantially improve CTUIR fisheries, and would restore access to important cultural areas presently flooded by Ice Harbor, Lower Monumental, Little Goose and Lower Granite reservoirs. It does not restore access to cultural areas inundated by John Day Pool. It represents a significant effort to meet tribal Trust Resource responsibilities associated with fishing - and would also significantly improve cultural access for some tribes along the lower Snake River.

The CTUIR Option equals and slightly exceeds the DFOP2 alternative with respect to restoration of spring chinook. Further, by restoring key cultural areas close to the CTUIR reservation currently flooded by John Day reservoir, as well as restoring access along the lower Snake River, it comes the closest of all options considered to meeting Trust Responsibilities to CTUIR - and in improving CTUIR material and cultural wellbeing. In fact, cultural areas presently inundated by John Day reservoir may be of such significance to CTUIR, that restoration of access to these areas may, by itself, be required before actions in fulfilment of responsibilities to CTUIR Trust Resources can be judged sufficient.

I. Introduction

This analysis considers impacts on trust resources of the Confederated Tribes of the Umatilla Indian Reservation¹ (hereafter CTUIR) from alternative system operating strategies (SOS) affecting Snake and Columbia river dams and reservoirs. The analysis is necessarily cross-cultural - and must be viewed as accurate and understandable by both Tribal and non-Indian cultures if it is to be effective.

For this reason, an expanded methodological discussion is necessary. So as not to bog the reader down, this methodology is discussed in Appendix 1. It will be reviewed for accuracy by CTUIR prior to final release - and provides the general basis for the analytical approach applied in this report. Its primary purpose is to increase non-CTUIR understanding of appropriate analytical frameworks and perceptions required if impact analysis is to accurately reflect Native American perspective, circumstances and impact concerns. It is considered essential reading for reviewers who may not be familiar with cross cultural impact analysis involving Native Americans.

II. Significance of CTUIR Trust Resources

1. CTUIR Trust Resources

Trust Assets are generally defined by CTUIR as follows:

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** (our bolding).²

Similarly;

As the record indicates, the federal courts have usually addressed trust resources in the context of water, money, land, timber, mineral or gas and oil resources, and fish and wildlife. The CTUIR considers all 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:

¹ These tribes are generally taken to be the Umatilla, the Walla Walla and the Cayuse.

² Donald G. Sampson, 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.

accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same; the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens, is also secured to them.

Tribal rights secured by the Treaty of 1855 (and others), including the right to 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.⁴

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.⁵

III. Indicators of CTUIR Trust Resource Circumstances and Impacts

The overarching criteria for assessment of the effect of each Systems Operating Strategy (SOS) on CTUIR trust resources will be effect on CTUIR wellbeing. This criteria will be further delineated to consider "effect on CTUIR cultural wellbeing" and "effect on CTUIR material wellbeing".

A particular emphasis of our analysis will be to examine the effect of SOS alternatives on CTUIR fish resources. As will be outlined in following sections, fish runs of the CTUIR have played the critical role in Tribal subsistence, culture and general wellbeing since earliest time. The salmon provided the natural clock by which CTUIR members live; their coming telling the Tribes when to break winter camp, when to fish lower down on the Columbia, when to move higher up into the Snake, and into tributary streams.

All the Indian groups of the Middle Columbia River depended upon fish, and particularly upon anadromous fish, for their subsistence. However, it is doubtful if any depended on this

⁴ Supra at pp. 6-7.

⁵ United States of America, et al. v. State of Washington, et al. Supra at pp. 23-24.

"...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 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..."

Rather than develop a "list" of "trust resources", the CTUIR view "trust resources" as: A category of natural elements and environs including but (not) limited to: air and water resources; native fish and wildlife and habitats; native plant life and habitats; mineral deposits; timber and timber related resources; gas and oil reserves; archaeological, cultural and burial sites; and other resources and sites of the natural environment necessary to sustain tribal culture for present and future needs of its members. These resources which are protected by treaty or are part of tribal culture and economy are considered trust resources.³

2. The Treaty of 1855

The importance of the Treaty of 1855 for this assessment has also been summarized by CTUIR.

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:

Provided, also, That the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and

³ Confederated Tribes of the Umatilla Indian Reservation, 1995. Identification of Trust Resources: System Operation Review. Department of Natural Resources, April 27. pp. 7-8.

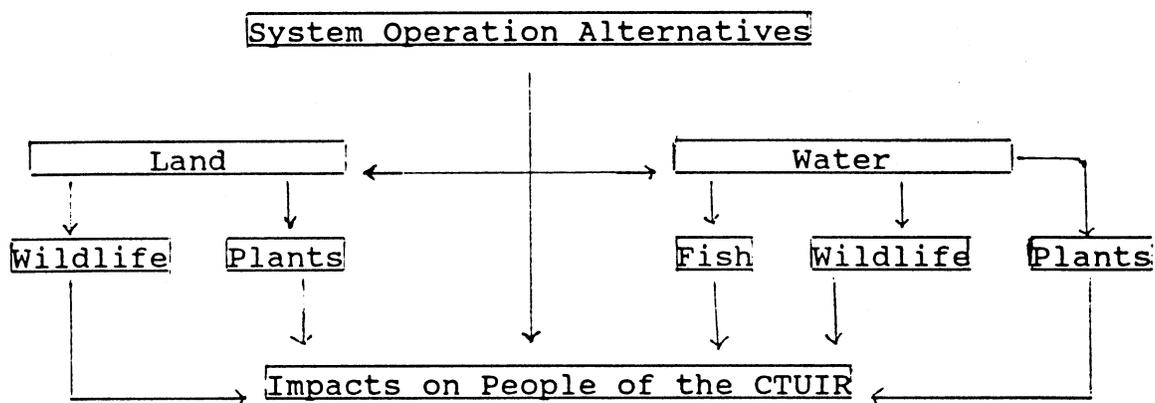
source of food to a greater degree than did the Walla Walla and their close kin the Umatilla.⁶

It's just that salmon are a part of the country, they're part of the environment. They belong here as much as Indians belong here. And in that way they compliment each other. They've become a part of us because its what we depend on to live as much as I guess say that a white man would depend on beef or bologna or something like that. You know, it becomes a part of the person's or peoples' culture. See, and its the same way with these salmon. Its very important that the salmon survive, that they be brought back to this river. And the Indians as I know them are always seeking salmon. And they go a long ways to get it. And I think its the same as an Alaska Eskimo having this relationship with whales or seals. That kind of a cultural relationship becomes a part of your world, your environment.⁷

1. Selection of Impact Indicators

The impact interrelationships relevant to this analysis are outlined in Figure 1.

Figure 1



⁶ Lane and Lane Associates, and D. Nash, **Indian Fishing and the Walla Walla River System**. A Report to the Bureau of Indian Affairs, December, 1981. p. 52.

⁷ Antone Minthorn, 1982. "Oral Statement", 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 Reservation - with Particular Reference to Dams of the Mid-Columbia Area**. A Report to the Bureau of Indian Affairs, p. 38.

As noted, measurement of impacts on the people of the CTUIR will focus on evaluation of effects on cultural wellbeing and on material wellbeing. These effects are also interrelated, one with the other - and therefore both categories of effects must be considered to reach overall impact conclusions.

2. Cultural Wellbeing

Assessment of effects on cultural wellbeing will depend principally on written and oral information provided by leaders, elders and other cultural experts within CTUIR. Indicator information in seven categories will be sought (Table 1).

Table 1

Indicators of CTUIR Cultural Wellbeing

<u>Indicator</u>	<u>Information Sought</u>
1. Historic villages, gravesites, etc.	Number, characteristics and accessibility.
2. Historic camps and special use sites.	Number, characteristics and accessibility.
3. Materials for ceremonies.	Characteristics and accessibility.
4. Language.	Percent of speakers. Materials/resources to facilitate meaningful learning.
5. Fish and fishing.	Species, numbers, sizes, fish quality.
6. Wildlife and hunting.	Acres of habitat. Species and numbers.
7. Plants, roots and berries and gathering.	Acres and abundance. Species use.

i) Historic Villages, Gravesites, Etc.

Historic villages play (at least) two important indicator roles with respect to culture. First, they provide tangible historic evidence of who a people are - reminding modern-day CTUIR people of their history, of the experiences of their ancestors, of the lessons learned in the past.

Since culture is also contemporary, access to historic village sites also provides an opportunity to "practice one's culture" - to live and carry out present-day cultural activities in the same places that were important to one's ancestors - and to learn from them. (Also see Appendix 1.)

Gravesites are among the most spiritually significant of these historic cultural sites and areas. Each Tribal member will express his or her linkage to the grave of ancestors in their own individual and private way. Some may not be able to talk about this subject at all.

ii) Historic Camps and Special Use Sites

Much of what was discussed in the prior paragraphs applies here also. Historic camps and sites will tend to be more dispersed than villages - and will be use-oriented - focusing on fishing, hunting, gathering and spiritual activities. Where they exist and are accessible, they also provide opportunity for present day members of CTUIR to attain cultural knowledge and hence power, and to practice CTUIR cultural activities. (Also see Appendix 1.)

iii) Materials for Ceremonies

Some areas and/or resources affected by the SOS may have particular relevance for CTUIR cultural ceremonies.

iv) Language

Hunn (1990) identifies that the Sahaptin language does not just describe common concepts, objects and transactions using different sounds - but rather describes a unique 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.⁸

This ability to describe uniqueness through use of one's own language is an essential element of culture. But language does

⁸ Hunn, Eugene S., 1990. Nch'i-Wana; "The Big River": Mid-Columbia Indians and Their Land. Seattle: University of Washington Press, p. 78.

more than describe culture - it also protects it.

Languages are like species of living things in some key respects. They are defined by a mutual intelligibility that includes a barrier to the outside exchange of information.⁹

It follows that Tribal language is an important tool to provide privacy and protection for key elements of cultural knowledge which empower CTUIR society.

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 thus 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.¹⁰

Conversely, loss of language risks loss of cultural uniqueness, and of the ability to protect (keep private) cultural knowledge and power. Further, and recalling prior discussion, it is more difficult to persuade Tribal youth of the importance of their own language if there are no locations or opportunities where it can be practically used in their everyday life.

v) Fish and Fishing

As noted at outset, fish and fishing are an obvious key element of CTUIR cultural wellbeing - and were specifically reserved by the ancestors of the CTUIR in the Treaty of 1855. To excerpt from the CTUIR statement provided at Note 3:

...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.¹¹

⁹ Supra at 59.

¹⁰ Supra at 81.

¹¹ See Note 3.

vi) Wildlife and Hunting

Similarly, access to hunting was an important right reserved under the Treaty of 1855, and will consequently be used, as information permits, as a cultural impact indicator during this analysis.

The Treaty also reserved the right of continued access to certain lands for hunting, for gathering traditional foods and medicinal herbs, and for religious purposes.¹²

vii) Gathering of Plants, Roots and Berries

Similarly, effect on opportunities to gather plants, roots and berries is an important indicator of CTUIR cultural wellbeing (see previous quote).

3. Material Wellbeing

Material wellbeing refers to "the degree of adequacy of food, clothing, shelter and other tangible goods and services that support Tribal existence"¹³. This definition, and an indicator approach to measurement have been recently accepted by a federal court (Note 5).

Assessment of effects on material wellbeing will depend on Census data, on published reports where applicable, and on information from the CTUIR. This assessment will seek information on six indicators of material wellbeing, outlined in Table 2.

¹² See Note 3.

¹³ P.A. Meyer, 1993. Analysis of the Material Circumstances of 17 Washington Tribes. A Report to Evergreen Legal Services. Davis, California, p. 6.

Table 2

Indicators of CTUIR Material Wellbeing

<u>Indicator</u>	<u>Mode of Measurement</u>
1. Availability of food.	Abundance, by species.
2. Employment/ unemployment.	Percent employed/ unemployed.
3. Poverty	Percent in poverty.
4. Income	Dollars per capita.
5. Economic advantage.	Resource-based competitive capabilities of CTUIR.
6. Health	CTUIR health and access to health facilities.

i) Availability of Food

Where impact data permits, effects of alternative SOS on availability of food - primarily fish - will be specified.

ii) Employment/ Unemployment

Employment/ unemployment effects of alternative SOS will be discussed. A contemporary CTUIR baseline will be established using Bureau of Census "special run" statistics for CTUIR from the 1990 Census, and Bureau of Indian Affairs statistics.

iii) Poverty

CTUIR poverty effects for each SOS alternative will be discussed. Bureau of Census "special run" data for CTUIR from the 1990 Census will be used to reflect contemporary poverty baselines.

The original (Bureau of the Census) 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 - non-farm 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 ...that families of three or more persons spent approximately one-third of their income on food; the poverty level was therefore set at three times the cost of the economy food plan.... Annual revisions of these poverty cutoffs were

based on price changes of the items in the economy food budget....

The poverty thresholds rise each year by the same percentage as the annual average Consumer Price Index.¹⁴

The Bureau of the Census considers the terms "below the poverty level" and "poor" to be interchangeable.

iv) Income

Income impacts on CTUIR members will also be identified. The Bureau of Census "special run" for CTUIR members will provide the basis for contemporary quantification of income.

"Total income" is the algebraic sum of the amounts reported separately for wage or 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; public assistance or welfare income; retirement or disability income; and all other income.¹⁵

v) Economic Advantage

The impact under each SOS on the ability of CTUIR to compete and trade effectively - and to identify and exploit economic opportunity will be discussed. The economic term of art associated with this analysis is "comparative economic advantage".

vi) Health

The health status and access to medical services of CTUIR members will be discussed and where possible quantified, for each SOS alternative. Linkage between health and other indicators of material wellbeing such as food and poverty has been previously identified by Bachtold¹⁶. In this section, we

¹⁴ Bureau of the Census. **Poverty in the United States: 1991.** Current Population Reports Series P-60, No. 181, p. A-7.

¹⁵ Bureau of the Census, **1990 Census of Population and Housing: Summary Social, Economic and Housing Characteristics.** CPH-5-49, p. B-15.

¹⁶ Bachtold, L.M., 1982. "Destruction of Indian Fisheries and Impacts on Indian Peoples", in, **The Historic and Economic Value of Salmon and Steelhead to Treaty Fisheries in Washington, Oregon and Idaho.** Meyer-Zangri Associates: A Report to the U.S. Bureau of Indian Affairs.

Generally, the territories in which the CTUIR lived, fished, hunted and gathered roots and berries extend southward from the Columbia River at the mouth of Rock Creek through the Rock Creek drainage to Condon; thence south-easterly to Wetmore; then southward again beyond Dayville to Battle Creek Mountain; thence eastward along the chain of Oregon mountains named Aldrich, Fields Peak, Strawberry, Table Rock, Ironside and Cottonwood to Willow Creek; thence northeasterly to the confluence of the Snake and Weiser Rivers on the Oregon/Idaho border; thence northward along the Snake River to the area of Brownlee Dam; thence northwesterly through Halfway and Flagstaff Buttes to Cove, Oregon; then north to the Minam area; then northeast to Troy, Oregon and the upper reaches of the Grande Ronde River; then northwesterly in Washington to the confluence of the Snake and Tucannon Rivers; thence down the Snake to the Columbia River; thence northward on the Columbia for some distance beyond Richland, Washington; then southward intersecting the Columbia River west of Plymouth, Washington; then back down the Columbia River to Rock Creek²¹. These various territories are reported to have covered some 6.4 million acres²².

Salmon was the staple food of the CTUIR Tribes. It provided them with ample sustenance, determined when and where they moved in their seasonal rounds of subsistence and trade, and, in concert with the waters of the Columbia and Snake Rivers and their tributaries, materially tied their cultures together.

The first catch, you know, the first spring salmon? We still had a big feast. Like in Celilo they do yet. They always did so that our Creator would preserve it, help the Indian people to have more salmon come up, and so that 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. So they call us "salmon eaters".²³

Similarly, Lane and Lane (1979) refer to findings of the Indian Claims Commission (Docket No. 264).

²¹ These descriptive boundaries are general, and were developed in consultation with cultural experts at CTUIR.

²² Confederated Tribes of the Umatilla Indian Reservation, 1979. *Supra* at 23.

²³ Carrie Sampson, 1982. *Personal communication*. On the Umatilla Reservation, October 13. In, Meyer Resources, 1983. *Supra*. at 42.

will reference both statewide and CTUIR-specific information concerning health and health access circumstances.

4. Temporal Issues Associated with CTUIR Impact Assessment

Circumstances affecting CTUIR trust resources are dynamic. Past trends in resource availability and use explain, to a considerable extent, present cultural and material circumstances of the CTUIR. Future circumstances will differ from those at present, even under "no action" alternatives. The present report will relate impact analysis to major trends affecting trust resource indicators - and discuss likely impact outcomes for each SOS alternative on that basis.

The CTUIR give equal consideration to present and future generations. Further, where Treaty resources are concerned, resource decision-making based on discounted future values can represent a "taking"¹⁷. This analysis will therefore not discount future impacts on CTUIR trust resources, relative to those occurring in the present.

IV. Characteristics of CTUIR Trust Resources Prior to 1855

The Umatilla, Walla and Cayuse Indians of the Confederated Tribes of the Umatilla Indian Reservation are part of the larger culture of Sahaptian speaking people of Southeastern Washington, Northeastern Oregon and Western Idaho¹⁸.

The Walla Walla, Cayuse and Umatilla each had a tribal form of political organization since before the dawn of recoverable history.¹⁹

The basic religion of the three tribes was the guardian spirit religion, and the religious practices of the three tribes were much the same. Closely related to religion was their attitude toward their lands. They regarded their lands as sacred, not only because their ancestors were buried there, but because they had been placed upon the land to care for it, and the land, in turn, cared for them.²⁰

¹⁷ R. Bush, 1992. Memorandum to P.A. Meyer. July 27.

¹⁸ Confederated Tribes of the Umatilla Indian Reservation, 1979. Tribal History. Umatilla, Oregon, p. 1.

¹⁹ Supra at 2.

²⁰ Supra at 5.

The Commission found that salmon was the staple food for all three tribes. The annual runs of the several species of salmon controlled the subsistence cycle and seasonal movements of the Umatilla, Walla Walla and Cayuse people.

17. In pre-historic times the staple food of the Walla Walla, Cayuse and Umatilla tribes was salmon, although they obtained many other species of fish from the Columbia River. After acquiring horses these tribes adopted a fishing, hunting and root-gathering subsistence cycle, and by the early 19th century the Cayuse and to a lesser extent the Walla Walla and Umatilla Indians were engaging in hunting activities, going east of the Snake River to buffalo country near Fort Hall and even further to the east. By the 19th century the Umatilla and Walla Walla occupied permanent wintering villages along the Columbia and Umatilla or Walla Walla Rivers, with the Cayuse wintering not far to the east and the southeast. These villages were also used as more or less permanent residences when the tribes were not travelling on their gathering, hunting and fishing expeditions. Such sites were chosen with a view to avoiding the deep snows in the mountains and for some shelter from the elements, for available fuel and in order that the tribes might conveniently take advantage of the early salmon runs in the spring when the chinook, blueback, and silver salmon migrate up the Columbia River to spawn in the headwaters of its tributaries.

The annual runs of these several species controlled the subsistence cycle of these tribes. These runs began about the first of May and again in October. The Indians were familiar with the various places where the salmon could be found in greatest abundance probably beginning with the Columbia River as far down stream as The Dalles and Celilo Falls where their fishing began, and as the fish moved up stream the Indians followed to the headwaters of the tributary streams, principally the Walla Walla and the Umatilla Rivers which were encompassed in the territory they claimed they used by right of Indian title. The men fished and hunted game while the women dug roots, gathered berries and pounded and dried the fish and game for winter food. As autumn approached they returned to their winter villages for the late summer run of the salmon, taking with them the food they had accumulated for the winter. There they remained until the following spring when the cycle began again.²⁴

²⁴ Robert B. Lane and Barbara Lane, 1979. **Traditional Fisheries of the Walla Walla, Cayuse and Umatilla**. In files, Cultural Resource Center, Confederated Tribes of the Confederated Tribes of the Umatilla Indian Reservation. pp. 27-28.

Ancestors of the CTUIR established their permanent villages along rivers, travelling to other portions of their territories in seasonal rounds that related cycles of resource abundance to subsistence, commercial and social needs of the people.

During the winter months, the Umatilla, Cayuse and Walla Walla Indians clustered in villages or bands along the Columbia, Walla Walla and Umatilla rivers in such spots as afforded them a nearby supply of fish, roots and wood, as well as some shelter from the elements. ... While the winter village or band sites tended to remain constant over many seasons, changes in natural conditions (such as the exhausting of the available wood supply) would in time cause the settlement site to be moved; the new site selected would be in the same general location.

In the spring and summer, family groups from these winter sites would move out in quest of fish, roots, berries and game.²⁵

More specific information concerning villages and camps of Umatilla, Walla Walla and Cayuse ancestors of the CTUIR is supplied by Suphan (1974) - and is summarized in Appendix 2. Suphan identifies a number of specific subsistence areas along the mainstem Columbia used historically by Umatilla, Walla Walla and Cayuse peoples²⁶.

1. Soon-see-tepa, a fishing site on the Columbia river 2.5 miles west of Boulder, Oregon on the Washington shore.
2. Quas-qui, a permanent camp about 1/2 mile west of Alderdale, Washington on the north Columbia shore.
3. Iquan-puss-poucah, a fishing site near the upper end of Thanksgiving Island on the Washington side.
4. Tee-ow-tuch-wa-ta, a permanent site on the Washington bank of the Columbia opposite Thanksgiving Island.
5. Auk Kuk Pa, a permanent camp at Alderdale, Washington.
6. Snim-asho (the thorns), a permanent camp and fishing site one mile east of Boulder, Oregon, on the Oregon shore.

²⁵ Robert J. Suphan, 1974. *Ethnological Report on the Umatilla, Walla Walla, and Cayuse Indians*. Commission Findings. New York: Garland Publishing Inc., p. 101.

²⁶ *Supra* at 159-169.

7. Wulth quas pa, a fishing site one mile below Castle Rock on the Oregon shore.
8. Slapee-hus, a permanent camp north and west of Castle Rock, Oregon, on the Washington shore.
9. Kin-kenie-pa, a fishing site one mile downstream from Castle Rock, on the Washington side.
10. C-Cas-se, immediately adjoins site No. 9.
11. Yep-po-luc-sha, a permanent camp and fishing site along the banks of Blalock Island and the Washington shore for about a mile below the beginning of Blalock Island.
12. To-mash-show-po, a fishing site 1/2 mile downstream from the Patterson Ferry on the Oregon side.
13. Wanaket (Water Against the Bluff), a camp and fishing site one mile west of River View Siding, where the town of Umatilla, Oregon now stands.
14. So-luc-a, a permanent camp and fishing site north of the present town of Umatilla, Oregon, on the Washington shore.
15. Pushem (Foaming Water), a fishing site one mile west of Juniper, Oregon.
16. Twall-ou-tus (Dipping Place), a fishing place two miles downstream from Lasts Island on the Oregon shore.
17. Kghien Pa, a permanent camp and fishing site one mile below the confluence of the Walla Walla and Columbia rivers - with fishing carried out from the north side of Lasts Island and from the (opposite) Washington shore.
18. A fishing site on the east bank of the Columbia about 3/4 mile upstream from the mouth of the Walla Walla.
19. A fishing site on the east bank of the Columbia, just up from the previous one.
20. Another fishing site just north of the Walla Walla - Columbia river junction, on the east shore.
21. A fishing area from the mouth of the Walla Walla to a point one or two miles up stream.
22. A fishing camp on the Columbia River between Two Rivers and Burbank.
23. Le-co-tum-pa, a fishing site just north of the previous one.

24. Khotsuts-pa, a fishing site at the confluence of the Snake and Columbia rivers.
25. Tomist-pa and Isle-kie-pa, two fishing sites just below Khotsuts-pa.

Horses were likely introduced to CTUIR peoples in the early 1700's by the Cayuse, who obtained them from the Shoshoneans²⁷.

In sum, during the period prior to 1855, the waters of the river systems flowing through CTUIR territory, together with the fish they bore, were the lifeblood of Umatilla, Cayuse and Walla Walla material and cultural wellbeing. These resources were supplemented by abundant game, plants, roots and berries as the Tribal members visited each fishing location in its appropriate time - and from the latter days of the 18th century, by extensive herds of horses.

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 not one of securing sufficient supplies, provided only that they keep on the move.²⁸

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 geographic setting placed the people in the prime situation of being the middlemen of the trade between the Great Plains and rich Pacific Coast cultures. The people were in essence the wholesalers and retailers between the two cultures.²⁹

²⁷ Confederated Tribes of the Umatilla Indian Reservation, 1979. Supra at 2.

²⁸ Robert J. Suphan. *The Socio-Political Organization and Land Use Patterns of the Umatilla, Walla Walla and Cayuse Indians*. Columbia University, Masters Degree Thesis. pp. 75-76.

²⁹ Confederated Tribes of the Umatilla Indian Reservation, 1979. Supra at 7.

With the appearance of the white man, already brisk trade with other Indian peoples was expanded to meet the need of immigrants travelling west over the Oregon Trail.

Initial contacts with the British & Americans were strictly economic in nature. The Indian Nations viewed the goods and supplies as a welcome addition to their own thriving economy. ... Tariffs were levied against the Trading Post for incoming and outgoing goods by the leaders of the bands whose forts occupied their lands.³⁰

Conversely, the advent of the white man caused widespread havoc with the health of Tribal ancestors of the CTUIR.

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...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 rampaged along the Columbia in 1801... This likely carried off another 10 to 20 percent, reducing the original population by about one half by the time of Lewis and Clark's exploration... Two more (subsequent) waves of smallpox may have afflicted Indian people on the mid-Columbia....

...the 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.³¹

As a result of these pestilences, the population of the peoples of the CTUIR dropped from an estimated 5,000 persons in 1790, to about 2,300 in 1850 (1,000 Walla Wallas, 800 Cayuse and 500 Umatilla).³²

³⁰ Supra at 15.

³¹ E.S. Hunn, 1990. Supra at 27-31.

³² Confederated Tribes of the Umatilla Indian Reservation, 1979. Supra at 2.

*** Benchmark 1 - Pre-1855 ***

Cultural Indicators

Villages, gravesites, etc. existed throughout the CTUIR traditional territory.

Camps and special use sites existed throughout CTUIR territory.

Materials for ceremonies were available as required.

CTUIR language(s) were spoken by all Tribal members.

Fish were plentiful.

Wildlife was plentiful.

Plants, roots and berries were plentiful.

Material Indicators

Food was abundant. Fish was plentiful. Roots, plants, berries and game were available, each at its own location and in its own season.

All able bodied CTUIR men and women were employed in meaningful activities during harvest rounds.

Poverty, as we understand it today, did not exist. Food abundance and CTUIR lifeways ensured that the very old and the young were cared for.

Income, measured in food, horses, furs, and in other material ways was adequate for virtually all.

The CTUIR had strong economic advantage based on the natural resources they harvested, their positioning between plains and coastal Tribal peoples and (later) the needs of white immigrants entering their territory along the Oregon Trail.

In pre-contact times, accounts suggest the CTUIR were in good health, and vigorous. With the coming of "white" diseases, more than half of the people of the CTUIR died.

V. Circumstances Surrounding The Treaty of 1855

As immigrants continued to pour into the country along the Oregon Trail increased conflict developed between the Tribes and the "white" settlers. In the mid-1800's Governor Stevens, on behalf of the United States, set out to negotiate treaties with Northwest tribes. One such Treaty was negotiated with ancestors of the Walla Walla, Cayuse and Umatilla at Camp Stevens, Oregon Territory, in June, 1855 - and ratified on March 8, 1959.

In this Treaty, the ancestors of the CTUIR ceded their vast 6.4 million acre territory to the United States, retaining to themselves only a reservation of 245,699 acres, and the right to fish at their usual and accustomed stations, and to hunt, gather roots and berries and graze stock on unclaimed lands. The following encapsulation is from Swindell (1942).

Article 1

Cedes to the United States certain described lands occupied by tribes situated in Washington and Oregon territories.

Describes boundaries of lands within ceded territory to be reserved to the exclusive use of said Indians.

Provides no whites shall be permitted to reside upon reserved area without permission and that the tribes will settle thereon within one year after ratification of treaty.

"Provided, also, That the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same; the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens is also secured to them." [Verbatim] ...³³

On May 30, 1855, Governor Stevens spoke to the Cayuse, Walla Walla and other Indians assembled at Camp Stevens in the Walla Walla Valley.

I went back to the Great Father last year to say that you had been good, you had been kind, he must do something for you. My brother (General Palmer) wrote to the Great Father in like manner.

³³ Edward G. Swindell, 1942. Report on the Source, Nature and Extent of the Fishing, Hunting and Miscellaneous Related Rights of Certain Indian Tribes in Washington and Oregon together with Affidavits Showing Locations of a Number of Usual and Accustomed Fishing Grounds and Stations. Los Angeles: U.S. Department of the Interior, Office of Indian Affairs., 469.

He told the Great Father, these men have farms; the Great Father said I want them to have more and larger farms; I told him you had cattle and horses; he answered that he wanted your cattle and horses to increase: I told him some of your grown people could read and write: He answered I want all the grown people and all the children to learn to read and write; I told him that some of you were handy at trades; he answered, that he desired to give all who choose the means to learn these trades;

Why did the Great Father answer this way? Why did he sent my brother and myself here this day, to say this to you? Because you are his children; his red children are as dear to him as his white children; his red children are men, they have hearts, they have sense; they resent injury: we want kindness on the one side and kindness on the other; we want no injuries to resent.

The Great Father has been for many years caring for his red children across the mountains; there /pointing East/ many treaties have been made. Many councils have been held; and there it had been found that with farms and with schools and with shops and with laws the red man could be protected.

Why do I say laws? What has made trouble between the white man and the red man? Did Lewis and Clark make trouble? They came from the Great Father; did I and mine make trouble? No! but the trouble had been made generally by bad white men and the Great Father knows it, hence laws.

The Great Father therefore desires to make arrangements so you can be protected from these bad white men, and so they can be punished for their misdeeds; and the Great Father expects you will treat his white children as he will make a law they shall treat you.³⁴

The proposed terms of this Treaty concerned the Tribes.

Pee-o-pee-mox-a-mox Said, ...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 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. Suppose you show me goods shall I run up and take them? That is the way we are, we Indians, as you know us. Goods and the Earth are not equal; goods are for using on the Earth. I do not know where they have given lands for goods.³⁵

³⁴ Supra at 393-394.

³⁵ Supra at 409-410.

Stachus Said. My friends I wish to show you my mind, interpret right for me. How is it I have been troubled in mind? If your mothers were here in this country who gave you birth, and suckled you, and while you were suckling some person came and took away your mother and left you alone and sold your mother, how would you feel then? This is our mother this country, as if we drew our living from her.³⁶

Young Chief. ... I wonder if this ground has anything to say: I wonder if the ground is listening to what is said. I wonder if the ground would come to life and what is on it: though I hear what this earth says, God has placed me here. The Earth says, that God tells me to take care of the Indians on this earth: the Earth says to the Indians that stop on the Earth feed them right. God named the roots that he should feed the Indians on: the water speaks the same way: God says feed the Indians upon the earth: the grass says the same thing: feed the horses and cattle. The Earth and water and grass says God has given our names and we are told those names: neither the Indians or the Whites have a right to change those names: the Earth says God has placed me here to produce all that grows upon me, the trees, fruit, etc. The same way the Earth says, it was from her man was made. God on placing them on the Earth during then to take good care of the earth and do each other no harm. ...

I am as it were, blind. ...Although I see your offer before me, I do not understand it and do not yet take it.³⁷

The next day, The Young Chief spoke again.

The Young Chief Said. We have been tiring one another for a long time. We did not know our hearts, we did not understand each other on both sides, about this country. We have so many horses and cattle in this country is the reason we were troubled. Your marking out the country is the reason it troubles me so and has made me sit here without saying anything. ... The reason why we could not understand you was that you selected this (Nez Perce) 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.³⁸

³⁶ Supra at 425.

³⁷ Supra at 429.

³⁸ Supra at 64.

General Palmer then made the compromise proposal that eventually led to the terms included in the Walla Walla Treaty. In part:

Gen. Palmer Said: My brothers, when we quit talking yesterday your minds were very troubled, you were unwilling to go to the Nez Perces reservation. We have thought of your words. The Nez Perces have a great many horses and cattle, you too have a great many horses and cattle, perhaps you might not agree together quite so well; your people appear to be much divided where to go. We asked you to give us your hearts and tell us where it was, the Young Chief has given us his heart, the Grand Ronde Valley. We have thought of the Umatillas. Many of your people died there. It is a good country for your horses and cattle. We desired first to have you go all to one place, but to show that we wish to do you good I will make you another proposition. I propose to designate for the Cayuses, the Walla Wallas and the Umatillas...a reservation commencing at the mouth of Wild Horse Creek and running up this creek to the mountains to the head waters of Hou-te-nic Creek, now down that creek till you strike Mr. McKay's claim, now across from his claim to the Umatilla river, then up to the mouth of the Wild Horse Creek, leaving Wm. McKay's claim out of the reservation.³⁹

With the Treaty of 1855, the people of the CTUIR lost 96 percent of their territorial lands. Treaty language reserved their right to continue to fish, hunt, gather roots and berries, and graze their stock off reservation. But they were discouraged in many instances from doing so. At the same time, white settlers began to take up these lands - plowing, fencing and conducting similar activities adverse to Indian access to the fish, game, roots and berries that Indians had traditionally sought.

All the (Stevens) treaties provide for the right of fishing and the privilege of hunting, gathering roots and berries and pasturing stock on unclaimed lands outside the reservations. The difference is consistent and no doubt deliberate. Fishing was seen as a permanent staple resource in contrast to game, roots and berries.

On several occasions during the Walla Walla treaty council the Indians were warned that as settlement progressed game, roots and berries would diminish in supply. The main staple, fish, is not mentioned in any of these discussions.

The Indians were urged to accept the grist mills and instruction in agriculture and trades because they would need to substitute agricultural foods for roots and game and cloth for skin and hide clothing. There is no mention that fish

³⁹ Supra at 439.

would diminish in supply or of any need to substitute other foods for fish.

Given that fish was the staple food, failure to include them in the warnings about future scarcities is significant. Mention of fish in these discussions is conspicuous by its absence.⁴⁰

VI. Changes from 1855 to the Early 20th Century - Losing the Land

Economic greed led many non-Indians to believe that reducing CTUIR territory from 6.4 million acres to 246,000 acres (by the Walla Walla Treaty) was too generous to the Indians.

Rumors of gold in Idaho and Oregon's Blue Mountains were founded in fact. By 1860, a new gold rush was on. During a four month period of that year, over 6000 wagons passed through the reservation en route to the mines on Oregon's Granite Creek and Powder River.⁴¹

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 the year, rendering it a very popular as well as profitable business to raise stock."⁴²

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."⁴³

⁴⁰ Robert B. Lane and Barbara Lane, 1979. *Supra* at 14.

⁴¹ James B. Kennedy, 1977. *The Umatilla Indian Reservation, 1855-1875: Factors Contributing to a Diminished Land Resource Base*. Oregon State University: Doctoral Thesis., p. 75.

⁴² J. Orin Oliphant, "Encroachments of Cattlemen on Indian Reservations in the Pacific Northwest, 1870-1890", in, *Agricultural History*. pp. 43-44.

⁴³ *Supra* at 44.

There was hardly a time when Indian land had not been sought by envious settlers....

Pressure to remove the Indians from the Umatilla reservation intensified during the 1860's. Some desperate emigrants attempted to obtain treaty land by goading Indians into committing hostile acts. Others circulated petitions to Congress and the State Legislature requesting that the Indians be relocated. Perhaps the general attitude of the local settlers was reflected in the words of a contemporary historian, Frances Victor:

The Indians on the reservation are remnants of Umatilla, Walla Walla and Cayuse tribes and altogether number less than one thousand. They are a particularly civilized and peaceful people, yet whose presence as neighbors can not be particularly desirable. Their territory is unnecessarily large, amounting to a square mile to each individual.

The case for relocating the Indians was strengthened by the opinion of resident (Indian) agents.⁴⁴

As a result of these pressures, Congressionally authorized negotiations for the sale of the reservation were pursued in 1871, but the CTUIR unanimously voted not to sell.⁴⁵

Ancestors of the CTUIR concluded a Treaty with the community of Pendleton in 1882. This Treaty resulted in transfer of 640 acres of reservation land to Pendleton in 1884⁴⁶. Pendleton acquired a further 200 acres in 1912.

Rail and road easements also began to appropriate CTUIR reservation land, beginning in 1881⁴⁷ and these have continued to the present.

The Slater Act of 1885 completed the restructuring necessary to the subsequent taking of further reservation lands from the CTUIR.

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

⁴⁴ James B. Kennedy, 1977. *Supra* at 77-78.

⁴⁵ *Supra* at 81.

⁴⁶ *Supra* at 83.

⁴⁷ *Supra* at 84.

be sold with the proceeds deposited to the credit of the Indians. In 1879, the Confederated Tribes were sceptical. It was possible, however, that land allotment might accomplish what the Council of 1871 did not; namely a relief from white encroachment. ...

Conditions in 1879 were such that several Indian leaders were compelled to meet with officials in Washington, D.C. ...

The Indians left Washington, D.C. tentatively agreeing that each tribal member would be entitled to 160 acres of farmland plus an additional 40 acres of timberland, if they so desired. The Indian spokesman presented the proposals to the Tribal Council in January of 1880.

The Tribal Council endorsed the agreements made in Washington. Agency reports during the next few years indicate that the Indians were clamoring for land allotments. The truth is difficult to determine. There are at least two reasons: (1) By the mid-1880's, land allotment had become national policy. The resident agent's reports may have reflected wishful thinking rather than actuality. (2) The Confederated Tribes failed to agree on the question of allotment after two lengthy councils in 1885. ...

Senator Slater's bill was written specifically for the Umatilla Reservation. It... is considered to be the forerunner of the General Allotment (Dawes) Act.... On March 3, 1885, Senator Slater's bill became law. The new Act contained these provisions:

- 160 acres to the head of each family;
- 80 acres to a single person over 18 years of age;
- 80 acres to an orphan child under 18 years of age;
- 40 acres to children under 18 years of age not otherwise provided for;
- land title in fee simple to be awarded after a continuous occupancy of 25 years.⁴⁸

The Indians of the CTUIR did not accept the provisions of the Slater Act during negotiations in 1885. In 1886, a new "special commission" was appointed to pursue CTUIR acceptance of the Act.

⁴⁸ Supra at 86-89.

After several days of deliberation, the Indians agreed to accept the provisions of the Slater Act. The resident agent was pleased to report that with few exceptions, the Indians seemed to be satisfied with the arrangement. They were also aware that "they must now earn their own living". However, neither the Indians or the negotiators could have been aware of the many problems that would develop. The optimism expressed at the council table was destined to vanish as rapidly as the Indians' land resource base.⁴⁹

Pursuant to the Slater Act, the CTUIR Reservation was reduced from 245,699 acres to 157,982 acres in 1888. Auctioning off CTUIR lands declared "surplus" by this action began in 1891.

Following implementation of allotment provisions of the Act, some Indian allottees began to lease allotments to non-Indian farmers.⁵⁰ These allotment-based actions unleashed a potpourri of unethical or "sharp" practices (Kennedy, 1977).

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 government ultimately addressed the problem of trespassers on surplus land. In the interim, Indian-owned timber and rangelands were exploited by white stockmen and squatters.⁵¹

The conduct of surplus land sales was no less surprising. Although the methods of obtaining land were not illegal, they were unethical. A writer for the East Oregonian was amused by

⁴⁹ Supra at 90.

⁵⁰ Supra at 107.

⁵¹ Supra at 108-109.

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.⁵²

As a result of these practices, and widespread leasing of land by Indian allottees, in 1895, 90 percent of the reservation's arable land was farmed by non-Indians.

Subsequently, in 1902, further Congressional action authorized disposal of 70,000 acres of "surplus" CTUIR range and timber land created by diminishment of the reservation under the Slater Act.⁵³

Data from Kennedy (1977)⁵⁴ summarizes the land tenure status of the CTUIR during this period (Table 3).

Table 3

Land Status of the CTUIR at the Close of the 19th Century

CTUIR Reservation at the 1855 Treaty	292,112 acres
Diminished Reservation (1991)	157,982 acres
Number of Allotments (1899)	1,192
Acres Allotted	82,279 acres

Substantial diminishment of CTUIR lands, in 1855 and thereafter, together with the ongoing pressures from surrounding white settlement, increased Tribal efforts in agriculture, and substantially restricted CTUIR accessing of fishing sites, hunting grounds, root, plant and berry gathering places, and spiritual sites by the turn of the century - although these rounds were not entirely eliminated.

The necessity of the Indians to remain on the reservation was born of necessity and experimentation. Although the Treaty of 1855 provided for the gathering of native foods and

⁵² Supra at 110.

⁵³ Supra at 158.

⁵⁴ Supra at 116.

pasturing of livestock off the reservation, such activities were becoming increasingly difficult. Confrontation with the emigrants must have been anticipated with every journey off the reservation. Agents considered these trips to be a problem ... Although their trips became less frequent, the Confederated Tribes never relinquished this treaty right.⁵⁵

Fishing on-reservation and at mainstream sites on the Columbia increased in relative importance as access to some tributary fisheries and to other food resources substantially diminished.

During the nineteenth century, the Plateau Indian population declined drastically. It might be argued that this would have taken the 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.⁵⁶

The mountain basins and the 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 camp grounds 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.

⁵⁵ Supra at 79.

⁵⁶ Lane and Lane Associates and D. Nash, 1981. **Indian Fishing and the Walla Walla River System**. A Report to the Bureau of Indian Affairs, p. 54.

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 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 people and has been challenged.

When Sahaptin-speakers such as the Walla Walla, Umatilla, and Cayuse travelled 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.⁵⁷

Tribal fishers at remaining sites also faced increasing competition from whites. In 1866, Hapgood, Hume and Company located the first fish cannery on the Columbia⁵⁸, heralding an era of technological intensification of fishing effort and the entry of non-Indians into large scale fishing and processing. Gillnetters, fish traps and seiners expanded in the lower Columbia, "out in front" of CTUIR mid-Columbia fisheries. Fish wheels capable of taking thousands of pounds of salmon in a day also intensified catching power in the fisheries until outlawed in 1926⁵⁹. Catches of Columbia River salmon rose sharply, and peaked at 49.5 million pounds in 1911⁶⁰. This increased catch seemed excessive, and had a

⁵⁷ Supra. at 54-55.

⁵⁸ Courtland L. Smith, 1979. *Salmon Fishers of the Columbia*. Corvallis: Oregon State University, p. 16.

⁵⁹ Supra at 35-36.

⁶⁰ Supra at 111.

detrimental effect on market price.

As a result of overfishing, the yield from... the Columbia River continued to diminish in proportion to the capital and labor expended. By 1884, costs had increased by leaps and bounds as canneries were forced to purchase fish from independent fishermen.⁶¹

Some regulatory effort was made to restrict fishing effort, but with limited success⁶².

As a result of these commercial developments, CTUIR fishermen, especially those fishing mainstem Columbia sites, faced expanded economic opportunity to sell their fish - but also, massive technology driven-competition from non-Indian fishermen, who, by 1911, were taking the lions share of Columbia river catches⁶³.

⁶¹ Daniel B. DeLoach, 1939. *The Salmon Canning Industry*. Corvallis: Oregon State University, p. 15.

⁶² C. L. Smith, 1979. *Supra* at 83-84.

⁶³ *Supra* at 91-100.

*** Benchmark 2 - 1855 to the Early 1900's ***

Cultural Indicators

Lands have declined to 2 percent of original territory, impeding access to some gravesites and other spiritual places.

Access is impeded to many camps and special use sites that are now off reservation.

Access to outlying areas for materials for ceremonies is sharply reduced.

CTUIR language is still spoken by virtually all CTUIR members.

Fish from main streams are still abundant. Access to fish in outlying streams is diminished.

Access to wildlife is severely reduced, save on-reservation.

Access to plants, roots and berries is severely reduced, save on-reservation.

Material Indicators

Food is adequate for CTUIR people. More dependence on mainstream fisheries.

Employment declines for some CTUIR members. "White" jobs often less desirable to CTUIR members.

As CTUIR resource base declines, some members are less well cared for -poverty.

Income (food, fish, horses, furs, dollars, trade goods) is lower than in previous period, but may still be generally adequate. The economic advantage of the CTUIR is severely reduced. Their "capital in land" is largely lost. Their surpluses of fish, horses, game, furs and other items for trade are severely reduced. Their position as wholesalers, retailers and traders in the mid-Columbia region is being preempted by white businesses. This is particularly true for fish, where technology-driven fishing and processing initiatives establish non-Indians as the new "control group" in fisheries.

The disastrous impacts on health from "white" diseases seemed to be in decline in this period. At the same time stress and turmoil associated with conflict with white settlers and loss of land increased - and a formerly rare affliction, suicide, begins to appear in reports by Indian agents.

VII. Changes From the Early 20th Century to the Present
- Losing the Fish -

Pre-contact annual catch of salmon by Columbia River system fishers has been estimated at about 18 million pounds⁶⁴. As noted, commercial overfishing raised catch levels to a peak level of 49.5 million pounds in 1911. Columbia River catches have declined steadily ever since.

Using 4-year moving averages, annual catches declined below 40 million pounds in the early 1920's. A decade later, annual catch averages fell below 30 million pounds. By the end of World War II, total annual catches had descended to less than 20 million pounds. None of these catch levels have been reached subsequently. In the five years through 1950, total annual Columbia River catch averages approximated the 18 million pound estimate for pre-contact fisheries - but with far greater expenditure of catching effort - and with only a small fraction of that catch taken by CTUIR members. Since 1950, catches have plunged downward again. The present plight of Columbia river salmon has been recently synopsized.

Since 1970 the minimum number of adult salmon and steelhead entering the Columbia River has ranged from 0.9 million fish in 1983 to 2.9 million fish in 1986. In 1990 a total of 1.1 million adult salmon and steelhead entered the Columbia River, which was the smallest run since 1983. Artificial propagation facilities, built throughout the basin as compensation for the loss of wild runs, now count for about three-quarters of all fish returning to the Columbia River basin. ...

The decline of wild runs has been so severe that three stocks of salmon in the Columbia basin are now listed under the Endangered Species Act: Snake River sockeye salmon (endangered); Snake River spring/summer chinook salmon (threatened); and Snake River fall chinook salmon (threatened).⁶⁵

Causes of these declines has varied, making it popular for those damaging Columbia fish productivity to point at each other. Overfishing was a significant, and perhaps dominant factor through the 1920's (see previous) - and management of catching power remains an important conservation obligation to the present day.

⁶⁴ Supra at 5.

⁶⁵ 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.

Diversion of water for irrigation, often through unscreened intakes, has had a continuing negative impact on Columbia River salmon stocks during this century. For example:

Many salmon migrating downstream were diverted into the irrigation canals and ended up on farmers' fields. Dennis Winn, a hatcheryman, was sent to investigate Yakima River salmon losses in Central Washington irrigation ditches in 1916. He found that in July when the salmon were migrating "it is estimated that from 90 to 97 percent of the river passes into irrigation ditches".⁶⁶

An extensive series of dams were also built on the Columbia River system during the early years of this century.

A study by the Fish Commission of Oregon showed that by 1933 dams for irrigation and power on the tributaries to the Columbia had taken "approximately 50 percent of the most important salmon producing area within the basin".⁶⁷

The CTUIR did not escape these adverse tributary impacts.

My father-in-law said that in them days they used to have lots of chinook, and steelhead and all other fish. But when they put the Three Mile dam in on the Umatilla River that's when it all ceased.⁶⁸

Nine Mile Dam appears to have been the early key barrier in the destruction of anadromous fish.... The Fish and Wildlife (Service) reports....:

...Local people report that Nine Mile Dam, built in 1905 near Reese, Washington, was an effective though not a complete barrier to the upstream migration and that it was largely responsible for the decline in the runs of chinook salmon. ...

Before the Nine Mile Dam was constructed on the main Walla Walla River the Touchet was said to have had excellent runs of chinook salmon and steelhead.⁶⁹

⁶⁶ C.L. Smith, 1979. Supra at 78-79.

⁶⁷ Supra at 79.

⁶⁸ Kenneth Bill, on the Umatilla Reservation, October 13, 1982.

⁶⁹ Lane & Lane with D. Nash, 1981. Supra at 90.

Between 1933 and 1975, 31 major federal and non-federal dams were built on the mainstem Columbia and Snake rivers, and on major tributaries affecting waters and/or fish resources traditionally available to the CTUIR⁷⁰. In 1991, Nehlsen, Williams and Lichatowich produced a study of depleted stocks of Pacific⁷¹. Meyer (1992) further analyzed these data.

(The Nehlsen et.al) data confirm the predominant role played by loss of habitat, including impedance by mainstem dams, in anadromous stock declines. Negative impacts from other (often introduced) species are again recognized as significant. The data on Pacific salmon seem, at first look, to indicate a more significant role for overfishing than do the (non-salmonoid) data from (Miller, et.al). On closer examination, however, it appears that the data from Table 2 merely identify the number of declining salmon stocks that still support a fishery, not the original causes of that decline.

... Origins of Stress for Pacific Salmon Stock

Origin	Percent of Total Stocks
1. Damage of or restriction to habitat.	90.7
2. Hybridization/ introduction of species/ other.	53.3
3. Overfishing/ overuse.	49.5
4. Disease	0.0

I conducted additional analysis of the data underlying Table 2. Of the 214 salmon stocks identified, 101 were considered affected by habitat damage, or overfishing, but not both. Ninety-four percent of these identified habitat damage as a primary causal factor. Only six percent identified overfishing as a primary cause of decline.⁷²

⁷⁰ Bonneville Power Administration. **Multi-Purpose Dams of the Pacific Northwest.**

⁷¹ Willa Nehlsen, J.E. Williams and J.A. Lichatowich, 1991. "Pacific Salmon at the Crossroads: Stocks at Risk from California, Oregon, Idaho and Washington", in, **Fisheries**. A Bulletin of the American Fisheries Society. Vol. 16, No.2, March-April, pp. 4-21.

⁷² Philip A. Meyer, 1992. "The Argument for Prevention", in, **Fisheries Management and Watershed Development**. American Fisheries Society Symposium 13. Bethesda, Maryland. p. 151.

Putting these findings together with following Table 4, it is reasonable to conclude that construction and operation of dams on the Columbia River, on the Snake River and on their tributaries is the likely major cause of decline of salmon stocks in the system from 1933 forward.

Table 4

An Historic Chronology of Salmonoid Catches from the Columbia
and Snake River Systems - With Notation re. Post-1933
Major Dam Completions

<u>Year</u>	<u>Catch</u> -millions lbs-	<u>Notation</u>
Pre-Contact	18.0	
1872	17.0	
1876	30.6	
1880	36.0	
1884	42.2	
1888	25.3	
1892	33.1	
1896	32.8	
1900	25.8	
1904	36.9	
1908	24.3	
1911	49.5	:Salmon harvest peaks.
1915	43.8	
1919	44.9	
1923	35.7	
1927	37.7	
1931	27.0	
1933	26.8	:Rock Island Dam completed on Columbia.
1934	27.9	
1935	25.8	
1936	25.5	
1937	26.1	
1938	18.8	:Bonneville Dam completed on Columbia.
1939	17.9	:Kerr Dam completed on Flathead.
1940	19.3	
1941	31.6	:Grand Coulee Dam completed on Columbia.
1942	26.5	
1943	14.8	
1944	17.6	
1945	17.4	

...Table 4 cont'd. on next page...

Table 4 Cont'd.

<u>Year</u>	<u>Catch</u> -million lbs-	<u>Notation</u>
1946	18.1	
1947	21.7	
1948	21.2	
1949	13.1	
1950	13.3	:Anderson Ranch Dam completed on Snake.
1951	12.9	
1952	10.7	:Cabinet Gorge Dam completed on Snake. :Hungry Horse Dam completed on Snake.
1953	9.7	:McNary Dam completed on Columbia.
1954	7.6	
1955	10.8	:Chief Joseph Dam completed on Columbia. :Albeni Falls Dam on Pend Oreille.
1956	9.8	:Chandler Dam completed on Yakima.
1957	7.3	:The Dalles Dam completed on Columbia.
1958	8.1	:Roza Dam completed on Yakima. :Brownlee Dam completed on Snake.
1959	6.1	:Priest Rapids Dam completed on Columbia. :Noxon Rapids Dam on Clark Fork.
1960	5.2	
1961	5.4	:Rocky Reach Dam completed on Columbia. :Ice Harbor Dam completed on Snake. :Oxbow Dam completed on Snake.
1962	6.9	
1963	5.9	:Wanapum Dam completed on Columbia.
1964	7.0	
1965	8.6	
1966	8.4	
1967	9.4	:Wells Dam completed on Columbia. :Duncan Dam completed on Duncan. :Boundary Dam completed on Pend Oreille. :Hells Canyon Dam completed on Snake.
1968	5.6	:John Day Dam completed on Columbia. :Keenleyside Dam completed on Columbia. :Lower Monumental Dam completed on Snake.
1969	8.0	
1970	12.6	:Little Goose Dam completed on Snake.
1971	9.0	
1972	7.9	
1973	11.1	:Mica Dam completed on Columbia.
1974	6.3	:Dworshak Dam on North Fork, Clearwater.
1975	8.2	:Lower Granite Dam completed on Snake. :Libby Dam completed on Kootenai.
1980	4.3	
1985	5.4	
1990	3.9	

Table 4 catch data are from Smith (1979)⁷³ and Oregon Department of Fish and Wildlife and Washington Department of Fisheries (1991)⁷⁴.

Historically, there has been sharp disagreement between Tribal peoples and dam builders on potential adverse impacts of dams on Columbia and Snake River fisheries.

...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 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 the Bonneville Dam is considered objectively and with unbiased honesty.⁷⁵

After they built the McNary Dam down here, when the fish would come up, well they would shut the water off down here, and that would make the Celilo water where the Indians fish too low. ... That was the beginning of the end I guess you would call it.⁷⁶

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'd 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. Everybody knew that, even white people.⁷⁷

⁷³ Smith, C.L., 1979. *Supra.* at 110-112.

⁷⁴ Oregon Department of Fish and Wildlife and Washington Department of Fisheries, 1991. *Status Report.* p. 67.

⁷⁵ P.M. Othus, U.S. Army Corps of Engineers, 1954. *Statement to a Yakima Indian Tribal Committee*, during compensation discussions associated with The Dalles Dam. Portland: April, 22. Meeting Minutes, pp. 18-20.

⁷⁶ Denny Williams. 1982. Personal communication on the Umatilla Reservation. October 13. In, Meyer Resources, 1983. *Supra.* at 60.

⁷⁷ *Supra.*

Meyer Resources (1983) concluded.

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 was ignored.⁷⁸

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.⁷⁹

VIII. Present Circumstances of the CTUIR

1. Material Circumstances

The adverse trends discussed in previous sections have had a predictable effect on Umatilla material and cultural wellbeing. Salmon stocks have declined, until, today, there are only nominal Treaty ceremonial and subsistence catches in Zone 6, with no Treaty commercial salmon harvest at all⁸⁰. Sturgeon and eels are also in difficulty⁸¹.

⁷⁸ Meyer Resources, Inc., 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 the Dams of the Mid-Columbia Area*. A Report to the Bureau of Indian Affairs. pp. 71-72.

⁷⁹ Meyer Resources, 1983. *Supra.* at 71-72.

⁸⁰ U.S. Army Corps of Engineers and U.S. Department of the Interior, 1994. *Columbia River System Operation Review: Draft Environmental Impact Statement*. Appendix C-1, Anadromous Fish, pp. 2-28 to 2-31.

⁸¹ CTUIR staff.

Just as remaining Tribal land is now checkerboarded, so the salmon resource upon which the Tribes of the CTUIR have relied for centuries has also become checkerboarded and disconnected - swimming to those stretches of river the dams don't preclude, spawning in the few areas where habitat remains or being stripped for next years hatchery production, surviving in those reaches and at those times where flow is adequate and water temperature tolerable, avoiding, to a small extent the perilous gauntlet of dams in their passage to the sea.

Game, roots, berries, plants, and all the other things the Tribes relied on have also almost been destroyed. In addition to the loss of lands discussed in previous report sections - and by way of example - wildlife habitat loss assessments prepared by BPA, State and Federal agencies and the Tribes, identify 20,749 acres of habitat lost within the Bonneville Project Area, 27,455 acres in the John Day Project Area, 9,138 acres in The Dalles Project Area, and 15,502 acres in the McNary Project Area⁸².

In this manner, the capital stock of wealth in land, water, fish, game and other resources that the Tribes of the CTUIR have relied on to provide annual subsistence, income and cultural and religious satisfaction has been almost entirely destroyed - and despite the fact that at least the core of these "survival assets" were supposed to be protected by Treaty.

"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 homes 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. You just go out farming. 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."⁸³

⁸² Bonneville Power Administration, 1989. **Wildlife Impact Assessment: Bonneville, McNary, The Dalles and the John Day Projects**. Annual Reports. Division of Fish and Wildlife.

⁸³ Meyer Resources, 1983. Supra at 62. Indented quotation is from: Carrie Sampson, Personal communication on the Umatilla Reservation, October 13, 1982.

This decapitalisation of CTUIR economic wealth is mirrored in the harsh statistics provided by the U.S. Bureau of the Census' 1990 National Survey. Table 5 compares the income, unemployment and poverty status of CTUIR members with all-resident data for the State of Oregon⁸⁴.

Table 5
Comparative Income, Poverty and Unemployment
- CTUIR and Oregon -

	<u>CTUIR</u>	<u>Oregon</u>
Percent in Poverty (%)	36.9	12.4
Percent Unemployed (%)	19.3	7.5
Per Capita Income (\$)	7,897	17,495

Source: U.S. Bureau of the Census, 1990.

Bachtold (1993)⁸⁵ identified linkages between economic and health for Northwest Tribes, including the Tribes of the CTUIR. The American Indian Health Care Association reached the following conclusions in a 1992 study of Oregon.

The "Northwest Area American Indian Health Status and Policy Assessment Project: State of Oregon" findings indicate that the status of American Indian health lags behind the general population, and the 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.⁸⁶

⁸⁴ CTUIR data is from a Special Census Run including only those Native Americans who indicate their Tribe as Umatilla, Walla Walla or Cayuse. This tabulation is more accurate than published "census track" data, which, according to the data referenced, may also count Native Americans from other tribes and/or non-Indians.

⁸⁵ Bachtold, L.M., 1993. *Supra*.

⁸⁶ American Indian Health Care Association, 1993. *Northwest Area American Indian Health Status and Policy Assessment Project: State of Oregon Report*. Saint Paul, pp. ix-x.

More specifically, the age adjusted death rate for Native Americans is 23 percent higher than for other residents in the Umatilla service area⁸⁷.

In considering the material circumstances of the CTUIR in 1983, Meyer Resources reached the following conclusion.

...the Nez Perce and Umatilla are experiencing conditions of extreme poverty by any standard... .

Only a renewed fishery provides a present real opportunity for all five tribes. For the Nez Perce and Umatilla, it may very well be their only real hope for survival.⁸⁸

Tribal poverty has moderated somewhat since that time. Recent CTUIR initiatives in gaming, and in cultural resource interpretation⁸⁹, if sustained over the medium to long term, offer significant improvement in jobs and income for some CTUIR members. The CTUIR is also actively pursuing economic opportunity in such diverse fields as campgrounds and trailer parks, convenience stores, property management, grain loading and storage and Tribal farming⁹⁰.

Considering present CTUIR circumstance, we conclude that these new initiatives will likely contribute to a significant, although not yet fully determined extent, to CTUIR material wellbeing. They do not, however, represent a full substitute for the benefits provided by CTUIR fisheries over thousands of years. Consequently, CTUIR's best economic strategy will be to continue efforts to substantially restore their Treaty fishery resources, while also taking advantage of other economic opportunities where and as they can.

2. Cultural Circumstances

Present day cultural circumstances of the CTUIR are equally difficult. They have lost most of their lands - either outright, or through loss of access and/or control. With this, the game, roots, berries and plants that formed an integral part of the CTUIR cultural existence are largely gone as well. The waters they depend

⁸⁷ Indian Health Service, 1994. **American Indian and Alaska Native Mortality: Idaho, Oregon and Washington, 1989-1991.** Seattle: Portland Area Office, p.75.

⁸⁸ Meyer Resources, 1983. *Supra.* at 48-49.

⁸⁹ Confederated Tribes of the Umatilla Indian Reservation, 1993. **"Plan for Growth", Overall Economic Development Program (OEDP) Update, 1993-1994.** Department of Economic and Community Development, pp. 13-22.

⁹⁰ *Supra.*

on have often been drained away for other purposes. Most importantly, the fish that provided the survival core for CTUIR material and cultural existence have declined to only a few. With completion of The Dalles, John Day and McNary hydroelectric projects, more than 52,000 acres of usable river-side⁹¹ - where CTUIR members and their invited neighbours camped, fished, hunted, held ceremonies and buried their dead - were inundated and lost. Included in these losses were virtually all the major CTUIR traditional fishing sites listed on pages 14 through 16 of this report.

The adverse results of this depravation are unfortunately predictable⁹². CTUIR elders struggle to preserve their culture, and to teach it to their children. Development of CTUIR professional capability for cultural assessment, and initiation of the Oregon Trail cultural interpretive facility⁹³, will assist these survival efforts.

But loss and inundation of lands, cultural sites and cultural materials - together with losses of water, fish and game, leave little opportunity for CTUIR youth to see that their culture is still relevant today - to fish for salmon as their ancestors did - to stand in the villages and camps where their ancestors stood - to speak their own language as a unique means of communication, and to understand, preserve and beneficially use the lessons of their ancestors and the power these lessons convey in the present-day world.

Today, it is estimated that only about 10 percent of CTUIR peoples still speak their Umatilla, Walla Walla or Cayuse languages⁹⁴. In the context of this cultural struggle, the words of CTUIR elder Carrie Sampson, given on the Umatilla reservation in 1982, bear repeating.

"My heart cries for my people."

⁹¹ See Note 82.

⁹² Also see Appendix 1 - Methodology for Impact Analysis.

⁹³ Confederated Tribes of the Umatilla Indian Reservation, 1993. *Supra.* at 14-15, and 21-22.

⁹⁴ Armand Minthorn, 1995. CTUIR Oral Historian. Personal communication. August 28.

IX. Impact of Selected Alternative System Operating Strategies
- On CTUIR Trust Resources -

1. Scoping of Alternatives

Alternative Columbia/Snake Rivers System Operating Strategies (SOS) are still being discussed and defined. In 1994, Bonneville Power Administration, the U.S. Army Corps of Engineers and the U.S. Department of the Interior (USBR), published a draft document discussing and evaluating several SOS options⁹⁵. Only one option considered offered any substantial hope for fish restoration - and the authors made no recommendation as to a "preferred alternative".

Making in-river fish migration more closely resemble conditions before the dams were built is the only strategy that has the potential for providing in-river survival rates for salmon equal to or greater than current rates achieved through fish transportation programs. The exception is fall chinook, which must be transported to maintain its already low numbers.⁹⁶

Subsequently, biologists in some agencies have discussed, but not published, a further option, termed the "Biological Option". Careful examination of this option has led the CTUIR to conclude that the so-called "Biological Option" is not, in fact, "biological enough" to attain sufficient recovery of CTUIR trust fish resources.

We can no longer simply look at the symptoms of the salmon's destruction, but must stop the deadly actions that have caused it. The Systems Operation Review offers some possibility of changing this disastrous situation. However, significant and substantial changes need to be made in the DEIS and the federal agencies' approach to the process.

In its current incarnation, the SOR DEIS fails to sufficiently acknowledge and comport with our Treaty Rights and the Trust Responsibility the United States owes to the CTUIR and other Columbia River Basin tribes.... If the Final EIS is not demonstrably altered and improved to reflect the concerns expressed here, then it would appear to be of little use--and questionable legal validity. ...

⁹⁵ Bonneville Power Administration, U.S. Army Corps of Engineers, and U.S. Department of the Interior, 1994. Columbia River System Operating Review: Draft Environmental Impact Statement. DOE/EIS-0170.

⁹⁶ Supra. at 4-192.

The federal government must honor its' promises and responsibility to the CTUIR and other Indian Nations, and begin to recover and restore salmon. A return to sustainable, healthy, and harvestable populations of fish, wildlife, and plants and the protection of our Treaty Rights and other resources should be a primary focus of the SOR process.⁹⁷

Chairman Sampson's concern about inadequate treatment of impacts on cultural resources is also understandable - as analysis of Tribal issues in the DEIS was limited.

This insistence on a non-Indian stereotypical "accounting stance" approach to assessing impacts - regardless of the fact that it dismisses effects on Tribal cultures without consideration, is termed "cultural encapsulation" in the professional literature. Cultural encapsulation is discussed in methodological Appendix 1. Its employment in the DEIS invalidates any claim of adequate impact assessment with respect to effects on CTUIR trust resources⁹⁸.

Even given perfunctory treatment of Tribal impacts, the DEIS concluded:

Generally, key Native American interests - principally access to and protection of natural and cultural resource sites - would be poorly served by all of the SOS alternatives, with few exceptions.⁹⁹

The present assessment of SOS alternatives is based on four general alternatives, which we describe as: the "no action" option; the "Biological-Option"; the "DFOP2" option and the "CTUIR" option.

No Action Option: System operation, pool elevations and flow releases will remain as in 1991.

⁹⁷ Donald G. Sampson, Chairman, CTUIR Board of Trustees, 1994. Letter, to Bonneville Power Administration, Army Corps of Engineers and Bureau of Reclamation. December 15. pp. 42-43.

⁹⁸ There are other substantial problems with human effects sections of the DEIS, which recommend that it be redone. Principal among these are: failure to formally incorporate preservation values, a probable impact for some of the alternatives considered; and the need to factor the very considerable recent changes in energy supply and cost conditions in the BPA service area into analysis.

⁹⁹ Bonneville Power Administration, et.al., 1994. Supra. at 4-125.

Biological Option: System operation studies drawdown and proposes up to 4 million acre feet of flow from Snake River system projects to augment fish passage in the mainstem Columbia. It proposes operating lower Snake River reservoirs at minimum pool levels for power and transportation, and John Day reservoir at minimum irrigation pool.

DFOP2 Option: System operation draws down lower four Snake River projects to natural elevation, and draws John Day reservoir down to spillway crest to augment fish flows.

CTUIR Option: System operation should embody the following features;

- * Draw lower four Snake River dams reservoirs to natural river elevations by Year 2000.
- * Draw John Day reservoir down to natural river elevation by Year 2005.
- * Continue to spill to meet 80% fish passage efficiency April 15 to June 15, and at least 90% efficiency June 15 through September 15.
- * By Year 2000, Tribal, Federal, and State governments, in coordination with local communities, should develop a New Energy Plan for the Pacific Northwest, which reduces the energy production burden on the Columbia and Snake Rivers and facilitates the restoration of Treaty-protected fishes to levels harvestable at pre-Treaty rates.

2. Material Impacts on CTUIR Trust Spring Chinook

Under the No Action option, we simply assume that referent fish stocks will continue to yield negligible or zero harvests and are trending toward extinction.

The Columbia River Inter-Tribal Fish Commission has provided preliminary harvest estimates for spring chinook for the other three alternatives¹⁰⁰ (Table 6). The range of result for the Biological Opinion option depends on whether one assumes that escapement of mid-Columbia stocks would double under this option or not.

¹⁰⁰ Weber, Earl, 1995. Projected Harvest Under Three Proposed Management Scenarios. Columbia River Inter-Tribal Fish Commission.

Table 6

Projected Tribal Harvest of Upriver Spring Chinook Under
Alternative Columbia/Snake Dam Operating Strategies

<u>System Option</u>	<u>Snake Harvest</u>			<u>Columbia</u>	<u>Total - Snake</u>
	<u>Zone 6</u>	<u>Tributary</u>	<u>Total</u>	<u>Zone 6</u>	<u>and Columbia</u>
	-----thousands of spring chinook-----				
No Action	neg.	neg.	neg.	neg.	neg.
Biological Opinion	12.2	2.1	14.3	8.2 to 16.3	22.5 to 30.6
DFOP2	57.2	12.0	69.2	25.7	94.9
CTUIR	57.7	12.2	69.9	25.8	95.7

These harvest estimates are for all mid-Columbia and lower Snake tribes - namely the Umatilla, Warm Springs, Yakima and Nez Perce.

The 1990 Census of Population estimates approximately 12,000 tribal persons living on or near these four reservations¹⁰¹. We further estimate that spring chinook in this area would weigh approximately 18 pounds at harvest¹⁰². Finally, we note that in-river spring chinook bring a substantially higher price than do fall chinook - an use an estimated average price per pound of \$3.50, from data in the early 1990's¹⁰³. Combining the data identified in this

We estimate the general magnitude of impacts on tribal members from alternative treatment of spring chinooks in Table 7.

¹⁰¹ U.S. Bureau of the Census, 1990. 1990 Census of Population: Social and Economic Characteristics - American Indian and Alaska Native Areas. 1990 CP-1-1A.

¹⁰² U.S. Fish and Wildlife Service, 1954. Summary Report on Indian Fishery Census: Celilo Falls and Vicinity - 1953.

¹⁰³ Columbia River Inter-Tribal Fish Commission. Data from selected years.

Table 7

Estimated Annual Per Capita Impact of Alternative SOS Treatment
of Spring Chinook Salmon of the Mid-Columbia/Snake System

<u>System Option</u>	<u>Total Harvest</u> '000 lbs.	<u>Added Benefit Per Tribal Person Harvest</u> -lbs-	<u>Harvest Value</u> -dollars-
No Action	neg.	neg.	neg.
Biological Opinion	478.0	39.8	139.30
DFOP2	1,708.2	142.4	498.40
CTUIR	1,722.6	143.6	502.60

It can be observed that either the CTUIR or the DFOP2 options have the capacity to significantly increase numeric and monetary returns from Columbia/Snake River spring salmon to CTUIR peoples. To the extent that a stable salmon supply allows the CTUIR to process as well as catch their fish, revenue associated with recovery of spring salmon could approach \$1,000 per capita under either the DFOP2 or CTUIR options¹⁰⁴.

Comparison with data in Table 5 (pg. 40) indicates that, even under the most favorable recovery scenario, restoration of spring salmon alone will not bridge the substantial gap in material wellbeing which exists between CTUIR members and other non-Indians living in Oregon.

3. Impacts on Other Salmon Stocks

Similar estimates of the potential impact from SOS options for other Columbia/Snake anadromous stocks have not yet been developed. Overall CTUIR salmon recovery goals have been recently published (Table 8)¹⁰⁵.

¹⁰⁴ See data in: Bonneville Power Administration, 1986. Calculation of Environmental Costs and Benefits Associated With Hydropower Development in the Pacific Northwest. Portland: DE-AC79-83BP11546, p. 42.

¹⁰⁵ CTUIR staff.

Table 8

Anadromous Fish Population Goals for CTUIR Ceded Area Sub-basins

<u>CTUIR Sub-basin</u>	<u>Species</u>	<u>1989-93 Average Population</u> --thousands of fish--	<u>CTUIR Goal*</u>
Umatilla	Spring Chinook	1.1	11.0
	Fall Chinook	0.6	21.0
	Coho	2.0	6.0
	Steelhead	2.0	9.7
Walla Walla	Spring Chinook	0	5.0
	Steelhead	2.0	11.0
Tucannon	Spring Chinook	0.6	3.0
	Fall Chinook	neg.	2.0
	Steelhead	0.5	2.5
John Day	Spring Chinook	2.1	7.0
	Steelhead	20.0	45.0
Grande Ronde	Spring Chinook	1.6	16.4
	Fall Chinook	neg.	10.0
	Coho	0	3.5
	Sockeye	0	2.5
	Steelhead	13.0	27.5
Imnaha	Spring Chinook	0.9	4.0
	Fall Chinook	neg.	2.0
	Steelhead	5.0	5.0

*CTUIR also intends to restore other anadromous and resident fish stocks not listed here.

Recognizing that these estimates are incomplete, we nevertheless note that spring chinook recovery accounts for about 78 percent of recovery by all salmon species - and for about 27 percent of recovery if steelhead are also considered under the CTUIR goals.

Such estimates are very rough, and require replacement with actual harvest modelling of the type completed for spring chinook at the earliest possible time. In general terms, however, they suggest, as a rough first cut estimate, that all-species dollar benefits from the CTUIR and DFOP2 options could approach \$1,500.00 per capita at the fishing level, and \$3,000.00 per capita if fish were also processed by the Tribes.

These all-species dollar returns would substantially narrow income and poverty gaps between CTUIR members and Oregon residents, but would not eliminate them.

4. Impacts on CTUIR Trust Lands

Creation of reservoirs at Bonneville, John Day, The Dalles, and McNary inundated more than 70,000 acres of productive canyon bottom land¹⁰⁶. Further bottom land was inundated by construction of the four lower Snake River dams - Ice Harbor, Lower Monumental, Little Goose and Lower Granite. This loss of productive land will continue under the No Action and Biological Opinion options. Loss of 27,000+ inundated acres under the John Day Pool will also continue under the DFOP2 Option. It is this continued loss of trust bottom lands that provides the main impact difference between the DFOP2 system option and the CTUIR option.

The range of tradeoff for wildlife associated with SOS action options is identified in Table 9. Essential tradeoffs are between emergent riparian lands and alternative land uses along present reservoir rims - and between inundation and land use along original river elevations. Data is available for John Day only.

Table 9

Land Use Tradeoffs Under Alternative SOS Options - John Day Pool

<u>System Option</u>	<u>Land Along John Day Reservoir Rim</u>	<u>Land Along Original River Bottom</u>
No Action	Maintains approx. 25,000 acres of riparian habitat.	Inundates 27,000+ acres of bottom land under John Day pool. Mostly riparian habitat.
Biological Option	Loses 2,800 acres of riparian wetland. That land available for other uses.	Inundates 27,000+ acres.
DFOP2	Loses 2,800 acres of riparian habitat. Land available for other use.	Inundates 27,000+ acres under John Day. Recovers bottomland along original river elevations at four lower Snake River dams.
CTUIR	Loses 2,800 acres of riparian habitat. Land available for other use.	Recovers 27,000+ acres of original river-side at John Day. Recovers original bottom land at four lower Snake dams.

¹⁰⁶ Childs, Allen, 1995. Memorandum. Data developed from BPA 1989 Annual Report.

5. Impact on CTUIR Trust Cultural Resources

We have identified that all Tribal trust resources have important cultural linkages for the CTUIR. In this analysis, the alternative options for Columbia/Snake systems management have particularly differing effects on CTUIR culture through their effect on fish resources and through their effects on lands of particular cultural significance. Effects on fish stocks have been outlined previously.

Almost 1,500 known sites of particular cultural significance to the CTUIR have been inundated by Bonneville, The Dalles, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose and Lower Granite reservoirs¹⁰⁷ (Table 10). These sites represent only a portion of the number that potentially exist.

Table 10

Known Sites of Particular Cultural Importance to the CTUIR - Inundated by Selected Columbia/Snake River Reservoirs -

<u>Reservoirs</u>	<u>Number of Cultural Sites</u>
Bonneville	21
The Dalles	99
John Day	509
McNary	168
Ice Harbor	73
Lower Monumental	77
Little Goose	199
Lower Granite	<u>314</u>
Total Known Sites	1,460

Source: CTUIR Cultural Resources staff.

Only with sufficient cultural resources, sites and opportunities can CTUIR members "grow their culture" - fishing where their ancestors did - fishing for the salmon, their historic survival resource - standing where their ancestors stood, in their villages and campsites, at their fishing places, in their burial and ceremonial places - communicating in their own language, about the

¹⁰⁷ Some of these sites are shared with other tribes.

knowledge learned from the past, and about its application to the contemporary circumstances of their life - and understanding that all these actions give them self-esteem, power and a healthy capability to deal with the challenges of contemporary society as CTUIR Indians.

Today, the people of the CTUIR are threatened, if not endangered. Their survival resource - the salmon- is threatened and endangered. Most of the key sites where they lived, fished and buried their ancestors are drowned. Access to other ceded lands, and to the diminished trust resources on them is severely impeded. And, as the opportunities to "practice their culture" diminish - own language capability, a key indicator of cultural wellbeing, has declined - until only 10 percent of CTUIR members can presently speak their own language.

Taking these circumstances together, the general effect of each SOS alternative on CTUIR cultural wellbeing is identified in Table 11.

Table 11

Impact on CTUIR Cultural Trust Resources and Wellbeing
- Alternative SOS Options on the Columbia and Snake Rivers -

<u>System Option</u>	<u>Impact on Cultural Wellbeing</u>
No Action	<ul style="list-style-type: none"> *Continues to destroy fishing opportunity. *Continues to flood CTUIR traditional villages, camps, fishing sites, burial and ceremonial sites. *Marginal remaining opportunity to practice CTUIR culture. *Threatens and endangers CTUIR culture.
Biological Opinion	<ul style="list-style-type: none"> *Significant, but limited improvement in fishing opportunity. *No improvement in flooding of CTUIR traditional villages, camps, fishing sites, burial and ceremonial areas. *Survival of CTUIR culture remains very difficult.
DFOP2	<ul style="list-style-type: none"> *Significant increase in CTUIR fishing opportunity. *Substantial recovery of cultural sites and opportunities flooded by four lower Snake River reservoirs. *Continued flooding of 509 cultural sites under John Day Pool continues to denigh cultural opportunities associated with this key area to CTUIR peoples.
CTUIR	<ul style="list-style-type: none"> *Significant increase in CTUIR fishing opportunity. *Substantial cultural recovery through access to key village, camp, fishing, burial and ceremonial areas presently flooded by John Day Reservoir. *Substantial cultural recovery through similar access to traditional areas presently flooded by the four lower Snake reservoirs.

Considering all effects, we conclude that the No Action alternative represents a policy of continued destruction of CTUIR Trust Resources, and of the ingredients necessary for the material and cultural survival of the CTUIR as a people.

Action under the **Biological Opinion** offer a measurable improvement for fisheries stocks. But this improvement, if obtained, would be insufficient to return Columbia/Snake stocks to levels of the historic past - and are also insufficient to significantly close the poverty gap between CTUIR members and non-Indians resident in the State of Oregon. The Biological Opinion also fails to restore any of the critically important traditional villages, camps, fishing sites, burial areas and ceremonial sites inundated by the reservoirs. We therefore conclude that the Biological Opinion does not sufficiently address responsibilities to CTUIR Trust Resources or CTUIR material or cultural wellbeing.

The **DFOP2 Option** does substantially improve CTUIR fisheries, and would restore access to important cultural areas presently flooded by Ice Harbor, Lower Monumental, Little Goose and Lower Granite reservoirs. It does not restore access to cultural areas inundated by John Day Pool. It represents a significant effort to meet tribal Trust Resource responsibilities associated with fishing - and would also significantly improve cultural access for some tribes along the lower Snake River.

The **CTUIR Option** equals and slightly exceeds the DFOP2 alternative with respect to restoration of spring chinook. Further, by restoring key cultural areas close to the CTUIR reservation currently flooded by John Day reservoir, as well as restoring access along the lower Snake River, it comes the closest of all options considered to meeting Trust Responsibilities to CTUIR - and in improving CTUIR material and cultural wellbeing. In fact, cultural areas presently inundated by John Day reservoir may be of such significance to CTUIR, that restoration of access to these areas may, by itself, be required before actions in fulfillment of responsibilities to CTUIR Trust Resources can be judged sufficient.

Appendix 1

Methodology for Impact Analysis1. Dangers of Cultural Encapsulation

Sue and Sue (1990) define the imposition of perspectives and analytical procedures of dominant society on culturally differentiated groups as 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.¹⁰⁸

Sue and Sue (1990) discuss these issues at length.

Those who succeed in society (say the White middle class) do so on the basis of their own efforts and abilities. Successful people are seen as mature, independent and possessing great ego strength. Apart from the potential bias in defining what constitutes competence, autonomy, and resistance to stress, the use of such a person-focused definition of maturity places the blame on the individual. When a person fails in life, it is because of his/her own lack of ability, interest, maturity, or some inherent weakness of the ego. If we see minorities as being subjected to higher stress factors in society and placed in a one-down position by virtue of racism, then it becomes quite clear that the definition will tend to portray the lifestyle of minorities as inferior, underdeveloped and deficient. Ryan and others have referred to this process as "blaming the victim".¹⁰⁹

2. The Role of Knowledge in Tribal Society

Tribal impact analyses are reliant on obtaining and understanding knowledge concerning Tribal society. It is therefore critical to understand how Tribal information is validated as reliable, and how knowledge is exchanged in Tribal society.

Assessment of reliability in non-Indian analysis emphasizes written professional published articles and written agency reports, then proceeds to other written material, and finally to oral reports, which are usually described as "anecdotal" and given lesser weight. In Native American culture, oral information, usually provided by

¹⁰⁸ Sue, Derald Wing and David Sue, 1990. *Counseling the Culturally Different*. New York: John Wiley & Sons, pp. 8-9.

¹⁰⁹ *Supra* at 11.

Tribal elders and leaders, is given considerable validity. This issue has been addressed by Renker and Pascua (1989), in recent work on the Olympic Peninsula in Washington State.

It is unfortunate that the words of Elders were not accepted as valid documents. But, the Ozette (archaeological) data are conclusive and cannot be dismissed as easily as scholars dismiss Tribal oral documents. ... These new data, along with other economic data from the Ozette excavation, have revolutionized the academic perspective on Makah pre-contact economy, and have provided proof of the accuracy of the Makah oral record.¹¹⁰

Most non-Tribal knowledge can be obtained from written material, and scientific surveys and studies, Tribal knowledge tends to be based on experience, and empowers the person who possesses it.

Knowledge, the elders say, empowers a person to live in this world with intelligence and understanding. They recognize that knowledge is a distinctively human attribute. They recognize knowledge as a form of power.... 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 in defense against an attack. These circumstances reveal the times and places in which power may be revealed. They define knowledge and power in relation to experience.¹¹¹

Ridington continues, in reference to the Dunne-za, a Tribe in northeastern British Columbia.

The thoughtworld of anthropology is different from that of the Dunne-za. For the Dunne-za, knowledge and power come to a person through direct experience of the world.... 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.

¹¹⁰ A.M. Renker and M. Pascua, 1989. *Makah Traditional Cultural Property Study*. Olympia: Washington State Office of Archaeology and Historic Preservation. p. 7.

¹¹¹ R. Ridington, 1990. *Little Bit Know Something*. Vancouver: Douglas & McIntyre, p. xvii.

A relief from this apprehension, I believe, lies in the feedback between my texts and those of the Dunne-za.¹¹²

Tribal and non-Tribal perspective concerning knowledge is not completely separable. CTUIR, CRITFIC and other Northwest Tribal entities have a growing cadre of persons with advanced technical training. Yet Tribal and non-Tribal perspective remains distinct, dictating culturally sensitive procedures for information gathering and analysis, and CTUIR validation of results obtained.

3. A General Approach to Analysis

While failure to appropriately consider Tribal cultural perspective will misrepresent Tribal circumstances and impacts, analysis that is both accurate from the Tribal viewpoint and understandable to the non-Tribal reviewer is a non-trivial undertaking. For example:

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.¹¹³

Bella (1974) places this difficulty in the more familiar (to non-Tribal analysts) framework of analytical uncertainty.

The general goal of environmental planning is to improve the quality of life as perceived by this and future generations. Because the "perceived quality of life" is considered too general to be applied to specific plans, there is the tendency of environmental planners to restrict use of this term to the general introduction of their planning reports. They then attempt to define goals which are specific, measurable and objective (our underlining). This tendency reflects the notion that a rational approach begins with the specific definition of measurable quantities....There are dangers in this approach however, for it is biased by the capacity of the planner to

¹¹² Supra at xv-xvi.

¹¹³ Eugene S. Hunn, 1990. Nch'i-Wana "The Big River": Mid-Columbia Indians and Their Land. Seattle: University of Washington Press, p. 78.

obtain specific measurements and to arrange such measurements into a specific framework which is defined as knowledge.¹¹⁴

Bondi (1977), writing in the entirely different field of thermodynamics, offers an alternative analytical model.

Another case, different from the historical one, where completeness of description looks attractive at first sight, is the case of the study of overall systems, as in thermodynamics. In a certain sense a system in thermodynamic equilibrium is fully described by a small set of parameters (volume, temperature, entropy, etc.), a set we like to think of as complete. However, the very power and elegance of the thermodynamic appraisal lies in its essential incompleteness. Whatever the interactions between the constituent particles, whatever their character, the system's parameters give a valid and most useful description of its state. It is true that this is a description of the overall state rather than of all the detail that goes on in the micro-scale, but this detail is generally not required. The fact that we can say a great deal about such a system without knowing about it in detail is a source of pride rather than of regret at the incompleteness of our knowledge.¹¹⁵

Similarly, it is impossible for the non-Tribal analyst to fully understand CTUIR cultural interactions - but complete understanding may not be necessary. Rather, we will focus on **key characteristics of CTUIR circumstance** that can usefully serve as **trust resource indicators**. Such an indicator approach can provide **valid representation** of Tribal circumstances and impacts, and has been previously accepted as a basis for decision-making affecting Tribal resources¹¹⁶.

¹¹⁴ David A. Bella, 1974. "Fundamentals of Comprehensive Environmental Planning", in, **Engineering Issues**. Vol. 100, No. E11, January, p. 18.

¹¹⁵ Hermann Bondi, 1977. "The Lure of Completeness", in, **The Encyclopedia of Ignorance**. New York: Pergamon Press, p. 7.

¹¹⁶ Eg. United States of America et al., v. State of Washington, et al, **Memorandum Opinion and Order**. United States District Court, Western District of Washington. No. CV 9213, Sub-
Proceeding No. 89-3. December 20, 1994, p. 51.

4. Time Dimensions and Cross Cultural Impact Assessment

Chambers (1985) defines a culture as "a group of people who share standards of behavior and have common ways of interpreting the circumstances of their lives"¹¹⁷. Thus, culture is dynamic - both historic and contemporary.

...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.¹¹⁸

In this sense, history and tradition are key elements of culture, but do not delimit it.

Culture is what you do every day of your life--and 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.¹¹⁹

Availability of sites where ancestors lived and conducted traditional activity also plays an important role in tying historic and contemporary Tribal perspectives and values together - and in transferring knowledge that is important for Tribal survival. Some sense of this importance is captured in the words of a Quinault woman, talking about time spent on one of her Nation's traditional beaches.

When I was small, I went with my Grandfather down to the beach, in his words, "to talk to the ocean". I think that when he was old, and thought it was time, he took me down to talk of the things he needed to talk to me about--to give me an inner vision of myself, and the understanding that it was within my power to do and to be what I wanted to be. ...

(Today) when you're down at the beach, you remind yourself of how your ancestors lived. When we'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

¹¹⁷ E. Chambers, 1985. *Applied Anthropology*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., p. 4.

¹¹⁸ A. Fienup-Riordan, 1982. *Navarin Basin Sociological Systems Analysis*. U.S. Minerals Management Service. Alaska OCS Socioeconomic Program Technical Report Number 70, p. 23.

¹¹⁹ David Forlines, 1990. Personal communication. La Push, Washington.

our people have always done. It reminds me that my ancestors live on through me, and it makes me more responsible.¹²⁰

Similarly, words inscribed on the wall of the Makah Cultural and Research Center at Neah Bay, Washington refer to the significance of Ozette, a Tribal village unearthed after being buried for thousands of years.

The Ozette houses are canoes carrying scientists into a new world. The Ozette houses are war clubs against ignorance and hostility. The Ozette houses are thunder and lightning for Makahs, voices from the past illuminating our heritage. At Ozette, endings have become beginnings. From Ozette comes new understanding.¹²¹

These individual and collective words talk of the transfer of cultural knowledge from ancestors to the young. They talk of achieving personal and Tribal self-assurance. They talk of remembering and reinforcing culture through practising it - "just doing what our people have always done". Conversely, it is more difficult to convince young people of the relevance of their culture where there are no "places" where they can practice it - no places where it can play a role in their everyday lives.

It follows that in order to understand present day CTUIR circumstances and to assess the intensity of potential impacts upon them, it is necessary to have some understanding of CTUIR history and tradition, and of the major changes that have affected CTUIR circumstances up to the present.

5. Interrelation Between Tribal Economic Circumstances and Health

Authorities point out that Tribal circumstances are not only temporally interrelated, but that different elements of Tribal circumstances at any point in time are interrelated as well. Findings by Bachtold (1982), considering relationships between economic wellbeing and health are of particular interest in the present analysis.

Before the advent of Europeans on the North American continent Native Americans lived in general harmony with their universe, maintaining a balance between harvesting natural resources and harboring them for the future. For tribes that lived by the rivers, fish was the staple food. According to Indian belief and practice, "the Creator made food for all creatures and it

¹²⁰ Karen Harp, 1990. Personal communication, at Taholah, Washington.

¹²¹ On display at the Makah Cultural and Research Center, Neah Bay.

must be free for all". Consequently, they shared what they had with those in need. Food was seldom borrowed to be "paid back" later.

Assured of sustenance, tribal members could turn their attention to higher level needs, such as the need for mastery or power, which was viewed by the Yurok as "excellence in doing something". Success in life, on the other hand, was generally perceived as stemming from supernatural communication rather than as the direct result of an individual's effort ... 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 was also expressed in Western contemporary psychology, especially among European theorists. 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 humankind can be motivated to meet higher level needs. In order to reach ones full potential as a person, everyone must first have 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, and synergy within the person". Someone who is absorbed totally in fulfilling ongoing hunger needs, for example, will attend less to safety needs...

When people are found to be behaving in ways that clearly indicate they are under stress, the question must be asked, "Where on the hierarchy of needs have they been blocked...?"

A major characteristic of the healthy personality is being in control of one's environment. Without this autonomy, the personality is under stress, and indicators of stress are common among Native Americans.... Failure to move through development stages with positive outcomes, difficulty in meeting basic needs, and lack of control over one's environment can, when negative conditions persist, result in overwhelming stress. Suicide victims provide silent testimony....

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.... Movement through developmental stages has been perilous, beginning with birth itself, increasing with entry into school, and peaking in excessive stress for young adults...

Gloster identified economics as potentially the key to improvement for Native Americans. He further maintained it is essential 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 achieve and 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.¹²²

¹²² L.M. Bactold, 1982. Supra.

Appendix 2

Detailed Information Concerning CTUIR Villages, Camps and Seasonal Rounds, Prior to 1855

Suphan (1974) has supplied detail with respect to circumstances of CTUIR ancestors¹²³.

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.... From west to east these permanent camps were:

1. Quas-qui, on the Washington shore about 1/2 mile west of Alderdale, Washington.
2. Tee-ow-tuch-wa-ta, on the Washington side opposite Thanksgiving Island and across from Boulder, Washington.
3. Auk Kuk Pa, at Alderdale, Washington.
4. Snim esho, on the Oregon shore 1 mile east of Boulder, Oregon. This was a good fishing site to which the Yakima Indians came as well.
5. Slapee-hus, on the Washington shore north and west of Castle Rock, Oregon.
6. Wulth quas pa, one mile below Castle Rock on the Washington shore. The Cayuse fished here too.
7. Yep-po-luc-sha, on the Washington side and along the banks of Blalock Island for about one mile below the upper end of the island. This was a good fishing spot; traded here with other Indians for roots, berries, hides, and furs. The Satus Yakima used it occasionally.
8. So-luc-a, north of Umatilla, Oregon on the Washington shore.
9. Tko'pa, at Echo, Oregon.
10. At Hermiston, Oregon.

Umatilla fishing areas along the Columbia, as given by the same sources, were at and interspersed among these villages from the vicinity of Alderdale, Washington, upstream to where

¹²³ Suphan, 1974. Supra.

the Washington-Oregon line meets the Columbia River. On the Umatilla River, they extend to about Echo, Oregon. ...

Verne Ray's list of Umatilla village and camp sites is apparently derived from but one informant; their names and locations are given as:

1. i'matitam (lots of rocks), which was on both sides of the mouth of the Umatilla River; this was an important winter site, a center of berrying and root-digging, as well as fishing. From this village the entire group derived its name....
2. tuq'waye'pa (tule place), which was a spring and summer camp on the south side of the Columbia between Umatilla and Cold Springs. Berries and roots were gathered nearby.
3. xu'lulupa (rapids in the river), a summer fishing camp on the north side of the Columbia about 3 miles above Mottinger, Washington....
4. ama'ama'pa (island), either on Blalock Island or those opposite Mottinger; used as a stronghold against attacks of the Snake Indians.
5. ta ksasam (elbow of the river), a temporary camp on the north bank near Roosevelt, Washington.
6. k'amilpu (opening through the canyon where light penetrates), a permanent village on the north shore at the mouth of Rock Creek.

While these two lists of village and fishing sites do not correspond as to name and precise location, agreement is close as to their general range....

During their summer treks, the Umatilla crossed over the Blue Mountains into the Grande Ronde Valley to numerous fishing, root-gathering, hunting, and berrying areas. Such spots were about the present sites of the towns of La Grande, Hilgard, and Island City on the Grande Ronde River, as well as on the headwaters of that river near Chicken and Sheep creeks. Others were in the vicinity of Hot Lake and along the course of Catherine Creek north and east of Telocaset. 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 Minam 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 Lemah 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. Specific areas in this region include: that about Beack Creek, Oregon; the Beech-Laycock creek junction; five sites along the middle fork of the John Day downstream from Bates, Oregon; Bull, Granite, and Crane creeks. Other important areas in Grant County were on Silvies River just south of Seneca, in Logan Valley and on Poison Creek just east of Silvies, Oregon, the headwaters of the Malheur River and the prairies between it and the north fork of the Malheur. Virtually every one of these sites were jointly shared with the Cayuse, while those along the John Day, Silvies, and Malheur River were also visited and exploited by the Warm Springs (Tenino), Columbia River Indians, and the Paiute.

Here we have only attempted to indicate in a most general way those regions of eastern Oregon which figured in the economic round of the Umatilla Indians...

...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, Wallowa 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 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.¹²⁴

Suphan (1974) also provides information for the Walla Walla.

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 at least one, while the site at the Snake junction was fished by the Palus and Upper Columbia (Wanapum) as well....

Turning now away from the main river course a brief indication of Walla Walla land use in the mountainous regions of north-eastern Oregon may be given here. Owing to the numerous accustomed fishing, hunting and gathering spots as given by the survey party list, ...we will only indicate in this text the streams and valleys along which they were situated...

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 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

¹²⁴ Supra at 128-134.

visited; informants alleged that each would be visited at least once yearly by some members of the Walla Wallas.¹²⁵

Concerning the Cayuse peoples, Suphan (1974) reports:

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 following list of local groups may be compiled:

1. The Butter Creek band;
2. The Pilot Rock band;
3. The McKay Creek band;
4. The band resident near nixya'wi, a spring near Cayuse, Ore.; ...they camped from Mission to Cayuse along the Umatilla River.
5. The Gibbon-Umatilla river band;
6. The Cottonwood Creek band;
7. A band wintering where Milton-Freewater now stands;
8. The pa'cxapu, "Cayuse people in the region of the Walla Walla river. Informants say this band was at and about Walla Walla, Washington.

The Cayuse bands remained in these winter quarters until well into 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 the salmon into the headwaters of such streams as the Grande Ronde, Minam, and Wallowa rivers for their supplies of this staple than on 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.

Subsistence areas customarily visited by the Cayuse ... shows that a wide range was covered. Both forks of the Walla

¹²⁵ Supra at 135-144.

Walla River above Milton-Freewater were shared with the Walla Walla Indians, as was the upper reaches of the Wenaha River. South of this point, the Cayuse had many subsistence areas in the Grande Ronde Valley, a region jointly exploited with the Umatilla and Walla Walla, as well as with the Nez Perce. Eastward, Catherine Creek was cited as one of the most productive fishing streams frequented by the Cayuse together with the Umatilla and Nez Perce Indians. Minam River, Wallowa River, and the shores of Wallowa Lake were all sites of several fishing, root-digging, and hunting regions, again shared with the neighboring ethnic groups.

In Baker County three sites were given along the upper Eagle Creek, one on Pine Creek near Halfway, Oregon, one on Powder River just west of Salisbury, Oregon, and another west of North Powder on Anthony Fork. At each of these, the Umatilla Indians fished or hunted as well.

In the John Day country, through Grant County, their wanderings took them to the creeks north of Monument, Oregon, and south to Silvies River at about Seneca and Silvies, Oregon. Here, Poison Creek and Logan Valley were of considerable importance for their fishing and for obsidian for projectile points. The upper Malheur River, a spawning ground for salmon, was a most important and productive fishing area in addition to being a spot at which many Indian groups met to visit and trade. Other sites in Grant County were along the Middle Fork of the John Day west of Bates, Oregon, and along the mountain streams about Granite (Bull, Lake, and North Trail creeks).

In Umatilla County, the Blue Mountains sector about Albee, Ukiah, and Lehman Springs were exploited as was the North Fork of Cable Creek and Winom Creek just south of Lehman Springs...

In addition to making annual circuits to the above-mentioned sections of eastern Oregon, the Cayuse apparently roamed far and wide to the west. In 1843, John Fremont found "an old camping ground of the Cayuse Indians" along the Deschutes River just south of Bend, Oregon, with signs that they had been hunting there. Some years earlier, Ogden writes that the Klamath Indians of Klamath Lake were fearful of attacks by the Cayuse and Nez Perce....

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.¹²⁶

¹²⁶ Supra at 145-149.

**A Review of Cultural Resources Concerns of the Systems Operation Review Environmental
Impact Statement Cultural Resources Appendix**

October 12, 1995

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Introduction

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Protection Program (CRPP) has been involved in the Columbia River Systems Operation Review (SOR) process since prior to the CTUIR's first communication about the Draft Environmental Impact Statement (DEIS) in January 1994. The SOR has been going on since 1991. The CTUIR as is the case with many other Tribes were not involved from the beginning of this effort. At a meeting of the SOR Cultural Resources Working Group in which the CTUIR were invited, staff and policy members from several Tribes were informed that numerous alternatives (System Operation Strategies) had been suggested and refined into seven alternatives with 21 options, but that no decisions had been made.

At this time representatives of various tribal staff began the process of educating and informing mid level agency management about Tribal organization, policies and procedures. At that time it was explained that consultation between policy makers of the United States and Tribal policy representatives needed to occur. It had to be explained again and again to agency staff that consultation needed to occur on a government to government level. The ramifications of this study will directly effect the future of the CTUIR and requires policy consultation. The health of the Columbia River is crucial to the survival of the CTUIR. Within the lifetime of many Tribal people alive today (not just elders) the water from the Columbia could be consumed without treatment and there were enough fish and eels for a family to survive.

River management was determined when decisions were made to equate water with dollar values based upon the kilowatt. Further damage occurred when the agencies divided the river into many working groups based upon the many river uses. The management practices alone of the SOR Agencies (USDE Bonneville Power Administration, U.S. Army Corps of Engineers, USDI Bureau of Reclamation) already divides the river. Often the agencies missions are not coordinated and the end product is that there are many interests competing for the most valuable resource on earth, water.

The Tribes need to be directly involved in management of resources that are significant to them. Most importantly for land managers, many tribal members today still possess intimate knowledge of the ecological adaptations of native species in the environment (Hanes 1995:47). The agencies need to find avenues and mechanisms that allow the tribes to be directly part of management decisions affecting culturally significant resources. The Tribes can provide a crucial role in the successful management of the Columbia River.

SOR is just the first of many studies to come that will in effect re-design our Columbia River System. Even as written the SOR is directly tied to many other studies such as the U.S. Army Corps of Engineers, Systems Configuration Study (SCS) that will redesign river operation. The SOR study will have regional and national impacts and will directly affect every Indian living on the

Columbia Plateau. Even no tribal leaders were contacted or consulted with until the study had started and alternatives developed. In fact, agency officials are still confused as to their responsibility to consult as Trustees under the 1855 Treaty with representatives of the CTUIR and their responsibility under cultural resources laws such as the National Historic Preservation Act (NHPA) and the Native American Graves Protection and Repatriation Act (NAGPRA). The United States has a fiduciary relationship and responsibility with the CTUIR and other Tribes. Are the Agencies deciding how the Treaties with Native Americans are to be honored and how are they prioritizing the treaties they need to honor? Are there conflicts amongst the various treaties and agreements that they must adhere to? What are the agencies doing to resolve these issues?

Demonstration of need is key for funding appropriation. Analysis of the Columbia River SOR demonstrates a region of industry and agriculture that has been extensively subsidized by the operation of the Columbia River. Land was given freely to settlers through the Land Donation Act, water has been appropriated on a first come first served basis, water usage has not been regulated, farmers receive aid in price fixed subsidy and cash checks designed to protect the family farm, industry's electric bill is picked up by the rate payers, and BPA has picked up the tab for the failed Washington Public Power Supply System nuclear power plant. "The SOR DEIS water management agencies provide no explicit discussion of these issues associated with property rights and responsibilities. Rather, they implicitly assume that the irrigators, utilities, and barge owners have had property rights to all the water they have used in the past, to the detriment of the fish (ECONorthwest 1995:11).

There are many flaws in the studies scope, the SOR fails to consider the Public Utility District Projects, Hells Canyon Complex, or any of the major system tributaries except the Clearwater River and the Dworshak project. The study is not always consistent with the efforts of other agency efforts such as the Interior Columbia Basin Ecosystem Management Project (ICBEMP) although the Columbia and Snake system are the major artery of the basin. In addition, the SOR suffers from divided agency direction, a confusion of federal legislation, conflicting treaties, and the poor decisions made by past and present managers that created the system. The flaws of the study are more than obvious but then they are easy to see when we have so many environmental problems.

SOR issues are tied directly to everyone who lives on the Columbia Plateau and Snake River Plain. The major issues of navigation, transportation, irrigation, hydroelectricity, water quality, fisheries management, water supply, flood control, irrigation, and other are all part of the future of the region. The SOR issue and discussion should really be about determining the correct balance of resources that will allow us to enhance and restore the health of the Columbia River system. Obviously, the current operation is destroying the regions once abundant fisheries resource and is devastating the regions rich archaeological heritage. Hard decisions made to balance the interests of the river, the people who live along it, the future of the region.

SOR should be a study of the mainstem Columbia and Snake river system including Dworshak on the Clearwater river and all projects including non-federal projects. This allows for a manageable view of but one of the major variables affecting the region and its river system. The operation of the river system will directly effect how the surrounding region is utilized. It is impossible for the SOR agencies to continue to claim they are only studying 14 federal facilities and their reservoir. Since 1939 when the first projects were constructed and begun numerous dams have been constructed on the mainstem. This has in effect changed the ecosystem along the river from a river to a series of lakes. For many years river operation has been justified by Cold War paranoia and industrial development specifically developing projects for hydroelectricity, irrigation, and navigation. Fisheries has never been a planning factor as evident in the band aid fish ladders and declining runs. The fishery was however one of the most abundant resources in the region.

Dams were constructed to help industry and certainly helped to win World War II. Most projects however were constructed during the Cold War. They were seen as an industrial security blanket against communism. The situation is similar to the over production of nuclear weapons. Contingency plans must be developed for those affected directly by such decisions but we cannot allow a minority of the Regions population or of the United States to dictate the future of the Columbia one of the countries greatest resources.

Hydroelectricity is a cheap source of electrical power and it is relatively clean compared to nuclear or fossil fuels. The problem in many cases is simply the design of the dam. The U.S. Army Corps of Engineers are some of the finest engineers in the world, however, were they ever ordered to design a dam that allows for the passage of fish. Hydroelectric projects can be removed, redesigned, and developed that allow for the passage of fish, provides water for other uses, and generates electricity more effectively than the current projects. It would create numerous jobs and be a major public works projects to remove or redesign selected hydro-electric projects.

The removal and/or reconstruction of a hydroelectric project is a monumental task that requires thousands of temporary jobs. Thousands of jobs in the fisheries industry could be restored to the region. The Columbia River was once teeming with canneries, off shore fisherman were at sea, recreation fisherman had real stories, and an Indian family living on the Plateau could get enough fish to survive on. Current river operation in the SOR is entirely dominated by the hydro-electric projects and associated Direct Service Industrial (DSI) interests. The fisheries on the Columbia are not even considered a regional economic benefit. In fact, water spilled for fishery interests are actually calculated as a loss by the SOR Agencies.

There are additional jobs in the environment if there were incentives for farmers and industry to follow federal regulations. Currently there seems to be a major lack of enforcement of federal regulations. Jobs could be create to enforce federal environmental regulations. Basically the citizens of the U.S. suffer because some groups feel they are privileged and need not comply with

federal law. Enforce federal laws and use the penalties to fund further law enforcement. No single interest group or industry should be allowed to destroy or contribute to the destruction of significant resources at the expense of everyone.

There are many river uses but we must prioritize the uses that affect the quality of the other uses. All interested parties within the Columbia system must address water quality and overuse, we cannot establish healthy ecosystem without water quality. The velocity of the river and the river systems natural filtering ability must be restored. The Columbia river must be able to clean itself out. The water in the river is warm, slow, and dirty with agricultural, industrial, and radioactive pollutants. This has happened in the last 150 years with most destruction happening in the last 50 years. This is not effective long term management of the river system.

Diverse Tribal Interests and Concerns

The federal agencies continue to address Indian Tribes as a whole, continually causing confusion on crucial issues. One specific issue is the need for drawdowns and the variety of concerns and conflicts of views raised by the Tribes. All concerns are valid and all concerns can be addressed. The problem is that it is absolutely necessary to drawdown the river and emulate natural river conditions to restore Columbia Basin Salmon. The CTUIR believe the lower Snake river must be restored to its natural condition and setting in addition the John Day Pool should also be operated at natural river levels. The river must be drawn down to benefit all river related resources natural and cultural.

The concerns of other Tribes have often purposely or inadvertently have been used or presented to maintain the SOR agencies preference for Stable Storage system operating strategies (SOS). Some upriver Tribal interests (generally speaking those Tribes located above Chief Joseph Dam) have voiced a concern for stable storage reservoir levels. One side to this equation is that these Tribes have successfully adapted to the change in the environment from a river to a lake. Many of the tribes who live along the upper Columbia are accustomed to living in a lake environment and the transition may have been easier than for those who lived along the river lower in the system. Further several upriver Tribes have gone on to invest into the industries that have developed along Lake Roosevelt and the other reservoirs. This includes resident fisheries and recreation.

Some of these same Tribes are very concerned about Salmon fisheries and have also invested resources into Salmon recovery. Such Tribes certainly understand the need for cold clean water and can contribute but do not want to see their resources adversely affected such as the situation at Dworshak Reservoir. It will require water from many sources to restore Columbia river Salmon and over half of the water in the Columbia River System is located above Grand Coulee.

Dworshak is a storage reservoir and the water within the reservoir has been used in the past to provide water for electricity, irrigation, and fisheries. Drawdowns at Dworshak are dramatic with over one hundred feet drawdown capabilities. Run of river reservoirs fluctuate about 10 feet maximum on a daily basis. Ironically, Dworshak is also one of the reservoirs where there actually has been cultural resource work conducted over a period of time and in which the data is contemporary. The information clearly demonstrates that the continual abuse of water stored in Dworshak has utterly destroyed many sacred, significant, and traditional resources in Dworshak. Many resources significant to the Tribe have been adversely impacted due to the abuse of Dworshak water. Water needs to be drawn from many sources and one storage reservoir should not be abused to band aid a problem created by stem wide management.

The SOR Agencies through the SOR DEIS have quickly used the information in the Appendix to suggest stable storage is best for cultural resources. Stable storage protection of sites is a fallacy. The SOR DEIS points out that 86-100% of cultural resources properties are adversely affected by current operations or any proposed alternative. This analysis does not even consider inundation as an adverse effect. The National River Inundation Study conducted by the ACOE identified inundation as an extreme adverse effect. Further there are numerous sites located above the reservoir levels are affected by erosion and wind action produced by the reservoir. The reality is that most cultural properties are located along the river in the "zone of fluxuation" and are adversely effected by daily operations. The data available on many of the known sites is completely inadequate and drawdowns if necessary may provide an opportunity to get adequate baseline of data. The concern is really what will the SOR Agencies be doing to enforce the Archaeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and the National Historic Preservation Act (NHPA). There is very little if any thing being done to currently protect cultural properties and violations occur daily along the Columbia River System by members of the public and agency actions. The agencies have never enforced ARPA and there are very few successful prosecutions under that legislation even though violations occur regularly.

What are the SOR Agencies policies on the protection of Native American Graves and implementation of the NAGPRA? What is their policy on repatriation? The SOR Agencies also have the management responsibility to implement the National Historic Preservation Act. This includes Section 106 undertakings and ongoing management under Section 110 of the NHPA. How many days a year to SOR Agency archaeologist get on the ground? How many new sites have been recorded? How many sites have been protected from adverse effects or what strategies have been sought? How many sites have been nominated by the SOR Agencies to the National Register of Historic Places?

The SOR agencies cannot continue to hold one resource against another to maintain the status quo. The United States absolutely needs to re-evaluate the operation of the Columbia or we will be at risk of destroying one of the United States and the Earth's greatest natural fishery. We need to

accomplish drawdowns, this will require the cooperation of all interested parties and not always the same all the people living in the region. We need to prepare for adversity. Just as some federal agencies prepare for fire season the SOR agencies will need to prepare for drawdown. Plans can be developed, crews can be mobilized, and the laws can be enforced. Cultural resources properties can be protected during a drawdown. In addition other crucial cultural resources such as anadromous fish and many wildlife would benefit. Federal agencies fail to recognize anything other than a property as a cultural resource.

Conflict of Salmon as a Cultural Resource

The SOR cultural resources working group and the region is continually faced with the distinction of salmon as a cultural resource. Cultural resources are much more than the standard stone, bone, and boundary approach used by the agencies to manage archaeological sites. Essentially there would be no cultural properties on the Columbia River if there were not Salmon. Archaeological evidence supports this. Many of the significant properties located along the Columbia river are directly related to salmon procurement directly or indirectly. Wild salmon are necessary for the continuation of Native American religion and survival on the Columbia Plateau.

"People inside and outside the region, see salmon as an icon of the regions heritage and way of life. For many there is something inspirational in the salmon's arduous journey, linking the ocean with the mountains spanning years and hundreds of miles. Countless statements of the religious, cultural, and biological importance of salmon represent economic values that are priceless. Because these values are so difficult to measure they are no less important. They cannot be ignored because the agencies analysts have failed to develop adequate tools for measuring them (ECONorthwest 1995:67)."

Salmon was one of the first resources exploited by non-Indians in the region. It was key for the survival of early explorers and homesteaders. Salmon and the history of the region can not be separated. The agencies have consciously avoided it by essentially claiming that the fish have their own work group. No one wants to take the responsibility for the fish. Many Tribal representatives have tried to speak for the fish but the bureaucracy hasn't listened. The federal government has to take the responsibility and realize the importance of Salmon in the Columbia System and begin aggressive restoration and recovery strategies.

Drawdown management actions provide water for migrating Salmon allowing a timeless way of life to continue and prosper. Fish were so significant to the people living on the Columbia Plateau that fish and usual and accustomed fisheries were specifically addressed during the treaty negotiations. Special provisions were made to protect access to usual and accustomed fishing areas and locations.

The American Indian Religious Freedom Act (AIRFA) provides that it is the U.S. Government policy to protect and preserve American Indians freedom to believe, express, and exercise their traditional religions. This statute provides that access to traditional religious sites is a right that the government felt important enough to protect by statute. The sites on the river are among the most sacred to the Columbia River tribes. The denial of access to these sites not only violates the spirit of AIRFA but the free exercise of religion.

By failing to protect salmon, a traditional cultural and religious resource, the SOR agencies are violating U.S. policy contained in AIRFA. Salmon are an indispensable part of many ceremonies and religious rites to tribes along the Columbia as well as coastal tribes. The agencies responsible for the diminishing fish runs have failed in their responsibilities under the Endangered Species Act, National Environmental Policy Act, a host of other statutory considerations, as well as violating the Treaty of 1855 between the CTUIR and the United States.

Traditional Cultural Property

The Columbia River is a Traditional Cultural Property. The Columbia is the life blood of the plateau, the river provides us all life. It is disconcerting to see the way that land managers champion this truth. "Some tribes consider the Columbia river itself a "TCP (SOR DEIS 2-22)." The fact is that no Tribe has said otherwise. The traditional cultural property (TCP) portion of the SOR DEIS is entirely insufficient. Perhaps understandably so this section cannot be completed without extensive tribal involvement. It is not appropriate to use anthropological studies to categorize and quantify the traditional value of the Columbia River to Tribes living on the Plateau. The river cannot be separated from the people after thousands of years of living along its shores or from the sites the Tribes have used in the past. Non-Indians certainly couldn't have survived on the Plateau without the resources provided by the Columbia River.

Guidelines have been developed to identify Traditional Cultural Properties, the concept is tangible and can be understood by people from diverse cultural backgrounds. Such areas include; a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world; a rural community whose organization, buildings, and structures, or patterns of land use reflect the cultural traditions valued by its long term residents; an urban neighborhood that is the traditional home of a particular cultural group and that reflects its beliefs and practices; a location where Native American Practitioners have historically gone, and are known or thought to go today , to perform ceremonial activities in accordance with traditional cultural rules of practice; and a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historical identity;

"A TCP then, can be defined generally as one that is eligible to the NRHP because of its association with cultural practice or beliefs of living community that (a) are rooted in that communities history;

(b) and are important in maintaining the continuing cultural identity of the community. (Bulletin 38)" The Columbia River System certainly meets all the criteria necessary to be considered a TCP. It is essential for the maintenance of Traditional Columbia Plateau life.

SOR DEIS Cultural Resources Appendix D

The Systems Operation Review Draft Environmental Impact Statement (SOR DEIS) Main Report and Cultural Resources Appendix portrays that Cultural Resources will be best protected by Stable Storage Alternatives and will be most affected by drawdown alternatives (SOR DEIS 4-2). Such a broad statement is a fallacy. It is not even an accurate assumption based upon the results of the actual data and analysis presented in Appendix D of the Draft EIS. Within the "smoke and mirror" barrage of graphs and tables there is not enough solid substantiable data to make such a management assumptions. There is no way to adequately determine the effects of any System Operation Strategy (SOS) on cultural or possibly any other resources based upon the data presented in the appendix.

Even as written, the data is not intended to be represented as such in fact no matter what SOS is developed the management of cultural resources will always be reactionary. This includes managing the cultural resources along the Columbia river in their current devastated condition ravaged in many cases by the stable storage fallacy. Data should be presented more objectively and even as presented the data does not suggest that stable storage reservoir levels are benefitting the river or the region. Current operations, stable storage alternatives, and mis-represented information, continue to hide the problems of cultural resource destruction, inadequate resource allocation and questionable management.

Cultural resources issues are presented in Appendix D near the beginning of a lengthy Environmental document and is very noticeably toward the front of the package. Appendix D is very lengthy in its own right and due to its location in the package will probably be one of the few appendices that any reader actually reads through. Cultural Resources are presented in a fashion that makes the reader believe it is a driving concern and force in the study.

There are extensive tables and graphs the information presented in the Main Report and Appendix D that information fails to provide enough substantial data for cultural resources management use. The reality is that there are pro's and con's to both stable storage and drawdown alternatives, however, the analysis does little to discuss "pro's and con's." Appendix D assumes that stable storage is the best selection and does not provide an objective discussion of what needs to be accomplished to adequately manage the resource based on the selected SOS.

The impacts of selected operating strategies for several years. The SOR study is a study with fifty year ramifications. The models are essentially a qualitative analysis based upon geomorphological factors and a quantitative analysis based upon time and exposure factors. These models are useful

however they are far from being tested to the point that a broad statement about Cultural Resource Management in the DEIS. The models are more appropriately tools to be used for developing and implementing Historic Preservation Plans at each reservoir.

The analysis is based entirely upon models and theories using two different types of reservoirs (flow and storage) as models. The results of these analysis will be used to make long term management decisions about all 14 federal projects. The reality is that data from only two reservoirs John Day and Dworshak were used to make broad based assumptions for all 14 facilities. A review of site forms housed at the CTUIR archives indicates that sites recorded within many of the reservoirs were incompletely recorded and many have never been evaluated. Many archaeological sites have never been seen since they were recorded and the condition of the sites is essentially unknown.

There are major gaps, discrepancies, and a total lack of data necessary to effectively manage the resources on the Columbia Plateau. Very few sites have been nominated to the National Register, almost none nominated by the SOR agencies themselves. There is a desperate need to rerecord these many of the documented sites and new properties using new methods and technologies such as completed site forms, computer data bases, geographical information systems, global positioning satellites, cameras, and video recorders.

There is a tremendous need to conduct oral histories with knowledgeable tribal members to salvage much of the information that has been lost by the inundation and destruction of important resources and resource gathering areas. The alteration of the Columbia River System has damaged Native American culture and life. There has been the loss of many opportunities to continue practicing integral parts of Columbia Plateau life. There is the immediate need to begin documenting place names, and histories from elders and other tribal members who are knowledgeable of such things. It is critical that Tribes be allowed to gather information in their own languages and in their own ways for the purpose of managing cultural resources consistent with traditional life. Many areas where language was practiced have been lost due to inundation.

Computer models cannot assess all qualities and values of cultural resource properties. This can only be accomplished by going through the Section 106 process outlined in the National Historic Preservation Act, 36CFR800, or an Agreement document of some magnitude. The land managing agencies must first identify the properties and then assess values such as integrity and this cannot be completed without "ground truthing" the models. Determining the value and integrity of cultural resource properties cannot be determined by a model. Scientific value/integrity and tribal/traditional significance of cultural resource properties cannot be generated by a computer model. This requires Tribal elders and members as well as the anthropologists and archaeologist to determine significance.

Appendix D also points out that many sites have been eroded and deflated leaving them with very little integrity and/or scientific significance. Other sights may have eroded away in their entirety others have been buried by geomorphological processes. There is however, no way of estimating the degree that sights have been impacted and degraded. .

How many previously unknown and unrecorded sites are currently being impacted or will be discovered during the implementation selected alternatives? This is a concern because the agencies have failed in the past to develop and implement adequate cultural resources inventory strategies as required under Section 110 of the NHPA. Agencies have typically allocated all financial resources to Section 106 undertakings and have not maintained programs that assess the effects of their actions on properties under their jurisdiction and control. Some of the SOR agencies have consistently planned and implemented Section 106 historic preservation activities without consultation with the Tribes and there is concern about the consistency of such consultation and resource management because there are three lead agencies and myriads of other parties involved in the SOR.

Federal Agencies have never consulted with the Tribes about the developing consistent long term management plans for cultural resource properties. The Tribes are only consulted if their is a federal undertaking being planned or sometimes after they have been started or conducted. Federal agencies have never committed the necessary funding to cultural resource management. Now it will require resources to be allocated to identify, evaluate, and protect significant cultural properties and will cost more money because the agencies didn't have such programs established over the last 30 years. Unfortunately, the SOR agencies will use that fact against the need to draw down the river for fisheries concerns. The cost however actually associated with implementing cultural resources management is marginal compared to the overall costs identified in operations, maintenance budgets, and profits associated with hydro-operations.

The agencies lack of support for their cultural resources programs to address Section 110 concerns such as ongoing historic preservation programs has left the agencies in a situation where they need to make recommendations about resources without the necessary baseline to accurately portray the results. This is not untypical of most federal agencies, however, now that land management projects are being developed on such a large scales such as SOR, Section 110 data will be crucial.

The interpretation of the actual data presented in the document is questionable. This assumption is basically based upon the amount of time a site may be exposed and partially because of supposed increase in erosion potential. The geomorphological model clearly points out that no matter what System Operating Strategy (SOS) is selected there is an adverse effect on cultural resource properties. In the John Day Pool there are over 200 known and previously recorded properties representing all ranges of site types and after 13,000 years of proven occupation. Many more properties are likely to be discovered and known properties and must be reevaluated, this is a major undertaking.

Under the National Historic Preservation Act there are specific actions the agencies must take to manage cultural resources. There are violations of these actions including violating 16 U.S.C. 470h-2(a)(2)(A) by failing to implement a preservation program whereby "historic properties under the jurisdiction or control of the agency, are identified, evaluated, and nominated to the national register." NHPA sec 110(a)(2)(A). The SOR illustrates this problem by stating, "The analysis does not distinguish among the sites that are eligible for National Register nomination and those that are not, since archaeologists have evaluated a small percentage of the known sites. . . There are no sites in the analysis from Hungry Horse Reservoir because there has been no cultural resources survey there." SOR-DEIS, Appendix D, page 3-11.

Problems of the current listings include the time-span from initial evaluation, failure to reevaluate sites damaged by federal undertakings, and inadequate surveys that have neglected sites or failed to survey entire portions of reservoirs where there is a high probability of site locations. Federal agencies have acted inconsistently with the mandates of the NHPA by failing to implement any strategy to mitigate the damage to, or destruction of, historic sites under the departments control. Additionally, by failing to negotiate in good faith with the tribes in the implementation of a Programmatic Agreement or Memorandum of Agreement pertaining to cultural resources, the agencies have failed in their responsibilities under the National Historic Preservation Act.

In the SOR EIS, one of the alternatives to executing a programmatic agreement was to implement the ROD under existing MOA's and PA's. Draft EIS, Appendix D, page 6-2. This alternative is clearly not a viable one because there is no PA for John Day, McNary, and Bonneville. There is no legal way the agencies can continue under existing PA's and MOA's because of the changes in the law.

The SOR study uses arbitrary and capricious standards for evaluating the effects of the SOR alternatives on Cultural Resources. The decisions were based on misleading and erroneous assumptions as well as groundless conclusions. Among these conclusions is, "The analysis assumes that inundation is a relatively benign impact, since it prevents most kinds of erosion and site exposure." SOR-DEIS, Appendix D, page 3-11.

Inundation has long been known to the tribes as an adverse effect but even in the last several decades archaeologist have also recognized that inundation is an adverse effect on cultural properties. The National Reservoir Inundation Study (NRIS) concluded after 5 years of study that "1) the effects of fresh water inundation is overwhelmingly detrimental; 2) some resources are more susceptible to adverse impact than others; 3) site protection is a viable mitigation alternative to excavation only in limited circumstances; and 4) archaeological mitigation plans should be incorporated into reservoir construction plans as early as possible (Nickens 1990:1)." The results of the SOR analysis further substantiate many of these destructive qualities of hydro-operations and cultural resource sites.

The sites that have been inundated since the construction of the dams have been extensively impacted. It is unclear why the SOR agencies feel the draw-downs will adversely effect sites that have been subjected to inundation, erosion, siltation, and in some cases dredging. Exposure of sites is likely to be less damaging effect than continued erosion and siltation. Although the exposure would change the chemical state of the organics on the site and might encourage decay of the site, as all the sites were originally above water, it would be preferable to have them in their original state.

This has much implication on SOR and the cultural resources that are located within the 14 federal resevoir along the Columbia and Snake Rivers. At this point in time many of the cultural resource properties along the Columbia and Snake are inundated and subject to many impacts and are no longer accessible for traditional use. The NRIS study seems more suited to those planning to construct reservoirs however there are several relevant points to be made based on this study. Many if not all the organic deposits associated with archaeological properties are destroyed by inundation.

Under the drawdown scenarios the actual time cultural resource properties are exposed is the greatest. It is suggested that this may lead to increased access to cultural properties therefore encouraging traffic, looting and or vandalism as well a making the site susceptible to wind erosion. Experience demonstrates this is true. Law enforcement will be necessary for drawdown scenarios. One problem of this analysis, however, is that vandalism and wind erosion occur on stable storage reservoirs as well as on drawn down pools. Vandalism and looting occur on a regular basis along the river and in the region even in during stable storage operations.

It is clear that the agencies have been neglecting their duties placed on them to implement a plan to document and report suspected violations of federal law pertaining to Cultural and Archaeological resources as required by 32 C.F.R. § 229.21(e). The SOR DEIS repeatedly states that theft and vandalism are factors to consider while balancing the interests of salmon in draw-downs that expose site. The report states, "Some reservoir areas are, however, more susceptible [to vandalism] than others, due to their isolation. They do not have law enforcement patrols that could prevent them [sic] vandalism and theft." SOR DEIS, Appendix D, page 3-11. The DEIS presupposes that vandalism and theft are an unavoidable effects of exposure. Theft and vandalism are not unavoidable. It is the agency with jurisdiction over the land who has the responsibility to protect the cultural resources by enforcing federal laws against theft and vandalism.

Stable storage in fact may actually enable vandals and looters access to water for site destruction and robbery. Shoreline can fluxuate as much a six feet a day during regular operations causing impacts to cultural properties on a daily basis. Other pools regularly experience drawdown situation during drought causing site damage and exposure.

Erosion potential from weather factors is not increased. The very same natural erosion factors that would be present during drawdowns occur daily along pools where reservoir levels are stable. Some

of the actual wave erosion characteristics have actually buried cultural resources properties preventing them from being exposed. This is still an adverse effect because in some cases such siltation effects will prevent tribal members from accessing some significant places and resources.

The results of the cultural resources analysis was conducted to simulate a 50 year time span simulating wave erosion potential and site exposure suggests that stable storage will actually have the most dramatic effects. The results of the quantitative analysis as stated in the DEIS indicates; "When reservoirs are high for longer periods of time such as under SOS 4 options, site exposure decreases, but shoreline erosion increases. Conversely, alternatives that involve large drawdowns such as the SOS 5 options, cause more site exposure but less shoreline erosion than other alternatives." This suggest that for the scientific integrity of the cultural resource properties that drawdowns are actually the best alternative for the protection of cultural resources because drawdowns allow for site recordation, site stabilization efforts and minimizes shoreline erosion. (DEIS MR 4-119)

Even during a drawdown there are federal laws such as the Archaeological Resources Protection Act (ARPA) that enable the SOR Agencies to protect cultural properties. Basically, there has been very little done by these agencies in the way of public education about protecting such resources. Historically the three SOR Agencies have done little to allocate resources to address ARPA , public education, or any non Section 106 concerns. The agencies are attempting to address SOR as an undertaking under Section 106 of the National Historic Preservation Act when in actuality this is but part of the problem. Further the same drawdown effect has occurred on many reservoirs in the region due to drought. The agencies have not been successful in addressing ARPA concerns , vandalism, and access to those areas.

The SOR agencies now are trying to get a Programmatic Agreement in place that will enable them to comply with the NHPA. The major concern is that the agencies have failed to allocate sufficient resources in the past. Now they must allocate significant resources to get the necessary data to best protect such properties. Since the agencies failed to invest in the management of cultural resources during facility operations in the past and because gathering such data is costly they may fail to identify adequate resources to allocate to the management of cultural properties. The agencies were able to identify funding for tribal participation in planning but what about the costs of implementing such plans. There is no indication from the agencies that they will begin to fund their historic preservation responsibilities.

If the federal government is holding historic sites and cultural resources in the "spirit of stewardship and trusteeship" pursuant to Executive Order 11593, then it is their responsibility to protect the cultural resources and enforce the existing laws and regulations implemented for their protection. It is the governments responsibility to define which agency has the responsibility to monitor and enforce the existing laws. Additionally, the government is holding lands that were previously Indian

lands in trust and as such owe a fiduciary duty to protect Indian cultural resources in trust and protect individual sites from harm, vandalism, and theft.

The entire cultural resource analysis is fatally flawed because of the lack of tribal participation in the identification of significant resources from the beginning of the SOR process. Most cultural resources are discussed in terms of scientific value and very little has been done to address, and identify traditional concerns. Many significant resources are not only protected by historic preservation legislation but also by the Treaty of 1855 between representatives of the U.S. Government and members of the CTUIR. The Federal Governments' agencies have a responsibility as a trustee toward managing treaty reserved resources.

The scientific values are given top consideration this does not reflect the importance of tribal members continuing to use those resources to enhance and restore aspects of their cultures. Drawdowns for instance may provide access to areas that had been previously inundated and may allow tribal members to utilize these areas for traditional, cultural, religious, or other uses. Drawdowns also may aid in the restoration of salmon stocks in the Columbia Basin, this is crucial because many of the properties that the tribes are concerned about are directly related to salmon and without the salmon a crucial element in the significance of the Columbia is absent.

The SOR Cultural Resources appendix does not even begin to address historic cultural resource concerns. Certainly there are historic properties such as shipwrecks, old townsites, historic burials and others affected by drawdown that are not even discussed. The SOR DEIS fails to recognize the historic importance of Salmon to non-Indians who lived in the region. Lewis and Clark would not have survived without Salmon; the fur traders and missionaries could not have survived without Salmon; the emigrants on the Oregon Trail would not have made the final leg of their journey without Salmon; the early history of the Willamette and the Columbia cannery industries would never have occurred; the people who survived on fish during the depression wouldn't have made it.

Most of the analysis justifies for the need for developing Historic Preservation Plans and Programmatic Agreements which will address all concerns not addressed in detail in the study. Such agreements are tools to bring the SOR agencies into compliance with historic preservation laws. This includes the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA). The bottom line is that the agencies have never identified enough resources to manage cultural resources and they must build such costs into the operation and maintenance costs of the facilities. As long as the Columbia river dams are producing hydro-electricity there are resources available to manage cultural resources. The fact that the SOR managers have not dealt with this in the past is negligent.

ARPA requires the SOR Agencies to properly implement a survey schedule or plan. During the years since the passage of the Archaeological Resource Protection Act, the SOR Agencies

responsible under this regulation have not conducted the necessary surveys of sites along the Columbia River. There have been proposals by agencies to set a yearly goal of the area of land they have under their control, but to date, these proposals have not been implemented consistently.

NAGPRA

The NAGPRA has addressed and answered many questions of ownership of many archaeological collections housed by museums and agencies. What have the SOR agencies done to change their policies to implement NAGPRA. The desecration of sacred areas is still felt by Tribal people living along the Columbia. Tribal elders recall stories of being held back as archaeologists excavated family members. Congress has attempted to resolve this atrocity by creating the NAGPRA. Tribes will have tribal members and other materials defined under the law returned to them for repatriation. The Tribes may wish to exercise their right to return those individuals to locations where they were removed from. The agencies will have the responsibility to help protect those individuals.

The CTUIR are concerned about the need for agencies and tribes to adhere to a defined process as part of NAGPRA. The inventories to be completed as part of NAGPRA are just now being completed. The CTUIR wishes to see all ancestral remains returned to their proper place but caution Tribes and agencies that agencies are moving fast, mostly to rid themselves of their curation responsibilities. The CTUIR do not want to see problems arise if people move to fast in a confused process. We do not want to see academic mistakes arise because of haste. It is the policy of the CTUIR to make the best effort possible to identify associated funerary objects to be repatriated with ancestral human remains. The inventories must be completed and reviewed by affected parties before any steps are made to address claims and related issues. This does not mean a 30 day review period. There will need to be time for considerable policy discussion and consultation.

Due to the continued operations of the dams and the presence of cultural resources, the SOR agencies are in technical violation of 25 U.S.C. § 3002 (d)(1) by failing to discontinue operations upon the discovery of cultural items and human remains on federal lands. Additionally, the agencies have not taken the necessary steps to protect these items discovered while in the operation of the dams.

Summary

In summary, cultural resources information presented unjustly implies that stable storage alternatives are the best for cultural resource management issues. The reality is that there is not enough quality data to make this determination. The data and information actually presented indicates that stable storage may not be the best for cultural resources management. There are too many variables and factors to be assessed to make such a determination and because the agencies have not been diligent in allocating resources to meet Section 110 requirements of the NHPA there is not enough data available to make the most accurate determinations. The bottom line is all possible alternatives will have an adverse effect on Cultural Resources and we must start with that

reality.

The agencies have not been able to fully identify actual cultural resource properties that this undertaking will have an effect on. This cannot be accomplished without conducting cultural resource inventory work along the reservoirs. The cultural resource modeling is an academic exercise and is useful but these models need to be adequately tested before such broad statements can be made. Further there is no indication that the agencies have begun to identify the resources necessary to conduct adequate cultural resource inventories. Cultural resources are priceless and the federal agencies must begin to identify how they will fund cultural resource management. If such broad statements such as stable storage is best for cultural resources are to be made then it would be just as accurate to say that drawdowns are in the best interest for cultural resources.

SOR Recommendations

1) The SOR agencies should continue to support the Tribes in their efforts to develop cultural resource management capabilities through the locating, restoring, enhancing, protecting, and preserving those resources affected by the SOR or selected SOS and years of unchecked private, agency, and commercial development, molestation, vandalism, and commercial trafficking.

2) That the SOR Agencies uphold their responsibilities of the Treaty of 1855 (Stevens 1855) and carefully consider the Treaty's applicability to the present project. The U.S. and all its agencies will recognize the Columbia river System and its anadromous fisheries as a cultural resource of national and international significance and will continue to work for the restoration of anadromous fish populations to their 1855 Treaty period levels. The salmon is a cultural resource, crucial to continuing life in the Pacific Northwest.

3) That the SOR Agencies create the necessary vehicles to actively consult with and involve the Tribes in the management of cultural resources along the Columbia River. The Tribes want to be actively involved in the management of cultural resources. The tribes can work with the Agencies as co-managers of such resources. Under the National Historic Preservation Act (NHPA) as well as the Native American Graves Protection and Repatriation Act (NAGPRA) federal agencies must consult with affected Tribes. The CTUIR specifically desire to work with affected Tribes and agencies at the following SOR projects; Bonneville, The Dalles, John Day, McNary, Ice Harbor, Little Goose, Lower Monument, and Lower Granite.

4) The SOR Agencies should be looking to utilize the opportunity of the proposed John Day Drawdown to test the model and the data provided by the SOR DEIS Cultural Resources Appendix. and prepare for law enforcement concerns. The SOR agencies should be emphasizing the need for and identifying funding for cultural resources law enforcement survey, archaeological survey, monitoring, and restoration. This would involve direct Tribal participation.

- 5) The SOR agencies must internally identify financial resources and mechanisms as part of existing operation and maintenance resources for cultural resources management during reservoir operation. There are resources already available in the system and the tax/rate payers should not have to identify additional funding. This would include identifying resources for the development, completion, and implementation Historic Preservation Plans for each reservoir on the Mainstem Columbia and Snake Rivers.
- 6) That the developed historic preservation plans are consistent with each other and do not further divide the resources along the river. There needs to be consistent management strategies utilized by the SOR Agencies. Such plans should also incorporate a strategy that acknowledges, perpetuates, and promotes the treaty rights and interests of affected Tribes.
- 7) Develop such historic preservation plans using modern tools including the development of databases, Geographic Information System (GIS), and Global Positioning Satellite (GPS) capabilities.
- 8) That areas providing suitable habitat for traditional floral products be identified, recorded, assessed, enhanced, protected, and preserved for use by Indian people.
- 9) Begin monitoring and updating known and accessible cultural resource properties to complete and gather the necessary data for developing effective cost effective cultural resource management strategies to be implemented as part of the HPP's.
- 10) Identify archaeological cultural resource locations that are known to be significant and begin the process of nominating such properties to the National Register of Historic Places. Begin conducting ethnographic studies to identify significant traditional cultural properties.
- 11) The SOR Agencies should produce progress reports on the development of the HPP's and the results of law enforcement and monitoring activities. This includes coordinating meeting with the tribes and other affected parties to review the progress reports.
- 12) Develop and implement Programmatic and Interagency agreements as appropriate to develop vehicles for allowing all interested parties a role in the co-management of cultural properties affected by project operation.
- 13) Look at the current configuration of the hydroelectric and transportation systems and projects and begin to redesign the system to restore and enhance the many on the resources damaged by past current and future operation. Operate hydroelectric projects to emulate natural river cycles. Will operate and restore the lower Snake River to natural river level.

14) Agencies should also adhere to the intent of NAGPRA, the process and develop plans for implementing NAGPRA for comment and review by affected Tribes. The agencies should produce a complete inventory of all the is within their jurisdiction and control before they repatriate any materials. A full disclosure of all NAGPRA items is crucial to ensure accuracy of the process. The agencies need to update their inadvertent discovery policies to be consistent with the law. The CTUIR prefer using existing CTUIR policy where applicable.

15) SOR agencies should cease to evaluate water spilled for salmon restoration as an economic loss. BPA's surplus of energy is irrelevant compared to the value of a living fishery.

SOR Affected Tribes and Bands

1. Chomnapums
2. Walulapums
3. PcWanwapam
4. Wanapam
5. Palouse
6. Wauyukma
7. Wenatchepums (Pishquuws)
8. Cayuse
 - kimi lehicpu (Butter Creek)
 - walu pu (Pilot Rock)
 - ha utmipu (McKay)
 - nixa' wipu (Cayuse)
 - meqicnime' pu (Gibbon-Umatilla)
 - qapqapi'tspu (Cottonwood Creek)
 - pa'cxapu (Wai ilat pu)
 - imce me pu (Milton Freewater)
 - ehetimepu (Heppner)
9. Ni mi pu (Nez Perce)
 - upper
 - lower
 - Wallowa
 - pikunenma
 - lamata
10. Umatilla
11. Kitittas
12. Klickitat
13. Molala
14. Wasco
15. Rock Creek
16. Wyampums
17. Tenino
18. Wishram
19. Methow
20. Chelan
21. Spokane
22. Pend d'Oreilles
23. Kalispel
24. Skitswish (Coeur D'Alene)
25. Nespelem
26. Colville
27. Similkameen
 - KerEme'us (Lower Similkameen)
 - Acnu'lox (Ashnola Band)
 - Snadzai 'st (Upper Similkameen Band)
28. Okanogon
 - Spa'xamen (Douglas Lake Band)
 - Nkama'peleks (Komaplix band)
 - Pent'kien (Penticton Band)
 - Nkami (Osoyoos band)
29. Sandpoil
30. Sinkaqai'ius
31. Sinkaitx
32. Columbia (Salish)
33. Kootnai
34. Shuswap
35. Nicola
36. Senisextee (lake)
37. Shoshone
 - He'kandika
 - A'gaidika
 - Tu'kufika
 - Ya'handika
 - Si'ptika
 - Ka'mufrka
 - Pifpengwi
 - Te'etrka
 - Pia'-a'gaidika
 - Se'heweki
38. Bannock
 - Yambadraka
 - Lemhi
49. Paiute
 - Hunipui
 - Walpapi
 - Wada
 - Yahushkin
 - Kidu
 - Tsoso-odo
 - Tago
 - Koa'-agai
 - Atsa-kudokwa
 - Yamo sopo
 - Agaipanina
40. Blackfoot
41. Crow
42. Chinooks
43. Grande Ronde
44. Siletz
45. Kalapulya
46. Klamath
47. Tillamook
48. Yaquina
49. Alsea
50. Clatskanie
51. Kwahiokwa
52. Cowlitz
53. Tenino
54. Clatsop

Bibliography

Aikens, Melvin

1992 Archaeology of Oregon. USDI Department of Interior.

Athearn, Robert G.

1971 Union Pacific Country. University of Nebraska Press, Lincoln, Nebraska

Bailor, Thomas

1993-4 Cultural Resources Working Group Meeting Notes. On file at CTUIR.

Bailor, Thomas, Paul Minthorn, Jeff Van Pelt, and Michael J. Farrow

1994 A Study of Impacts due to the Construction of Bonneville Dam, Bonneville Pool, The Dalles Dam, and Celilo Pool, on the Columbia river between Washington and Oregon, on Resources Significant to the Confederated Tribes of the Umatilla Indian Reservation, and Opportunities Lost Due to Dam Construction Impacts. Prepared for USACOE, Portland District, #DACW57-94-M-1412. On file at CTUIR , mission OR.

Bancroft, Hubert Howe

1888 Bancrofts works. History of Oregon Vol II, 1848, 1888. The History Company Publishers, San Francisco.

Boas, Franz (editor)

1928 The Middle Columbia Salish. University of Washington Publications in Anthropology 2(4). Seattle.

Bonneville Power Administration, U.S. Army Corps of Engineers, U.S.D.I Bureau of Reclamation

1994 Columbia River System Operation Review Draft Environmental Impact Statement. DOE/EIS-0170. Main Report and Appendicies A-Z. On file at CTUIR.

Bonneville Power Administration, U.S. Army Corps of Engineers, U.S.D.I Bureau of Reclamation, (Cultural Resources Working Group)

1994 Columbia River System Operation Review Draft Environmental Impact Statement. DOE/EIS-0170. Cultural Resources Appendix D including prior unpublished drafts. On file at CTUIR.

Bonneville Power Administration, U.S. Army Corps of Engineers, U.S.D.I Bureau of Reclamation, (Cultural Resources Working Group)

BPA 33-06

1993-5 Cultural Resources Working Group Minutes, Handouts, and Notes. On file at CTUIR.

CH2MHill

1973 Planning for the Umatilla Indian Reservation: Initial Comprehensive Planning Investigation. Program Planning Committee, CTUIR.

Cole, David L.

1966 Report on Archaeological Research in the John Day Dam Reservoir Area - 1965. Interim Report 1965-66, Contract No. 14-10-0434-1886 John Day Reservoir - F.Y. 1965, between The National Park Service and the University of Oregon, Museum of Natural History, Eugene, OR . November 15, 1966.

Conner, Gilbert, and David Temple

1941 Accustommed Fishing sites, Umatilla Indian Reservation. Interviews taken by the CTUIR in 1941, Cayuse, Walla Walla, and Umatilla. On file at the CTUIR.

Edwards, P.L. Esq.

1842 Sketch of the Oregon Territory or, Emigrants' Guide. Printed at the Herald Office, Richmond, MO.

East Oregonian

1956 Pendleton, Oregon a history, 1880-1955. The East Oregonian Press, Pendleton, Oregon.

East Oregonian

Umatilla County: A Backward Glance. Umatilla County Historical Society. East Oregonian Master Printers, Pendleton, Oregon.

Garth, Thomas R.

1964 Early nineteenth Century Tribal Relations in the Columbia plateau. Southwestern Journal of Anthropology Vol. 29:43-57.

Hanes, Richard C.,

1995 Treaties, Spirituality, and Ecosystems. American Indian Interests in the Northern Intermontane Region of Western North America. Social Assessment Report for the Interior Columbia Basin Ecosystem Management Project. On file CTUIR Mission Oregon

Hines, Gustav

- 1881 Wildlife in Oregon, Being a Stirring recital of Actual Scenes of Daring and Peril among the Gigantic Forests, and terrific Rapids of the Columbia River (the Mississippi of the Pacific slope) and Giving Lifelike Pictures of Terrific Encounters with Savages as Fierce and Relentless as its Mighty Tides including a Full, Fair, and Reliable History of the State of Oregon, its Crops, Minerals, Timber Lands, Soil, Fisheries, its Present Greatness and Future Vast Capabilities, and Paramount Position. R. Worthington Press, New York.
- Hunn, Eugene S.
1990 Nch'i-Wana, "Big River" : Mid Columbia Indians and Their Land. University of Washington Press. Seattle.
- Lane, Robert and Barbara Lane
1979 Traditional fisheries of the Cayuse, Walla Walla, and Umatilla. on file at the CTUIR.
- Lyman, Horace S.
History of Oregon, The Growth of an American State. The North Pacific Publishing Society, New York.
- Marceau, Thomas E , Darby C. Stapp and Joy K. Woodruff
1995 Action Plan for Managing Hanford Cultural Resources Reactor Areas. Cultural Resources Group Environmental Restoration Contractor. On file CTUIR.
- Meacham, Walter E.
1923 The Old Oregon Trail the Road Which Saved an Empire. The Old Oregon Trail Association. Baker City, Oregon.
- Meyers Resources, Inc.
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. On file CTUIR, Mission Oregon
- Niemi, Ernie, Ed Mac Mullan, and Ed Whitelaw
1995 Economic Consequences of Management Strategies for the Columbia and Snake Rivers
On File at the CTUIR, Mission, Oregon.
- Oliphant, J. Orin
nd "Encroachments of Cattlemen on Indian Reservations in the Pacific Northwest, 1870-1890." Agricultural History.

Parkman, Francis

1927 The Oregon Trail. Father and Son Library. J.H.Sears and Company Inc. New York. Original copywrite 1872.

Parsons, Col. Wm, and W.S Shiach

1902 An Illustrated History of Umatilla County and Morrow County. WH. Lever Publisher

Ray, Vern , G.P Murdock, B. Blythe

1936 "Tribal Distribution in Eastern Oregon and Adjacent Regions." American Anthropologist 40:384-415.

Ray, Verne

1959 Tribal Territories and Village Locations of the Walla Walla, Cayuse, and Umatilla Tribes (w/Map), Together with Testimony in the Confederated Tribes of the Umatilla Indian Reservation v. United States, Petitioner's Proposed Findings of Fact and Brief, Docket No. 264, before the Indian Claims Commission.

Ray, Verne

1930 "Native Villages and Groupings of the Columbia Basin." Pacific Northwest Quarterly 27:99-152.

Relander, Click

1986 Drummers and Dreamers.Northwest interpretive Association., Seattle Washington. Caxton Printers, Ltd.

Richards, Kent D.

1993 Isaac I. Stevens Young Man in a Hurry. Washington State University Press, Pullman, Washington.

Robinson, H.M.

1879 The Great Fur Land of Sketches of Life in the Hudson Bay Territory. G.P Putnam's Sons, New York.

Ross, A.

1849 Adventures of the First Settlers on the Oregon or Columbia Rivers, edited by M. M. Quaife. Chicago: R. R. Donnelley and Sons, Co.

Ruby, Robert H. and John A. Brown

- 1972 The Cayuse Indians: Imperial Tribesmen of Old Oregon. Civilization of the American Indian Series 158. University of Oklahoma Press. Norman, Oklahoma
- Stevens, Isaac, and Joel Palmer
1855 Treaty of June 9, 1855 between the United States and mebers of the Walla Walla, Cayuse and Umatilla Tribes.
- Suphan, Robert J.
1959 The Socio-Political Organization and Land Use Patterns of the Umatilla, Walla Walla, and Cayuse Indians. M.A. thesis, Faculty of Political Science, Columbia University, New York. Ms. on file, CTUIR, Mission, Oregon.
- Swanson, Cynthia R.
1977 Cultural Resource Survey of the Proposed Sewage & Water Facilities at Umatilla, OR. Western Washington State College, Bellingham, WA
- Teit, James A
1927 The Salishan Tribes of the Western Plateau. 45th Annual Report of the Bureau of American Ethnology. On file at CTUIR.
- Thwaites R.G. (ed)
1905 Original Journals of the Lewis and Clark Expedition, 1804-1806, 8 Volumes. Antiquarian Press, New York.
- Umatilla County
1922 Umatilla County, Oregon A truthful Exposition of the Facts and future Possibilities of the Leading Agricultural County of the State. A Land of good living and great opportunity in an ideal climate where thousands of acres of fertile land await the coming of the home seeker. Issued Co-operatively by the Umatilla County Commercial Club Federation, the County Farm Bureau, and The County Court.
- Winser Henry J.
1883 Guide to the Northern Pacific Railroad and its Allied Lines. G.P. Putnam's and Sons, New York.
- Zucker, Jeff, Kay Hummel, and Bob Hogloss
1987 Oregon Indians, Culture, History, and Current Affairs an Atlas and Introduction. Oregon Historical Society Press.

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