



Confederated Tribes and Bands
of the Yakama Indian Nation

Established by the
Treaty of June 9, 1855

Office of Legal Counsel

August 10, 2000



Dr. Francis P. McManamon
Departmental Consulting Archaeologist
Manager, Archaeology and Ethnography Program
National Park Service
1849 C Street N.W.
Washington, D.C. 20240

RE: Information for the Administrative Record in Cultural Affiliation Study

Dear Dr. McManamon:

The Confederated Tribes and Bands of the Yakama Nation is hereby submitting documents into the administrative record for your Department's current study to determine the cultural affiliation of the human remains excavated at Kennewick on July 28, 1996, under Section 3(a)(2) of the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. § 3002(a)(2). Enclosed is a report by Dr. Morris L. Uebelacker, Professor of Geography at Central Washington University in Ellensburg, Washington. Also enclosed is a copy of his *curriculum vitae*.

Dr. Uebelacker's report supports the Yakama Nation's claim of cultural affiliation and ownership filed with the U.S. Army Corps of Engineers, Walla Walla District, on January 25, 2000. This material is being given to you with the expectation that it will be of assistance in the Department's final recommendation to the Corps of Engineers concerning affiliation and custody of the remains under NAGPRA.

If you have any questions regarding the enclosed documents, please contact either myself at (509) 865-7268 or Tim Weaver at (509) 575-1500.

Sincerely,

Tom Zeilman
Assistant Attorney
Yakama Nation Office of Legal Counsel

cc: Dr. Morris Uebelacker
William Yallup, Sr.
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**Cultural Affiliation Determination
for
The Kennewick Remains:
A Critical Review of the Evidence**

August 10, 2000

By

Morris L. Uebelacker

Professor and Chair

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Ellensburg, Washington

**Requested by the Confederated Tribes and Bands of the
Yakama Nation**

Abstract

I have found a preponderance of evidence favoring cultural affiliation of the Kennewick remains with the contemporary indigenous people of the Southern Plateau. Such evidence lies within the disciplines of geography, biology, archaeology, anthropology, linguistics, and within folklore, oral tradition and history as well. In fact, that evidence demonstrates cultural persistence and adaptive change within the context of the elevation gradients and ecological diversity inherent to the Southern Plateau. The evidence clearly indicates that indigenous people in the Southern Plateau have been persistently adaptive with respect to changing spatial and temporal landscape patterning over the millennia that encompass the culture affiliated with the Kennewick remains. By virtue of a shared group identity directly connected to places, resources and people within the geographical context of a cultural landscape, affiliation is certain.

Within the NAGPRA guidelines, a critical evaluation of the "circumstances and evidence" which lead to the conclusion that the Kennewick remains are culturally affiliated with the present-day indigenous people of the Southern Plateau is offered.

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Introduction

I will provide herein for your review and consideration, the reasons for giving full credence to affiliation of the Kennewick Native American remains with present-day indigenous people living in the Southern Plateau of the Pacific Northwest. Such a decision requires no leap of faith for me, no choice of one side of this unfortunate conflict versus the other. This, then, is my understanding of affiliation under NAGPRA, and why I know that under NAGPRA guidelines cultural affiliation of the Kennewick remains is certain.

"Cultural affiliation means a relationship of shared group identity that may be reasonably traced historically or prehistorically between a present-day Indian tribe or Native Hawaiian organization and an identifiable earlier group." 43 CFR 10.14(c).

NAGPRA regulations require that all of the following conditions must be met:

- (1) Existence of an identifiable present-day Indian tribe or Native Hawaiian organization with standing under these regulations and the Act;**
- (2) Evidence of the existence of an identifiable earlier group. Support for this requirement may include but is not necessarily limited to evidence sufficient to:**
 - (A) Establish the identity and cultural characteristics of the earlier group,**
 - (B) Document distinct patterns of material culture manufacture and distribution methods for the earlier group, or**
 - (C) Establish the existence of the earlier group as a biologically distinct population; and**
- (3) Evidence of the existence of the shared group identity that can be reasonably traced between the present-day Indian tribe or Native Hawaiian organization and the earlier group. Evidence to support this requirement must establish that a present-day Indian tribe or Native Hawaiian organization has been identified from prehistoric or**

historic times to the present as descending from the earlier group.

Further, NAGPRA regulations established that:

Cultural affiliation should be based upon the overall evaluation of the *totality of the circumstances and evidence* pertaining to the connection between the claimant and the material being claimed and should not be precluded solely because of some gaps in the record. 43 CFR 10.14(d).

Evidence of the following types will be used:

Geographical, kinship, biological, archaeological, anthropological, linguistic, folklore, oral tradition, historical, or other relevant information or expert opinion. 43 CFR 10.14(e).

Importantly, the regulations require that **cultural affiliation of a present-day Indian tribe must be established by a preponderance of the evidence**, and:

Claimants do not have to establish cultural affiliation with scientific certainty. 43 CFR 10.14(f).

Historical Circumstances

The Treaty of 1855 clearly establishes the claimants' geographic connection to the remains, and the Lewis and Clark expedition offered early historic testimony to the occupation of this region on October 17, 1805. The expedition clearly noted the claimants' presence and occupation of this region and remarked upon the value the culture accords to elders.

During and before this contact period disease swept through the populations, killing most of the indigenous people in the region (Boyd 1998). Chaos reigned as key aspects of geography, kinship, biology, archaeology, anthropology, language, folklore, oral tradition, and history were changed. Disease,

displacement, starvation, aggressive racism, newly imposed religions and reservations marked the processes of transition for indigenous people. With the arrival of miners, ranchers, farmers, and small towns, the sacred places that connected indigenous cultures to the landscapes were occupied and changed. Relevant here is the desecration of graves and traditional places by the new occupants, both intentionally and unintentionally.

Early in the contact period, Native People actively began to remove markers from graves and to hide their history from outsiders. It was early in these emerging patterns of desecration that the major museums began collecting skeletons, grave goods, and artifacts in the region (Smith 1906, 1910; Jesup North Pacific Expedition; etc.). Anthropologists and archaeologists soon added to the lively trade in human remains and cultural objects as the plunder continued (Thomas 2000:52-63). In fact, it would have been hard to distinguish the work of "amateurs" from "professionals," as Native American places all along the Columbia were dismantled in the name of science and recreational digging (Sprague 1973). Indeed, throughout the dam building era professionals, amateurs, and ghouls sifted and sluiced entire cultural places into oblivion. It is interesting to note the difference in how archaeologists tell the story of their past and how that story is viewed and told from outside the discipline by the very people archaeologists were professing to study. This "History of Research" is well told by Lohse and Sprague (1998:28) and they note as the outcome, "Native American informants remain hostile and suspicious of the intent of outsiders."

It is the claimants' position that they are more than informants. They are in fact the subject and verbs of the story. It continues to baffle the claimants that their story--the one they tell--is not regarded or accorded the same level of reliability as the story told by archaeologists. The logical conclusion is that archaeology as it has been practiced in this region is a threat to Native American identity. After all, what have Native Americans received from all the "excavations" of graves and sacred objects? Have they received a deeper understanding of their past?

Have they received knowledge that allows them to understand human systems any better? Have they come to know settlement patterns and changes in tool types and the trade patterns of obsidian any better? Have these things enhanced their culture? None of these things have taken place, to any appreciable degree. The archaeology was not done *for* indigenous people so much as it has been done *to* them, and in spite of them. Now the work of archaeologists is obtusely being used to argue against what the present-day Native people know beyond any doubt—in fact, it is a basic core of their cultural identity -- that they are descendants of ancient people who lived in this region, represented in this instance by the Kennewick remains. The NAGPRA claimants are right to be wary of outsiders, particularly archaeologists, for some of them have earned the adversarial reputations that almost all of them carry.

NAGPRA has encountered a circumstance in which the very identity of contemporary Native American people is threatened, and where Native People must perforce demonstrate their connections to an ancestor they absolutely identify as theirs. The irony of having to use the findings of the very group that has desecrated your ancestral places to justify your cultural affiliation with remains that came from ground where you buried your people (ground you have lived on, along a river you have known for all remembered time) has not escaped Native understanding. It has, in fact, verified a pattern that has been going on for almost 200 years. It is exactly this pattern that NAGPRA was intended to change.

Critical Evidence

Geographical Evidence

The location of the Kennewick remains and the historic location of the NAGPRA claimants on the landscape constitute positive geographic evidence of their cultural affiliation. This evidence not only establishes a geographic link between these populations, but also ensures cultural affiliation between them with respect to the major physical features that structure both perception and spatial geometry

within this landscape. Ames (2000) affirms this connection of enduring landscape elements linking cultures through time. He correctly argues that: certain features of topography have not changed much over the last 9,500 years, noting that rivers and their tributaries are generally deeply entrenched and have little room for lateral movement; amounts of rainfall grade in predictable ways; and terrestrial productivity probably has always been highest in areas to the east. Further, Ames (2000:17) argues that trails and travel routes are examples of geographic invariance through time. Regrettably, Ames neglected to include mention of an integral part of the Southern Plateau region -- the eastern slope of the Cascades, west and north of the Kennewick remains, which contains an equal if not greater biological diversity (Uebelacker 1986). Along these topographically complex elevation gradients, precipitation amounts range from 100 inches in the west to 10 inches in the east in under 30 miles.

It is a fact that the physical geography of the middle Columbia has many elements that predate 9,500 years ago. Included among them are the dominant ridge and basin systems that structure the location of the region's rivers, giving the location of the Kennewick remains a unique physical geography. These features are recorded in the oral history of the present-day indigenous people, as are the processes that created and shaped this landscape. Some of these features and their formation, dated at over 13,000 years ago, are recorded in the oral traditions. The facts contained in these oral traditions are not accepted by "outsiders" as evidence of cultural connections through time. To those who are unfamiliar with people who are connected to a landscape filled with cultural places developed over thousands of years of living, it is inconceivable that culture can explain it and live in it accordingly over this stretch of time. However, to linguists tuned to language and the messages it carries such knowledge is clearly not inconceivable. Hunn (2000) offers one example:

In conclusion, I note the legend of *lal'iik*, a summit that is said to have stood above the waters of an ancient flood. I suggest that this story might link Sahaptin-speaking contemporary residents to a

group that witnessed the Bretz ice-age floods, that a "cultural memory" of events long pre-dating Kennewick Man is embodied in the Sahaptin language.

I have also known indigenous people who not only spoke of the broad implications of these floods, but also point to specific landscape features that are now "scientifically" explained by the Bretz floods (Uebelacker 1984). I have listened multiple times to the stories of ice and cold holding the land (cold wind) followed by warm wind, and find versions of this story throughout the region occupied by the Sahaptin speakers (Boxberger 2000:41).

In addition to these preponderate facts, the physical landscape and its associated riverine and terrestrial resources add weight to cultural affiliation. The physical and biogeographic reality of this region is best characterized by a series of elevation gradients running from the topographic low, very near the location of the Kennewick remains, to topographic highs in surrounding foothills and mountains. Archaeologists and anthropologists know this physical and cultural region by various names (Kroeber 1938, Ray 1936), but most commonly as the Southern Plateau:

The Southern Plateau, as defined here, encompasses a vast region. Its northern boundary is the rugged Okanagon Highlands at the international border. On the east, the region is bounded by the Bitterroot mountain range. The crest of the Cascade Mountains in Washington and Oregon (to Crater Lake in the Oregon Cascades) forms the western boundary. In Oregon, the southern boundary runs along the uplands at the southern edge of the drainages of the Deschutes and John Day rivers. This boundary crosses the Snake River above Weiser, Idaho, at the southern end of Hells Canyon and follows the rugged mountains that form the southern rim of the Salmon River Drainage east to the Bitterroot Range (Ames et al. 1998:103).

When the diversity of plateau, canyon-plateau and canyon-ridge topography and associated biota is added to these elevation gradients, zones of extreme biotic diversity are created (Uebelacker 1986). It is within this regional scale and

context that cultural persistence and affiliation become meaningful. Chatters (1998:42-48) has summarized numerous spatial/temporal patterns of change in environmental conditions and resources for the larger region. This body of work (Chatters 1998: 43) on which Chatters based his general summary of paleo-environments, adds weight and connections to tribal knowledge regarding changes in landscape patterning, specifically resource patterning (Boxberger 2000). Frey and Hymes (1998:584) echo this common theme of changing resource patterns, explaining how the mythic beings account for physical and cultural change:

In the collective actions of the mythic beings, the world in its entirety is indelibly transformed, rendering it meaningful and spiritually potent....As a consequence of their adventures [the mythic beings], the landscape is molded as rivers are channeled, fish are set free, and the ways to trap and respect those fish are established. Where hunting methods, ceremonies, and social customs had been crude, and where the animals, fish, plants, and birds had been ill-defined, they are now refined and given their particular form and character [my brackets].

It is interesting to note that the paleo-environmental interpretations by Chatters and others are in effect moving from the crude and ill-defined generalizations found in the early archaeological literature to more refined and specific statements about the past. The archeologists are moving through a mythic dimension similar to transitions noted in native oral knowledge.

Given the physical geography of this region, organisms responding to the types of change projected by both indigenous knowledge and paleo-science can be expected to move up and down these elevation gradients depending on the nature of the change. (Note: the description of grassland, shrub-steppe, and forest change outlined by Chatters is essentially an elevation gradient pattern (1998:46-49)). Given the diversity of landforms, topography, and biota, **no change yet postulated is sufficient to cause total abandonment of the region**, particularly when riverine ecosystems are added to the landscape

mosaic. This does not mean that indigenous people did not alter their patterns of life and their cultures did not change. Indeed, environmental and cultural change is a constant theme in the oral history of indigenous people. The archaeological record, even with all of its various analytical problems, supports this theme of cultural change or adaptive change through time and across space.

What is clear, from the combination of both oral history and the archaeological record, is that people, the holders of cultural knowledge, have been present and adapting in the Southern Plateau for thousands of years. For example, Chatters and Pokotylo (1998:74-75) summarize a sweep of time from 9000 BC to 3300 BC for the entire Plateau with the following statement:

In many ways, cultures of the Early Middle subperiod [6000 BC to 3300 BC] were a continuation and distillation of the Early period [9000 BC to 6000 BC] patterns. (Chatters and Pokotylo 1998:74) [dates in brackets added for clarity].

When referring specifically to the adaptations in the Southern Plateau over the period of time from 9000 BC to 3300 BC, they state:

In the south, adaptations remained little changed from the Early period, although the technology underwent notable deletions and additions (Bense 1972), and there are apparent stylistic and technological influences from both the Northern Plateau and Great Basin (Chatters and Pokotylo 1998:75).

Archaeologists have given credence to the antiquity of adaptive response over thousands of years and have flatly stated:

The entire Plateau has a record of continuous occupation through the entire Holocene (Ames 2000:27).

What has been less clear to archaeologists, but crystal clear to indigenous people, is that there has been cultural continuity through time. Based on the physical geography of the Holocene period, the archaeological record, linguistics,

and the oral history of indigenous people, there is preponderate evidence for continuous occupation and cultural affiliation by human populations through time within these elevation gradients and landform mosaics. In fact, the material evidence drawn from the seriously biased archaeological record supports such spatial adjustments by indigenous people (Butler 1961, Swanson 1962a, 1962b, Uebelacker 1986, Schalk 1988, 1995).

Biological Evidence

It is not required that people be of direct biological descent to participate in a given culture, and we find a world full of examples where biologically distinct people share common cultural perceptions and behavior. This is why DNA is not always relevant when addressing cultural affiliation, and why numerous authors have pointed out that culture and biology are not synonymous pathways (Maschner 1996). As Ames (1996:110) notes, Durham modeled the potential "differences between cultural and genetic inheritance:"

First, genes and culture each contain information within codes that have very different biophysical properties (DNA versus memes [see below]); second, the information is stored and processed in different, highly specialized structures (cell nuclei versus the brain); third, it is transmitted through space and time by very different mechanisms (sexual versus *social* intercourse [emphasis Durham's]); and fourth, the information in either system may undergo lasting, transmissible change without there being a corresponding change in the other (Durham 1991:420 [Ames' comments in brackets]).

This simply means that a DNA structure at any one point in time, or skull morphology, is not intrinsic with respect to cultural affiliation. This is not new or surprising. It was an early observation of anthropologists working in North America that when cultures moved spatially they quickly assimilated and adopted the "culture type" characteristic of the new area. In doing so, they lost the culture traits not shared with the groups common to the new area (Wissler 1914). This observational dynamic, and the volumes of associated work on "Cultural Core,"

"Cultural Hearth," and "Cultural Landscape" (Kroeber 1939, Sauer 1925) reveal that we should not expect to see abrupt changes in the archaeological record due to human migrations and that "culture regions" (anthropology) or "landscapes" (geography) should maintain a more generalized pattern of change over time. The notion that people take their culture with them when they move does not mean that they doggedly adhere to technologies and ideas out of place and out of context with the occupied landscape. It also does not mean that the human movements need to be on the order of barbarian invasion, hostile takeovers, or manifest destinies. "Cultural landscapes" or "cultural regions" are "unique associations of forms both natural and cultural" (Sauer 1925) and within them biological populations may change independently of culture and vice versa. The Kennewick remains appeared via a chain of relationships and lay approximately in the center of such a region or landscape, and by virtue of location are affiliated with a primary cultural region or cultural landscape -- the Plateau, specifically the Southern Plateau.

Biological evidence, particularly from mortuary practices, is poorly organized and vaguely analyzed for this region. Hackenberger (2000) correctly summarizes studies of mortuary practices, noting problems with chronological control, lack of systematic analysis, lack of interest on the part of the profession, and non-comparability. Further, much of these data are not well provenienced and are out of context, reflecting a haphazard approach to the collection and curatorship of much of the potential biological data.

It is surprising how little has been done with the "recovered burial data." One wonders why in the world the profession bothered with the recovery effort when no attempt was made to analyze most of these collections. This lack of analytical activity extends beyond the mortuary data to associated archaeological data as well. It is a pattern of neglect that begins with the earliest activity by national museums, and continues through the salvage periods driven by riverine reservoir impoundment, to the contemporary Cultural Resource Management (CRM)

activities. Ried and Gallison (1996:26-28) comment on this for the Lower Snake River:

The salvage excavations carried out in these reservoir flood pools produced an unprecedented volume of archaeological data in the form of site reports and academic theses and dissertations..... Nevertheless, few of the rescued site assemblages have been reported in a complete fashion, and many have never been analyzed or even described. Much remains to be done with respect to description, analysis and comparison of existing site collections (Page 26).

With reference to the more recently emerged Cultural Resource Management efforts:

While much of this inventory work was done in-house, where it remains largely inaccessible, several contracted studies of upland sites in the Grande Ronde, Imnaha, Powder, and Silvies basins did make it at least as far as the regionally circulated gray literature (Page 28).

The almost total disconnect between the archeological record as synthesized by Ames (2000) and the primitive descriptive attempts possible with the mortuary records as summarized by Hackenberger (2000) is no accident. Further, it points to the necessity of extreme caution when identifying "gaps" in the record for purposes of cultural affiliation in light of the lack of chronological control, the vagaries of context, the inadequacies of sampling, and limited analysis.

Hundreds upon hundreds of human remains and their associated grave goods have been "removed/excavated" over the past 100 years from the Southern Plateau, and the lack of results should be professionally embarrassing. In fact, if not for the sustained and respectable efforts of Roderick Sprague (forty years of work) and a few of his students, and the recent work by Schulting (1995), these remains and associated objects would be almost invisible in the literature. These data have been neglected to such an extent that they have never been

incorporated into regional cultural chronologies to any appreciable degree, and are seldom mentioned or utilized by archaeologists working in the region. Again, the contrast between the bibliography constructed by Ames (2000) and the one constructed by Hackenberger (2000) supports this discontinuity, as does the almost total lack of mortuary data incorporated into regional chronologies by Chatters and Pokotylo (1998), Ames et al. (1998), and Galm et al. (1981).

Sample size, chronology, and spatial patterning presents a major problem for comparative analysis of biological data, particularly with respect to early time periods. Hackenberger (2000:4) describes "gaps" in the mortuary information from 7,000 to 5,000 BP and from 5,000 to 3,000 BP:

7000-5000 BP: Within the Middle Columbia Region the most significant gap in burial and osteological studies appears between 7000 and 5000 years ago.

5000-3000 BP: For all practical purposes, this period also represents a major gap in burial and osteological data for the Middle Columbia Basin (Page 4).

There is no way to know with certainty, given the lack of chronological control:

Table 1 includes Early and Middle Period archaeological sites assigned to 2,000 year intervals. Most of these sites and/or burials can only be roughly assigned to time periods (Page 3).

The lack of connections between the mortuary record and the archaeological record, and the haphazard curatorship and analysis of mortuary and archaeological data, fail to define whether this is an on-the-ground "gap" or if it is a "gap" created by a lack of analytical systematics. I suspect it is the latter, in combination with a lack of defensible sampling of the landscape variability.

To assert in the form of a "topic for discussion" by the Department of Interior that these "gaps" might represent abandonment of the landscape is to legitimize a fictitious pattern:

Topics for discussion: Hackenberger (2000) describes temporal gaps in the mortuary record from 7000-5000 BP, and from 5000-3000 BP. Burials have been found during these periods but in limited quantities and geographic distributions. Rock cairn burials covering cremated remains are found along portions of the Columbia River from between 5000-3000 BP, but not at other times. The gaps in the mortuary record correspond to gaps in settlement sites and might indicated abandonment of the area by human populations subsequent to the occupation by the Kennewick earlier group (McManamon, July 7, 2000 Tribal consultation meeting) [See Appendix I].

Prior to such an assertion, sampling biases and chronological control must be established. Hackenberger could only use 2,000-year increments in reporting these data, and he clearly states this and other inherent problems. It is an analytical error to identify these "gaps" as existing in correlation with "gaps" in the settlement record, as this set of data is subject to similar sampling and analytical biases.

To verify gaps of the nature contemplated, and to assert that the mortuary record contains "gaps" that might indicate abandonment, one must acknowledge the limits of the data created by depositional and erosion processes, processes of discovery, and processes of analysis. This has never been systematically assessed for the mortuary data or the archeological data. In fact, to promulgate a correspondence between "gaps in the mortuary record and gaps in settlement sites" is a naive fabrication of correlative patterning and indicates a complete disregard for the ecological variability that the persistent cultures of the Plateau inhabit.

I find nothing of substance in the "gaps" in mortuary data that suggest abandonment. In fact, I find a mortuary record that, with few exceptions, is

inadequately collected, curated and analyzed, and is therefore incapable of arguing against affiliation. Nevertheless, statements sprinkled throughout the regional literature support cultural change and affiliation through time with respect to mortuary practices.

Early-Middle Subperiod, 6000 to 3300 BC ...Mortuary practices were elaborated in the southeastern Plateau during this time, but little is known elsewhere. Finds at Damoss (Green et al. 1986), and in the Boise Basin (Pavesic 1985) included secondary inhumations, some cremated, and caches of delicately flaked bifaces, projectile points, pipes and beads, often made from exotic materials. Manifestations of this practice, known as the Western Idaho Archaic Burial complex, may occur on the lower Snake River at Marmes Rockshelter, where the tradition of inhumations continued (Rice 1969) and on the Middle Columbia at Cox's Pond (Hartmann 1975). This phenomenon began as early as 4000 BC at Damoss and fluoresced between 2500 and 3700 BC (Chatters and Pokotylo 1998:75).

These are not statements of gaps and abandonment. These are weighty statements with respect to cultural affiliation and the Southern Plateau.

Archaeological Evidence

Concerning the scope of archaeological study, I join in the opinion expressed by James Ebert:

We must stop trying to see instants in the past, since we cannot. We must begin to understand that the archaeological record is a composite of distributions at many spatial and temporal scales superimposed one upon another. The archaeological record [is] the unitary and inseparable product of many millions of human events upon the landscape (James Ebert 1992).

It would be ideal to be able to see back through time and across space and connect the Kennewick remains to the people he associated with 9,500 years ago, and then document how the "culture" these people carried in their minds and made operational in their lives is now affiliated with the culture of contemporary indigenous people. The archaeological record as it has been

collected, curated, and analyzed precludes this archaeological fantasy of a fact-finding trip through time and space tied to the individual remains. Rather, the available archaeological record has resulted from a Cultural Resource Management (CRM) paradigm:

The vast majority of all archaeological work on the Plateau has been CRM-related, even before there was a concept of CRM. While fieldwork on the Plateau began well before World War II, its real impetus was post-war dam construction, and the resulting River Basin Surveys of the 1950s. The great majority of projects since the 1950s has been related to dams and reservoirs. Within the last 25 years work has expanded out of the canyons and river bottoms. Virtually all this work is also CRM related in the form of Forest Service projects, pipeline projects, etc. (Ames 2000).

This approach has created a record collected through various methods and under a wide variety of assumptions about what constitutes data and what does not. It is a record that is only grossly comparable at the levels of artifact, assemblage, inter and intra site, or region. Even when sustained efforts were possible, like the work conducted on the Lower Snake or the Upper Columbia, there are monumental assumptions and problems associated with the basic concepts of culture, site, assemblage, occupation, and particularly with interpretation of the patterns observed (Campbell 1991). Even in these projects, differing and non-comparable methods of collection and analysis were used, as the "science" developed and as varying questions and contractual constraints drove differing strategies of analysis and, in fact, of data collection. Reid and Gallison (1996:21) comment with respect to the lower Snake River basin, the area to receive the most sustained attention by archaeologists:

Changes in the sponsorship of archaeological investigations have been accompanied by shifts in theoretical orientation. The initial efforts of museum fieldworkers such as Fletcher and Spinden tended to focus on the collection, classification, and comparisons of specimens rather than assemblages or sites, or the establishment of logically defined archaeological units. Explanations of similarities and dissimilarities tended to emphasize processes of diffusion and

migration. By contrast, the River Basin Survey fieldworkers had adopted the site concept and a culture historical paradigm that allowed for local adaptations as well as diffusion and migration as explanations for change. During the most recent reservoir salvage and CRM phases, evolutionary and ecological perspectives associated with the "new Archaeology" became influential. These perspectives followed the development of radiocarbon dating and unit forming systematics in the 1950s and the shift to settlement pattern analysis, systems theory, and "middle range theory" that occurred between the 1960s and 1980s.

This problem is further complicated by a significant and important debate among archaeologists over how to assign meaning to the patterns various researchers have been and are detecting in the record. Given these inherent cautions and other significant problems of sampling, chronological control, and data resolution, regional interpretations become tentative stories based on increasingly generalized cultural chronologies (Ames 2000:7). It is not surprising that Ames concludes his review of archaeological data with respect to cultural affiliation with the following statement:

These conclusions emphatically do not mean that to my mind there was not cultural continuity between the people of the Columbia Plateau in 1800 and earlier peoples on the Plateau. At the beginning of this section, I wrote that the empirical record precludes establishing cultural continuities or discontinuities across increasingly remote periods (Ames 2000:69).

Despite this conclusion, Ames makes appropriately qualified reference to a number of gaps in the archaeological record. Because the Department of Interior included specific questions regarding these "gaps" in a consultation meeting with Tribal representatives on July 7, 2000, further comments on the nature of the archaeological record and its interpretation are warranted.

First, it needs to be established that the archaeological record is not a direct record of cultural affiliation. The archaeological record is not an unambiguous record of culture--it is a record of millions of human events. Such events left

physical objects that do not contain meaning in and of themselves. The meaning and patterns that the physical objects portray are ambiguous even when placed in three-dimensional archaeological context. Critically, the depositional events occurred in a cultural ecological context, but the material remains do not now contain in and of themselves the cultural context of their use or their deposition histories. Meaning is assigned from the science of archaeology and from archaeological systematics, and these have changed markedly over the 100 years of professional work in the Plateau. Therefore, linking the "recovered" archaeological record (derived from the early "specimen approach") to the more recent record (derived from the "systems approach") to determine "cultural affiliation" becomes an impractical exercise, in all but the broadest scales and most general resolutions. At the very least, extreme caution is in order:

Our current systematics is rooted in misguided ideas of "inductive objectivity" and is based on limited experiences believed to be informative as to the "nature of culture." These impressionistic ideas then guide our judgements as to how to observe and, in turn, how to interpret observations once they are made (Binford 1983:378).

Nature of Culture

As an illustration, we may ask: what does culture mean in the context of Plateau cultural chronologies that were largely derived for each new site, project, or other naively selected portion of reality (Ames 2000:6)? Critically, what do cultural chronologies mean in the context of affiliation under NAGPRA? The history of anthropology holds some clues.

Throughout the writings of the founders of American anthropology, we find repeated emphasis that the "essential" feature of culture is that culture traits can be exchanged independently of race, language, or socio-political identity. As Wissler (1914:490) indicated, the one thing culture does not have is "cohesions" among units over time (Binford and Sabloff 1982:140).

This means that if we see changes in "cultural traits," we can not assume other changes within the culture under study. It means that a patterned change in projectile points does not mean a change in race, language, or socio-political identity. ("Race" as used here is in accord with Cavalli-Sforza 1997:392). In fact, change in the formal attributes of projectile points is not expected to have a direct relationship to cultural affiliation. Wissler (1914) and many others realized that they could not recognize tribal individuality because it appears only "in decorations and a few inessential features," and that continuities exist at the level of geographic regions, with cultural traits moving across language and other cultural dimensions. It clearly means that a change in regional settlement patterns does not indicate a gap in oral history or concepts of cultural identity.

Although this explanatory framework has been modified through subsequent research, pieces of it and subsequent frameworks (Krieger 1944) are still very much apparent and potentially relevant to a determination of cultural affiliation:

One of the hallmarks of the "Kriegerian" method.... is to group sites into cultures or traditions on the basis of the formal similarity of selected diagnostic artifacts (Ebert 1992:39).

The "Kriegerian Method" is still a hallmark of archaeological thinking that appears in modern work (Binford and Sabloff 1982). Based on the "gaps" identified by Ames, notions of culture "based on formal similarity of selected diagnostic artifacts" appear in the arguments about the cultural affiliation of the Kennewick remains. The assumptions reflected in the questions and topics prepared for discussion with the Tribal representatives (See Appendix I) are particularly disconcerting in this regard, because they reflect a mix of Kriegerian assumptions about site-based culture and a more current systems approach. Ebert (1992:15-44) elaborates these points with a relevant review of explanatory frameworks in archaeology.

To demonstrate the kind of cultural affiliation contemplated by the topics and questions brought forward in consultation with the tribes, the contemporary archaeological record and its interpretation would need to demonstrate:

- (1) Chronological control over all the various components of the human systems existing in a region at any given time and through time.
- (2) Spatial control of inter and intra assemblage variability, landscape and ecosystem scale distributional variability, and depositional and post-depositional variability.
- (3) Methodological comparability at the levels of discovery, recovery, and analysis.
- (4) Established and testable relationships between patterns observed in the archaeological record and their meaning with respect to human systems.

The archaeological record and the research representing it do not fully meet any of these basic criteria. What does exist is a mix of data collection methodologies, analytical constructs, and importantly paradigmatic interpretations. So confused is the interpretation fostered by the hybrid Kriegerian /Systems Approach now operating in the Plateau that Ames in his conclusion enters into a classic Kriegerian argument over the relationship of "projectile point style" at the Lind Coulee site and the point embedded in the Kennewick remains. He concludes that something may be wrong with the chronology of Lind Coulee, and that if we just had more well-dated sites this issue might not even arise.

Ames goes on to argue:

The sample of radiocarbon dates for this early period is small and marked by gaps. These gaps may reflect the sample's size, or like the gap in house floor dates at Hatwai, point to something else (Ames 2000:68).

Interestingly, Ames acknowledges that the gap in house floor dates at Hatwai might be an artifact of analysis and yet has entered into a debate with Chatters over the meaning of the gap in the literature (Chatters 1989, 1995; Ames 1988, 1991). Others do not even think the gap exists (Reid 1991, Schalk et al. 1998), and argue for continuous pithouse construction after they first appear. There is nothing unusual about disagreements and questioning of interpretations-- it is healthy and certainly expected by all that are involved. However, assigning meaning to patterns that may well be simply artifacts of archaeological systematics, particularly in the context of NAGPRA and cultural affiliation, is extremely disconcerting. Even more disconcerting is how a pattern summarized by Ames and others becomes an argument for abandonment:

A key issue here is the general absence of occupation of the Central Basin, except immediately along the river. The riverside occupation in the immediate area is probably somewhat later, however, than the Kennewick individual's lifetime. The occupation record is continuous to the east, along the lower Snake River and its tributaries (Ames 2000:68-69).

It is the central Columbia Basin that Ames is referring to, and the assertion is based on surveys by Greene (1976), Chatters (1984), and Galm et al. (1981). Essentially, what these researchers have noted is this:

During Period 1B (11,000 - 4500 BC), population distribution appears to have been controlled by effective moisture (Ames 1988), with sites located in areas we would expect to have been moister, or areas that had moist, edaphic conditions (e.g. Lind Coulee)...the available evidence suggests that what little activity there was in this area prior to c. 4000 BC occurred within about a mile of the Columbia River (Ames 2000:44).

Might these statements....

....indicate abandonment of the area by human populations subsequent to the occupation by the Kennewick earlier group? (McManamon, July 7, consultation with the Tribal representatives).

How did we get from Ames' statements, which rightly expect human systems to be organized around critical moisture patterns when faced with extreme aridity, to statements about abandonment? We get there because McManamon is tacitly suggesting that if an area is abandoned then cultural affiliation between the Kennewick remains and contemporary indigenous people is less plausible.

First, Ames and the data do not suggest nor even hint at abandonment. In place of the "Kriegerian abandonment leap," I would argue that the patterns Ames has summarized suggest that the spatial organization of human systems occupying the Southern Plateau changed through time, and responded with differential use of the landscape in ways that are directly correlated to changes in spatial and temporal patterns of culturally identified and affiliated resource patterns. Further, I believe that the patterns Ames has summarized are ambiguous reflections of a portion of an organized human system differentially utilizing rivers and springs, and seasonally and perennially wet areas that are localized by extreme aridity. It is a human ecology: a cultural system built around the elevation-based resource gradients mentioned earlier, and a pattern mentioned by Ames (2000: 17). The central Columbia Basin is simply the most arid portion of this larger resource geography. Schalk (1988) provides a relevant model with respect to the Old Cordilleran land use system during this period of time. Secondly, even if the entire Southern Plateau was completely abandoned, this does not mean those who abandoned the area are not culturally affiliated with the area and prior inhabitants. It cannot be argued that areas "abandoned under Kriegerian site based culture" are not part of a human group's cultural landscape. This is like arguing that because the Hanford Nuclear Reservation has been "abandoned" by indigenous people for 60 years, it is therefore not culturally affiliated with them.

Cultural Affiliation: places, resources, people, and explanations

The geographic location of the Kennewick remains lies at the base of a 100 mile elevation gradient that expresses vegetation patterns ranging from true desert to

sub-alpine forests. Marine resources pulse through and along this gradient by virtue of a complex of riverine networks. These diverse riverine networks and their floodplains tie the seasonal resource mosaic together, creating direct linkages with shrub-steppe and forest habitats. They also add inherent resource diversity, seasonal migration corridors, and core habitat for fish, birds, animals and people. The archaeological record clearly establishes the use of this gradient by people, and shows that from before the time the Kennewick man was deposited in a floodplain terrace on the middle Columbia River, by whatever means (Chatters 2000), people inhabited these elevation gradients.

Archaeologists working with diverse and complex sets of data have postulated that these early people were highly mobile, and class them generally as foragers. They have found hints of small huts and the use of fish, animals, and plants and have come to recognize that particular and recognizable artifacts dominate large geographic regions over long time periods (Ames 2000:7-8). Chatters and Pokotylo utilize the collective literature of the Plateau to portray a period of time from 9000 to 3000 BC where "adaptations remained little changed." Further, no supportable evidence exists in the archaeological record (as summarized by Ames (2000) or by Chatters and Pokotylo (1998)) to support abandonment or massive replacement level changes either in culture or biological populations in the Southern Plateau (Hackenberger 2000).

Archaeologists now interpret the record to indicate that the organizational structure of human communities changed from one dominated by foraging to one dominated by collecting over roughly the last 10,000 years. They have made solid and appreciable efforts to sort back through and across their collective efforts, and have recast the story as one of human communities adapting to and transforming a changing physical landscape. They have come to see the Plateau as a cultural landscape which is "a distinct association of forms both natural and cultural" (Sauer 1925). This is significant work because it takes the archaeologist out of the "culture as traits" problem and places the work in the

context of human ecology. It is within this framework that cultural affiliation of the Kennewick remains with the present-day indigenous people of the southern Plateau becomes an absolute certainty.

Cultural knowledge and affiliation survives and changes through time (vertical) and across space (horizontal) primarily through vertically structured generational interactions. Cultural systems assign meaning to cumulative experience and have the ability to change, both vertically and horizontally, in complex relationship with the genetic systems that they support.

Change is a response to new challenges in everyday life; conservation is the consequence of mechanisms developed to guarantee the maintenance of generations of acquired knowledge. Both mechanisms are very important for survival. Culture is an adaptive mechanism which must permit fast change if new challenges imperiously demand our attention and adaptation to new conditions, but it also must conserve all knowledge likely to be valid in the long run. Cultural transmission must therefore be susceptible both to rapid change when necessary and to high conservation in other situations, almost as much as genetic transmission. Horizontal and vertical transmission can accomplish that (Cavalli-Sforza 1997:399).

Cultures exist in habitats, in places which are the sites and situations of human lives. This is true of the indigenous people of the Southern Plateau. Theirs is a culture of habitat, and it is their interaction with it, this landscape of named and known places and its connections with themselves, that manifests shared group identity through time and cultural affiliation.

It is the nature of living in place, generation after generation, that creates the collective knowledge necessary to build and support the complex cultural landscape that was present in the historic Southern Plateau. This "regional place-based" knowledge is evidenced in the Sahaptin language filled with the symbolic knowledge of places, resources, actions, connections, and ultimately explanations.

Hunn (2000:20) clearly makes this point:

With respect to the cultural correlates of language, it seems even more likely that Kennewick Man participated in a culture fundamentally like that practiced by the historic Southern Plateau Indians (i.e. those residents south of the Canadian border in east central Washington and Oregon). This follows from the fact that Plateau peoples throughout the intervening millennia made their living by harvesting a diverse suite of local resources including salmon and other fish, shellfish, a range of roots and berries, and game (Hunn, Turner, and French 1998)...Extant Sahaptin vocabulary shows how closely linked are language and specific local environmental features. The contemporary Sahaptin ethnobiological vocabulary gives no suggestion whatsoever that the Sahaptin-speaking peoples ever lived elsewhere than in their historic homeland. Furthermore, Sahaptin place names provide a meticulous map of the local territory and clearly indicate a cultural focus on riverine resources, an emphasis that is evident throughout the Plateau archaeological record.

Hunn then qualifies his statement:

It is possible that the demonstrated close association between Sahaptin vocabulary and local environmental features could have developed in a matter of centuries rather than millennia, leaving open the possibility that Kennewick Man spoke some non-ancestral language. However, even if Kennewick Man spoke a non-Penutian language, historic Sahaptin-speakers might nonetheless have inherited their "cultural core" of knowledge, belief, and practice with respect to their environmental relationships from the earlier group to which Kennewick Man belonged.

What is important about this, in addition to the weight of Hunn's knowledge of the region and its resources, people, language and culture, is that this pattern fits with the geography of places that archaeologists have monitored. For example, Ames, Dumond, Galm, and Minor (1998:103) provide an excellent summary in their chapter, "Prehistory of the Southern Plateau." This summary characterizes the adaptive patterns, chronology, artifact assemblages, and faunal remains through time for the Southern Plateau. Obviously biased in the ways mentioned

earlier, this summary clearly identifies occupation prior to the Kennewick remains, and maps and names numerous places correlated, by various means, with those remains (Period 1B). These places range from riverine to upland settings along the elevation gradient, and their content and placement in the landscape indicate an economy based on the same general suite of resources used in historic times. The author's summary (Ames et. al. 1998) is structured around three broad time periods, and again, many of the same or proximate places are named in Period II even though a more focused collector adaptation is posed for this period (Ames 2000). The hallmark of Period II is the widespread occurrence of "pithouses." This occurrence and its meaning, and patterned variation in time and space, has fostered a healthy and fascinating discussion in the archaeological literature. What is important here is that people are living in, and proximate to, many of the same locations where people lived in prior times. Period III marks the obvious complexity and energy of "patterns that persisted into the nineteenth century" (Ames et. al. 1998:111). Importantly, even in Period III people are often at or in proximity to the locations people have used for thousands of years.

What is certain is that people have lived, generation after generation, for thousands of years in the Southern Plateau. They have enacted their lives on or near places in a landscape connected culturally through both vertical and horizontal transmission. These people, mobile, observant, learning, and culturally knowledgeable, ate similar foods, used similar tools, lived in and buried their family members in places similar to those used by generations of people before them. They encountered from birth, through cultural transmission, a landscape embedded with meaning and explanation derived from cultural affiliation. In addition, they encountered a cultural landscape alive with places, patterns, processes, and people, and because of this dynamic interaction they inherently possess a shared group identity both with past generations and with generations yet unborn.

Clearly, the culture of contemporary indigenous people does not carry every one of all the details and specifics of this dynamic process of cultural landscape formation, transmission, and change over hundreds of generations. However, it did and does hold the broad context that builds and shapes knowledge, perception, and behavior, and explains the past through a shared group identity. Present-day indigenous people clearly carry a shared group identity older than the Kennewick remains, and that identity holds sacred the places, landscapes, and remains of the ancestors.

Clearly, there are great differences in capture, processing, and distribution of energy (resources) evident in Southern Plateau land use systems over 10,000 years of adaptive change. Clearly, there are great differences in how available energy was ecologically structured over 10,000 years, and the human cultural systems reflect this profound ecological transformation. Chatters provides an excellent summary of the major environmental changes that the inhabitants faced as the landscape transformed from catastrophic floods and glacial retreat to the complex biogeography evident in the historic period (Chatters 1998:42). Cumulative knowledge of the landscape played a key role in survival. Each generation needed to know about resources, where they were and how to procure and process them, but each generation could not learn it all, over and over again for itself--they could not. The landscape is too complex, too variable, and too far-ranging. Each generation acquired this knowledge, like all people, from their parents, their relatives, their places, and their culture; each generation survived by changing as the dynamics of the landscape and their knowledge changed. What these people carried was a culture of habitat, a regional cultural geography of places, resources, people, and explanation. What they carried in their minds and transferred through oral traditions and living is a shared group identity, a culture of affiliation. Across space and through time they became affiliated with a cultural landscape--its places, resources, people, and explanations.

Conclusions

Cultural affiliation evolves in human systems that are "place-based" by virtue of repeated interactions with a dynamic physical landscape and through dynamic cultural transmission. Over time, connections are established and maintained with generations long past, and cultural affiliation is forged through a shared group identity within a living cultural landscape. In the Southern Plateau, contemporary indigenous peoples' shared group identity extends beyond the age and cultural affiliation of the Kennewick remains by thousands of years. This shared group identity extends to places, resources, people, knowledge, and ancestors. It is the sharing of these core features, their connections (i.e. language, technology, settlement and land use systems, etc.), and their explanations that establishes clear cultural affiliation of the Kennewick remains with the present-day indigenous people of the Southern Plateau.

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APPENDIX I



United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

IN REPLY REFER TO:

JUN 30 2000

Mr. William F. Yallup, Sr.
Chairman
Confederated Tribes & Bands of the Yakama Indian Nation
P.O. Box 151
Toppenish, WA 98948

Dear Chairman Yallup:

On behalf of the Department of the Interior (DOI), I invite you and other tribal representatives to a meeting to discuss issues related to the DOI consideration of the cultural affiliation of the Kennewick remains. The meeting is scheduled for 7 July at the Ridpath Hotel in Spokane, Washington. We shall begin at 9 am.

On the attached sheets are a list of questions and topics related to cultural affiliation of the Kennewick remains that will be the subject of the meeting.

Your tribe's participation with DOI is greatly appreciated and we hope it will continue. Thank you for your attention to this matter.

Sincerely,

fm Francis P. McManamon
Departmental Consulting Archeologist
Manager, Archeology & Ethnography Program

cc: Tom Zeilman, Johnson Meninick, Fred Ike, Sr.

DOI 09040

**Human culture in the Central Columbia Plateau, 9500-9000 BP
and Links to Present-day Tribes**

Topics Related to Cultural Affiliation of the Kennewick Remains

30 June 2000

[Prepared for discussion with tribal representatives, 7 July 2000, Spokane, WA]

This is a list of topics and questions that additional discussion and information might help to make clearer. We have focused upon topics for which there appears to be a change indicated in the physical, written, or oral record. The challenge is to interpret correctly what the change means. Is it due to biological, cultural, or social discontinuity, such as a population shift, or it is due to a developing *in situ* culture, adapting to a changing natural or social environment.

The topics are developed from the four major information summaries that examine cultural affiliation, as well as the written materials that have been received from interested Native American tribes and other relevant sources. Attention will be directed to areas where tribal representatives may be able to supply additional information to address perceived discontinuities or gaps in the anthropological record.

1. Mobility and Settlement Pattern

Topics for discussion: This pattern of settlement and population movement differs from later periods of occupation. What connections can be drawn with the subsequent periods? What differences may indicate cultural discontinuity?

2. Raw Materials and Trade or Exchange--Lithics

Topics for discussion: A change in obsidian usage may reflect a similar discontinuity in procurement and settlement systems. The lack of provenience information related to chert procurement represents a major gap in prehistoric studies on the Plateau.

3. Raw Materials and Trade or Exchange--Marine Shell

Topics for discussion: A change in shell procurement, probably indicative of changing exchange/trade patterns, may be noted in the appearance of dentalium shells after ca. 3000 BP. What about this change might indicate cultural continuity or discontinuity.

4. Technology--Projectile Points

Topics for discussion: Projectile point styles change over time. Is this an indication of cultural changes, technological developments, change in functions, or another factor? Increasing diversity of projectile point forms is noted during Period III, in association

with Pithouse II. One possible explanation for diversity in forms may be restricted mobility and limited intergroup contact.

5. Technology--Overall lithic technology

Topics for discussion: Did lithic technical methods change over time in a way that would reflect cultural differences, rather than changes in function, technical developments, or other factors?

6. Types and patterns of dwellings

Topics for discussion: The earliest archeological evidence of a dwelling in the Columbia Plateau region predates the Kennewick remains by 2000-3000 years. The dwelling is interpreted as a small hut or windbreak as part of a residential camp. There are several features interpreted as structures dated c.7500 BP. These are small (<11 square meters) circles of stones with trampled interiors. The oldest pit houses appear on the southern Plateau by 6000 BP and shortly afterward at various sites. A gap in construction of pit houses has been identified ca. 3800 BP, although the existence of this gap is debated. Pit houses occur again and widespread across the Plateau. The size of groupings of houses, in association with cemeteries, increases after 1500 BP. These changes in dwelling type may indicate cultural discontinuities or functional shifts. Do these variations reflect cultural differences, rather than changes in function, technical developments, or other factors?

7. Subsistence—Variety of Foods

Topics for discussion: Changes in subsistence technology do not necessarily indicate cultural discontinuity. It seems clear, however, that a shift in subsistence resources was associated with increasing sedentism during Periods II and particularly III. Gaps exist in the nature of faunal and floral data recovered and in more detailed studies relating to topics such as seasonality.

8. Burial Patterns

Topics for discussion: Hackenberger (2000) describes temporal gaps in the mortuary record from 7000-5000 BP, and from 5000-3000 BP. Burials have been found during these periods but in limited quantities and geographic distributions. Rock cairn burials covering cremated remains are found along portions of the Columbia River from between 5000-3000 BP, but not at other times. The gaps in the mortuary record correspond to gaps in settlement sites and might indicate abandonment of the area by human populations subsequent to the occupation by the Kennewick earlier group.

9. Linguistic evidence

Topics for discussion: Present-day terms for some animals such as bison, which were hunted since the earliest occupations on the Plateau, have been incorporated from

neighboring languages. Many Sahaptin terms for plants and animals indicate a close association with the present-day natural environment of the region. However, since 9500 B.P. there have been substantial variation in the natural environment due to fluctuation between wet and dry climatic conditions. These long-term changes in the natural environment do not seem to be reflected in the Sahaptin vocabulary.

10. Traditional histories

Topics for discussion: In evaluating modern day oral traditions, Boxberger (2000) infers considerable, but unspecifiable, time depth for various traditional stories that mention natural events, for example, floods. Are there additional oral traditions related to specific natural events that might be identified and dated independently?

Other stories, such as the pre-human “myth people” who lived in villages (Boxberger 2000:12) are more difficult to interpret. Village settlement pattern did not appear in the region until age life was not a factor of settlement patterns on the Plateau until well after the appearance of the earliest human hunters and gatherers.

Boxberger (2000:52) concluded the various oral traditions established the following: lack of evidence of migration; environmental relationship in traditions; time depth relating traditions to post-glacial events; fundamental dependence upon Columbia River as symbolized in importance of salmon.

FPMNOTE—30 June 2000—Draft attachment for further discussion of information for cultural affiliation consideration, Kennewick remains
Filename:\0006CAffquestions or 0006CAqu

VITA

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AREAS OF SPECIAL AND REGIONAL INTERESTS

Human Ecology and Evolution in Temperate/Arid Ecosystems
Cultural Landscapes of the Cascades and Rocky Mt.
Settlement and Land Use in Western North America
Environmental Alteration of the Columbia River Basin
Mountain Land Use by Indigenous People of North America
Landscape Policy, Planning, and Regulation in the Mountain West
Wilderness, Grazing, Forests, and Recreation in the Mountain West
Cultural Ecology of Western Rivers

PROFESSIONAL EXPERIENCE:

Professor of Geography, Department of Geography and Land Studies, Central Washington University (1988-1999)

Distinguished Professor for Teaching (1998)
Chair of the Department of Geography and Land Studies (1997-2000)
Co-Director of the Resource Management Graduate Program (1997-1999).
Director of the Environmental Studies Program (1995-1999)
Chair of the Farrell Merit Committee (1993-1999)
Faculty Senator (1995-2000)

Teaching Awards

1998 Distinguished Professor for Teaching, Central Washington University
1995 Outstanding Achievement in Public Education, State Historic Preservation Office and the Governor.
1992 Excellence in Teaching Award, Central Washington University.

Undergraduate Teaching

(Note: 1999-2000 research not offering courses)

I teach Introduction to Physical Geography, and Cultural Geography every year. Sometimes twice a year. My role in **Environmental Studies** has increased over the last few years and I taught ENST 301, 302, and 444. I served as **Director of the Environmental Studies Program**. I teach a variety of other courses in Geography but the two I am most fond of is Geography 310 - Introduction to Landscape Analysis and The Geography of Rivers (498). I try to support the teaching of other members of my department by being able to **teach a wide variety of classes**. In the past three years I have **team taught** four courses with other members of my department. I have taught an Introduction to Archaeology for the Anthropology Department.

I teach unpaid **overloads every quarter**. I average 20 contact hours of individual studies and graduate research/thesis per year.

I offer, each quarter anywhere from three to six **Individual Studies or Field Experience** courses not because this is an efficient way to teach but because it is effective. I have seen poor students become good students, and some become great students when specific attention is given to their interests.

In the past three years I have worked directly with five or six **Farrell Merit Scholars** to encourage their efforts on their research projects. All of these experiences have been positive and worth the effort.

Most years I mentor one student in the **McNair Scholarship Program**. This year my first student graduated with a Masters of Science. I like that.

Each quarter I work directly with **undergraduate students in Anthropology and Biology** helping with maps and field related problems. These contacts, too few by my estimation, are delightful and I must thank the faculty in those two departments that encourage them to come and see me.

Each year I have from 20 to 30 **undergraduate advisees**. These numbers are impossible to keep track of but I did keep track of how much time I spend each day teaching and advising undergraduates one on one. Winter quarter of 1996 it **equaled four hours per day** and this has been the typical pattern. I can not over emphasize the value of this time to me because it means I will have to work at home each evening and on weekends. It means when I am teaching I am not doing topical or thematic research. It means that my creativity - my energy - my daily life is being given to an unending stream of students. It means I place **teaching as a priority** in my life.

I have offered a section of the **Freshman Advising Seminar** fall quarters and work with about ten freshman (non-majors) each quarter.

Graduate Teaching

I play a major role in the **Resource Management Masters** program. I teach several courses that are well attended by graduate students and have taught several of the core courses in this program. I do not know exactly how many **graduate committees** I am on but I do know that it is over ten and under twenty (currently about eighteen). I chair at **least eight** at any one time. Normally I am on at least one **graduate committee in Biology**. I have employed at least two students from this program each summer for the past five years through research grants and currently have five fully funded graduate students working on grants. I am heavily involved with the **Native American** graduate students in this program serving as a teacher and advisor. This program has expanded my life and I am very grateful for the opportunity to work with these students. I have worked directly with three of them each summer.

Spring quarter of 1997 eight of my graduate students finished. Spring quarter of 1998 five of my graduate students finished. In 1999 five of my graduate students finished. I have served on three committees where the thesis was selected as "Distinguished Thesis of the Year". In 1998 I chaired the committee of the Distinguished Thesis and this thesis was runner-up in the western regional competition. All of my students who have completed the program are employed in their chosen fields. I am not paid for this work.

Research

Current research involves an analysis of the **Cultural Ecology of the Yakima River Floodplain**. This research is being conducted in cooperation with the University of Montana, Flathead Biological Station and is funded through the Bureau of Reclamation. The Yakima Reaches Project is a **grant of \$480,000** over two years.

From 1993-1997 focused my research on Native American land use patterns in Kittitas County. This research has been directly relevant to the Yakama Indian Nation, U.S.F.S. Cle Elum Ranger District, Washington Department of Natural Resources, private timber companies (specifically Plum Creek and Boise Cascade), Washington Environmental Council, Washington State Department of Ecology, Kittitas County Audubon Society, ALPS, and private citizens. It has **directly supported** Central Washington University as a member of the Yakima River Management Cooperative (YRMC) and the University's **stated Mission** as a regional support institution.

The grants obtained during this effort totaled over \$50,000 dollars and almost all of this was spent supporting students and other faculty members

Winter quarter of 1995 I received a **Faculty Research Appointment**. My research project was to construct a model "Native American Traditional Resource Value Map" for Kittitas County. This work was completed on time and copies of the report and map filed in the Map Library, with the Research Dean, and with the interested parties. All grants and contracts have been finished on time and found acceptable by the funding sources. This research is now being incorporated into several master theses and a portion of it is **now Law** in the State of Washington.

I have **presented this work in workshop and formal lecture formats** numerous times. I gave formal papers on this work at the national meeting of the **Association of American Geographers** in Fort Worth, Texas and the **Northwest Anthropology** meeting in Ellensburg, Washington.

Spring 1995: Biology Department Speaker Series.

Summer 1995: The Yakama Indian Nation Tribal Council and Management Team.

Fall 1995: The Cultural Committee of the State Timber Fish and Wildlife (TFW) organization. The Yakima River Management Cooperative. The Yakima River Management Cooperative Cultural Committee

Spring of 1995 to Present: Numerous university courses in various disciplines and countless individuals from federal, state, county, and private entities.

Fall of 1996 to The Nature Conservancy, Northwest Ecosystem Alliance, and Bullet Foundation.

I received the following award along with the Yakima Resources Management Cooperative Archaeological and Cultural Resources Task Group:

State Historic Preservations Officer's 1995 Annual Award for Outstanding Achievement in Historic Preservation Planning.

Service to the University and the Public

I do all of this that time allows and I do not keep a record of most of it. Below is a rather incomplete but representative and a respectable list.

Public Lectures in the last few year.

“Geography of the West” once each summer for Senior Ventures.
“Man, Space, and Time in the Yakima Valley” spring 1995 for the Cascadians in Yakima.
“Kittitas County” annually for three years for the Leadership Program in Kittitas County.
“Culture” for numerous High School groups in Kittitas County (Ellensburg High school Earth Day, Thorp High school Health Fair).
“Italy” Global Places Lecture Series.
“Man, Space, and Time in the Yakima Valley” fall 1998, Yakima Valley Museum

University Services

Member of the Technical Advisory Committee to the State Salmon Board
Member of the Administrative Structure Review Committee
Member Presidential Search Committee
Member Faculty Senate
Chairman of Farrell Merit Scholarship Committee
Mentor in McNair Scholarship Program
Member of Steering Committee for the Community Development Plan (resigned).

Public Schools -lectures and interactions

Earthday lecture Ellensburg High School
Earthday lecture Thorp High School
Yakima River Basin Cultural Ecology, Wilson Junior High
Yakima High Schools working with staff on a course dealing with the history of the Yakima River Basin.

County Services

Member of the Kittitas County Boundary Review Board (Appointed by the Governor).

State Services

Member of the Archaeological and Cultural Task Group for the Yakima River Basin Resource Cooperative (inactive 1998).

Federal Services

Member of the Technical Cultural and Natural Resources Committee (CNRC) at the Yakima Training Center. Federal Advisory Committee representing the City of Ellensburg (resigned, fall 1996).

Public Services

Almost weekly I work with one or more people from the local or regional community involving land use problems they are encountering. This work ranges from air photo analysis to testifying in legal proceedings. Increasingly development interests regarding land use history and my research on Native American Land Values contact me. I am in weekly contact with the Yakama Indian Nation regarding various land use issues. I consider this work public service.

Past Professional Activity

Geographer/Consultant

Cultural Resources Survey of V-194, Columbia River at Avery for Yakama Indian Nation Cultural Program and Wheeler Construction, summer 1999.

Past Professional Activity

Geographer/Consultant

Expert witness testimony for the Yakama Indian Nation regarding impacts to Traditional Cultural Properties from the proposed Cross Cascade Olympic Pipeline, spring 1999.

Geographer/Consultant

Contract to evaluate cultural impacts of proposed Nuclear Waste Repository-Hanford (BWIP), Yakima Indian Nation, Nuclear Waste Program. 1986-1987.

Geographer/Consultant

Multiple contracts with the Yakama Indian Nation to perform field surveys, literature reviews, document evaluations, prepare legal testimony; provide "expert witness" testimony on Native American land use and make recommendations regarding proposed and on-going land use projects on the Yakama Nation and its Ceded Lands. Contracts involved cultural, forestry, range, wildlife, fisheries, agricultural, mineral, and water resources 1983-1989.

Resource Geography

Taught interdisciplinary graduate seminar titled "Resource Management." Winter quarters 1987, 1988. Central Washington University.

Geographer/Anthropologist

Contract to prepare a Cultural Resource Overview of the Yakima Indian Nation. 1981-1983.

Historical Geographer

Taught off-campus course titled "Man, Space, and Time in the Yakima Valley", spring 1982, Central Washington University.

Past Professional Activity

Assistant Professor of Geography

Offered courses titled Regional Land Use Planning, Conservation Geography, Advanced Urban Geography, Introduction to Cultural Geography, and served on Graduate Committees. Field Research conducted on historical geography of the Rio Grande River and prehistoric land use patterns in Northern New Mexico. University of New Mexico, Alb. 1980-1981

Geographer/Anthropologist

Contract to prepare a Cultural Resource Overview of the Naches River Basin, Eastern Cascades, Washington State, Wenatchee National Forest. 1978-1980

Graduate Teaching Fellowship

Department of Geography University of Oregon, Eugene, 1978-1979.

Associate in Anthropology

Conducted archaeological research on three sites in the Mid-Columbia Region of Washington State. Washington State University, Department of Anthropology, summer 1978.

Field Anthropologist

Anthropological field work on the prehistory and history of St. Catherine's Island, Georgia. American Museum of Natural History, New York, spring 1978.

Project Director

Archaeological survey of the Sisters Timber Sale Region. USFS, Baker, Oregon, spring 1978.

Field Archaeologist

Archaeological survey of Hells Canyon, Oregon, USFS, National Recreation Area, early spring 1978.

Past Professional Activity

Archaeological Consultant

Lectures and instruction given to USFS management and field personnel on prehistoric and historic land use in North Central Washington and on legal aspects of Cultural Resource Management.

Anthropologist

Contract to prepare a Cultural Resource Overview of the Tonasket Planning Unit, USFS, Okanogan, Washington, 1977.

Instructor (Archaeology)

Archaeological Field School, Central Washington University, Ellensburg, Washington, summer 1977.

Project Director

Central Washington Archaeological Survey, Ellensburg, WA. spring and summer 1976.

MAJOR WORKS:

- 1978 Cultural Resource Overview of the Tonasket Planning Unit. Government Printing Office, Seattle, Washington, 189 p.
- 1980 Land and Life in the Naches River Basin. U.S.F.S, Region 6, Portland, Oregon, 390 p.
- 1984 Time Ball: A Story of the Yakima People and the Land. Yakima Indian Nation, Toppenish, Washington, 220 p.
- 1986 Geographic Explorations in the Southern Cascades of Eastern Washington: Changing Land, People, and Resources. Ph.D. University of Oregon, University Microfilms, 216 p.
- 1995 Traditional Resource Values, Yakima River Basin, Kittitas County Washington (unpublished maps and text Central Washington University Library).
- (2000) The Cultural Ecology of the Yakima River Floodplain. In preparation.

PROJECT/GRANTS/CONTRACT REPORTS

- 1977 Smith, William C., Uebelacker, Morris L., Eckert, Timothy, and Nickel, Larry J.
An Archaeological-Historical Survey of the Proposed Transmission Power Line Corridor from Ashe Substation, Washington, to Pebble Spring Substation, Oregon. Project Report 42. Washington Archaeological Research Center, Washington State University.
- 1977 Uebelacker, Morris L.
Archaeological Testing of Three Hinterland Sites in the Lower Columbia River Area. Project Report. Washington Archaeological Research Center, Pullman, WA.
- 1980 Cleveland, Gregory C., and Morris Uebelacker
Evaluation of Two Prioritized Sites, 45BN161 and 45FR101, in the McNary Reservoir. Project Reports No. 2. Laboratory of Archaeology and History, Washington State University, Pullman.
- 1989 "The Columbia River Scenic Area Act and its relationship to Native American Treaty Rights." Yakima Indian Nation and USFS, Hood River.
- 1992 "Social and Economic Impacts of Outer Continental Shelf Oil Exploration and Development on Native American Polities in the Columbia River Basin." Mineral Marine Management Service, San Francisco.
- 1995 "Traditional Resource Values of the Upper Yakima River Basin." Yakima River Basin Resource Cooperative.

CONFIDENTIAL PROJECT REPORTS

1982-1989 Project reports detailing research on Native American Land Use on the Yakama Indian Nation and Ceded Lands. Yakima Indian Nation Cultural Heritage Center and Hovis, Cockrill, Weaver and Burr law office, Yakima, Washington.

1978-1980 Project reports detailing research on Native American and Historical land use Naches Ranger District, Wenatchee National Forest.

1990-1996. Project reports including: (1) Native American Resource Atlas Upper Yakima River Basin, report, geologic maps, archaeological site distribution maps, and Native American

resource maps, (2) Methodology for modeling Native American land use patterns and recommendations for resource planning. Timber, Fish, and Wildlife Program of the Yakima Indian Nation and the Upper Yakima River Basin Planning Cooperative. Interim Reports 1993 and 1995.