

4.8 Archaeological and Cultural Historic Resources

4.8.1 Introduction

The following discussion of the prehistoric, ethnographic, and historic background provides a context for identifying the variety of artifacts and features that may be affected by the proposed Vegetation Treatment Program (VTP).

- Prehistoric Native American archaeological sites predating sustained Euro-American settlement in 1850.
- Historic districts as defined in Public Resources Code Section 5020.1(h), “a definable unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.”
- Historic archaeological sites typically dating from the period 1850-1954 (50 years of age is the general threshold for recognition of historic period resources).
- Historic period architectural features older than 50 years, such as building and structures.
- Traditional cultural places important to contemporary Native Americans who have heritage ties to the land.

4.8.2 Regulatory Framework

The California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) recognize that only those heritage resources determined per the respective state or federal criteria to be “significant” qualify for consideration of impacts in environmental impact analyses. The management of archaeological and historical resources for the VTP is designed to comply with requirements of CEQA (as amended), the State CEQA Guidelines, the Public Resources Code (Section 5020 et. seq.), the California State Register Bill (CCR Title 14), Executive Order W-26-92 and to conform with established CDF procedures (Foster 1992, 1994).

CEQA requires that state agencies must identify and examine significant adverse environmental effects on archaeological and historical resources before approving most discretionary projects. CEQA provides statutory requirements for establishing the significance of archaeological resources (Section 21083.2) and historical resources (Section 21084.1).

CEQA defines a significant heritage resource as “a resource listed or eligible for listing on the California Register of Historical Resources (CRHR): (PRC §15064.5(a)(1)). For a heritage resource to be eligible for listing in the CRHR, it must meet one or more of the following criteria (PRC 5024.1(c)):

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history or 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, or represents the work of an important creative individual, or possesses high artistic values; or

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(4) Has yielded, or has the potential to yield, information important in prehistory or history.”

Heritage resources determined eligible for or listed on the National Register of Historic Places (NRHP) are automatically included on the CRHR. The CRHR criteria are similar to those of the NRHP (36 CRF 60.4).

The California Forest Practice Rules (14 CCR 895.1, Definitions) reflect the criteria defined for the CRHP and the NRHP, as follows:

“Significant archaeological or historic site” means a specific location that may contain artifacts or objects, and where evidence clearly demonstrates a high probability that the site meets one or more of the following criteria:

- (1) Contains information needed to answer important scientific research questions;*
- (2) Has a special and particular quality such as the oldest of its type or best available example of its type;*
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person;*
- (4) Involves important research questions that historical research has shown can be answered only with archaeological methods; or*
- (5) Has significant cultural or religious importance to Native Americans as defined in 14CCR Section 895.1.*

These criteria must be addressed when evaluating the significance of archaeological and historical resources under CEQA. The important aspect of this evaluation process is the identification of the characteristics held by the resource that qualifies it as being significant. These identified characteristics provide the basis for establishing whether or not a proposed project will cause a substantial adverse change to that resource.

Archaeological and historical resources that are not deemed significant through formal evaluation must be noted in the initial study or EIR (if one is prepared) along with the project effect, but need not be considered further in the CEQA process.

4.8.3 Prehistoric California Background

As a generalization, prehistoric California was settled during five prehistoric periods (Fredrickson 1974). The first demonstrated entry and spread of humans into California took place during the Paleo-Indian period (10,000 B.C. to 6000 B.C.). Social units during this period are thought to have been small and highly mobile; rather than exchanging resources with other social groups, the group moved to obtain needed resources. Sites have been identified in deposits under deep accumulations of recent alluvium along ancient pluvial lakeshores and coast lines. A recent summary of Paleo-Indian assemblages has shown sites from this period distributed throughout the state, often as surface deposits on arid, brush-covered slopes typical of areas treated under the VTP. These sites contain such characteristic hunting implements as the fluted projectile point and chipped stone crescentic. The period’s characteristic artifacts also occur as isolated finds along ancient lake shores (such as Borax, Tulare, and Buena Vista Lakes) and in other highly eroded contexts.

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The beginning of the Lower Archaic period (6000-3000 B.C.) coincides with that of the climatic change during the mid-Holocene to generally drier conditions that caused the pluvial lakes to dry up. The hunter-gatherer populations of this period were composed of small, mobile social groups that foraged for subsistence and economic resources across a broad landscape. These populations focused on exploiting large game animals and plant communities that yielded abundant small, hard seeds. Distinctive artifact types are large dart points and the milling slab and handstone. Sites from this period have been found throughout the state. In the Central Coast and Southern California geographic regions, sites can occur as large, deep middens most notably containing burials furnished with shell beads and milling stones. Sites distinguished by large, square-stemmed points and the milling stone and handstone assemblage in the North Coast geographic region occur in the valleys and on high-elevation ridges and passes.

The Middle Archaic Period (3000-1000 B.C.) begins when the mid-Holocene climatic conditions became similar to those of the present. Sedentism appears to have become more fully developed along with general population growth and expansion. Broad regional patterns of foraging subsistence strategies give way to more intensive procurement strategies, possibly with the introduction of acorn processing technology, which is evidenced by infrequent occurrences of the bowl mortar and pestle. This shift in procurement strategies is manifest throughout the state with the establishment of year-round inhabited villages at the confluences of major waterways. Local variants of the cultures initiated in the previous period persist in marginal and upland areas throughout the state.

The growth of sociopolitical complexity marks the beginning of the Upper Archaic Period (1000 B.C. to A.D. 500), including the development of status distinctions, greater complexity of exchange systems, and further development of sedentary settlement systems. This period retains the large dart points in different styles, but the bowl mortar and pestle replace the milling stone and handstone throughout most of the state. In the Shasta-Sierra geographic region and interior portions of the North Coast and Central Coast geographic regions, permanent villages are established in the foothills and large seasonal camps are established in higher elevations to take advantage of varied resources. A similar pattern is present along the coast in the North Coast, Central Coast, and Southern California geographic regions, where the populations emphasized both marine and terrestrial resources in their subsistence strategy, resulting eventually in a greater settlement of the interior valleys. Rock art first appears in this period, occurring as petroglyphs associated with hunting practices and territorial boundary definition in the Modoc and Southern California geographic regions and the southern portion of the Shasta-Sierra geographic region.

The Emergent period (A.D. 500-1800) is distinguished by several technological and social changes. The bow and arrow are introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups are well established and exchange of goods between groups becomes more regularized. Petroglyph and pictograph rock art become manifest in the Southern California geographic region and in portions of the Central Coast and Shasta-Sierra geographic regions. In the latter portion of this period (A.D. 1500-1800), exchange relations become highly regularized and sophisticated, with specialists governing various aspects of production and exchange. Pottery appears in quantity for the first time in the Southern California geographic region.

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Throughout the state, large organized villages in complex ecological zones are complemented by many smaller satellite villages situated in adjoining, less diverse ecological settings (e.g., tributary streams and creek valleys). These diverse village complexes are complemented by many smaller sites used for special purposes, such as acorn processing, shellfish collecting, stone quarrying, and ritual activities. Small task-specific groups continue to obtain seasonally available resources in higher elevations. Within the Shasta-Sierra geographic region and interior portions of the North Coast and Central Coast geographic regions, entire populations moved from their foothill villages during summer to seasonal camps in the mountains. In the Modoc geographic region, permanent villages are established in the valleys between major hills and mountains while the uplands remain the loci of special-purpose sites.

General Types of Prehistoric Resources

The following are general prehistoric resource types that may be present in areas treated under the VTP. Terms and definitions are adopted from Dillon (1997).

Village Site. Village sites are locations of continuous and concentrated habitation generally situated close to a source of fresh water and resource abundant ecological zones. These sites typically have a large, well-developed midden deposit containing abundant artifactual (flaked stone tools and debitage, ground and battered stone, bone, and shell) and ecofactual (floral, faunal, and molluscan) evidence. They may also contain burials, rock art, bedrock milling stations, or other features.

Temporary Camp Site. Temporary camp sites are locations occupied for short periods and generally display the same variety of cultural remains as village sites. Their deposits tend to be shallow, contain few artifacts, and have a poorly developed midden soil. Features and burials are normally few and isolated.

Burial Site. A burial site or cemetery is a location where intentional human interments are found in large numbers and close concentration. These locations typically lack evidence of other prehistoric activities.

Milling Site. This is a boulder or group of boulders or bedrock outcrops that contain at least one modified surface (mortar, slick, or metate) caused by the processing of food or other natural resources.

Quarry Site. A quarry is a geological deposit from which rock and mineral materials were extracted, leaving evidence of the extractive activities.

Lithic Workshop. A lithic workshop is a distribution of stone flakes and tool fragments reflecting purposeful modification of parent stone through percussion and/or pressure detachment. These sites typically have a shallow deposit.

Ceramic Scatter. A ceramic scatter consists of fragments of ceramic vessels and artifacts distributed over generally open, flat ground.

Shell Middens. Shell middens are locations with large amounts of marine shell that extend to an appreciable depth below ground surface. They are normally found in coastal contexts but are also present in fewer numbers in the interior.

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Shell Scatter. Shell scatters contain small amounts of marine shell, generally limited to the ground surface, and lack other associated artifacts.

Rock Art. Rock art consists of designs or design elements on rock surfaces created by surface applications (pictographs) or by pecking or etching (petroglyphs). These are found on nonportable surfaces such as boulders, cave walls, or cliff walls.

Rock Shelters. These are natural caves or crevices in rock outcrops in which human use has left artifactual remains.

4.8.4 Ethnographic Background

California Native American societies and cultures were remarkably diverse in their adaptations to the immense variety of environmental conditions throughout the state. Landforms and hydrographic features of every description, the great numbers of plant and animal species, and varied climatic conditions produced microenvironments of immense variety and resource potential. The Native Americans were intimately familiar with their immediate environment and relied almost totally on natural resources. An estimated 300,000 people who spoke 90 separate languages, including hundreds of dialects, inhabited the state before historic-period contact.

Excluding cultures adapted to the desert region of California, three of the four major Native American culture regions are within portions of the state proposed for implementation of the VTP. At the northern end of the North Coast geographic region, adaptations were focused along deep and narrow river systems. Hamlets of 25-75 residents subsisted primarily by fishing for salmon, collecting shellfish, and gathering acorn. Native Americans also hunted for deer, elk, and sea mammals. In the Shasta-Sierra geographic region, the vast waterways of the valley and foothills supported communities ranging from 10-15 to several hundred inhabitants. Acorns were the staple food, but the diverse subsistence base also comprised of deer, elk, antelope, fish, waterfowl, and many plants. The Modoc geographic region and interior portions of the North Coast and Central Coast geographic regions offered similar subsistence resources but supported lower population densities. Along the coast of the Southern California geographic region and a portion of the Central Coast geographic region, subsistence strategies emphasized marine fishing, shellfish collecting, sea mammal hunting, and gathering of terrestrial resources. This maritime-based adaptation supported villages of as many as 1,000 people.

The principal settlements in each of these cultural regions were situated near sources of fresh water, generally along the coast, rivers, or major creeks or at springs. These settlements were generally established within grassland and woodland environments that contained abundant food resources exploited by the Native American groups. These environments are also the most likely to be treated under the VTP. Areas within conifer forest environments that were distant from sources of water generally did not support permanent settlements, but Native American groups visited or occupied these areas on a seasonal basis to gather available resources. Areas with high mountains, dense timber, rolling hills, and open plains also were not conducive to permanent settlements. Special features of the environment, such as a mountain peak, prominent rock outcrop, or particular bend in a stream, sometimes held special meaning in spiritual beliefs or myths of Native American groups.

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General Types of Ethnographic/Contemporary Native American Resources

Resource Collection Location. This is a location where Native Americans have historically gone, and are known or believed to go today, to collect resources in accordance with traditional cultural rules of practice.

Spiritual Location. This is a location where Native American religious practitioners have historically gone, and are known or believed to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice.

Traditional Location. This is a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world.

Cemetery. A cemetery is a location that has been selected for human burial or interment.

4.8.5 Historic Background

The post-contact history of California can be viewed as a succession of four periods that have left physical traces on the modern landscape. The Hispanic era (1542-1846) can be subdivided into the Spanish and Mexican periods based on political history. Early coastal explorations left little trace in the archaeological record. Formal colonization began in 1769 with the construction of a mission and presidio (fort) at San Diego. Franciscan friars established a chain of 21 missions in Alta (or “Upper”) California that extended along the western margin of the North Coast, Central Coast, and Southern California regions from San Diego to Sonoma. Mission buildings were clustered generally in a quadrangle form, although several missions established outlying agricultural and ranching outposts within a half-day’s journey on foot. Many of the early trails used for delivering supplies were prehistoric trade routes adopted by the Spanish and, later, the Mexicans.

The Russian-American Company established a southern outpost for its Alaskan fur trading operations along the coast of the North Coast geographic region from 1805 to 1841. The post was established to exploit the numerous sea otter populations and to furnish food for the Alaskan installations, which were in desperate need of fresh fruits and vegetables. Their initial settlement was established at Bodega Bay, but a permanent site for settlement was established at present-day Fort Ross in 1812. Agriculture, fruit orchards, and stock raising developed around Ross, but the area was not well suited to agriculture and farms were established in the interior valleys. The colony never prospered, and the settlement was abandoned with the sale of moveable properties to John Sutter in 1841.

After 1822, the Mexican government administered California and granted lands to citizens as a reward for services. Settlers engaging in the lucrative hide and tallow trade established outlying ranchos, often building adobe structures, barns, fences, and other improvements. The grants were mostly along the coast and around San Francisco Bay within the North Coast, Central Coast, and Southern California geographic regions, but some extended into Mendocino County and up the Central Valley to Redding. This type of settlement produced a rural, agrarian lifestyle that was disrupted in 1848 with the discovery of gold at Sutter’s Mill and the subsequent influx of people.

The Early American period (1847-1879) had its origins as early as the 1820s when Euro-Americans began to filter into California. With the discovery of gold at Sutter’s Mill near Sacramento

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in 1849, California's Euro-American population grew; settlers established regular exchange routes and sold their surplus goods to newly arriving immigrants. Mining activities, mostly in the North Coast and Shasta-Sierra regions, have left behind many archaeological features, include pits, hydraulic cuts, shafts, and (probably most common) water conveyance systems (e.g., ditches, canals, and flumes). Small towns grew up throughout these two regions to serve the needs of miners with mercantile stores, blacksmith shops, restaurants, hotels, and saloons. Churches and schools soon followed. Under the Homestead Act of 1862, 160-acre farms were made available on unappropriated public land. Homesteaders settled in all portions of the state in areas with abundant water and grazing lands. Agriculture, logging, and transportation systems also developed but were limited largely to local enterprises that relied on human and animal power. The ranching industry continued to dominate the economy of the Southern California region.

Settlement and growth of transportation systems were the focus of the period from 1880 to 1929. During the first decades of this period, cycles of economic boom and bust occurred as California's population and the number of economic enterprises continued to increase. Economic growth was aided by the development of new power sources for machinery. The completion of the Transcontinental Railroad in 1869, powered by the steam locomotive, stimulated construction of railway lines across the state during the next two decades. These lines provided the means to connect California agriculture and industry with markets in the east. Other large-scale enterprises such as logging, electrical power generation, and irrigation systems were undertaken in mountainous, forested portions of the state. These endeavors employed large numbers of workers, at least for initial project construction, and therefore required work camps, employee housing areas, workshops, logistical centers, and transportation networks.

Urban centers along the railroads became more important, although rural patterns for homesteading and agricultural enterprises were also well established throughout the state. The pervasive pattern of small-scale settlements, including farms and ranches, has resulted in building and structure foundations, trash dumps, and the remains of ranching and irrigation systems. In the latter part of this period, the development of the gasoline-powered automobile and its ability to attain higher speeds initiated the development of paved highway systems throughout the state.

During the Depression period (1930-1941), the Civilian Conservation Corps and the Works Progress Administration performed an unprecedented amount of infrastructure construction (e.g., sidewalks, sewer lines, roads, and dams) throughout the nation. Both agencies set up many temporary camps across California. Gold mining increased, primarily from small-scale lode mines. Some larger companies operated bucket-line and drag-line dredges. These mines primarily used existing water conveyance systems built in the previous decades, and they frequently reworked tailings piles left over from hydraulic mining activities of the 1870s and 1880s.

General Types of Historic-Period Resources-General Definition of Terms

Buildings. A building is a structure created to shelter any form of human activity (e.g., house, barn, church, hotel).

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Structure. A structure is a work made up of interdependent and interrelated parts in a definite pattern of organization. Constructed by humans, it is often an engineering project or large in scale (e.g., bridges, dams, lighthouses, water towers, radio telescopes).

Foundation. These are structural footings or lineal alignments made from wood, brick, or rock to support a building or structure.

Landscaping. This constitutes evidence of modification to the ground surface through such activities as contouring the land or planting vegetation (e.g., hedgerow, orchards, terraces, ponds).

Refuse Deposit. These are discrete areas such as ground surface, drainage embankments, earth pits, or other receptacles that contain artifact concentrations of glass, ceramic, metal, bone, or other material reflecting the purposeful discard of those materials (e.g., privies, dumps, trash scatters).

Linear Resource. Linear resources are most long, narrow constructions, either depressed, elevated, or at ground level. These include any device constructed to transport water (e.g., flumes, pipes, ditches, canals, dams, and tunnels), corridors designed to facilitate the transportation of people, vehicles, or information (e.g., roads, trails, railroad grades, and telegraph/telephone lines), and barriers constructed to separate adjoining areas (e.g., stone fences, retaining walls, post-cairns, walls, and fences).

Mine. This includes excavations and associated structures and tailings built into the earth to extract natural resources.

Cemetery. As with Native American cemeteries, these are locations that appear to have been selected for human interment and include any single or multiple burial.