4.4 CULTURAL RESOURCES

This section of the environmental impact report describes the potential impacts to cultural resources that could result from the implementation of the Wal-Mart distribution center project. The Merced area and its vicinity are known to contain numerous traces of past human activity ranging from early Native American sites and artifacts to the remains of historic-era agricultural and ranching activities. Such materials can be found at many locations on the landscape and along with prehistoric and historic human remains, are protected from significant project-related impacts by the California Environmental Quality Act (CEQA).

A discussion of potential impacts on paleontological resources is contained in Section 4.5, "Geology, Minerals, Soils, and Paleontological Resources," of this report.

4.4.1 ENVIRONMENTAL SETTING

PREHISTORY

Archaeological data gathered over the past century has shown that humans have inhabited California, likely including the Central Valley, for at least the past 10,000–12,000 years. Because, in part, of the varied topography and climate of the state, technological adaptations to these disparate conditions vary greatly from region to region and over long periods of time. To a certain degree, however, Native American technological and subsistence systems and land use patterns appear to have possessed similar general elements during various periods of prehistory. The basic aspects of these broad temporal and cultural periods are outlined below and are based in large part on the work of David Fredrickson (1973).

The *Paleo-Indian Period* (10,000 BC–6,000 BC) saw the first clearly demonstrated entry and spread of humans into California. Known sites are situated along shores of pluvial lakes and typically exhibit implements likely used in hunting. Traditionally, Paleo-Indian subsistence and land use has been tied to the hunting of Pleistocene megafauna. However, there is little archaeological evidence supporting the notion that Paleo-Indian lifeways were consistently tied to the pursuit of species such as mammoth, mastodon, or bison. The social units are thought to have been small, highly mobile, and were not heavily dependent on exchange of resources with exchange activities occurring on an ad hoc, individual basis.

The beginning of the *Lower Archaic Period* (6,000 BC–3,000 BC) coincided with a middle Holocene climatic change. Generally, drier conditions prevailed and this brought about a reduction in the size and number of pluvial lakes that appear to have been so important in earlier land use patterns. Subsistence appears to be focused on the consumption of plant foods over faunal resources and settlement appears to have been semi-sedentary. Most stone tools were manufactured with local materials, and patterns of material exchange remained on an ad hoc basis.

The *Middle Archaic Period* (3,000 BC–1,000 BC) began at the end of middle Holocene and climatic conditions were similar to those of the present day. The material cultural changes noted in the archaeological record likely occurred at least in part as a response to shifting environmental factors. The economic base became more diversified and acorn-processing technology first appeared. Hunting remained an important source of food, although there was clearly a shift in emphasis toward floral resources. Sedentism appears to have been more fully developed and there was a general population growth and expansion onto more varied parts of the landscape.

The growth of sociopolitical complexity marks the *Upper Archaic Period* (1,000 BC–500 AD) and the development of status distinctions based on material wealth is well documented. Group-oriented religions emerged and may represent the origins of the Kuksu religious system at the end of the period. There is greater complexity of exchange systems with evidence of regular, sustained exchanges between groups. Shell beads gained in significance as possible indicators of personal status and as important trade items.

Several technological and social changes distinguish the *Emergent Period* (500 AD–1,800 AD). The bow and arrow were introduced, ultimately replacing the dart and atlatl (spear-thrower) that were employed at least as early as the Lower Archaic Period. Territorial boundaries between groups became well established and settlement patterns were highly sedentary. It became increasingly common that distinctions in an individual's social status could be linked to acquired wealth. Exchange of goods between groups became more regularized with more resources, including raw materials, entering into the exchange networks. It was during the latter years of this period that large-scale European settlement began to greatly impact traditional Native lifeways.

ETHNOGRAPHY

The project area appears to have been inhabited by the Northern Valley Yokuts, whose territory extended from the large bend in the San Joaquin River near Mendota and north to the confluence of the San Joaquin and Calaveras Rivers. Unfortunately, archeologically and ethnographically, "no large section of California is so little known as the lower San Joaquin Valley" (Wallace 1978:462). Much of what is known about the Yokuts must be inferred from the archaeological record because of a deficiency in historical documentation (Wallace 1978:462). Excavations at habitation sites in Merced and Fresno Counties have yielded artifact assemblages similar to those found in the delta area of the Sacramento and San Joaquin rivers, suggesting strong cultural links between, at least in later prehistoric times, between the early native residents of the Merced area and peoples in the Bay and Delta areas.

The word Yokut roughly translates to "person" or "people" in the valley dialects. Their language belonged to the California Penutian family, which includes the languages of four other central and coastal California groups: the Miwok, Costanoan, Maiduan, and Wintuan (Silverstein 1978:446). As with archaeological evidence, linguistic relationships also suggest strong cultural ties between the Northern Valley Yokuts and those groups from surrounding regions.

Year-round population (often referred to as "tribelet") centers were established in the western subarea of the Northern Valley Yokuts. However, because of the limited range of resources, these centers were dependent on exchange relationships with larger villages located along the San Joaquin River, and Los Banos Creek and San Luis Creek (Olsen 1972:7) to the west of Merced. It is inferred that both tribelet centers and large villages maintained a similar sociopolitical organization where groups were organized on the basis of totemic moieties; chieftainship was based on inheritance along patrilineal lines, and secondarily by popular vote. Some archaeological evidence for this kind of social arrangement can be found in the large house remains that probably served as patrilocal residences for extended families (Olsen 1972:7).

The acorn was an important food staple and was processed in both stone and wood mortars. Buckeye nuts were also processed for consumption. Deer, antelope, rabbits, and gophers were hunted year round, while ducks and other waterfowl, fish, and various insects, including grasshoppers and caterpillars, were available on a seasonal basis (Kroeber 1925:524). However, a single valley oak could produce 300–500 pounds of acorns each year (Baumhoff 1963) and tule roots could be ground into meal to supplement the abundant faunal resources (Wallace 1978). Other food sources included seeds obtained from the grasslands, which Native Americans burned off annually to increase the following year's crop (Cook 1960). This basic subsistence pattern, along with most other aspects of the traditional Yokuts lifeways, remained largely unchanged until the early-to-middle decades of the nineteenth century. Although mining never took place on a large scale in Merced, the 1849 Gold Rush quickly resulted in a Euro-American population boom throughout the Central Valley. Yokuts people soon became marginalized and their numbers decimated by conflict and disease. However, today the Yokuts are reinvesting in their traditional lifeways and, through new-found political and economic influence, are revitalizing their community.

HISTORY

Traders and fur trappers associated with the Hudson's Bay Company and other groups may have traveled through the Merced region as early as the middle to late decades of the eighteenth century. However, the first documented

European travels through the region did not occur until 1806, when Alferez Gabriel Moraga and Father Pedro Muñoz led an exploratory expedition into the Central Valley and what is now the Merced region. The party consisted of Moraga, Father Muñoz, and 25 soldiers. They left San Juan Bautista in September 1806. Moraga and Muñoz, scouting potential interior mission sites, soon encountered and named the *El Rio de Nuestra Señora de la Merced* (Merced River). Although Moraga and Muñoz noted the river and the area near the present-day City of Merced as favorable for a mission, no such establishment was ever constructed.

Numerous Spanish and Mexican expeditions in search of mission sites, mineral wealth, and other natural resources occurred in the Central Valley throughout the early decades of the nineteenth century, but little in the way of Euro-American settlement took place until the 1840s, with the establishment of large Mexican land grants. Few such tracts were granted to private citizens in what would become Merced County and the closest to the present-day City of Merced was the 48,824-acre *Sanjon de Santa Rita*; located to the west of the City (Beck and Haase 1974).

Intensive Euro-American settlement of Merced County did not take place until after the Gold Rush of 1849, when the rich soil and well-watered landscape was recognized for its ranching and agricultural potential. Merced County was not established until 1855, when it was separated from Mariposa County. Little of consequence occurred in the new county until the Southern Pacific Railroad arrived in the area early in 1872. Intended to facilitate the transportation of goods throughout the Central Valley, it was the arrival of the Southern Pacific Railroad that spurred the formation of the City of Merced, which was laid in January of 1872 and established as the county seat that same year (Hoover et al. 1990, Gudde 1969).

With a booming population, the arrival of the railroad, and the designation of the City of Merced as the county seat, agricultural and ranching pursuits soon developed into the economic mainstay of the region, as they did throughout the Central Valley. As farms and populations grew, water-conveyance systems such as the Crocker-Huffman canal and others were constructed and continue to serve the farms and residents today. Such canals are a major feature of the landscape and, along with the ranches, farms, rail lines, and highways, define the physical, social, economic, and political character of the region.

CULTURAL RESOURCES DOCUMENTED IN THE PROJECT AREA

Several cultural resource investigations have been conducted within and in the immediate vicinity of the project area. These include the 2004 Peak and Associates study (Table 4.4-1) that surveyed the entire project site and did not result in the identification of any prehistoric or historic-era sites, features, or artifacts. In addition, a record search conducted in 2004 by the Central California Information Center of the California Historical Resources Information System did not identify any cultural resources within or near the project area. A reconnaissance survey conducted by EDAW archaeologists in June 2006, intended to "ground-truth" previous findings, confirmed the conclusions of these studies and also did not identify any potential cultural resources within or in the immediate vicinity of the project area.

Table 4.4-1
Cultural Resources Investigation in the Project Area

Report Title	Author	Date	Identified Resources
Cultural Resource Assessment for an Industrial Park Site, City of Merced, Merced County, California	Peak & Associates	2004	none
Archaeological Survey Report, Merced Campus Highway	URS, Inc.	2001	none
Archaeological Survey Report Addendum 1, Merced Campus Parkway	URS, Inc.	2001	none
Archaeological Inventory Survey. Tracy to Fresno Longhaul Fiberoptics Data Transmission Line	Peter Jensen	1996	none

Source: Data compiled by EDAW in 2006

4.4.2 REGULATORY SETTING

The significance of cultural resources within the project area is measured against the criteria outlined in the California Register of Historical Resources (CRHR). CEQA requires that cultural resources eligible for listing on the CRHR be afforded degrees of protection ranging from preservation to the mitigation of adverse impacts. Determining the CRHR eligibility of historic-era and prehistoric sites located within the project area is guided by Sections 21083.2 and 21084.1 of the Public Resources Code (PRC), and the CEQA Guidelines (California Code of Regulations Title 14) Section 15064.5. In the CRHR, cultural resources are defined as buildings, sites, structures or objects that may have historical, architectural, archaeological, cultural, or scientific importance. A cultural resource may be eligible for listing on the CRHR if it:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history.

In California, if a prehistoric or historic resource does not necessarily meet any of the four CRHR criteria, but does meet the definition of a "unique" site as outlined in the PRC (Section 21083.2), it may still be treated as a significant resource. This is the case if it is:

- an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
    - It contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
    - It has a special and particular quality such as being the oldest of its type or the best available example of its type.
    - It is directly associated with a scientifically recognized important prehistoric or historic event.

These two sets of criteria operate independently to ensure that significant potential effects on archaeological and historic resources are considered as a part of a project's environmental analysis. PRC guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC section 5097.98).

4.4.3 ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, a cultural resources impact is considered significant if implementation of the proposed project would do any of the following:

- cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5,
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5,

- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or
- disturb any human remains, including those interred outside of formal cemeteries.

IMPACT ANALYSIS

IMPACT 4.4-1 Destruction/Damage to As-Yet Undiscovered Cultural Resources. *Subsurface disturbances could potentially destroy or damage of as-yet undiscovered prehistoric or historic cultural resources. If these resources were to represent "unique archaeological resources" or "historic resources" as defined by CEQA, a* ***significant*** *impact would occur.*

The project site is located in a region where significant prehistoric and historic-era cultural resources have been documented. Although no "unique" or "historic" cultural resources (as per CEQA definitions) have been documented on the project site, there is a potential that unrecorded cultural resources could be unearthed or otherwise discovered at the project site during ground-disturbing and construction activities. If such resources were determined to be unique or historic, a ***significant*** impact would occur.

Mitigation Measure 4.4-1: Contact Cultural Resources Specialist for Potential Cultural Finds during Project-Related Ground-Disturbing Activities. If unrecorded cultural resources are encountered during project-related ground-disturbing activities, a qualified professional cultural resources specialist shall be contacted to assess the potential significance of the find.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. The preferred mitigation would be preservation in place. If that is not feasible, a mitigation plan would be prepared and implemented and could include, but not necessarily be limited to documentary research; subsurface testing; data recovery; the analysis of excavated materials; preparation of a technical report; and curation of the collection and supporting documentation at a qualified institution.

Implementation of the above mitigation measure would reduce potentially significant impacts resulting from inadvertent damage or destruction of unknown cultural resources during construction to a ***less-than-significant*** level.

IMPACT 4.4-2 Potential to Uncover Human Remains. *Subsurface disturbances could potentially uncover unmarked historic-era and prehistoric Native American burials. Any such disturbance would represent a* ***significant*** *impact.*

While no evidence for prehistoric or early historic interments was found in the project site in surface contexts, this does not preclude the existence of buried subsurface human remains. California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and 7052 and California PRC Section 5097. If any human remains were unearthed during project construction, particularly those that were determined to be Native American in origin, a ***significant*** impact would occur.

Mitigation Measure 4.4-2: Stop Potentially Damaging Work if Human Remains Are Uncovered during Construction, Assess the Significance of the Find, and Pursue Appropriate Management. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or the project proponent shall immediately halt potentially damaging excavation in the area of the burial and notify the Merced County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is

required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in California PRC Section 5097.9.

Implementation of Assembly Bill (AB) 2641 requires that the following procedures be implemented:

> Upon the discovery of Native American remains, the procedures above regarding involvement of the County Coroner, notification of the NAHC, and identification of a MLD shall be followed. The landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. AB 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall comply with one or more of the following:
>
> (1) Record the site with the NAHC or the appropriate Information Center
> (2) Utilize an open-space or conservation zoning designation or easement
> (3) Record a document with the county in which the property is located

The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also reinter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641(e) will reduce potential impacts to human remains to a ***less-than-significant*** level.