

Table 1: Summary of Information Used to Assess Cultural Affiliation of Kennewick Man, Secretary Babbitt’s Assessment, and SAA’s Commentary<sup>1</sup>

CULTURAL AFFILIATION EVIDENCE	CHARACTERISTICS OF THE COLUMBIA PLATEAU CA. 9500 BP	CHARACTERISTICS OF THE CLAIMANT GROUPS CA. AD 1805	SECRETARY BABBITT’S ASSESSMENT	SAA’S COMMENTARY
<b>Geographic</b>	<p>“... [T]he group represented by the Kennewick human remains ... spent at least a portion of their lives in [the Mid-Columbia] region between 9500-8500 BP.” FDE3:9; DOI 10058</p> <p>“Certain portions of the Plateau, such as the central Columbia Basin immediately north of the Kennewick discovery site may have been uninhabited or abandoned [between 9500-8500 BP].” FDE3:11; DOI 10060</p>	<p>The claimants’ ancestors lived in the Plateau Region.</p> <p>“The existence of earlier human groups in the same geographic location as the historic period ancestors of the present-day tribe does not automatically indicate cultural affiliation ... but it can be an important fact in determining whether a shared group identity can be reasonably traced.” FDE3:9; DOI 10058</p>	<p>“The modern-day claimant tribes are known to have been living in the Columbia Plateau region where the Kennewick remains were discovered ... in the early 1800s.” BL:4; DOI 10015</p>	<p>Assessment of the geographic evidence for cultural affiliation cannot be limited to the co-occurrence of Kennewick Man’s remains in the same general area historically occupied by the claimant groups, especially when the area of the Kennewick locality lacks evidence of permanent occupation until about 5200 years ago and the surrounding area was sparsely occupied at this time. FDE3:10-11; DOI 10059-10060 These geographic data argue strongly against cultural continuity.</p>
<b>Archaeological/Historical</b>				
<i>Settlement Pattern/Group Mobility</i>	<p>“Windust and Early Cascade groups which the Kennewick Man would have been a member of, are widely regarded as small in size and highly mobile.” FDE3:11; DOI 10060 “The transition to increased sedentism is represented by the more substantial evidence of fixed, formally constructed dwellings [pit houses], following about 5200 years ago.” FDE3:11; DOI 10060 “The initial pit house sites include only a few contemporary houses with no obvious storage features, which suggests periodic occupations with some group movement.” FDE3:10; DOI 10059</p>	<p>“Mat lodges appear about 1500 years ago in association with large concentrations of houses and cemeteries. The settlement pattern during this later period reflects a substantial commitment to sedentism, as reflected in the widespread use of storage features. The period ends with the appearance of the horse on the Plateau in the early 18th century when some of the historic tribal groups begin to follow a more mobile settlement system.” FDE3: 10-11; DOI 10059-10060</p>	<p>“Cultural discontinuities are suggested by the evidence that the cultural group existing 8500-9500 years ago was likely small in size and highly mobile while the Plateau culture consisted or larger, more sedentary groups.” BL:5; DOI 10016</p>	<p>Several dramatic changes in lifeway are in evidence: 1) highly mobile to semi-sedentary, to sedentary residence; 2) from impermanent camps of small bands, to small villages, to larger villages; and 3) use of impermanent huts replaced by pit houses and then by mat lodges. As the Staff Report concludes “The small, mobile cultural groups that Kennewick Man was a part of [ca. 9500-8500 BP] indicate a way of life quite different from the much more sedentary residential pattern associated with the historic tribes ...” FDE3:11; DOI 10060</p>
<i>Raw Materials and Trade or Exchange</i>	<p>“Obsidian is present on the plateau at an early date ... procurement patterns [indicate] direct acquisition via group mobility” FDE3:12; DOI 10061</p> <p>“Olivella is the only kind of marine shell found on the plateau.” FDE3:12; DOI 10061 “The presence of Olivella shells from the Pacific</p>	<p>“Obsidian ... procurement patterns shifted ... to indirect procurement through some sort of economic or social exchange.” FDE3:12; DOI 10061 “By about 2500 years ago, an extensive system of exchange in trade in a wide variety of objects and materials had developed throughout</p>	<p>“The evidence also suggests that there may have been differences in procurement and exchange of raw materials or specialized objects between the two time periods. BL:5; DOI 10016</p>	<p>The Staff Report explicitly notes a clear discontinuity: “In addition: many other raw materials and finished artifacts began to be exchanged among the sedentary groups throughout the Plateau around 3000 years ago. This pattern seems to have no parallel during the earlier period when Kennewick Man lived.” FDE3:13; DOI 10062</p>

<sup>1</sup>Information in this Table is presented primarily in Letter of Bruce Babbitt to Louis Caldera, September 21, 2000, (BL) and the Final Determination Enclosure 3, “Human Culture in the Southeastern Columbian Plateau, 9500-9000 BP and Cultural Affiliation with Present-day Tribes,” (FDE3). Where appropriate, we also cite the experts’ reports: Cultural Affiliation Reports (CAR1-CAR5) where 1=Scope of Work, 2=Ames, 3=Boxberger, 4=Hunn, 5=Hackenberger, and “Report on the Osteological Assessment of ‘Kennewick Man’ Skeleton” by Powell and Rose (KM2).

	Coast may indicate the existence of an even larger mobility pattern if direct procurement of these items was undertaken.” FDE3:13; DOI 10062	the Columbia Plateau. This pattern continued into the Historic period.” FDE3:12; DOI 10061 “Dentalium becomes the prevalent marine shell found in archaeological assemblages.” FDE3:12; DOI 10061		
<i>Technology Projectile Points</i>	Cascade and Windust points are large and tipped spears propelled by spear throwers (atlatls). FDE3:13; DOI 10062 Unlike the points dating to the time of Kennewick Man, late Cascade and subsequent points, ca. AD 5000. CAR2:8-9; DOI 10151-10152. are side notched. Two cited authors see this as evidence of different cultural traditions. Cressman 1977 and Leonhardy and Rice 1970 in FDE3:13; DOI 10062	“Small projectile points that appear about 2500 years ago suggest the use of bow and arrow.” FDE3:14; DOI 10063	“New artifact types appear, such as the replacement of edge-ground cobbles used in 8500-9500 with the mortars and pestles associated with the Plateau culture, and new materials are utilized.” BL:5; DOI 10016	Changes in projectile point form likely reflect an evolving production technology and functional differences associated with the changing subsistence base. They also probably result from intergroup interaction and changing cultural styles that may reflect cultural boundaries. Overall, they suggest cultural changes that could be consistent with either continuity or discontinuity but weigh against shared group identity.
<i>Technology House Forms</i>	Small huts or windbreaks were used for dwellings, replaced by pit houses starting ca. 6000 BP. FDE3:14; DOI 10063	“Mat lodges appear about 1500 years ago.” FDE3:10; DOI 10059		The Staff r concludes: “The kinds of structures built and used varied substantially from the 9500-8500 years ago period to the 3000 years ago period.” FDE3:15; DOI 10064
<i>Subsistence</i>	“Data from ... the 9500-8500 period suggest a broad-based subsistence pattern” FDE3:15; DOI 10064. that would have emphasized “a wide range of large mammals, including bison, plants, and marine fishes including salmon.” FDE3:16; DOI 10065 There is no evidence of food storage. FDE3:9; DOI 10058	Specialized subsistence pattern with heavy dependence on salmon and root crops, food storage emphasized. FDE3:16; DOI 10065 “The historic pattern of salmon exploitation is one that seems to have emerged only ... about 3500 years ago.” FDE3:16; DOI 10065		Substantial shifts in subsistence are doubtless associated with changing mobility, settlement type, and hunting technology. They represent another indication of major cultural difference between the group associated with Kennewick man and the claimant groups.
<i>Burial Patterns</i>	No distinctive burial pattern at the only comparable site (Marmes Rockshelter), which has cremations and human remains in burial and non-burial contexts. Some burials have funerary objects. FDE3:17; DOI 10066. Near the Dalles, ca. 5000-3000 BP, a distinctive pattern had rock cairns covering partial cremations. A different pattern, the Western Idaho Burial Complex (dated 6000-ca. 1500 BP) includes secondary burial, cremation and caches of distinctive artifacts. FDE3:17; DOI 10066	Cemeteries associated with sedentary villages. FDE3:17; DOI 10066 Funerary objects, such as dentalia shells are common. “It is difficult to extend an argument of mortuary-based continuity in this region back before 7000 years ago.” FDE3:18; DOI 10067	“Some of the evidence was too limited to draw any conclusions on the cultural relationship between the two groups. ... There is very little evidence of burial patterns during the 9500-8500 period and significant temporal gaps exist in the mortuary record for other periods.” BL:4; DOI 10015	Treatment of the dead is an important expression of group identity. There are striking differences between cemeteries characteristic of the claimant groups and the diverse treatments of human remains in the period dating back to 7000 years ago. These different patterns of mortuary treatment suggest the presence of multiple groups at that time. It is not possible to connect any of them with the even older Kennewick remains.
<b>Biological</b>	“The Kennewick skeleton can be	Cranial form of modern Indian groups	“Some of the evidence was too	Cultural groups typically share substantial

	<p>excluded, on the basis of dental and cranial morphology ... from <i>all</i> late Holocene human groups ...” Powell and Rose 1999 in FDE3:19; DOI 10068, emphasis in original</p>	<p>including those of the Northwest Coast and Interior Plateau regions differ from that of the Kennewick skeleton. KM2:19; DOI 10691</p>	<p>limited to draw any conclusions on the cultural relationship between the two groups. ... The fact that morphological characteristics of the remains differ from modern day Indian tribes may indicate a cultural discontinuity between the two groups or may indicate that the cultural group associated with Kennewick Man may have subsequently intermingled with other groups migrating into or through the region, leading to changes in the morphological characteristics of the group.” BL:4; DOI 10015</p>	<p>physical similarities. The morphological characteristics of Kennewick Man differ significantly from those of all modern Native Americans, including those of the claimant groups indicating a substantial biological difference. The sort of migration suggested by Babbitt probably would have substantially altered the culture. Furthermore, accepting the existence of such a transformative migration undermines the oral traditional evidence indicating a lack of cultural change and a lack of migration on which Babbitt relies in his Final Determination. BL:4; DOI 10015</p>
<b>Linguistic</b>	<p>There is no direct evidence of the language spoken by Kennewick Man. He may have spoken of the “early hypothetical language family” (Proto-Penutian) which may have been spoken in the area ca. 8000 BP FDE3:20-21; DOI 10069-10070 “Proto-Sahaptian [derived from Proto-Penutian] was spoken in the central Columbia Plateau ... perhaps as early as 4000-5000 years ago.” CAER4:15; DOI 10322.</p>	<p>Historic claimant groups spoke Sahaptin and Nez Perce, which are derived, about 2000 BP, from proto-Sahaptian. Cayuse, once spoken by other claimant groups was more distantly related to Penutian. CAER4:16; 10323. “The evidence related to environmentally-related terms, however, does not necessarily lead to the conclusion that Sahaptin speaking peoples or their antecedents resided in the Plateau region during the very remote past.” FDE3:23; DOI 10072</p>	<p>“Some of the evidence was too limited to draw any conclusions on the cultural relationship between the two groups. ... The linguistic evidence was unable to provide reliable evidence for the 8500-9500 period but suggests that the antecedents of the historic language may have been spoken on the Columbia Plateau 4000 years ago.” BL:4; DOI 10015</p>	<p>The ability to communicate through the possession of a common language is an extremely common dimension of shared group identity. Prior to adopting English as a lingua franca, the claimant groups did not all share a common language. This linguistic evidence strongly suggests a lack of shared group identity between each of the claimant groups and Kennewick Man.</p>
<b>Oral Traditions</b>	<p>N/A</p>	<p>Oral traditions provided by four claimant groups lack reference to migrations in their origin stories and record events in the distant past. For example, the oral tradition put forth by the Colville tribe provides “explanations of modern landscape features in terms of the original creation of these features by mythical animals and other beings.” FDE3:24; DOI 10073 Some of the events may relate to events dating to the last several thousand years. Others explain topographic features that resulted from geological events that occurred million of years ago.</p>	<p>“The collected oral tradition evidence suggests a continuity between the cultural group represented by the Kennewick human remains and the modern-day claimant Indian tribes. The oral tradition evidence reveals that the claimant Indian tribes possess similar traditional histories that relate to the Columbia Plateau’s past landscape. The oral tradition evidence also lacks any reference to migrations of people into or out of the Columbia Plateau.” BL:4; DOI 10015</p>	<p>While oral traditions provide important insights into the past, evaluating them is difficult. The absence of migration traditions may suggest a longstanding presence in the Plateau Region. However, there is no evidence that these traditions stretch back 9000 years. The Staff Report concluded: “There is no indication of villages 9500-8500 years ago when Kennewick Man lived, so these stories would seem to derive from a more recent time.” FDE3:27; DOI 10076 Explanations for the creation of the modern landscape are inconsistent with the geological evidence for its development. Even if taken at face value, the oral traditions presented by the claimant groups contribute only <i>one</i> type of evidence to the assessment of cultural affiliation. This evidence alone <i>cannot</i> outweigh the multiple lines of evidence that</p>

				indicate a lack of continuity between Kennewick Man and the claimant groups.
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	Secretary Babbitt's Assessment	SAA's Commentary
<b>Summary</b>	“After considering and weighing the totality of the circumstances and the evidence, DOI has determined that the evidence of cultural continuity is sufficient to show by a preponderance of the evidence that the Kennewick remains are culturally affiliated with the present-day Indian tribe claimants.” BL:5; DOI 10016	The legal standard for cultural affiliation is not Babbitt’s “cultural continuity” but “a relationship of shared group identity that can be reasonably traced.” The dramatic differences in settlement patterns, subsistence, technology, and trade provide strong evidence for a lack of cultural continuity and a compelling case that Kennewick Man does not share a group identity with the claimant groups.
	“The available information provides evidence of both cultural continuities and cultural discontinuities between the modern day claimant tribes and the cultural groups that existed during the lifetime of the Kennewick Man. The cultural discontinuities are due, in part, to a lack of available data from the earlier time periods. Notably, none of the cultural discontinuities suggested by the evidence are inconsistent with a cultural group continuously existing in the region, interacting with other groups migrating through the area and adapting to changing climatic conditions.” BL:5; DOI 10016	The archaeological evidence is sufficiently robust to show fundamental cultural differences between claimant groups and people living in the Plateau Region at the time of Kennewick Man. Even where evidence is lacking during the 9500-8500BP period, gaps in the archaeological record simply cannot explain evidence from more recent periods— <i>through which the shared group identity must be traced</i> —that suggest multiple discontinuities. Preponderance of the evidence requires more than an argument that none of the contrary data is definitively inconsistent. The evidence is at least as consistent with an interpretation that Kennewick Man was a member of some recognized group that died out millennia ago. When none of the evidence is definitive the positive and negative evidence must be weighed. The weight in this case is strong against cultural affiliation (shared group identity).