

3.5 CULTURAL RESOURCES

3.5.1 AFFECTED ENVIRONMENT

ARCHAEOLOGICAL AND ETHNOGRAPHIC SETTING

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (10,000–6000 years Before Present [B.P.]). Social units are thought to have been small and highly mobile. Known sites have been identified within the contexts of ancient pluvial lake shores and coastlines, as evidenced by such characteristic hunting implements as fluted projectile points and chipped stone crescent forms. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by numerous researchers working in the area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984). Because of the plentiful resources and a generally temperate climate, the Central Valley was well populated prehistorically and served as the location for some of the more substantial village sites known in California.

Heizer and Fenenga (1939), Beardsley (1948), and others conducted numerous studies that form the core of the current state of knowledge about early archaeology in the upper Central Valley. Little has been found archaeologically that dates to the Paleo-Indian (10,000–6000 B.P.) or Lower Archaic (6000–3000 B.P.) time periods; however, archaeologists have recovered a great deal of data from sites occupied as early as the Middle Archaic Period (3000–1000 B.P.). The lack of sites from earlier periods may have been caused by high sedimentation rates that left the earliest sites deeply buried and inaccessible. During the Middle Archaic Period, the broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices. Subsistence economies were more diversified, possibly including the introduction of acorn processing technology. Human populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (1000 B.P.–A.D. 500). Exchange systems became more complex and formalized. Evidence of regular, sustained trade between groups was seen for the first time.

Several technological and social changes characterized the Emergent Period (A.D. 500–1800). The bow and arrow were introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups became well established. Distinctions in an individual's social status could be increasingly linked to acquired wealth. Exchange of goods between groups became more regularized as more goods, including raw materials, entered into the exchange networks. In the latter portion of this period (A.D. 1500–1800), exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit for exchange, and increasing quantities of goods moved greater distances. Specialists arose to govern various aspects of production and exchange.

In California, the broader time periods are frequently subdivided into more localized patterns. The three patterns found in the project region, well represented in archaeological assemblages in the vicinity of the SPA, are discussed in detail in Moratto (1984) and summarized here. The Windmill Pattern (3000–1000 B.P.) of archaeological assemblages included an increased emphasis on acorn use and a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay artifacts, and worked shell and bone were hallmarks of Windmill culture. Widely ranging trade patterns brought goods in from the Coast Ranges and trans-Sierran sources as well as closer trading partners. Distinctive burial practices identified with the Windmill Pattern also appeared in the Sierra foothills, indicating possible seasonal migration into the Sierra. The Berkeley Pattern (1000–500 B.P.) represented a greater reliance on acorns as a food source than was seen previously. Distinctive stone and shell artifacts distinguished it from earlier or later cultural expressions. The Berkeley Pattern appears to have developed in the San Francisco Bay Area and was spread through the migration of Plains Miwok Indians. The Augustine Pattern (500 B.P. to the historic era) may have been stimulated by the southern migration of Wintuan people from north of the Sacramento Valley. Their culture was marked by population increases resulting from more intensive food procurement strategies, as well as a marked change in burial practices, increased trade activities, and a well-defined ceramic technology.

Native Americans of the western Sierra Nevada foothills lived in relatively permanent settlements, visiting the higher reaches primarily during the summer months (Moratto 1984). Permanent settlements ranged from a handful of people to several hundred; they tended to be situated near water, preferably on slightly raised ground. A major village might include dwellings, granaries, sweat houses, a headman's house and dance house, or other ceremonial structures. The people of the villages would gather a wide variety of fruits, nuts, greens, bulbs, roots, and seeds, processing and storing many of them for winter. Fish, birds, deer, small game, and many other animals were hunted.

The SPA lies near the geographic boundary of the prehistoric spheres of influence of the Nisenan (sometimes referred to as the Southern Maidu) and Plains Miwok. The Nisenan belong to the Penutian linguistic family. Kroeber (1925) recognized three Nisenan dialects—Northern Hill Nisenan, Southern Hill Nisenan, and Valley Nisenan. The Nisenan territory included the drainages of the Yuba, Bear, and American Rivers and the lower drainages of the Feather River. The Nisenan ranged from the Sierra Nevada crest to nearly sea level at the Sacramento River. Plains Miwok groups occupied the lower reaches of the Mokelumne and Cosumnes rivers and both banks of the Sacramento River from Rio Vista to Freeport (Levy 1978); it is likely that both the Plains Miwok and the Valley Nisenan exploited resources found in the project vicinity.

The Plains Miwok, who like the Nisenan were members of the Penutian linguistic groups, were oriented toward collection of plant foods. They augmented their diet with fishing and hunting, which focused on small mammals and birds (Peak & Associates 1997). Granaries capable of holding 2 years' supply of food were constructed by family groups. Both Miwok and Nisenan villages were located on natural high ground near streams; a series of smaller villages and camps looked to the larger settlements for leadership.

Substantial Native American contact with Europeans in the vicinity of the SPA came late. Limited encounters with explorers and trappers during the early 19th century left the Hill Nisenan and Washoe relatively unaffected (Wilson and Towne 1978). The valley tribes were decimated by a malaria epidemic in 1833, which did not spread to the hill tribes. However, Captain John Sutter settled in Hill Nisenan territory in 1839 and the subsequent discovery of gold resulted in the widespread killing and persecution of the Nisenan located in the region. By 1860, disease, violence, forced relocation, and environmental destruction had greatly affected valley populations and traditional systems (Moratto 1984).

HISTORIC SETTING

Early European travelers through the region included Gabriel Moraga and a group of Spanish explorers in 1806–1808, and fur trappers and explorers in the 1820s. Jedediah Smith led a group of trappers along the edge of the foothills to the American River in search of a pass over the Sierra Nevada in 1826. Kit Carson and John C. Fremont crossed the mountains near Lake Tahoe and descended along the South Fork of the American River in 1844, eventually arriving at Sutter's Fort in Sacramento.

The SPA was located immediately north of *Rancho Omochumnes*, a rancho run by partners Jared Sheldon and William Daylor. Sheldon and Daylor profited by selling cattle and supplies to mines and miners who were making their way along Jackson Road, which was then the main route to and from Sacramento to the Cosumnes River diggings. Conflicts arose when miners began working streams within the rancho, ignoring the owners' property rights. Sheldon was killed in a confrontation with miners in 1850 (Peak & Associates 1997). However, other than any minor amounts of gold recovered by these illicit operations, little mineral wealth has been recovered in the SPA. The vast dredging areas to the north and west offer visual evidence of the location of gold mining activities that lasted into the 1960s. Some of those tailings areas have since been demolished for McDonnell-Douglas test facilities north of the SPA, where various facilities were used for assembly and testing of rocket systems through 1969 (Peak & Associates 2005). The SunCreek property has been used principally for cattle ranching and dry farming.

In 1918 the U.S. Air Force constructed Mills Field (later renamed Mather Field) located immediately west of the SPA. Mather Air Force Base was built to serve as a flight training school. After World War II, the base was the only aerial navigation school remaining for the U.S. military and its allies. A Strategic Air Command B-52 squadron was assigned to the air force base in 1958, a position it kept until 1989, when the base was decommissioned under the federal Base Realignment and Closure Act. The closure of the base prompted the Sacramento County Board of Supervisors to examine the potential for converting the base to a public use airport facility. The air force transferred the base to the County of Sacramento, and in May 1995 Mather Airport was opened. Other parts of the old base were redeveloped for use as housing and a business park (California State Military Museum 2007).

ARCHAEOLOGICAL RESOURCES

Peak & Associates (1997) sent a letter of inquiry to the Native American Heritage Commission (NAHC) in 1997 asking for information or concerns regarding the SPA. The NAHC's reply included a list of individuals and organizations that might have information or concerns regarding the project. Peak & Associates attempted to contact people on the list; the only response received was a verbal response from Joe Marine, who had no knowledge of specific sites or activities within the SPA. In May 2007, EDAW (now AECOM) sent out a new contact letter to the NAHC, with a map of the SPA and a request for information (Appendix O). On May 31, 2007, Ms. Debbie Pilas-Treadway of the NAHC responded; her response indicated that no sites were found in the Sacred Lands file that coincided with the SunCreek project location. Ms. Pilas-Treadway did provide EDAW (now AECOM) with a list of individuals and organizations that might have knowledge of cultural resources in the SPA. EDAW (now AECOM) sent contact letters to these individuals and organizations that contained information regarding the project and a request to provide any information or concerns that they might have. No response from these individuals or organizations was received.

Records Search Results

A records search was conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System, located at California State University, Sacramento. The NCIC records search included examination of the following resources:

- ▶ State Office of Historic Preservation's Historic Property Directory and Determination of Eligibility (2006)
- ▶ National and California Registers of Historic Places (2006)
- ▶ *Historic Resources Inventory*
- ▶ *California State Historical Landmarks* (1996 and updates)
- ▶ *California Points of Historical Interest* (1992 and updates)
- ▶ Historic maps:
 - 1849 Sacramento Valley
 - 1856 General Land Office Plat Township 8 North/Range 7 East
 - 1887-88 USGS Sacramento Sheet
 - 1908 USGS Buffalo Creek
 - 1954 U.S. Army Corps of Engineers Buffalo Creek Sheet 1761 11SW

The NCIC reported that several cultural resources inventories have been conducted at least partially within the SPA (Table 3.5-1). Additional surveys have been conducted within one mile of the SPA (Table 3.5-1), but only two cultural resources—both historic-era depressions in the ground—have been identified (Table 3.5-2). The remains of a homestead were identified near the eastern edge of the SPA (Table 3.5-2). In addition, tailings from post-World War II dredger mining are prominent on the landscape to the north and west of, but not within, the SPA. The historic locations identified in Table 3.5-2 have been examined for their historic and scientific significance and integrity; none were found to include qualities that would make them eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR).

Table 3.5-1 Cultural Resources Studies			
NCIC Report #	Author	Title	Date
Studies Conducted within the SPA			
1724	Peak & Associates, Inc.	<i>Cultural Resources Assessment of the Sunrise Douglas Specific Plan and Community Plan Area, Sacramento County, California</i>	1997
2383	Peak & Associates, Inc.	<i>Cultural Resources Assessment of the Sunrise Douglas Specific Plan and Community Plan Area, Sacramento County, California</i>	1997
2383 Update	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the SunCreek Residential Development Project, Sacramento County, California</i>	2005
5848	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the Arista del Sol Project Area, Sacramento County, California</i>	2004
Studies Conducted within One Mile of the SPA			
185	Kenneth J. McIvers	<i>An Archeological Survey of Mather Air Force Base, Sacramento County, California</i>	1985
1715	Peak & Associates, Inc.	<i>Cultural Resources Assessment of the Sunrise-Douglas Property, Sacramento County, California</i>	1989
2691	Garcia and Associates	<i>Cultural Resources Inventory Report for the County of Sacramento, Kiefer Landfill Bufferlands Acquisition 93-PWE-0158</i>	2001
5846	ECORP Consulting	<i>Cultural Resources Inventory and Evaluation Sunridge Ranch, Sacramento County, California</i>	2004
5847	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the Anatolia IV Project Area, Sacramento County, California</i>	2004
5849	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the Sunrise Douglas Road Improvements Two Project Area, Sacramento County, California</i>	2005
5850	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the Sunridge Park Project Area, Sacramento County, California</i>	2004
5855	Peak & Associates, Inc.	<i>Determination of Eligibility and Effect for the Grantline 208 Project Area, Sacramento County, California</i>	2005
Note: NCIC = North Central Information Center Source: Data provided by the North Central Information Center, California State University, Sacramento, in 2007			

Table 3.5-2 Cultural Resources within and near the SunCreek Project Site				
Site #	Site Type	Resource Description	Date Recorded	Location
P-34-532	Historic	Well depression	1999	Within SPA
P-34-533	Historic	Cellar depression	1999	Within SPA
CA-SAC-308H	Historic	Dredge tailings	1989	Near SPA
CA-SAC-507H	Historic	Remains of homestead structures	2000	Near SPA
Source: Data provided by the North Central Information Center, California State University, Sacramento, in 2007				

The records searches listed above were performed in 2007. New records searches have not been obtained since that time because the specific plan would be developed on privately owned land, and the project applicants have not undertaken any further cultural studies on their properties.

Field Survey Results

The *Cultural Resources Assessment of the Sunrise Douglas Specific Plan and Community Plan Area, Sacramento County, California* (Peak & Associates 1997) documented the only survey effort that included the entire SPA. The author reported that survey conditions at the time of the fieldwork were good, with good ground surface visibility. The archaeologists in that effort did not identify any prehistoric resources. They did note two historic resources. The first was a depression in the ground which they speculated could be a well either at a residence that has disappeared or at a cattle barn. The depression measured 5 meters in diameter and dropped steeply to a depth of about 1.5 meters. The 1916 USGS quadrangle map of the area shows a structure at this location. There were no artifacts seen at the site.

The second resource is a larger depression that serves as a water hole for cattle. The original source of the depression may be the cellar of the William Carroll residence, which was noted on the 1916 quadrangle map. The depression was full of water at the time of the survey, so archaeologists could not determine a depth; the surface area is irregular, measuring approximately 14.5 by 8 meters across. The area has been trampled by cattle, so the outlines of the depression have been altered. No artifacts were noted at the site other than barbed wire. Oak and willow trees were established on the northwest and south sides of the water hole.

3.5.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into consideration the potential effects of proposed undertakings on cultural resources listed on or determined potentially eligible for inclusion in the NRHP, and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the proposed undertaking. The regulations implementing Section 106 are promulgated by the Secretary of the Interior, as codified in Code of Federal Regulations (CFR) Title 36, Part 800 (36 CFR Part 800).

The SPA is not located on Federal land and the Proposed Project Alternative would not be Federally funded, but the project does require a Federal action authorizing a permit under Section 404 of the Clean Water Act; therefore, compliance with the requirements of Section 106 is required. Section 106 requirements apply to properties that are not formally determined eligible for the NRHP, but that are considered by the State Historic Preservation Office to meet eligibility requirements. The intensity of impacts on archaeological resources relates to the importance of the information the resources may contain and/or the extent of disturbance or degradation.

The process of determining the NRHP eligibility of a site or district is guided by the specific legal context of the site's significance as set out in 36 CFR Part 60.4 (see below). The NHPA authorizes the Secretary of the Interior to maintain and expand a National Register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. A property may be eligible for listing in the NRHP if it meets criteria for evaluation as defined in 36 CFR 60.4, as follows:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and 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 in prehistory or history.

If a cultural resource is identified that appears to be eligible for listing in the NRHP, then 36 CFR 800.6 (“Resolution of Adverse Effects”) states that consulting parties to an undertaking may use standard treatments established under Section 800.14(d) as a basis for a Memorandum of Agreement (MOA) to deal with known “historic properties” or a Programmatic Agreement (PA) to deal with as-yet undiscovered “historic properties.” Thus, under NEPA, an executed MOA or PA may include provisions to avoid impacts, limit the magnitude of the undertaking, rehabilitate historic properties, preserve properties in place, relocate historic properties, or document or recover data to mitigate the effects of an undertaking to a less-than-significant level.

A map of the Area of Potential Effects (APE) also is required, as described in Section 106 and codified in 36 CFR 800.4(a)(1). The project boundary, as depicted in Exhibit 2-2 of this DEIR/DEIS, has been used as the project APE.

American Indian Religious Freedom Act of 1978 (Public Law 95-341)

The American Indian Religious Freedom Act established Federal policy to protect and preserve the inherent rights of freedom for Native American groups to believe, express, and exercise their traditional religions. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

National Register of Historic Places

The NRHP was authorized by the National Historic Preservation Act of 1966 and is administered by the National Park Service. The NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

The NRHP program includes review of nominations submitted by states, tribes, and other Federal agencies and list eligible properties in the National Register; guidance on evaluating, documenting, and listing different types of historic places through the National Register Bulletin series and other publications; and help for qualified historic properties to receive preservation benefits and incentives.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Environmental Quality Act

CEQA offers directives regarding impacts on historical resources and unique archaeological resources. The State CEQA Guidelines define a “historical resource” to include more than one category of resources. The first category is “resource(s) listed or eligible for listing on the CRHR.” (California Code of Regulations [CCR] Section 15064.5[a][1]; see also California Public Resources Code Sections 5024.1 and 21084.1.) A historical resource may be eligible for inclusion in the CRHR, as determined by the State Historical Resources Commission or the lead agency, if the resource:

- ▶ 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 addition, a resource is presumed to constitute a “historical resource” if it is included in a “local register of historical resources” unless “the preponderance of evidence demonstrates that it is not historically or culturally significant.” (CCR Section 15064.5[a][2].)

Another category of “historical resources” is those deemed significant pursuant to criteria set forth in Public Resources Code Section 5024.1(g), as follows:

[a] resource identified as significant in an historical survey may be listed in the California Register if the survey meets all of the following criteria:

- (1) The survey has been or will be included in the State Historic Resources Inventory.
- (2) The survey and the survey documentation were prepared in accordance with . . . procedures and requirements [of the State Office of Historic Preservation].
- (3) The resource is evaluated and determined by the [State Office of Historic Preservation] to have a significance rating of Category 1 to 5 on [the California State Parks Historic Resources Inventory Form].
- (4) If the survey is five years or more old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historic resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Resources identified by such surveys are presumed to be historically or culturally significant unless the preponderance of the evidence demonstrates otherwise.

The final category of “historical resources” is an optional one, which a lead agency may opt to consider or not consider. According to the State CEQA Guidelines (CCR Section 15064.5[a][3]):

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

In addition to the obligation to consider impacts on “historical resources,” CEQA and the State CEQA Guidelines require consideration of unique archaeological sites (California Public Resources Code Section 21083.2, 14 CCR Section 15064.5). A “unique archaeological resource” is defined in CEQA (Public Resources Code Section 21083.2[g]) 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 any of the following criteria:

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

If data recovery through excavation is the only feasible mitigation, a data recovery plan that makes provisions for adequately recovering the scientifically consequential information from and about the historical resource shall be prepared and adopted before any excavation is undertaken (CCR Section 15126.4[b][3][C]). Other acceptable methods of mitigation under the State CEQA Guidelines (CCR Section 15126.4) include excavation and curation or study in place without excavation and curation (if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource).

The State CEQA Guidelines (CCR Section 15064.5[e]) require that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the State CEQA Guidelines (CCR Section 15064.5[d]) direct the lead agency to consult in a timely manner with any appropriate Native Americans as identified by the NAHC, and direct the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Native American Heritage Commission

The California NAHC is the state's "trustee agency" for the protection and preservation of Native American cultural resources, sacred sites on public land, and Native American burial sites. The NAHC facilitates consultation between California tribal governments, Indian organizations, and tribal elders with local, state, and Federal agencies.

California Register of Historical Resources

The State Historical Resources Commission designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under CEQA.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Rancho Cordova General Plan

Goals and policies from the *City of Rancho Cordova General Plan* (City General Plan 2003) relating to cultural resources that are applicable to the Proposed Project and other alternatives under consideration are listed in Appendix K.

3.5.3 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Cultural Resources

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines, as amended. These thresholds also encompass the factors taken into account under NEPA to determine the significance of an action in terms of its context and the intensity of its impacts. The Proposed Project or other alternatives under consideration were determined to result in a significant impact related to cultural resources if they would do any of the following:

- ▶ cause a substantial adverse change in the significance of a unique archaeological resource or a historical resource as defined in Section 21083.2 of CEQA and Section 15064.5 of the State CEQA Guidelines, respectively; or
- ▶ disturb any human remains, including those interred outside of formal cemeteries.

The State CEQA Guidelines (CCR Section 15064.5) define “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Under the NHPA, if it is determined that historic properties may be affected by an undertaking, the agency proceeds with the Section 106 process, assessing adverse effects. The criteria of adverse effects are found in Section 800.5(a)(1) of the regulations of the NHPA. According to the criteria, an adverse effect occurs when the integrity of the historic property may be diminished by the undertaking through alteration of the characteristics that qualify the property for the NRHP. Such alteration can be a direct result or an indirect consequence of the undertaking. The criteria of adverse effect state:

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties include, but are not limited to:

- ▶ physical destruction of or damage to all or part of the property;
- ▶ alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with *The Secretary of Interior’s Standards for the Treatment of Historic Properties* (36 CFR Part 68) and applicable guidelines;
- ▶ removal of the property from its historic location;
- ▶ change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;
- ▶ introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features;

- ▶ neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- ▶ transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

ANALYSIS METHODOLOGY

The analysis of cultural resources presented herein is based on a background record search and research in the Sacramento Archives and Museum Collection Center conducted by Peak & Associates in 1997, field studies of the area conducted by various sources from 1985 to 2005, a Native American contact program, and examination of archaeological survey, inventory, and evaluation reports prepared by various consultants in the last two decades.

The impacts and mitigation measures below are generally discussed using CEQA language such as “significant impacts” rather than “adverse effects.” This discussion includes consideration of resources under the NHPA as well as CEQA, but without offering the confusion of using two sets of similar terminology. As a reminder, cultural resources may be historic or prehistoric. The word “historic” may be a temporal reference, or it may signify the importance of a resource from either the historic or prehistoric era; a historic resource, as defined by CEQA, is a site that is eligible or potentially eligible for listing in the CRHR. The reader must follow the context of the discussion to understand which use of the word is being made.

IMPACT ANALYSIS

Impacts that would occur under each alternative development scenario are identified as follows: NP (No Project), NCP (No USACE Permit), PP (Proposed Project), BIM (Biological Impact Minimization), CS (Conceptual Strategy), and ID (Increased Development). The impacts for each alternative are compared relative to the PP at the end of each impact conclusion (i.e., similar, greater, lesser).

IMPACT 3.5-1 **Loss of or Damage to Known Cultural Resources Sites.** *Construction activities during project implementation could result in the loss of known cultural resources.*

NP

Under the No Project Alternative, the SPA would be undeveloped. There would be no project-related ground-disturbing activities and no demolition of known cultural resources, and thus **no direct** or **indirect** impacts would result. *[Lesser]*

NCP, PP, BIM, CS, ID

Development of the SPA would include grading activity over an approximately 1,000-acre area. Known cultural resources consist of the well and cellar depressions noted in Table 3.5-2. As described in the *Determination of Eligibility and Effect for the SunCreek Specific Plan Area* (Peak and Associates 2008), Appendix P, these two resources do not appear to meet significance criteria for the NRHP under the NHPA or for the CRHR under CEQA for the following reasons:

- ▶ The sites are not associated with important people or events in history (NRHP criteria a and b).
- ▶ Through history, the SPA was occupied sporadically by families attempting to earn a living from the land through agricultural pursuits; however, the land has a thin soil mantle and is therefore marginal for

agricultural use, suitable only for cultivation of hay, or for seasonal grazing of cattle, sheep, and horses. There is no distinctive design or plan to the two resources (NRHP criterion c).

- ▶ There are no associated artifacts or deposits that could be used to answer important research questions or provide more information about the history of the sites (NRHP criterion d).

Although USACE has not yet reached a formal eligibility determination at this time, for purposes of this DEIR/DEIS, and based on the evaluation performed in the *Determination of Eligibility and Effect for the SunCreek Specific Plan Area* (Peak and Associates 2008) as referenced above, it appears that the sites are not eligible or potentially eligible for the NRHP or CRHR, and thus no management of the resources is required. Therefore, destruction of these resources would have **no direct** or **indirect** impact. *[Similar]*

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-2 Potential Damage to As-Yet-Undiscovered Cultural Resources Sites. *Construction and other earthmoving activities during project implementation could result in damage to as-yet-undiscovered cultural resources.*

NP

Under the No Project Alternative, the SPA would be undeveloped. There would be no project-related ground-disturbing activities and no demolition of undiscovered prehistoric cultural resources, and thus **no direct** or **indirect** impacts would result. *[Lesser]*

NCP, PP, BIM, CS, ID

Development of the SPA would include grading activity over an approximately 1,000-acre area. No prehistoric resources or potentially significant historic-era resources were identified in any of the previous survey efforts. However, as-yet-undiscovered resources might be found during project construction. If any of these sites were eligible or potentially eligible for listing on the NRHP or CRHR, **direct** impacts to these as-yet-undiscovered resources would be **potentially significant**. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure 3.5-2: Reduce Potential Impacts on Cultural Resources through Preconstruction Worker Education and Consultation if Resources are Encountered.

Before the start of construction activities, construction worker training shall be presented to all construction personnel involved in earth work, including the site superintendent. This training shall include a presentation and flyer describing the types of resources and the procedures to be followed should resources be encountered. If traces of prehistoric occupation (e.g., midden soils, unusual amounts of shell, artifacts, bone) or historic-era remains (e.g., building or structure traces, concentrations of early-historic-era refuse) are encountered, the City of Rancho Cordova shall be notified and ground-disturbing activities within 50 feet of the find shall cease until a qualified professional archaeologist can determine the nature and potential significance of the find and recommend a treatment plan. As suggested by CEQA Guidelines Section 15126.4(b)(3)(A), preservation in place is the preferred method of mitigation for archaeological sites (i.e., avoidance through construction rerouting or revisions). If this is not feasible, a data recovery plan shall be prepared that could include, but is not necessarily limited to, additional archival research and subsurface excavations for archaeological testing and/or data recovery (using techniques outlined in State CEQA Guidelines Sections 15126.4[b], 15064.5, or measures outlined in 36 CFR 800.6). The data recovery plan shall include provisions for adequately recovering the scientifically consequential information from and about the historical resource, and it shall be prepared, submitted to the City for approval, and implemented prior to any excavation being undertaken. The project applicants of all project phases shall be required to implement all recommendations made by the professional

archaeologist, as deemed necessary and feasible by the City. Construction work in the vicinity of the find shall not resume until the treatment plan is completed.

Implementation: Project applicants for any particular discretionary development application.

Timing: Before and during all ground-disturbing activities.

Enforcement: City of Rancho Cordova Community Development Department.

The likelihood of encountering as-yet undiscovered resources in the SPA is low; however that possibility always remains. If such a resource were encountered, and it appeared to be eligible for listing on the NRHP or CRHR, then project impacts would be mitigated under Mitigation Measure 3.5-2, using techniques outlined in State CEQA Guidelines CCR Section 15126.4(b) (e.g., preservation, data recovery, recordation) or measures outlined in 36 CFR 800.6. These measures are specifically designed to reduce the impact of a project and therefore would reduce the impact of construction-related activities at the SPA on undiscovered/unrecorded historic cultural resources to a **less-than-significant** level under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives.

IMPACT 3.5-3 **Potential Damage to Human Remains.** *Construction and other earthmoving activities during project implementation could result in damage to as-yet-undiscovered human burials.*

NP

Under the No Project Alternative, the SPA would be undeveloped. There would be no project-related ground-disturbing activities and no demolition of burials, and thus **no direct** or **indirect** impacts would result. *[Lesser]*

NCP, PP, BIM, CS, ID

Although no evidence of prehistoric or early historic interments was found at the SPA in surface contexts, unmarked and undocumented subsurface human remains could still be present at the site. Because of the possibility that project-related construction activities at the SPA may affect as-yet-undiscovered or unrecorded human remains, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure 3.5-3: Provide Preconstruction Worker Education and Stop Potentially Damaging Work if Human Remains are Uncovered During Construction.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or the project applicants of all project phases shall immediately halt potentially damaging excavation in the area of the burial and shall notify the Sacramento 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 (California 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 NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor, or project applicants of all project phases, an archaeologist, and the NAHC-designated Most Likely Descendant (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 upon notification of a discovery of Native American human remains are identified in California Public Resources Code (PRC) Section 5097.9.

Upon the discovery of Native American remains, 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 descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the landowner shall employ:

- (1) Record the site with the NAHC or the appropriate Information Center.
- (2) Use 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 landowner's 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 if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner. The project applicants of all project phases shall implement mitigation for the protection of the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.

Implementation: Project applicants for any particular discretionary development application.

Timing: Before the approval of grading plans and during all ground-disturbing activities for all project phases.

Enforcement: City of Rancho Cordova Planning Department.

The likelihood of encountering human remains in the SPA is low; however that possibility always remains. If remains were encountered, then implementation of Mitigation Measure 3.5-3 would require the procedures in the California Health and Safety Code outlined above to be followed. These procedures are specifically designed to reduce the impact of project implementation related to human remains and therefore this impact would be reduced to a **less-than-significant** level under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives.

3.5.4 RESIDUAL SIGNIFICANT IMPACTS

Impacts related to known cultural resources are less than significant. With implementation of Mitigation Measures 3.5-2 and 3.5-3 listed above, potential impacts to previously undiscovered cultural resources and human remains, if any are encountered at the SPA, would be reduced to a less-than-significant level. Therefore, project implementation would not result in any residual significant impacts related to cultural resources.

3.5.5 CUMULATIVE IMPACTS

Cultural resources in the project region (City of Rancho Cordova, eastern Sacramento County) generally consist of prehistoric sites, isolated artifacts, mining features, and structures from rocket testing facilities. During the 19th and 20th centuries, intensive mining in the region likely resulted in the destruction or disturbance of prehistoric sites, as well as earlier, smaller-scale mining sites. Since this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts;

however, even with these regulations, cultural resources are still degraded or destroyed as development in the region proceeds.

The results of the cultural resources records searches and inventories conducted for the Proposed Project Alternative indicate that the SPA contains two separate historic depressions, one for a well and the other for a cellar. These features, however, were found to be not eligible for listing in the NHRP or CRHR, and removal of these features was found to not substantially alter the interpretation of prehistoric or historic activities in the region.

The SunCreek Specific Plan project would not contribute to any cumulatively incremental considerable impacts on known resources because surveys conducted for the SPA did not conclude that the SPA or vicinity is highly sensitive for archaeological resources and there have been no such discoveries of sensitive resources in the SPA and vicinity. Although undiscovered cultural resources may underlie the SPA, Mitigation Measures 3.5-2 and 3.5-3 would reduce the project's impacts on as-yet-undiscovered site-specific cultural resources to a less-than-significant level. It is unknown whether the related project sites contain historic resources, or whether the related projects would implement appropriate mitigation to reduce impacts on any resources that might be present. Furthermore, even after mitigation is implemented at the related projects, it may be impossible to avoid the historic resource, and a substantial adverse change in the significance of the historical resource (such as damaging or destroying the qualities that make it significant) could result. Therefore, the related projects could result in significant impacts in and of themselves. However, because all of the project-specific impacts would be less than significant, project implementation would not result in a cumulatively considerable incremental contribution to significant cumulative impact on historic resources.