2.5 CULTURAL VALUES

2.5.1 Cultural Outstandingly Remarkable Values

The continuum of human use along the Merced River and South Fork Merced River encompasses millennia of diverse peoples, cultures, and uses. American Indian and late 19th-century American cultures flourished along these rivers because they provided reliable, year-round water in extraordinary settings. Evidence that reflects trade, travel, and settlement patterns abounds in an intricate and interconnected landscape of archeological sites representing this cultural history. The ongoing cultural traditions of contemporary American Indian and other ethnic heritages are linked through space and time to their respective prehistoric and historic pasts via these ethnographic and cultural landscapes. Therefore, this landscape holds outstandingly remarkable scientific, interpretive, and cultural value for traditionally associated peoples and the public.

The Cultural ORVs designated for the Merced Wild and Scenic River include the El Portal Archeological District, Yosemite Valley Archeological District and ethnographic resources, U.S. Army Calvary Camp A.E. Wood, the Wawona Archeological District, the Wawona Covered Bridge, and a series of regionally rare American Indian rock-ring sites. These resources—including archeological sites, natural and cultural features of traditional significance to contemporary American Indian tribes and groups, and features of the historical built environment—are located primarily within the immediate shorelands of the river (within a quarter mile of the ordinary high-water mark on either side) and owe their location and existence to the presence of the river, thereby meeting the benchmark of being river-dependent.

The characteristics that illustrate the integrity of the Cultural ORVs are discussed below in terms of why the districts and other resources in the river segments qualify as outstandingly remarkable, as defined by the Interagency Wild and Scenic Rivers Coordinating Council (1999). This section analyzes the overall condition of archeological, traditional, cultural, and architectural resources within each river segment on a broad scale, although localized incidents of resource damage or loss of integrity may be noted to provide examples.

2.5.1.1 River Segment 2: Yosemite Valley

In Yosemite Valley, the Merced River has sustained human life, both through its waters and the biodiversity it sustains, in times past and present. Archeological sites and ongoing cultural attachments indicate a long, treasured, and regionally or nationally rare connection to and dependence on this river.

Yosemite Valley American Indian ethnographic resources include a linked landscape of specifically mapped, traditional-use plant populations and other ongoing cultural practices.

Traditionally associated American Indian tribes and groups associate strong cultural and spiritual values with the river and Yosemite Valley. These values are reflected in the abundance of names and stories attached to geologic and other significant features in the Merced River corridor. The ethnographic resources here include river-related and traditionally-used plant species, the village sites of Wahhoga and Ahwahnee. These American Indian communities maintain their cultural connections
to the area through ongoing traditional cultural practices and important religious ceremonies that continue to be conducted here, as they have for thousands of years.

The Yosemite Valley Archeological District is a linked landscape that contains dense concentrations of resources that represent thousands of years of human settlement along this segment of the Merced River.

Drawn by Yosemite’s year-round availability of water and diversity of edible plants, people have inhabited the Valley for thousands of years, leaving behind an exemplary collection of sites in the Yosemite Valley Archeological District. Many of these pre-contact and historic-era archeological sites are identified in ethnographic literature and native oral traditions, providing a rare example of the long and continuing association of people and places. While the landscape itself provides exemplary documentation of land use practices, many of the individual sites contain exceptional information with the potential to interpret not only ancient lifeways but also cultural change at the period of contact with the outside world. In addition to their regionally—and potentially nationally—significant scientific and interpretive value, the sites have value to American Indian tribes and groups as a connection to their ancestors.

River Segment 4: El Portal

The El Portal Archeological District contains dense concentrations of resources that represent thousands of years of occupation and evidence of continuous, far-reaching traffic and trade.

This segment includes some of the oldest deposits in the region and the Johnny Wilson Ranch, a regionally rare historic-era American Indian Homestead. El Portal’s location midway between Yosemite Valley and the San Joaquin Valley made it an important place of settlement, subsistence, and trade along the Merced River. The steep, narrow canyon at El Portal includes river terraces with level lands on which villages were built. The presence of Great Basin and Pacific Coast artifacts indicates that El Portal was a location of continuous, far-reaching traffic and trade. The El Portal Archeological District contains dense concentrations of resources representing some of the oldest deposits in the Sierra foothills, with data important to interpreting regional cultural history possibly as old as 9,500 years. Particularly significant is the Johnny Wilson Ranch, a rare example of an American Indian homestead, which took advantage of the river as an irrigation source. In addition to the regionally significant scientific and interpretive value of the archeological district, the sites have value to park-associated American Indian tribes and groups as a connection to their ancestors. These groups maintain their traditional cultural practices and religious ceremonies as they have for thousands of years.

River Segment 5: South Fork Merced River above Wawona

This segment includes regionally rare evidence of indigenous settlement along the South Fork of the Merced River, including prehistoric rock ring features with wooden remains.

The South Fork Merced River above Wawona presented seasonal trade, travel, and subsistence opportunities for American Indian people. This segment shelters regionally rare prehistoric archeological sites containing substantial rock-ring features with wooden remains. These river-
adjacent sites represent a settlement or land use pattern that is directly tied to the river as a water source, a wildlife corridor, or other strategic purpose. These resources hold regionally important data potential about subsistence and settlement during the summer months in the high country.

**River Segment 7: Wawona**

Flowing through a broad basin, the South Fork Merced provided the water and location necessary for human settlements, both prehistoric and historic. As with Yosemite Valley, there are several Cultural ORVs in this area:

*In this segment, remains of the U.S. Army Cavalry Camp A. E. Wood document the unique Yosemite legacy of the African-American Buffalo Soldiers and the strategic placement of their camp near the Merced River.*

Physical remnants of the African-American Buffalo Soldiers' federal protection of Yosemite National Park during the late 19th and early 20th centuries are present along the South Fork Merced River in Wawona. The South Fork served as a year-round water source for Camp A.E. Wood, the first Army headquarters in the park. These archeological remains provide evidence of the extremely rare African-American guardianship of national park lands.

**The Wawona Covered Bridge is one of the few covered bridges in the region.**

Built in 1868 by Galen Clark (Yosemite pioneer and park guardian), the Wawona Covered Bridge boasts state significance within transportation, entertainment, and recreation contexts. The bridge embodies a unique type of construction and is the only historic covered bridge in the NPS western region.

**River Segments 5, 6, 7 and 8: South Fork Above and Below Wawona, Impoundment, and Wawona**

The Wawona Archeological District encompasses numerous clusters of resources spanning thousands of years of occupation, including evidence of continuous, far-reaching traffic and trade. Sites of human activity reaching back thousands of years are concentrated along the river. The presence of Great Basin and Pacific Coast artifacts indicates that Wawona was a location of continuous, far-reaching traffic and trade. Sites in this district contain important research information relevant to permanent and semi-permanent settlement along a particularly long, mid-elevation meandering river. In addition to the regionally significant scientific and interpretive value of the archeological district, the sites have value to park-associated American Indian tribes and groups as a connection to their ancestors. These groups retain the rights to practice their religion and ceremonies.

### 2.5.1 Cultural ORV Conditions

The characteristics of the Cultural ORV that speak to its condition are based on the same seven aspects of integrity that contribute to the National Register eligibility of each ORV element: location, design, setting, materials, workmanship, feeling, and association. *Location* is the place where the historic property was constructed or where the historic event occurred. *Design* is the combination of elements
that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property. Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property’s expression of the aesthetic or historic sense of a particular period of time. Association is the direct link between an important historic event or person and a historic property (NPS 1997). Specific examples of the characteristics evidencing the integrity of the Cultural ORV include, but are not limited to:

1) Site Integrity: Archeological sites reflect eons of human use and cultural evolution in relation to the river. Prehistoric and historic resources in the Yosemite Valley and Wawona Archeological Districts include American Indian villages, camps, and special-purpose sites dating from at least 6,000 years ago to a period of historical occupation. In the El Portal Archeological District, some resources are possibly as old as 9,500 years. Benchmarks of integrity for archeological sites are primarily concerned with the in situ preservation of intact artifacts and features (the attributes of location, design, and association discussed above), so that spatial associations between site components can be observed in surface and subsurface assemblages. The integrity of features—such as pictographs, rock rings, or rock alignments—are judged on the clarity with which the outlines of such features can be delineated. Additions of cultural elements not related to the site (e.g., modern campfire rings, trails, roads, graffiti, buildings, or structures) can negatively affect the integrity of an archeological site’s setting, association, and feeling. Historical remains can provide clear evidence of former use and association and may retain integrity as archeological resources, such as the physical remains of U.S. Army Calvary Camp A.E. Wood.

2) Integrity of Association: American Indians assign strong spiritual value to the Merced River and to the Yosemite Valley through which it flows, continuing their sense of place and cultural association with the river that is both a destination and a place of refuge. American Indians have attached names and stories to geologic and other features in the Merced River corridor and consider many of these to be sacred or of spiritual significance. Villages or campsites were specifically sited to take advantage of seasonal resources, riparian plant species, or migrations of game animals along the river. Ethnographic resources, such as these, are evaluated for National Register eligibility based on specific criteria that do not always align with other types of National Register eligibility determinations. The integrity of the association with the community’s cultural practices and beliefs is a critical consideration in assessing the condition of the ethnographic resources in Yosemite Valley.

3) Built Environment Characteristics: Conditional benchmarks for the integrity of the Wawona Covered Bridge, as the sole built-environment contributor to the Cultural ORV, include continuity of original uses, maintenance of original physical form and materials, and a feeling of related association between the bridge and contemporaneous elements.

2.5.2 River Segment 2: Yosemite Valley

More than 100 recorded sites in Yosemite Valley contain evidence of human occupation and land use (Hull and Moratto 1999). The Yosemite Valley Archeological District (listed on the National Register
in 1978) is the largest established archeological district in the park, encompassing 8,100 acres; it reflects the wide variety of human needs that the river and Valley have accommodated since humans first entered the region (NPS n.d.) (Figure 2.5-1).

American Indian sites within the Yosemite Valley Archeological District are represented by milling stations (granite boulders with mortar cups or milling slicks, the most common feature documented to date), midden soils\(^3\), artifact scatters (including obsidian waste flakes, obsidian and ground stone tools, soapstone vessel fragments, and dietary faunal remains), rockshelters, rock art panels, artifact caches, house floors, fire hearths, and rock alignments. Prehistoric human burials, in both isolated locations and cemeteries, have been identified in Yosemite Valley.

C. Hart Merriam conducted a unique ethnographic study in the early 1900s, with results published in 1917. With the aid of local Miwok and Mono (Paiute) informants, Merriam was able to document 53 village sites within a 22-mile stretch of the Merced River, including 37 such sites within Yosemite Valley itself. Subsequent researchers have been able to correlate Merriam’s village names and descriptions with archeological remains to a degree unique in California archeology. These village sites and others were first recorded as archeological resources through survey efforts, beginning with James Bennyhoff in the 1950s and amended by a survey led by L. Kyle Napton in 1974. Ninety-eight archeological sites of American Indian origin are listed on the 1978 National Register nomination form for the Yosemite Valley Archeological District, including 28 of Merriam’s named villages. In addition to numerous sites that predate Euro-American contact (1851 in Yosemite Valley), Napton’s survey documented several archeological deposits from the late 19th and early 20th centuries and showed areas of known historical development on base maps.

**Yosemite Valley Ethnographic Resources.** When Euro-Americans first entered Yosemite Valley in 1851, the American Indian community residing there was most likely composed of members of several regional tribal groups, including Miwok, Paiute and Mono peoples. The upland areas of the Merced River drainage were undoubtedly frequented by Miwoks, Paiutes, and at least traversed by Western Mono and Yokuts peoples (Bibby 2002). The ethnographic resources in Yosemite Valley represent a rare example of continuing connection of places and people from before Euro-American contact to the present, with the river at the heart of this cultural system. The ethnographic resources include river-related and traditionally-used plant species. American Indian groups assign strong spiritual value to the Merced River and Yosemite Valley, attaching names and stories to geologic and other features in the river corridor. These American Indian communities continue to practice their religion and conduct ceremonies in Yosemite Valley as they have for generations. Important ongoing traditional cultural practices include the traditional use of important natural resources found within Yosemite Valley. These resources remain of special significance to traditionally associated American Indian peoples, who have continued to use native plants into present times (Anderson 2005). Some culturally important river-related natural resources are black oak acorns, mushrooms, tree mushrooms, wormwood, bracken fern roots, sedge roots, and deer grass. These plants have specific ethnobotanical uses and are in many cases found exclusively or primarily in the river-dependent meadows and marshes of Yosemite Valley (Heady and Zinke 1978). One defining aspect of ethnographic resources is

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\(^3\) Midden soils are those that contain moderate to dense concentrations of waste relating to human activity, such as shells and animal bones, as well as other indices of past human life and habitation. Middens mark the site of an indigenous settlement and may contain human burials related to that settlement.
that they possess both historical and contemporary significance to the culture with which they are 
associated and are vitally important in maintaining the continuing cultural identity and traditions of 
the group (NPS 1998).

**Condition at the Time of 1987 Designation**

2.5.3.1.1 Yosemite Valley Archeological District.

The 1979 National Register nomination for the Yosemite Valley Archeological District provides 
baseline conditions information on the district as a whole at that time, although selected individual 
sites were noted as examples of impact types and degrees of impact severity. No specific data gathering 
or fieldwork was conducted at the time of Merced Wild and Scenic River designation, but many of the 
sites within the District were revisited and tested and their condition information updated for various 
projects prior to the 1987 designation (Mundy and Hull 1988, Hull and Kelly 1995). Condition 
information was not updated for all sites between the time of National Register nomination and Wild 
and Scenic River designation; however, those that were revisited and updated are considered a 
representative sample of resources within the District.

**Administrative/Facility-related Impacts.** Many of the most-researched archeological sites in this 
segment have been impacted by park-related development, often by construction of buildings and 
structures that are now important historic resources themselves. For example, one multi-component 
archeological site located immediately adjacent to the LeConte Memorial Lodge experienced impacts 
from construction of the lodge and an associated road in 1915 (NPS n.d.). A second site that may 
represent the Miwok village known as A-wah’ne (according to Merriam 1917) was severely damaged 
by construction of the Park Headquarters, Museum, and Visitor Center (NPS n.d.). An excavation of 
midden soils by J. Rasson in 1966 confirmed that much of the remaining site deposit was heavily 
disturbed; the site is nonetheless listed as a contributing element of the Yosemite Valley Archeological 
District (NPS n.d.). At least four additional sites experienced moderate to severe pre-1987 impacts due 
to park facilities construction and maintenance (NPS n.d.; Middleton [NPS] 2009). The majority of the 
impacts to these sites occurred well before the listing of the Yosemite Valley Archeological District and 
Cultural ORV, and the impacts were not significant enough to preclude listing. Despite the impacts, 
these sites have been documented to contain intact cultural deposits with information important to 
understanding regional precontact and historic-era American Indian lifeways.

**Visitor Use-related Impacts.** Visitor impacts were noted at several of the contributing Yosemite 
Valley Archeological District sites prior to Wild and Scenic River designation. A rockshelter at one site 
was damaged by unauthorized excavations in 1986; NPS’s damage assessment conducted in the same 
year determined that – despite the degradation of integrity – the site still contained intact subsurface 
deposits capable of contributing important information to local research questions (Mundy and Hull 
1988). Other pre-1987 visitor impacts noted at this site and at least five others included the creation of 
informal trails, intentional or inadvertent movement of artifacts or feature elements (such as 
displacement of rock alignments), soil compaction, and bouldering/rock-climbing and camping 
impacts that included the creation of fire rings and clearing of tent areas (Middleton [NPS] 2009, 
2010). Although difficult to document, the unauthorized collection of artifacts was suspected at several 
sites (NPS n.d.).
Impacts from Ecological Processes. By 1987, a significant number of archeological sites had also been affected by ongoing ecological processes such as tree falls, bioturbation,\textsuperscript{34} erosion, and rockfall. These processes, although generally minor in comparison to human-caused impacts, nonetheless had affected site conditions at the time of the Wild and Scenic River designation (Middleton [NPS] 2008, 2009, and 2010). In at least one location, erosion had exposed previously buried human remains within the district (Hull and Kelly 1995).

Despite these three major types of impacts (administrative/facilities-related, visitor use-related, and ecological processes), the recorders of the Yosemite Valley Archeological District felt confident that the sites—which included contributing elements to the district—retained generally good integrity and that “considerable amounts of original cultural deposits are left” (NPS n.d.). With the few exceptions at specific sites noted above, conditions in the National Register district were likely similar at the time of the Wild and Scenic River designation.

\textsuperscript{34} The disturbance of soil by living things (e.g., rodent tunneling).
Figure 2.5-1
Cultural ORV - River Segment 2.
Yosemite Valley
Recreational WSR Corridor
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2.5.3.1.2 Yosemite Valley Ethnographic Resources.

Contributing elements of the ethnographic resources component of the Cultural ORV (e.g., traditional plants gathering areas) had experienced various modifications by the time of designation, primarily as a result of changing and intensifying human activity in the Valley (NPS 1994) as well as discontinuation of traditional native land management practices (Bibby 1994). The land management practices of local American Indian groups prior to Euro-American contact had encouraged the growth of plant species important for food, medicine, building materials, and basketry. This was accomplished primarily through seasonal burning, but also by the use of selective pruning, tilling, timely harvesting, and propagation to encourage healthy populations of important species within ecosystems of high biodiversity (Anderson 2005). By the late 1800s, these practices had been replaced by fire suppression, clearing of vegetation for homesteading and farming, grazing of range animals, introduction of new, non-native plant species, and ever-increasing tourist traffic through the 20th century (Bibby 1994). Ponderosa pine and incense cedar dominated Valley vegetation in the late 20th century prior to the Wild and Scenic River designation, crowding out the black oak and shrinking the open meadows that once existed on the banks of the Merced River (NPS n.d.). By 1987, historical aspects of the ethnographic resources had also experienced impacts as a result of visitor use and park-related development and management decisions, such as the resettling of all remaining American Indians living in the park to the “New Indian Village” in 1931, resulting in the abandonment of traditional habitation sites within the Yosemite Valley. By 1969, this village (known to its residents as Wahhoga) was also closed, and American Indian residents were resettled outside park boundaries (Deur 2007; Kirn 2010).

Current Condition

Yosemite Valley Archeological District.

While the majority of archeological sites in Yosemite Valley retain a relatively high degree of integrity, many have been disturbed by human activity and natural processes (Hull and Kelly 1995).

NPS archeologists have spent the field seasons since 2007 revisiting selected sites within the Merced Wild and Scenic River corridor and other areas in the park, including sites that contribute to the Yosemite Valley Archeological District (Middleton [NPS] 2008, 2009, and 2010; Darko 2011). This fieldwork has provided insight into the current conditions of archeological resources within the district and the forces that continue to impact those conditions. The goal of this work is to better understand the proximity of resources to development, types of visitor use, and the preservation of site integrity so that NPS can improve monitoring and provide more targeted management of archeological resources (Middleton [NPS] 2008). Additional research is also being conducted that will hopefully allow archeologists to better quantify potential impacts associated with various recreational and other activities, such as pack stock use (Wills 2011).

The majority (47%; 56 sites) of Yosemite Valley Archeological District sites within the Merced River corridor are rated in “good” condition according to their most recent ASMIS scores. An additional 33% (39 sites) are in fair condition, and 18% (22 sites) are in poor condition. The

35 The study of the development of culture from a combined historical and anthropological viewpoint, using written documents, oral tradition, material culture, and ethnographic data.
corresponding disturbance severity levels for the visited sites show that a majority of the sites (47, 39%) have low disturbance severity, with an additional 39 (33%) showing moderate disturbance severity, and 29 (25%) displaying severe disturbances (Darko 2011). The same types of impacts that were occurring at the time of designation continue to affect site conditions now.

**Administrative/Facility-related Impacts.** Facilities maintenance and other operational activities—including ecological restoration, forestry activities associated with fire and fuels management, ground-disturbing construction, and trail projects—have affected more than half (approximately 29) of the 54 sites visited by NPS archeologists in the 2007-2009 field seasons. During the 2008 field season, field workers noted that one site was being used as a storage lot and staging area for park vehicles and equipment, and another was located in an actively maintained campground (constructed prior to the Wild and Scenic River designation)—both of which have likely contributed to the current lack of any observable cultural materials (Middleton [NPS] 2009). Earlier projects are also known to have impacted sites, such as an electric utility upgrade project in 1988 that caused a trench to be excavated through a previously unknown burial site. However, these are examples of more severe types of recent or ongoing impacts from facilities maintenance/park operations, and most of the post-1987 impacts in this category are minor (Middleton [NPS] 2008, 2009, and 2010). Following designation of the Yosemite Valley Archeological District, NPS has adopted management strategies—including increased consideration of archeological resources in the context of infrastructure planning (in accordance with the requirements of Section 106 of the National Historic Preservation Act)—resulting in greater protection of significant and potentially significant resources in the vicinity of new construction or other earthmoving activities (NPS n.d.). Management of archeological resources within the context of infrastructure planning and facility maintenance, including preservation of cultural values significant to contemporary associated American Indians, has been the driving force behind much of the testing and data recovery work that NPS has conducted over the past three decades.

**Visitor Use Impacts.** Visitor activities—such as hiking, pack stock use, camping, and bouldering/rock climbing—have resulted in impacts (including soil compaction, vegetation damage, movement of artifacts, feature disturbance, and vandalism) at 31 of the 54 sites documented in Middleton’s NPS reports (2008, 2009, and 2010). Impact severity ranges from minor to severe, although most visitor-use impacts were characterized as minor or moderate. Seven sites were identified during recent visits as having experienced a moderate to severe degree of impact from visitor use (Middleton [NPS] 2009, 2010).

**Impacts from Ecological Processes.** Recent impacts on sites within the Yosemite Valley Archeological District due to ecological processes are similar in both type and severity to those noted prior to designation of the Merced River as Wild and Scenic. Erosion, bioturbation, and treefall are the most commonly noted natural impacts on site condition. At least two sites within this segment experienced flood-related impacts from a high-water event in 1997 (Middleton [NPS] 2009, 2010).

**Archeological Research.** Scientific research at known sites has increased in the period from 1987 to the present. Testing for subsurface deposits and excavation of data recovery units has increased

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36 Two of these seven sites were not included on the original National Register listing of the Yosemite Valley Archeological District, although an informal NPS recommendation of eligibility concluded that these and several other sites are likely eligible for inclusion in the district (in an anonymous notation on the National Register nomination form dated August 1997).
dramatically in the park since the development of the first Yosemite National Park archeological research design (Moratto 1981). This research design guides archeological investigations and site treatments related to implementation of the park’s General Management Plan. Compliance with the National Historic Preservation Act of 1966 (as amended) is the driving factor behind many of these studies, as recognized by Moratto’s (1981) research design and subsequent updates. The information gathered from these inquiries has greatly augmented the understanding of Yosemite’s cultural research themes; however, excavation irreversibly damages the integrity of the resources being investigated. As is noted in the National Register nomination form for the Yosemite Valley Archeological District, “Although professional excavation is an ultimate mitigation procedure, it is also basically destructive and should be utilized only to satisfy overriding research or management needs” (NPS n.d.).

2.5.3.2 Yosemite Valley Ethnographic Resources.

The NPS preservation mission encourages and seeks to facilitate ongoing cultural connections between traditionally associated American Indian communities and ancestral park lands and resources through the continuation of important cultural practices, religious ceremonies, and unimpeded access to sacred sites (Bibby 1994). Recognition of the ecological and ethnobotanical value of the open meadows found on the Valley floor has begun to result in restoration of these sensitive areas to conditions resembling those found in the period before intensive Euro-American influence (NPS 2010a). Several traditional use areas have been identified within Yosemite Valley, and the plant species within them are now actively being managed to encourage healthy populations of ethnobotanical resources (Bibby 1994; Deur 2007). Ongoing exhibits and activities associated with the Indian Cultural Center (located within the former community of Wahhoga, the “New Indian Village”), as well as interpretive panels throughout the Valley, serve to impart knowledge of American Indian traditional lifeways to park visitors. Three full-time Indian Cultural Demonstrators are currently on staff to share stories and demonstrate traditional practices such as basketmaking, beadwork, and traditional games.

2.5.3.3 Preliminary Management Considerations

The preliminary management considerations associated with the Cultural ORV in segment 2:

- The majority of archeological sites in Yosemite Valley retain a high degree of integrity, and the archeological district as a whole is in good condition.
- Various types of visitor use such as hiking, stock use, camping, theft and vandalism have been shown to affect individual archeological sites in the district.
- The specifically mapped black oak woodlands in El Capitan Meadow and at the Schoolyard are declining, primarily due to lack of recruitment.
- The park’s management strategy of preceding any ground-disturbing activities with a planning process that includes an assessment of potential effects and any need for focused investigations has reduced the likelihood of severe impacts at significant archeological sites.

2.5.3 River Segment 4: El Portal

The Cultural ORV within this river segment includes archeological sites representing American Indian villages that are contributing elements of the El Portal Archeological District (listed on the National...
Register in 1978). El Portal’s location between Yosemite Valley and the San Joaquin Valley made it an important place of settlement, subsistence, and trade along the Merced River.

The El Portal Archeological District encompasses 1,910 acres and contains 36 known sites within the Merced River corridor, including some of the oldest known deposits in the Sierra Nevada foothills. These sites have sparse but intriguing evidence of use, perhaps as old as 9,500 years before present (BP), and contain data important to interpreting cultural history (Hull and Moratto 1999) (Figure 2.5-2). More numerous sites date to between 2500 BC and 1900 AD, with several 19th-century homesteads and settlements by American Indians. The El Portal segment may contain some of the best-preserved archeological resources from this protohistoric period reflecting American Indian cultural change as a result of contact with Euro-Americans (NPS 1976).

The steep, narrow canyon at El Portal includes river terraces with level lands on which American Indian villages were built. Prehistoric human burials, in both isolated locations and cemeteries, have been identified in El Portal. As recently as the early 1900s, local American Indian inhabitants shared the names and histories of multiple villages within this river segment, including permanent year-round settlements with large winter populations in the 18th and 19th centuries (Merriam 1917). These sites would have included family homes, traditional roundhouses for dances and ceremonies, sweat lodges, acorn granaries, and mortars cut into the granite bedrock for processing acorns and other foods (Kroeber 1921). Surface remains include these bedrock mortars, house pits, and midden deposits with lithic debris; however, excavations have shown that sometimes sparse surface manifestations provide little indication of the potentially high density of materials contained in subsurface deposits. The presence of artifacts originating from the Great Basin and Pacific Coast indicate that El Portal was a location of continuous, far-reaching traffic and trade throughout prehistory. Eleven of the contributing sites in the El Portal Archeological District correlate with those villages named by Merriam’s informants (1917). Particularly significant is the Johnny Wilson Ranch, a rare surviving example of an early 20th-century American Indian homestead and cemetery on the south side of the Merced River (Davis-King 1997). Mr. Wilson and his family occupied the 30-acre ranch, granted under the Dawes Act in 1917, until his death in 1937 (NPS 2011).

Condition at the Time of 1987 Designation

Prior to 1987, several sites in the El Portal Archeological District had sustained damage from Euro-American occupation and industry in the 19th and early 20th centuries, as well as NPS development. Notably, construction of the Yosemite Valley Railroad and Highway 140, logging, mining, concession operations, and park facility or residential construction had damaged 30% or more of eight sites listed in the district (NPS 1976). Four sites are known to have experienced particularly severe damage, most notably a large ancient village and cemetery developed for park infrastructure needs. Unauthorized collection of surface artifacts was presumed at several sites, although this type of impact is very difficult to document (NPS 1976).

However, 1959-1960 excavations carried out at one of these sites revealed that a significant amount of information was intact beneath the surface at some sites within the district (Fitzwater 1962). This assessment was confirmed by testing at a multi-component site with fairly extensive surface damage resulting from early 20th-century Euro-American occupation as well as construction of Highway 140.
Figure 2.5-2
Cultural ORV - River Segment 4, El Portal
Recreational WSR Corridor
Limited excavations in 1959 showed intact subsurface deposits to a depth of at least 18 inches (Middleton [NPS] 2009). It was specifically noted that some sites, such as Johnny Wilson’s Ranch, were virtually undisturbed because of the difficulty in accessing their locations (NPS 1976).

Additional testing and excavation was carried out at several sites in the El Portal Archeological District prior to the Wild and Scenic designation, driven by the need for information to support planned facility development associated with implementing the park’s General Management Plan. Work by Baumler and Carpenter (1982), Riley (1987), and others has added substantially to the body of knowledge available for use in interpreting the cultural history of the region.

Current Condition

When the park’s General Management Plan was implemented, NPS park managers called for limitations on further development in the El Portal Archeological District until in-depth studies were performed to assess the information potential of individual sites that could be damaged or destroyed by such work (NPS 1979). Consequently, the archeological sites in the El Portal Archeological District have generally been well protected since the Wild and Scenic River designation. Sixty-nine percent of the sites within the Merced River corridor have been assessed in good condition, while an additional twenty-seven percent are in fair condition. No sites are currently in poor condition, although one historic-era can scatter (not a contributing element of the archeological district) has been destroyed (Darko 2011). The disturbance severity levels for visited sites in the El Portal Archeological District generally reflect the high-quality state of preservation for sites in this ORV. Eleven (42%) of the sites show low levels of disturbance, and seven more (27%) have a moderate disturbance severity (Darko 2011). Several recently visited sites in the district exhibited no natural or human-related impacts and retain excellent integrity (Middleton [NPS] 2008); however, there have been impacts at some sites related to the same activities described for the Yosemite Valley Archeological District. Eight (31%) of the El Portal sites exhibited a severe level of disturbance (Darko 2011).

Administrative/Facility-related Impacts. Continued use of the El Portal area for park infrastructure and other facilities has had minor to moderate detrimental effects on the condition of the archeological sites within this river segment, although the most severe of these impacts occurred prior to the Wild and Scenic River designation. Maintenance and upgrades of existing facilities have potentially damaged small portions of known sites, especially subsurface deposits that were not known to exist when planning activities were taking place.

Visitor Use Related Impacts. Because this area is used primarily for administrative facilities rather than public services, impacts related to visitor use have been minimal in this river segment. Middleton’s research into visitor-use and other impacts on archeological sites included a few examples from the El Portal Archeological District; based on this recent research, at least one site in the district exhibits evidence of moderate visitor-use impacts (e.g., social trails, piles of artifacts).

Impacts from Ecological Processes. Natural erosional processes within the steep Merced River canyon has affected artifact distribution and/or spatial patterning at a few sites, and at least one site immediately adjacent to the river experienced flood-related damage in 1997. Rodent tunneling
(bioturbation) was also noted at this site and can be presumed to exist at additional sites within the district (Middleton [NPS] 2009).

**Archeological Research Impacts.** Studies at Johnny Wilson’s Ranch and excavations at other individual sites in accordance with the General Management Plan and the park’s archeological research design have revealed valuable information about historical Miwok culture and lifeways. However, data recovery inevitably destroys the portions of the sites being investigated.

### 2.5.4.3 Preliminary Management Considerations

The preliminary management considerations associated with the Cultural ORV in segment 4:

- Residential and commercial development has occurred within the archeological district, affecting archeological sites.
- The park’s management strategy of preceding any ground-disturbing activities with a planning process that includes an assessment of potential effects and any need for focused investigations has reduced the likelihood of severe impacts at significant archeological sites.

### 2.5.4 River Segment 5: South Fork Merced River above Wawona

This river segment shelters regionally rare prehistoric archeological sites containing substantial rock-ring features with wooden remains. The rock-ring sites were first formally identified and reported by Knierieman (1976), who interpreted them as protohistoric Miwok deer-hunting blinds. These blinds were created to take advantage of lines of sight along the river and the local soda springs, which contained essential mineral salts attractive to deer (Knierieman 1976). Knierieman’s interpretation of these features has neither been confirmed nor refuted, and the features remain enigmatic. The features were typically constructed of two or three courses of stacked rock coupled with the remains of wooden timbers that may once have formed a kind of superstructure. Associated charcoal and obsidian flaked-stone artifacts (including projectile points) have been found near some sites, reinforcing the possibility of an association with hunting activities.

### Condition at the Time of 1987 Designation

Knierieman (1976) penned a short paper that described stacked rock rings with timbers within this river segment, their locations, associated artifacts, estimated temporal affiliations, and known impacts (1976). At the time, wilderness campers had reportedly destroyed at least one feature in a different area. Knierieman described the features as being in a “dilapidated condition” from natural processes.

### Current Condition

A Wilderness Historic Resources Survey conducted in 1992 reported that campers had built a bonfire in one of the rock-ring features near the soda springs, destroying any remnants of the wooden timbers (Snyder 1992). No impacts were noted at a second rock-ring feature. Revisitation and formal documentation as part of the park’s archeological assessment program in 2000 (Quinn 2001) and 2002 (Jackson and Hagen 2007) reported two of the sites in fair and good condition, with natural erosional processes and vegetation growth the only sources of impacts. A 2005 visit of the sites noted that one of
the features had been partially rearranged by campers to create campfire rings and a rock “table;” this was the same feature at which Snyder had earlier reported a bonfire (Montague 2005). Garbage was also noted at this feature, approximately 10 meters from a hiking trail.

2.5.5.3 Preliminary Management Considerations

The preliminary management considerations associated with the Cultural ORV in segment 5:

- Montague (2005) notes that one site located close to the trail is at a higher risk of impacts from hikers, campers, and other park visitors.

2.5.5 River Segment 7: Wawona

U.S. Army Cavalry Camp A.E. Wood. From 1891 until 1916, the U.S. Army stationed troops at Yosemite during the summer months to administer the fledgling park, enforce prohibitions on grazing and other incompatible uses, and construct much of the original park infrastructure (California Military Museum n.d.). Captain Abram Epperson Woods was the first leader of the cavalry units assigned to this post and became acting park superintendent from 1891 until his death in 1894 (Sargent 1961). The camp near Wawona that bears his name was the headquarters for summer cavalry troops until 1906. For three summers (in 1899, 1903, and 1904), the troops assigned to protect Yosemite were African-American infantry (24th) and cavalry (9th) units known colloquially as the “Buffalo Soldiers” (USDI 1906). During their tenure as Yosemite’s guardians, these soldiers policed the backcountry against sheepherding, game poaching, and other illegal trespass. They also built roads, trails and other improvements—such as a now-abandoned arboretum on the south side of the South Fork Merced River, west of its confluence with Big Creek (Palmer n.d.). Perhaps more significantly, these soldiers were agents of the United States government in advancing the innovative principle of preserving federal land simply for its scenic beauty. This was during a time when African-Americans were treated as second-class citizens in many parts of the nation, and their visibility was minimized as much as possible; as a consequence, their contribution to Yosemite’s history has only recently begun to be recognized (Johnson n.d.). The significance of Camp A.E. Wood is heightened by the scarcity of written information on this chapter in the park’s history and the rarity of physical evidence directly related to the buffalo soldiers’ tenure as park guardians (Kirn 2010).

Wawona Archeological District. The National Register–listed Wawona Archeological District is 4,940 acres in size and includes at least 74 archeological sites (NPS 1978; Darko 2011), many of which are located within the river corridor (Figure 2.5-3). The significance of the district, as documented in 1978, lies in its ability to provide information pertaining to American Indian subsistence strategies, seasonal use of specific ecological zones, demographic patterns, and both prehistoric and historic-era occupation of the area (NPS 1978). It is likely that this and the other archeological districts in the Cultural ORV possess additional significance not recognized at the time of their National Register nominations, both in terms of archeological information potential and traditional or cultural significance to associated American
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Figure 2.5-3
Cultural ORV - River Segment 7.
Wawona
Recreational WSR Corridor
Indian groups. In addition, material cultural remains of previously under-reported ethnic groups such as African Americans and Chinese are important. Historic contexts for these areas of significance have yet to be developed, and while not reflected in the existing National Register nominations, the NPS recognizes these as possible aspects of significance in the Wawona Archeological District.

The prehistory of the Wawona area is similar to that of the park as a whole, although most occupation by American Indians seems to have occurred somewhat earlier than in Yosemite Valley. There has been less ethnohistoric use in more recent times. Archeological sites range in size, and most include bedrock mortars and midden soil. At least 12 of the sites recorded as contributors to the district have 25 or more bedrock mortars with associated midden deposits, indicative of large village sites (NPS 1978). These sites frequently occur in clusters with close spatial association. The Wawona area is sheltered from harsh winds and extreme climatic conditions by the surrounding ranges, thus allowing for possible year-round occupation. Acorn-gathering and processing apparently took place during the early fall at times of low water, as suggested by the presence of bedrock mortars in the river channel itself, below the average mid-summer waterline. The time span of these sites is not accurately known but may range from before AD 500 (Crane Flat) to historical Miwok (Mariposa). One ethnohistoric-period Miwok village (Palachan) is recorded in the area, but its correlation with archeological deposits is uncertain (NPS 1978).

**Wawona Covered Bridge.** The community of Wawona is founded on the site of the log cabin built by Galen Clark in 1857. Clark moved to California during the Gold Rush and became a homesteader in the Yosemite Valley in 1856. Clark established a 160-acre homestead with a 12-by-16-foot cabin, called “Clark’s Station” or “Clark’s Crossing.” Between 1857 and 1858, Clark also constructed a bridge across the South Fork Merced River as part of an early road to the Valley (Greene 1987).

Clark ran a modest hostel and did not seek to enrich himself through his association with Yosemite. In 1869, Clark—facing financial difficulties—accepted Edwin Moore as a full partner in his hotel enterprise. The Clark and Moore partnership did not last, however, and the firm of Washburn, Chapman, & Coffman purchased the South Fork hostelry in 1874. Following the dissolution of Washburn, Chapman, & Coffman, the Washburn brothers maintained ownership of Clark’s hostelry and surrounding buildings (Greene 1987).

In 1875, the Washburns roofed the bridge across the South Fork Merced River and enclosed the sides to keep water and snow off the trestles. In 1900, approach spans were added to each end of this bridge, and the bridge was used until 1931, when visitor traffic was rerouted to a modern concrete bridge on the new Wawona Road.

The Civilian Conservation Corps completed general repair work, including the addition of stone masonry to the substructure in 1937 (Greene 1987).

By this time, the bridge consisted of two parallel wooden trusses that were 14 feet apart. Each of these trusses had an overall length of 130 feet and a clear span of 106 feet. The timbers were hand-hewn and varied in size from 12 by 14 inches to 14 by 18 inches. The housing was 130 feet long and 26 feet high.

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37 The study of the development of culture from a combined historical and anthropological viewpoint, using written documents, oral tradition, material culture, and ethnographic data.
(to the top of the gable roof), and the opening at each end was 14 feet, 2 inches high and 14 feet, 2.5 inches wide (Fry 1957).

The Wawona Covered Bridge is the only covered bridge in the Sierra Nevada region. This historic structure is listed on the National Register and is one of only 13 such structures in California. Covered bridges are now uncommon in California, most having burned, rotted, or been swept away by floods. The bridge is used daily by visitors as a central feature of the Pioneer Yosemite History Center (NPS 2010b). The Wawona Covered Bridge boasts state significance within transportation and recreation contexts. The bridge embodies the distinctive characteristic of a unique type of construction and is the only historic covered bridge in NPS’s western region (Greene 1987).

Condition at the Time of 1987 Designation

U.S. Army Cavalry Camp A.E. Wood. After the departure of U.S. Army troops from Camp A.E. Wood, the area was abandoned for several years until a public campground—known as “Camp Hoyle”—was established in the same location. In 1951, the campground was enlarged, improved, and renamed Camp A.E. Wood (Sargent 1961). The Wawona Campground grew around the site, with the portion known as Camp A.E. Wood eventually incorporated into the popular camping spot.

Archeological survey work conducted for the National Register nomination of the Wawona Archeological District noted the presence of significant historic-era Euro-American cultural materials but did not explicitly connect any of these remains to the early Army camp or to the African-American soldiers assigned to park duty (NPS 1978). Further evaluation of several sites in the district during 1983-1984 fieldwork revealed a wealth of military and domestic artifacts related to Camp A.E. Wood, and possibly the early homestead of 1860s settler Stephan Cunningham, located within and adjacent to the current Wawona Campground (Ervin 1984). Square-cut nails, gun cartridges (a majority dating to 1899-1905), bullets, can fragments, bottle and window glass, and rotting wood were discovered in the top 6 centimeters of one of the test excavation units. During the 1983 field season, Ervin (1984) noted that disturbances to the historic-era component of the site were mainly a result of formal campground construction and maintenance, beginning with campsite and road grading, restroom construction, and other infrastructure development in the 1940s and continuing with the burial of modern campsite trash, casual collection of artifacts, and tent trenching practices. However, Ervin (1984) concluded that despite these impacts, the historic component of the site contained important information related to the U.S. Army’s use of the area and possibly to early homesteading activities, as well.

Wawona Archeological District. When it was listed on the National Register in 1979, the Wawona Archeological District had undergone very little in the way of archeological testing or excavation. The statements of significance on the National Register nomination form were based largely on surface assemblages and the potential for subsurface deposits, rather than explicit knowledge of the nature of such deposits. This potential was confirmed when Ervin (1984) carried out limited auger testing at 24 sites and performed test excavations at nine of the sites during the field seasons of 1983 and 1984 in anticipation of a water/wastewater infrastructure project. The results of this investigation proved that many sites within the Wawona Archeological District contained intact, and in some cases deeply buried, cultural deposits with the potential to reveal much about the precontact inhabitants of the area. As a result of this fieldwork, plans for the infrastructure development were modified to avoid or reduce impacts to known sites, which kept them in overall excellent condition. Although substantial historic-period development has occurred within portions of the Wawona Archeological District,
Ervin (1984) concluded that impacts mainly affected surface artifact assemblages and only limited portions of subsurface deposits, leaving intact cultural materials with the potential to address important research questions related to the long history of human habitation and use of the Wawona area.

**Wawona Covered Bridge.** At the time of the 1987 Wild and Scenic River designation, the Wawona Covered Bridge had recently undergone structural safety improvements. NPS had dismantled and reconstructed the bridge in 1956-1957, employing hand-hewn timber construction in the same style as the original bridge (Photo 2.5-1). Some timbers were replaced in 1961 and again in 1983 when NPS corrected structural safety hazards following an inspection of the bridge (Greene 1987).

![Photo 2.5-1: Wawona Covered Bridge 1957 (NPS 1957)](image)

**Current Condition**

**U.S. Army Cavalry Camp A.E. Wood.** Apart from ongoing maintenance and use of the Wawona Campground, the primary influence affecting the condition of the U.S. Army Calvary Camp A.E. Wood was the extensive flooding in 1997. Flood-related impacts to this site and others in the Wawona Archeological District were assessed in 1999 and 2004 (Montague and Valdez 2004). As of the most
recent assessment, it was determined that Camp A.E. Wood and the other examined sites in the district still possessed intact cultural deposits, but additional investigation of these sites was needed to more fully define their horizontal and vertical extent and integrity. Additional historical research was recommended to correlate the historic-era artifacts within the Wawona Campground to the occupation of the site by the U.S. Army Calvary troops (Montague and Valdez 2004).

**Wawona Archeological District.** Of the 29 Wawona Archeological District sites that were visited during the 2007-2009 field seasons, 13 were estimated to have experienced severe impacts. Nine additional sites were rated as having a moderate degree of disturbance, and seven sites had a low rate of impact. Evidence of visitor use was seen at all but three of the monitored sites (Middleton [NPS] 2008, 2009, 2010). A recent summary of site conditions at all 59 of the Wawona Archeological District Sites within the Merced River Corridor found that 33% (19 sites) are in good condition, with an additional 38% (23 sites) in fair condition (Darko 2011). Eleven of the sites are in poor condition, while four could not be relocated during an attempted field visit, and two with unknown conditions were not visited as part of the project. Darko’s 2011 report corroborated the earlier estimations of disturbance severity levels, with 20 sites (35%) exhibiting a low level of disturbance, 17 (29%) having a moderate disturbance severity level, and 12 (19%) showing severe impacts. Ten (17%) of the sites within the 2011 Wawona Archeological District study area could not be assessed for disturbance severity levels.

Impacts seen at archeological sites within this ORV segment fall into largely the same categories as those noted in the Yosemite Valley and El Portal Archeological Districts: administrative/facilities-related impacts such as campground and infrastructure maintenance, visitor use impacts (including general trampling, artifact collection, and creation of informal trails), and natural impacts such as flooding and erosion.

**Wawona Covered Bridge.** Between 2002 and 2005, the Wawona Covered Bridge underwent a restoration effort to improve the deteriorating timber structure. Hand-hewn timbers were used to repair the structure in a manner similar to the original 19th-century construction (NPS 2005, Photo 2.5-2). Preservation of the bridge also included:

- Constructing shoring to support the 115,000-pound timber-frame of the bridge
- Removing the 8-inch sag from the superstructure, leveling the bridge
- Removing and replacing all seven of the deteriorated 14-square-inch by 30-foot transverse floor beams
- Repairing the bridge pier masonry in the riverbed
- Restoring the structural stability of the upstream and downstream timber-frame truss assemblies
Cultural Values

2.5-2

Replacing the undersized timber components in order to resist wind and snow loading

Replicating hand-hewed timbers using broad axes and traditional craftsmanship from 19th-century practices

All bridge restoration activities were designed to meet the Secretary of the Interior’s Standards for the Treatment of Historic Properties, thereby ensuring that the bridge retains its historical integrity. Completion of the bridge restoration project inaugurated the creation of the interpretive Pioneer Yosemite History Center, with the restored bridge as a central feature.

2.5.6.3 Preliminary Management Considerations

The preliminary management considerations associated with the Cultural ORV in segment 7:

- The sites within the Wawona Archaeological District, including the remains of U.S. Army Calvary Camp A.E. Wood, are subject to ongoing impacts from park operations and facilities management, use of hiking trails (as well as informal trails), camping, bouldering/rock climbing, artifact collection, and vandalism
- Management concerns in this river segment include proper visitor education and preparation of interpretive materials highlighting the importance of Camp A.E. Wood as a rare window into the contribution of African-American soldiers to the park’s history, as well as preservation of in situ archeological remains (Kirn 2010)
- The Wawona Covered Bridge is in good condition despite the wear resulting from adverse weather and visitor use.
- The park’s management strategy of preceding any ground-disturbing activities with a planning process that includes an assessment of potential effects and any need for focused investigations has reduced the likelihood of severe impacts at significant archeological sites.
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