4.4 CULTURAL RESOURCES

4.4.1 INTRODUCTION

This section addresses the potential for the Proposed Project to impact cultural resources. Following an overview of the cultural resources setting in **Subsection 4.4.2** and the relevant regulatory setting in **Subsection 4.4.3**, project-related impacts and recommended mitigation measures are presented in **Subsection 4.4.4**. The following information is distilled from *Cultural Resources Study: EWWTP Tertiary Project – Vacaville Easterly* prepared by Analytical Environmental Services (2009; **Appendix I**). The cultural resources study is being used for consultation between the State Water Resources Control Board (SWRCB) and the State Historic Preservation Officer pursuant to the requirements of Section 106 of the National Historic Preservation Act (refer to **Section 3.5** of this Draft EIR for a discussion of CEQA-Plus requirements related to the State Revolving Funds Program).

4.4.2 CULTURAL RESOURCES SETTING

Prehistory

Early and Middle Holocene

The cultural prehistory of central California spans more than 12,000 years. The earliest evidence for occupation of the region comes from archaeological assemblages attributed to the regional expression of the Fluted Point Tradition (FPT) and Western Stemmed Tradition. Commonly referred to as the Clovis culture, the FPT is generally associated with hunting of large, now extinct, megafauna such as mammoth, mastodon, sloth, camel, etc. In the far West, however, archaeological sites with FPT components suggest that these highly nomadic people were practicing a more broad-spectrum subsistence strategy. FPT assemblages in California have not been firmly dated because most finds have been made on the surface, precluding the possibility of correlating the artifacts to datable features. On the Plains and in the Southwest, Clovis assemblages have been dated to between 11,500–10,900 years before present (B.P.) (Haynes 1991), which corresponds to the terminal Pleistocene.

Although the FPT is generally assumed to represent a highly specialized subsistence strategy focused on hunting megafauna, (Chartkoff and Chartkoff 1984) a growing body of evidence suggests that a much wider range of habitats and resources were being exploited (Willig and Aikens 1988). Furthermore, archaeological evidence suggests that people of the FPT practiced a high degree of residential mobility. This fact is attested to by the presence of exotic raw materials in tool assemblages (sometimes representing sources located hundreds of miles from the point of discovery) and the technological organization inferred from assemblages. The Post Pattern is the regional manifestation of the widespread FPT. It is characterized by the use of Clovis-like fluted points and stone crescents. Based on landscape associations, the Post Pattern is presumed to represent a subsistence economy focused on lacustrine environments, such as those found on the margins of Clear Lake.

Sites attributed to the middle Holocene (7,500 – 4,500) are few in number. At the onset of this period the climate shifted to warm and dry conditions, which led to an expansion of the San Joaquin – Sacramento Delta. Regional sites that date to this period include CA-COL-247 (ca. 5,970 B.P.), CA-SJO-68 (ca. 5,000 B.P.), as well as CA-CCO-548 and -637 (ca. 5,000 and 6,900 B.P., respectively). Sites dating to this period suggest greater use of nut crops such as acorn and pine nuts, although groundstone assemblages dating to this period are dominated by millingstones and handstones.

Late Holocene

Archaeological sites dated to the latter half of the Holocene have been documented in much greater numbers and detail in the Central Valley and North Coast Ranges compared to the preceding periods. The following discussion focuses on regional prehistory between 4,500 B.P. to Spanish contact.
Early efforts to describe the cultural prehistory of the Central Valley focused on archaeological sites with burial features located in close proximity to the Sacramento / San Joaquin Delta and its surrounding tributaries (Meredith 1900; Schenck and Dawson 1929; Lillard et al 1939; Lillard and Purves 1936; Heizer and Fenenga 1939; Beardsley 1954; Heizer 1949). Investigations undertaken in the Central Valley in the first half of the Twentieth Century culminated in the development of a tripartite cultural sequence that came to be known as the Central California Taxonomic System (CCTS). Since its inception, the CCTS has been revised to accommodate new data, most notably by D. Fredrickson (1974) and J. Bennyhoff (1994). The following discussion retains the original terminology of periods that are distinguished on the basis of adaptive strategies, technology, and chronology.

Central California Taxonomic System

Beginning in the 1930s, before the advent of the 14C dating technique, archaeologists in central California attempted to order the succession of changes they encountered at archaeological sites into a comprehensive, sequential framework that would facilitate better understanding and interpretation of the temporal, spatial, and cultural changes that had taken place throughout prehistory in the Central Valley. The focus was on archaeological sites located in the vicinity of the rivers and tributaries that flowed into the Sacramento-San Joaquin Delta region. The result of these early efforts culminated with the recognition and naming of a tripartite sequence, that at the time was a popular theme throughout much of North America. This sequence would be subdivided into the Early, Middle, and Late Periods. The sequence was based on literally a dozen sites that were reported in several publications (Lillard and Purves 1936; Lillard, Heizer and Fenenga 1939; Heizer and Fenenga 1939). Key among these dozen sites was the Windmiller mound (CA-SAC-107), located on the Cosumnes River, which appeared to contain three separate and distinct stratified components. In addition, CA-SAC-107 also contained a post-Contact period component (Heizer and Fenenga 1939).

The identification of these components and their associated artifacts represented the beginning of analysis and interpretation of prehistory in the Central Valley. Furthermore, these interpretations would have a profound and lingering affect on analysis in adjoining sub-regions as they were outwardly applied to the San Francisco Bay, Southern Coast Ranges, Sierra Foothills, and the San Joaquin Valley. The following discussion introduces the CCTS and illuminates the strengths of the original interpretations as

well as the limitations that some of these interpretations created as they were liberally applied to other sites within the Central Valley and adjoining sub-regions.

Early Period (ca. 4,500 – 2,500 B.P.)

As initially conceived, artifact assemblages that typified Early Period components include Haliotis beads, projectile points and blades, charmstones, Olivella beads, Haliotis ornaments, bone implements, quartz crystals, and red ochre. These were funerary objects observed in the Early Period components at the principle sites of CA-SAC-107, CA-SJO-56, -68, and -142. Mortuary practices at these sites are characterized by extended interments oriented in a westerly direction. The majority of burials were ventrally extended, although some were dorsal extensions. Burials within this component exhibit a high incidence of associated artifacts. At CA-SAC-107, 54 burials were excavated and identified as belonging to this Early component. Within these burials, 64.8 percent contained Haliotis shell beads, 40.7 percent contained what Heizer referred to as flaked stone implements, 35.1 percent had charmstones, 31.5 percent contained Olivella beads and Haliotis ornaments, 29.6 percent contained bone and antler implements, 20.4 percent had quartz crystals and 11 percent contained red ochre (Heizer 1948:41). There were of course other artifact types found in these defined Early Period components, however, their occurrence was not a constant. Artifacts found sporadically included baked clay objects, artifacts of human bone, trident harpoon tips, and pipes. The near absence of plant processing artifacts in the initial inventories that were to characterize the Early Horizon Culture type is noteworthy, as these were essentially burial mounds.

Middle Period (ca. 2,500 – 940 B.P.)

Artifact assemblages that characterize the Middle Period component include, most notably, a large and varied assemblage of bone and antler objects such as sweat scrapers or “ceremonial wands,” beaver mandibles, tubes, whistles, incised game pieces, perforated needles, atlatl spurs, barbless harpoon tips, ground sturgeon mouth plates and wedges. Other typical artifacts related to the Middle Period include Haliotis beads, large obsidian and chert concave and stemmed-based projectile points, charmstones, Olivella beads, Haliotis ornaments, quartz crystals, millingstones and handstones, red ochre, asphaltum, chrysolite asbestos splinters, steatite tubes and earplugs, slate pendants and baked clay spools, net weights and occasional mortars and pestles. While many of these artifacts continued to be found as mortuary items, they were no longer exclusively so and were found in other contexts within Middle Period components at the principle sites of CA-SAC-60, -107, -66, -99, 1, CA-SJO-139 and -142. Mortuary practices at these sites are characterized by flexed burials with variable orientation. The incidence of high numbers of interments with associated artifacts and the quantity of those offerings declines considerably during this time. The Middle Period components clearly mark a florescence of artifact types and the materials used in their manufacture.

Late Period (ca. 940 – 150 B.P.)

Late Period artifact assemblages and characteristics include Haliotis beads, small chert and obsidian arrow points, with an emphasis on “Stockton Serrated” types. Other artifacts characteristic of this period include charmstones, Olivella beads, Saxidomus nuttalli beads and other species of clam, Haliotis ornaments, magnesite and steatite beads, ear spools and tubes, whole Haliotis shells, mammal bone

tubes, incised bird bone whistles, barbed harpoon tips, antler arrow shaft straighteners, baked clay objects, wooden fishhooks, netting and basketry items, mortars and pestles. As observed in Middle Period components, many of the artifacts that typify this period were not in exclusive burial association. The components at some of the early sites that defined this period were at CA-CCO-138, CA-SAC-107, -1, -120, -126, -127 and -6. Mortuary practices at these sites were variable, with both flexed interments and cremations were present. Also characteristic of this component is the number of burials found intermingled in the midden deposits within the village site and often in the floor of house structures. This highly variable practice was first observed in the Middle Period.

Soon after Heizer's initial articulation of this tripartite sequence, interpretive problems began to develop as the scheme was applied as a comparative tool to the growing number of sites being excavated in the Central Valley and adjoining sub-regions. The recognition of sub-regional cultural variation would eventually lead to many regional and sub-regional cultural chronological schemes based on specific artifact types and/or assemblages (Beardsley 1954; Kowta 1988; Moratto 1972; Olsen and Payen 1969; Ragir 1972; Sundahl 1982; White 2002). David Fredrickson (1974), while recognizing unique sub-regional cultural assemblages, sought to understand cultural changes in California from the perspective of broader characteristics. Despite refinements made by Fredrickson and others, many aspects of the CCTS proved to have relatively accurate temporal resolution despite a lack of cultural affinity.

Ethnography

Ethnographic literature indicates that at the time of historic contact, the project site was within the territory of the Patwin-speaking people. Sources on the ethnographic Patwin include Johnson (1978), Kroeber (1925), McKern (1922, 1923), Powers (1976), and the testimony of Princess Isidora, wife of Chief Solano (Sanchez 1930). Synonymous names for the Patwin include Copeh and Southern Wintun.

The core Patwin territory included lands in the southern Sacramento Valley west of the Sacramento River from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays. Distinction is made between the River Patwin, who resided in large villages near the Sacramento River, especially between Colusa and Knights Landing, and the Hill Patwin, whose villages were situated in the Long, Bear, Indian, Capay, Pope, and Cortina valleys. The term "Patwin" refers to the people belonging to the many small contiguous independent political entities in this area who shared linguistic and cultural similarities. Hill and River Patwin dialects are grouped into Northern Patwin language, separate from southern Patwin, spoken by people that occupied present-day Knight's Landing and Suisun. Together, they are classified as southern Wintuan and belong to the Penutian language family.

Dialects might encompass several tribelets and territories were vaguely defined. Villages were often located near major drainages, inhabited mainly in the winter as it was necessary to go out into the hills and higher elevations to establish temporary camps during food gathering seasons (i.e. spring, summer, and fall). Villages typically consisted of several bark houses, numbering from four or five to several dozen in larger villages, each house containing a single family of three to seven people.

The Patwin economy was based on fishing, hunting, and gathering, with tribelet members moving to various places within their territory to take full advantage of different resources as they became available. Game was hunted either by the individual or in community drives. Salmon runs and other food resources available along the Sacramento River and its delta tributaries also contributed significantly to Patwin economy. Acorns represented one of the most important staples of Patwin subsistence and were particularly abundant within oak woodland along both sides of the Sacramento River and delta margins. Some Patwin tribelets defended their territory against trespassers, but land was not considered privately owned (Johnson, 1978). The closest documented ethnographic village to the study area was hesa'ia, depicted as being located within the general area just north of Suisun City (Barrett, 1908:293). Beginning around 1800, Patwin culture was significantly disrupted through missionization and Euroamerican settlement.

As elsewhere in northern California, only fragmentary evidence of Patwin material cultural remains, due in part to a lack of preservation and impacts from historic-period land use. Based on the results of previous work in this portion of Sacramento Valley (Heizer and Fenega, 1939), a range of prehistoric site types is known to be present, including middens with associated surface scatters, small surface features such as rock rings and circles, petroglyphs, food processing stations including bedrock mortars, and isolated lithic flakes and tools.

History

Following the settlement of San Diego in 1769, the Spanish made steady progress in the exploration and settlement of the coastal regions of Alta California. By 1776 the Spaniards established the Presidio of San Francisco, and by 1798, the Mission San Jose. The Central Valley would remain largely uncharted in the first decades of Spanish settlement. Early in the colonial period, Spaniards made occasional forays into the Central Valley in pursuit of stolen livestock or natives who had fled the forced labor imposed at coastal missions. In addition, diseases introduced by Spanish settlers and other foreigners inflicted a heavy toll on native populations in California. The Measles epidemic of 1806 struck Missions Santa Clara, San Jose, and San Francisco particularly hard and, while it is known to have spread to remnant villages, its effect on populations inhabiting the Sacramento Valley is less understood.

Between 1804 and 1823' the Spanish made numerous trips into the Central Valley prospecting for new mission sites, attempting to recover stolen horses and cattle, or making punitive raids on the local natives believed responsible for the theft of livestock. Chief among the earliest Spanish explorers in the Central Valley was Pedro Fages, who led at least 46 explorations into the interior between 1805 and 1820. During his many expeditions he named the San Joaquin, Mariposa, Merced, and Sacramento Rivers (Caughey 1940). Gabriel Moraga is credited with leading the first documented Spanish expedition into the Sacramento Valley in 1808. In 1810, Moraga lead a military expedition across the Carquinez Strait to attack Patwin-speaking Suisuns that harbored some coast Miwok refugees from the missions. As a result, by 1820 most southern Patwin-speaking people such as the Suisuns, Tolenas from the Rockville area, and Malacas from the Fairfield area were brought into the mission system, particularly Mission San Francisco (Milliken 2005).

Secularization of the missions of California was initiated in 1813, and formally declared in 1821 (Caughey 1940). That same year, Mexican forces prevailed in their struggle for independence and declared California part of the Mexican empire. This event marked the beginning of the short-lived Mexican Period in California history. In 1833, the formal process of secularizing the missions began and the land holdings were divided among the Californios. The grants, known as ranchos, enriched those individuals fortunate enough to receive one, while effectively subjugating the native tribes as an indentured labor force. Among the first land grants issued in the area were Rancho Suisun, granted to Francisco Solano in 1837, and Rancho Tolenas, granted to Jose Armijo in 1840 (Hoover et al., 1990:463). The nearby town of Fairfield sat on the border of these two grants.

John Sutter obtained the first land grant in the Sacramento Valley, and in 1839, constructed a fort in present day Sacramento, then the edge of tribal frontier. After gold was discovered and the rush of foreigners began arriving in California, from 1849 until well into the 1950s, California Indians suffered from harassment, marginalization, displacement, and murder. Sacramento Valley tribes, including Patwin-speaking Colus and Willays signed a series of treaties granting them lands within the Sacramento Valley. None of these treaties were ratified by the U.S. Government.

In the late 1840s and 1850s, former gold seekers and pioneers began settling Solano County where they raised livestock and cultivated fruit orchards, vineyards, wheat, barley, and oats. Produce and livestock were transported overland by wagons to the many sloughs throughout the county for transportation to the mines and northern Valley cities like Sacramento. Two of these settlers, Dr. John Baker and Curtis Wilson sailed up what is now called Suisun Slough in 1850 to a bit of hard upland rising from the marsh and landed on the present site of Suisun City (Hoover et al., 1990:417). In that same year Captain Josiah Wing began to run a watercraft to the island and erected a warehouse there in 1852 that transported produce from the Valley and supplies to the mines. As this business grew Captain Wing and John Owen, who later became a merchant there, laid out the town of Suisun west of their wharf and just below the boundary line of the Suisun grant.

Twelve townships were established in Solano County between 1850 and 1871. Although the largest towns were adjacent to San Pablo and Suisun Bays, the majority of towns were situated at the ends of sloughs and channels that primarily ran through the eastern portion of the county. In 1868, the completion of the California pacific Railroad through Solano County allowed goods to reach ships bound for the East Coast, significantly bolstering economic development, agricultural production, and population growth.

In 1850, Don Manuel Vaca deeded nine square miles of Rancho Los Putos to William McDaniel to lay out a town that was to be named after him (Hoover et al., 1990:472). The fruit industry around the area of present Vacaville began in the late 1850s when Ansel Putman and John Dolan, local nursery owners, along with William and Simpson Thomas constructed a road from Pleasants Valley to Suisun City. This roadway, which was later known as Pleasants Valley Road, provided access for the shipment of fragile fruit from the Vaca, Pleasant, and Laguna Valleys to major markets (Hoover et al., 1990). This important transportation route spurred the development of land for commercial fruit and vegetable farming in the area. The construction of two major rail lines by 1870 broadened the market even further by providing

access of shipment overland across the country. By the 1890s, Vaca Valley and the foothills to the west were covered with orchards encompassing almost all of the available nonirrigated land (Gregory, 1912).

East of Vacaville, Stephen Hoyt laid out a 40-acre town, Vaca Station, prior to the 1868 completion of the California Pacific Railroad. The town took its name from its western neighbor; however, two train stops with similar names became problematic. Town members met and decided to change Vaca Station to Elmira, after the town in New York where a local respected teacher and lawyer were born. Elmira soon became the transportation center for the Vaca and Pleasants Valley's agricultural crop and was one of the original townships in Solano County (Gregory, 1912). After major roads and highways, such as Interstate 80, bypassed the area, Elmira's growth has been slow and it has remained a small town. Historic use of the project area has included agriculture and more recently the development of the WWTP that began in 1956.

4.4.3 Regulatory Context

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Several laws and regulations at the state level govern archaeological and historic resources deemed to have scientific, historic, or cultural value. The pertinent regulatory framework, as it applies to the Proposed Project, is summarized below.

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (as amended through 2000) authorizes the National Register of Historic Places (NRHP), a program for the preservation of historic properties ("cultural resources") throughout the Nation. The significance criteria for evaluating cultural resources for listing in the NRHP are defined in 36 CFR 60.4 as follows.

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history;
>
> B. that are associated with the lives of persons significant in our past;
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important to prehistory or history.

Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

All properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics in order to be eligible for listing on the NRHP. The property must, however, retain enough integrity to enable it to convey its historic identity; in other words, to be recognizable to a historical contemporary.

While most historic buildings and many historic archaeological properties are significant because of their association with important events, people, or styles (criteria A, B, and C), the significance of most prehistoric and historic-period archaeological properties is usually assessed under criterion D. This criterion stresses the importance of the information contained within an archaeological site, rather than its intrinsic value as a surviving example of a type or its historical association with an important person or event. As discussed further in **Section 4.4.4**, no cultural resources eligible for listing in the NRHP are known to exist in the project area.

State

California Register of Historical Resources

PRC Section 5024.1 authorizes the establishment of the California Register of Historical Resources (CRHR). Any identified cultural resources must therefore be evaluated against the CRHR criteria. In order to be determined eligible for listing in the CRHR, a property must be significant at the local, state, or national level under one or more of the four significance criteria, modeled on the NRHP. In order to be determined eligible for listing in the CRHR, a property must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.
2. It is associated with the lives of persons important to the nation or to California's past.
3. It 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.
4. It has yielded, or may be likely to yield, information important to the prehistory or history of the state and the nation.

In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association. As discussed further in **Subsection 4.4.4**, no cultural resources eligible for listing in the CRHR are known to exist in the project area.

California Environmental Quality Act (CEQA)

CEQA requires that, for projects financed by or requiring the discretionary approval of public agencies in California, the effects of the project on historical resources must be considered (PRC Section 21083.2).

Historical resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC Section 50201).

Under the CEQA *Guidelines*, an effect is considered significant if a project will result in a substantial adverse change to the resource (PRC Section 21084.1). Actions that would cause a substantial adverse change to a historical resource include demolition, replacement, substantial alteration, and relocation. Before the significance of impacts can be determined and mitigation measures developed, the significance of cultural resources must be determined. The 2000 CEQA *Guidelines* (Section 15064.5) define four cases in which a property may qualify as a significant historical resource for the purposes of CEQA review:

A. The resource is listed in or determined eligible for listing in the CRHR. Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:

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

B. In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association. Properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (Public Resources Code section 5024.1[d][1]).

C. The resource is included in a local register of historic resources, as defined in section 5020.1(k) of the Public Resources Code, or is identified as significant in a historical resources survey that meets the requirements of section 5024.1(g) of the Public Resources Code (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).

D. The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record.

E. The lead agency determines that the resource may be a historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

CEQA also provides for the protection of *unique archaeological resources*. Public Resource Code Section 21083.2 defines unique archaeological resource as 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 one or more of the following criteria: (1) that it contains information

needed to answer important scientific research questions and that there is demonstrable public interest in that information; (2) that it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person.

Local

City of Vacaville General Plan: Conservation Element

The Conservation Element of the Vacaville General Plan (1990) contains the guiding and implementation policies relating to historic and archeological resources that are applicable to the Proposed Project.

Guiding Policies

8.5-G 1: Continue to protect historic sites and archaeological resources for their aesthetic, scientific, educational, and cultural values.

8.5-G 2: Continue to protect the historic value of the Downtown area.

Implementing Policies:

8.5-I 1: Working in conjunction with the California Archaeological Inventory, review each proposed development project to determine whether the site contains known prehistoric or historic cultural resources and/or to determine their potential for as-yet-undiscovered cultural resources.

8.5-I 2: Require that areas found to contain significant historic or prehistoric artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation, if feasible. The City's Historic Preservation Ordinance mandates the maintenance of designated buildings and the review of any changes to building exteriors or building demolitions.

8.5-I 3: Continue to encourage the renovation of designated historic structures in the Downtown historic district to preserve the architectural, historical, and cultural significance of those buildings; continue to require new buildings in the Downtown historic district to be complementary to the character of the existing buildings.

8.5-I 4: Consider the creation of a Historic Preservation District for the residential areas west of Downtown.

8.5-I 5: Encourage property owners to rehabilitate historic buildings, consistent with regulations which allow such properties, with densities that exceed General Plan standards or are residential uses in a commercial district to be legally conforming. (See also Land Use Element, policy 2.5-I 16.)

Municipal Code: Historic Preservation Chapter 14.09.105 Historic Preservation Overlay District

The City of Vacaville established the *Historic Preservation Overlay District* (Municipal Code Chapter 14.09.105) to provide for "the identification of historically significant buildings and areas and the adoption of standards to ensure the preservation of such areas." The objectives of the Historic Preservation Overlay District are:

A. To implement the policies of the General Plan regarding the preservation and adaptive reuse of historic buildings;
B. To foster awareness of and interest in the heritage of the City of Vacaville through the designation of historic buildings and districts;
C. To provide for the preservation of buildings which exhibit varied architectural styles reflecting the cultural, social, and economic phases of the City's history; and
D. To enhance property values, stimulate economic activity, and provide for the stabilization of commercial and neighborhood areas.

The relevant chapter of the Code establishes provisions for the designation of historic buildings and historic districts and provides guidance related to the modification, maintenance, and demolition of historic buildings.

4.4.4 Impacts and Mitigation Measures

Method of Analysis

Records Search and Literature Review

A records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System by NWIC staff, on July 2, 2009 (NWIC File No. 08-1366). The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historic records and reports for a 16-county area that includes Solano County. Additional research was conducted using the files and literature maintained at AES.

The records search and literature review for this study were done to (1) determine whether known cultural resources have been recorded within or adjacent to the study area and determine if the project site has been subject to survey in the past; (2) assess the likelihood of unrecorded cultural resources based on archaeological, ethnographic, and historical documents and literature; and (3) to review the distribution of nearby archaeological sites in relation to their environmental setting.

Sources reviewed include the *California Inventory of Historical Resources* (California Office of Historic Preservation, 1976), the California Office of Historic Preservation's *Five Views: An Ethnic Historic Site Survey for California* (1988), *California Historical Landmarks* (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listing for Solano County* (2008). The Historic Properties Directory includes the National Register of Historic Places, the California Register of Historical

Resources, and the most recent listings (through February, 2009) of the California Historical Landmarks and California Points of Historical Interest.

The records search revealed that portions of the project site have been previously subject to a cultural resources study. KEA Environmental (Wickstrom, 1997) conducted a pedestrian survey of approximately 40 acres as part of the environmental review of the Vacaville Easterly Wastewater Treatment Plant Expansion Project. The study was confined to the existing plant facilities and resulted in the identification of a single isolated obsidian flake (P-419) located on the north bank of the Solano Irrigation District Canal, outside of the current project area. Based upon the location and condition of the isolated artifact, Wickstrom concluded that the specimen had been removed from its original place of deposition by modern ground disturbing activities associated with the construction of the canal and motor vehicle operation. No other cultural resources were identified.

The records search also revealed that two historic-period cultural resources have been recorded within a ½-mile of the northwest margin of the project site. These include the historic alignment of the California Pacific Railroad (P-549) and a steel water tower (P-546). No other cultural resources have been recorded within the records search radius.

Given the environmental setting, it was considered possible that intact prehistoric archaeological deposits would be identified. However, due to the high level of ground disturbance within the project area resulting from construction and operation of the EWWTP, disking, as well as historic and modern agricultural practices, any archaeological resources would most likely be found in a heavily disturbed state. Nonetheless, prehistoric archaeological constituents in the region range from isolates and lithic scatters to intact midden deposits. It was also considered possible, yet unlikely, that outlying historic-period deposits related to homesteads and agricultural activity might be present.

Native American Consultation

On May 5, 2009, the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information concerning significant Native American cultural resources within the. On May 15, 2009, the NAHC responded stating they have no knowledge of any Native American cultural resources or sacred sites within or adjacent to the project area. The NAHC provided a list of individuals and groups for further consultation. Letters to these individuals and groups were sent on June 1, 2009. To date, no response has been received from any of the individuals contacted.

Field Survey

On May 20, 2009, Damon Haydu, RPA, conducted a pedestrian survey of the project site. The survey used transects spaced no more than ten meters apart and examined the entire project area. Surface visibility varied between little ground surface, due to dense grasses and pavement (WWTP), to complete surface visibility in areas of bare soil (disked landscaping perimeter and southern field on the property). The ground surface was examined for archaeological remains, while rodent burrow backdirt piles and road cuts were examined for indicators of buried archaeological deposits. The survey found that the project site has been subject to significant historic and modern disturbances including past agricultural

use in open areas, landscaping, paving, and installation of underground infrastructure. No prehistoric or historic-period cultural resources were identified as a result of the field survey.

Thresholds of Significance

The following significance criteria associated with cultural resources have been adapted from Appendix G of the CEQA *Guidelines*. An impact to cultural resources is considered significant if implementation of the Proposed Project would:

- Cause a substantial adverse change in the significance of a historic resource as defined in PRC 21083.2, CEQA *Guidelines* Section 15064.5, or 36 CFR 60.4;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA *Guidelines* Section 15064.5, or ;
- Disturbance or destruction of a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

CEQA *Guidelines* Section 15064.5 defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Project Specific Impacts and Mitigation Measures

Impact

4.4-1 Ground-disturbing work associated with construction of the Proposed Project has the potential to affect previously undocumented archaeological resources and human remains.

As discussed in **Section 4.4.4**, no known protected archaeological or historic resources were identified on the proposed project site. There is always the possibility, however remote, that previously unknown archaeological resources and/or human remains could be encountered during subsurface construction activities. This is considered a potentially significant adverse impact. Recommended mitigation for potential impacts to unknown cultural resources and human remains is specified below. Implementation of **Mitigation Measures 4.4-1a** and **4.4-1b** would ensure that inadvertently discovered resources that may be eligible to the NHRP and CRHR are identified and important information regarding these remains is recovered. Moreover, implementation of the mitigation measures will provide for the appropriate treatment of human remains. These actions would reduce potential impacts to previously unidentified subsurface cultural resources to a less-than-significant level. **Less than Significant with Mitigation**.

Mitigation Measures 4.4-1a. Applicant shall require that, in the event of any inadvertent discovery of archaeological resources, all such finds shall be subject to PRC 21083.2 and CEQA *Guidelines* 15064.5. Procedures for inadvertent discovery include the following:

- All work within 50 feet of the find shall be halted until a professional archaeologist, or paleontologist if the find is of a paleontological nature, can evaluate the significance of the find in accordance with NRHP and CRHR criteria.
- If any find is determined to be significant by the archaeologist, or paleontologist as appropriate, then representatives of the City shall meet with the archaeologist, or paleontologist, to determine the appropriate course of action. If necessary, the Applicant shall provide a Treatment Plan, prepared by an archeologist (or paleontologist), outlining recovery of the resource, analysis, and reporting of the find. The Treatment Plan shall be submitted to the City for review and approval prior to resuming construction.
- All significant cultural or paleontological materials recovered shall be subject to scientific analysis, professional curation, and a report prepared by the professional archaeologist, or paleontologist, according to current professional standards.

Mitigation Measure 4.4-1b. If human remains are encountered during construction activities, work shall halt immediately in the vicinity and the Solano County Coroner should be notified in accordance with California Health and Safety Code Section 7050.5. If human remains are of Native American origin, the Coroner must, in accordance with PRC Section 5097, notify NAHC within 24 hours of this identification.

Cumulative Impacts and Mitigation Measures

Impact

4.4-2 Ground-disturbing construction activities may result in cumulatively considerable adverse impacts to previously unidentified subsurface archeological resources or human remains.

Potential cumulative projects in the vicinity of the project site, including growth resulting from build-out of the City's General Plan and proposed development of the power plant adjacent to the project site, have the potential to impact cultural resources. Archaeological and historic resources are afforded special legal protections designed to reduce the cumulative effects of development. Potential cumulative projects and the Proposed Project would be subject to the protection of cultural resources afforded by the CEQA *Guidelines* Section 15064.5 and related provisions of the Public Resources Code. In addition, projects with federal involvement would be subject to Section 106 of the National Historic Preservation Act. Given the non-renewable nature of cultural resources, any impact to protected sites could be considered cumulatively considerable. As discussed in **Section 4.4.4**, no known protected archaeological or historic resources were identified on the proposed project site. **Mitigation Measures 4.4-1a** and **4.4-2b** provide for the protection of unanticipated discoveries during ground disturbing activities. With the implementation of these mitigation measures, the Proposed Project's incremental contribution to cumulative impacts to cultural resources is considered to be less than significant. **Less than Significant with Mitigation**.

Mitigation Measure 4.4-2. Implement **Mitigation Measures 4.4-1a** and **4.4-1b**.