

similar impacts as instream operation except the potential problem can also include affecting slopes and soils. To productively deal with these concerns the County can establish performance criteria and require monitoring in all operation approvals. Development of overriding policy or standards which would preclude utilization of certain mineral resources due to conflicts with other open space, wetland and wildlife preservation goals, can ensure a balance is achieved between competing resource values.

Reclamation of operations deserve attention, including attempting to ensure it occurs throughout the life of a project whenever possible. All mining operations are required by state law to provide reclamation plans. However, the degree to which reclamation is required following mining operations is often controversial due to practicality and cost. Existing mining operations which do not have approved reclamation plans have been required by the State and the County to submit plans for approval prior to June of 1990.

Extractive lands are not automatically considered permanent open space; however, through land use control in the reclamation of these operations, a future open space area for passive or active recreational facilities can occur. It is important that "post-use" planning of sand and gravel operations be initiated early in the development stages of the resource.

## 5. Historical/Archaeological Resources

Beginning with the earliest Indian inhabitants, Merced County has been the repository of a rich legacy of historical and archaeological resources. The Yokut Indian tribe inhabited the San Joaquin Valley for a long period before falling prey to European diseases in the 1830's. The resources the Yokuts and earlier tribes left behind include fossils, cemetery and camp sites, artifacts and relics.

During the 1830's, new settlements came into existence on the large Spanish land grants that had been established on the west side of the County. Later, during the gold rush, the west side became a major feeding stop for sheep and cattle being herded over the Pacheco Pass to San Francisco. The County was formed in 1855, and in 1857, the first courthouse in the County was erected in the town of Snelling. The east side of the County began its principal development after the building in 1870 of the Central Pacific Railroad, followed in 1896 by the completion of the Santa Fe Railroad. The County seat was moved from Snelling and was established in the town of Merced in 1872; by the turn of the century, communities grew around an agriculturally based economy. Today, historical structures and landmarks span all parts of the County. They are recognized for the architecture, design and artifacts contained within, as well as their role in the history of the County. Places of historical significance include only two sites in unincorporated areas listed on the National Register of Historic Places and eleven sites designated as State of California landmarks.

Only an estimated 6 percent of Merced County has been surveyed for evidence of archaeological or historical cultural resources. There are 292 recorded cultural resources in Merced County, 278 of which are prehistoric archaeological sites and 14 of which exhibit historical features. These sites for the most part have been recorded from localized, limited surveys. Records of known archaeological and historical cultural resources (as of March 1, 1989) are filed with the Office of Historic Preservation, Central California Information Center, California State University, Stanislaus, Turlock, California, (no list is provided within this chapter or the Technical Appendix in order to protect the sites from vandalism). Figure VI-9 lists those County, Federal and State listed significant sites and landmarks.

Areas that are considered "sensitive" and likely to contain archaeological or historical cultural resources are often located near natural watercourses, springs or ponds, and on elevated ground such as ridges and knolls. The channels of natural watercourses change over the years and springs dry up or emerge at different locations, therefore, archaeological sites are often found in areas that are distant from present-day sources of water. Many archaeological sites in the region have been covered by alluvial deposits and therefore, will not necessarily be evident solely by inspection of the ground surface. Disturbance or destruction of cultural resources may result from any type of activity that involves disturbing the earth or removing existing structures.

Types of archaeological sites that could occur in Merced County include (but are not limited to) occupation sites, indicated by structural features such as housepits, ceremonial ("dance house") locations, remains of sweathouses and storage structures, which are often found in areas that have been organically enriched by accumulation of domestic debris. Other types of archaeological sites include cemeteries, isolated burials, quarry sites, petroglyph (rock carvings) and pictograph (rock paintings) sites.

Many archaeologists consider that all types of archaeological sites are significant because all sites may have the potential to produce information of value. Hence, all archaeological sites merit recordation, mapping and investigation at a level of detail sufficient to obtain essential information, especially if a site will be impacted directly or indirectly as a result of a proposed action or undertaking.

What is the significance of Merced County's archaeological resources?  
"Significance" is one of the least understood concepts in archaeological and historic preservation. Broadly speaking, when assessing significance, an effort should be made to ensure that properties important to all sorts of people, and properties representing all sorts of cultural phenomena, are intelligently and efficiently treated. Preservation of historical and archaeological resources are a physical link with the past and reinforces self-identity for present day residents.

FIGURE VI-9

## MERCED COUNTY FEDERAL &amp; STATE HISTORICAL SITES

SITE	LOCATION	HISTORICAL SIGNIFICANCE
<u>FEDERAL</u>		
Shaffer Bridge	Northeast of Gustine	Carries River Road over Merced River
Truss Bridge	North of Winton	Carries Oakdale Road over Merced River
<u>STATE</u>		
Los Banos Creek	Southwest of Los Banos	Early visiting place for Padres from San Juan Bautista Mission
Pacheco Pass	West of S.L. Reservoir	Early and present principle route for settlers and travelers between coastal areas and Central Valley
Temporary Detention Camps For Japanese Americans	Southwest of Merced	World War II incarceration camp for Japanese Americans
Snelling Courthouse	Snelling	First courthouse in Merced County (1857)
Snelling Community Recreation Hall	Snelling	One of the oldest public buildings in Snelling
Merced County Courthouse	Merced	Site of first established County Government
G.B. Neighbors Home	Snelling	Historic homestead
U.S. Union Post Office Building	Northeast of Le Grand	One of County's oldest public buildings
Lake Yosemite Water Tower	North of Merced	Built in early 1900's
Buhach Grammar School	Northwest of Merced	County's oldest schoolhouse
San Luis Gonzaga Archaeological District	West of San Luis Reservoir	Site of historical and archaeological resources
*San Luis Camp Adobe	County Center	Oldest house in County (1848)

\*Not recognized by State or Federal historical designations

Significant cultural resources may be one of a kind, or they may be representative of their type; they may be the oldest known examples of their kind or they may be associated with the lives of important individuals. Assessment of the quality of significance should be made on a case-by-case basis and not upon an arbitrary point score system, or upon some other type of "cookbook" approach for determination of significance.

6. Watersheds, Water Quality and Quantity Resources

a. Water Supply and Watersheds

A drainage basin, or watershed, is commonly defined as "the area of land that drains water, sediment and dissolved materials to a common outlet at some point along a stream channel." This drainage can be from a small ephemeral (seasonal) stream to that on a regional scale, like the multi-county San Joaquin River system. Watershed boundaries are usually ridgelines, which can be easily identified on topographic maps.

The San Joaquin Valley is separated into two hydrologic basins by an indistinct divide which interrupts the lengthwise slope of the Valley. The San Joaquin Subbasin to the north (including Merced County), which drains to the Pacific Ocean; and the Tulare Subbasin to the south, which has an outlet only when rare flood flows carry its water across the divide and into the San Joaquin Subbasin. Merced County can be divided into the two major subbasins' drainage basins: Merced River and San Joaquin River. However, these basins are quite large. Both basins also can be divided further into smaller watersheds which are illustrated in Map 22. Also see Figure VI-10, which briefly lists major river and stream courses, canals and reservoirs within the County.

Water supply is one of the major factors used to determine the intensity of land use and the type of use which can occur in an area. Planning, using a regional or local watershed to establish, study and plan boundaries, is valuable for several reasons. It is on this level that natural and human-related actions most directly affect one another and land use conflicts can be identified. Hill slopes, rivers, groundwater bodies, urban storm drains, and irrigated fields are all connected as parts of a watershed drainage basin. If upstream users deplete the flow or damage its water quality, then downstream users will suffer. Adequate water quantity and quality are essential to all land uses within the County.

Groundwater is a very significant source of water in the County; especially for urban land uses. It is supplied by runoff from foothills and mountains which percolates through the soil to the San Joaquin basin underground aquifer. Water from one of the three general levels of aquifer is pumped to the surface through wells. Due to the variety of depths that occur regionally, the groundwater basin experiences fluctuation in the depth of its water table