3.0 CULTURAL CONTEXT

The Timberline at Auburn Project is located in the City of Auburn at the eastern edge of the Central Valley and the foothills of the north-central Sierra Nevada. The archaeology and ethnography of this area is complex, and related to the archaeology and ethnography of the Central Valley, the north-central Sierra Nevada, and the Great Basin. Consequently, the discussion of regional archaeology and ethnography will highlight these areas and the possible relationships between prehistoric cultures of the Central Valley and the Sierra Nevada.

3.1 REGIONAL PREHISTORY

3.1.1 The Central Valley

The Central Valley of California has long held the attention of California archaeologists, and was a focus of early research in California. Archaeological work during the 1920s and 1930s led to the cultural chronology for central California presented by Lillard, Heizer, and Fenenga in 1939. This chronology was based on the results of excavations conducted in the lower Sacramento River Valley. The chronology identified three archaeological cultures. These cultures were named Early, Transitional, and Late (Lillard et al 1939). An antecedent to the Early Culture was postulated, but neither characteristics nor probable origins of this earlier culture were discussed in detail (Lillard et al 1939).

Heizer (1949) redefined the description of these three cultures. He subsumed the three cultural groups into three time periods, designated the Early, Middle, and Late Horizons. Heizer (1949), however, primarily focused his new archaeological research and reexamination of Lillard et al (1939) on the Early Horizon, which he named Windmiller. He also intimated that new research and a reanalysis of existing data would be initiated for cultures associated with the Middle and Late Horizons. Heizer, however, did not complete this work, and it was left for other researchers.

Ragir (1972) reanalyzed, updated, and elaborated the description, temporal span, and geographic distribution of Windmiller. Ragir (1972) refined the temporal span for Windmiller, dating it from 4,500-2,500 B.P., with a maximum age of 7,000 B.P. The 7,000 B.P. dates for the origin of Windmiller was postulated because the culture described at 4,000 years ago appears to be fully developed and seems well integrated into the regional economic system (i.e., artifacts of exotic materials, such as marine shell and obsidian are present in the assemblage).

Heizer (1949) and Ragir (1972) presented a set of characteristics to identify Windmiller. Some of these characteristics are: large and heavy, stemmed and leaf-shaped projectile points commonly made on a variety of materials other than obsidian; perforate charmstones; Haliotis and Olivella shell beads and ornaments; trident fish spears; baked clay balls (presumably for cooking in baskets); flat slab millingstones; small numbers of mortars; and ventrally extended burials oriented toward the west (Heizer 1949; Ragir 1972). The subsistence pattern of Windmiller groups probably emphasized hunting and fishing, with seed collecting (possibly including acorns) supplementing the diet (Heizer 1949; Ragir 1972; Moratto 1984).

Windmiller groups at about 4,000 B.P. are firmly established in the Lower Sacramento River Valley and are interacting with their neighbors. Windmiller groups acquired: obsidian from at least two Coast Range and three trans-Sierran sources; haliotis and olivella shells and ornaments from the coast; and quartz crystals from the Sierra foothills (Heizer 1949; Ragir 1972). It is hypothesized that the bulk of these materials were acquired through trade. Some of these materials, however, may have been acquired as part of seasonal movements between the Central Valley and the Sierra foothills.

There is evidence for seasonal transhumance in the distribution of Windmiller artifacts, sites, and burial patterns. Johnson's work (1967; 1970) along the edge of the Sierra Nevada foothills at Camanche Reservoir and CA-Ama-56, the Applegate site, suggest a link between Windmiller of the Central Valley and the Sierra Nevada mortuary caves. Johnson (1970:119) further suggests that his data reveals a pattern of gradual change from the Early through the Middle Horizon, rather than a displacement of local groups by foreign populations as postulated by Baumhoff and Olmstead (1963) based on ethnolinguistic evidence. Rondeau (1980) also working at the edge of the Central Valley at CA-Eld-426, the Bartleson Mound, identified components of the Early Horizon. He (1980:58) even postulated a potential relationship between the Early Horizon cultures and the Martis Complex. In addition, analysis of Windmiller burial orientation (Schulz 1970) and skeletal analyses (e.g., Harris Lines) by McHenry (1968) suggest a high percentage of winter death among Windmiller groups. Incorporating all these data, Moratto (1984:206) states that as early as 4,000 B.P. Windmiller groups may have been exploiting the foothills of the Sierra Nevada during the summer and returning in the winter to villages in the Central Valley.

Beyond lithic procurement Heizer does not discuss the possibility of Windmiller ties to the foothills or the Great Basin. He (1949) does suggest, however, that the valley floor may have been abandoned at the end of the Early Horizon, with the valley edges becoming a location for "cultural blending" with groups beyond the geographic limits of the valley. Heizer (1949) acknowledged that there were general similarities between Windmiller assemblages and those of other cultures found in different regions of California. Similarly, excavations at CA-PLA-500 (cf., Wohlgemuth 1984), the Sailor Flat site located near CA-PLA-101, and sites at the 12 Bridges Golf Course (cf., Jackson 2000) in Rocklin provides similar data to Spring Garden Ravine, CA-PLA-101. Consequently, there is evidence to support the hypothesis that there is a relationship between the Martis Complex and the Early Horizon or Windmiller of the Central Valley. Regardless, Ritter (1970: 532) believes that the Spring Garden Ravine site highlights the adaptation to the ecotone between the pine forest and oak-chaparral woodland (i.e., the Transition Zone) by Martis cultural groups beginning around 4,000 B.P. Ritter supports Elsasser's earlier hypothesis that the Martis Complex reflects an adaptation to the ecology of the Transition Zone.

The succeeding Middle Horizon, named the Cosumnes Culture by Ragir (1972), was first recognized at CA-Sac-66. The Middle Horizon is characterized by: tightly flexed burial with variable orientation; red ochre stains in burials; distinctive Olivella and Haliotis beads and ornaments; distinctive charmstones; cobble mortars and evidence of wooden mortars; numerous bone tools and ornaments; large, heavy foliate and lanceolate concave base projectile points made of materials other than obsidian; and objects of baked clay. Middle Horizon cultures are generally quite different from Windmiller, but do continue to exhibit some of the characteristics of Windmiller such as similar projectile point forms. The similarities in projectile point form may be indicative of cultural continuity and/or functional and adaptational success of particular forms. Regardless, many projectile point forms span long periods of time and may also be found in the assemblages of presumably different cultural groups. The Late Horizon, labeled the Hotchkiss Culture by Ragir (1972), ranges in age from 1,500 B.P. to contact. The Hotchkiss Culture primarily represents both local innovation and the blending of new cultural traits introduced into the Central Valley. It is distinguished by intensive fishing, extensive use of acorns, elaborate ceremonialism, social stratification, and cremation of the dead.

3.1.2 The Sierra Nevada

The Martis Complex is in important component of the archaeology of the north-central Sierra Nevada and the project area. Indeed, description and delineation of the geographic distribution of the Martis Complex has been a significant part of archaeological research in the project area since the early 1950s. In 1953 Heizer and Elsasser presented the first cultural chronology for the Sierra Nevada. The chronology was based on survey work conducted to the

east of the crest of the Sierra Nevada around Lake Tahoe and parts of the drainages of the Truckee and Carson Rivers. Heizer and Elsasser (1953) in the course of this work identified two "complexes". The earliest cultural group was named the Martis Complex, which was followed by the King's Beach Complex. Both "complexes" were defined on the basis of surface material. Heizer and Elsasser did not excavate either of these sites.

Heizer and Elsasser (1953) defined the Martis Complex based on nine criteria derived from data obtained from thirteen sites. These nine criteria are: 1) the use of basalt as the preferred lithic material for tools; 2) the rare use of chert and obsidian for tool production; 3) the use of roughly chipped, large, heavy projectile points in a variety of forms; 4) the use of the mano and metate; 5) the use of bowl mortars with cylindrical pestles; 6) the use of boatstones and atlatls; 7) an economy primarily based on hunting and supplemented by the gathering of seeds; 8) the use of large numbers of basalt flake scrapers; and 9) the frequent use of expanded base, finger held drills (Heizer and Elsasser 1953:19). Heizer and Elsasser highlight the use of basalt as the preferred material for tools as the most distinguishing characteristic of the Martis Complex. They (1953:20) also suggest that the Martis Complex, based on this characteristic, may be related to other basalt using complexes in the Great Basin, the Mohave Desert, and the Early Horizon in the Central Valley of California. Boatstones from the Martis Complex "type site", CA-Pla-5, resembling those from the Central Valley of California, reinforced the supposition of Heizer and Elsasser (1953:26) that the Martis Complex may be related to the Early or Middle Horizon of the Central Valley.

Elsasser continued research along both the east and west sides of the Sierran crest, and provided additional data to aid in characterizing the Martis Complex and defining its possible relationships to other cultures. He (1960:68) suggested Martis people most likely hunted large, seasonally migratory animals, such as deer and antelope, which they followed between the lower and higher elevations of the Sierra Nevada. Elsasser (1960) also emphasized the expanding and apparently widespread distribution of the Martis Complex across the mid-elevations of the Sierra Nevada. Elsasser, however, was reluctant to speculate on the relationship between the Martis Complex and other cultural groups in the Central Valley of California or the Great Basin. He (1960:29) believed that there were no dominant point types to characterize the Martis Complex and that they were not properly analyzed to be useful as "time markers". His data, on the other hand, suggest a very probable relationship between the Martis Complex and the Early/Middle Horizon. In fact, Elsasser (1960:29) states that Martis Complex projectile points "resemble in a general way points occurring in the Middle Horizon of the Central California sequence". In addition, he (1960) also recovered boatstones and steatite pipe fragments during his excavations that are characteristic of the Middle Horizon of the Central Valley.

Elsasser highlighted the need for an examination of Sierra Nevada archaeological sites and their assemblages in a broad, regional context. A context that compares and contrasts cultural elements of the Great Basin, the Central Valley, and the Southern Cascades with sites from the Sierra Nevada. Elsasser (1960:76) suggests, "Only then can the prehistory of any of the regions separately and of western North America as a whole be meaningfully synthesized". Unfortunately, regional archaeological comparisons are still lacking in California archaeology, only emerging within the last 5-10 years.

Elston (1971) augmented the previous work of Heizer and Elsasser and suggested dividing the Martis Complex into two phases. The first phase is linked to the first intensive occupation of the Sierra Nevada and dates from 3,000 B.P.-2,000 B.P. "Phase 1" is marked by Elko series, Martis series, and Sierra stemmed triangular projectile points. This phase may be associated with cultural groups from the Great Basin, but it seems to exhibit specialization in the exploitation of

the Transition Zone (Elston 1971:137). Indeed, the groups associated with the first phase of the Martis Complex probably had already incorporated patterns of transhumance similar to those of ethnographic groups on the western side of the Sierra Nevada (Elston 1971:137). "Phase 2" is differentiated from the first phase by smaller stemmed and triangular projectile points, an increase of the use of chert and obsidian for tools, the introduction of bedrock mortars and a concomitant decline in the use of manos, and dates from 2,000 B.P.-1,500 B.P.

Elston et al. (1977) provided an additional explanation for the areal distribution of the Martis Complex and also a refinement of the cultural chronology for the north-central Sierra Nevada. Indeed, Elston et al (1977) suggest that the Martis Complex could be divided into three phases. These three phases are: Early Martis (4,000-3,500 B.P.) characterized by contracting stem points (Elko and Martis Series); Middle Martis (3,500-2,500 B.P.) characterized by Steamboat points; and Late Martis (2,500-1,500 B.P.) characterized by notched and eared Martis and Elko Series points (Elston et al. 1977). This tripartite division of Martis was intended to be "tentative", but appears without modification in virtually all subsequent work in the region (Elston et al. 1994:15).

Elston et al. (1994:16) state that their original tripartite division for Martis is not substantiated due to recent analyses of the temporal distribution of contracting stem (i.e., Martis, Elko, and Gatecliff Series) and leaf shaped points (i.e., Steamboat). It is suggested that Martis be divided into two phases, Early and Late Martis (Elston et al. 1994:16). This division is also supported by Maher's (1993) lithic analysis of an assemblage from an excavated Martis site. Early Martis (5,000-3,000 B.P.) includes Martis Contracting Stem, Martis Split Stem, and Steamboat points and Late Martis (3,000-1,500 B.P.) includes Martis Corner Notched, Elko Corner Notched, and Elko Eared points. Early Martis coincides with Windmiller in California (i.e., points identical to Martis Contracting Stem and Steamboat are found at Windmiller sites in the Central Valley) and Gatecliff Rockshelter in central Nevada (Elston et al 1994:16). Elston et al. (1994:16) emphasize, however, that Early and Late Martis merely define blocks of time, since nothing is really known about culture change beyond changing frequencies of point types.

At about 1,500 B.P. shifts in the cultural patterns of the Martis Complex become evident in the archaeological record of the north-central Sierra Nevada. For example, changes become evident in technology and subsistence and settlement strategies. Technological shifts are apparent in the appearance of larger numbers of smaller projectile points made from obsidian flake blanks rather than larger projectile points made from basalt. Subsistence and settlement strategies highlight an intensification of plant exploitation and other lower ranked resources, and suggest an increase in regional population size, but also a reduction in the size of regularly used territory (Zeier and Elston 1986; Moore and Burke 1992; Elston et al. 1994). These changes are probably related to a shift in climatic regime and an overall increase in population size across the region (i.e., growth of local populations and/or an influx of new cultural groups). Regardless, these changes mark the waning of the Martis Complex and the emergence of the Kings Beach Complex.

Initial characterizations of the Kings Beach Complex by Heizer and Elsasser (1953:20) highlighted: a preference for obsidian in the production of small projectile points; the rare use of basalt; an absence of drills; bedrock mortars; and an economic emphasis on seed processing and fishing. The Kings Beach Complex is commonly divided into two periods: Early Kings Beach (1,300-700 B.P.), characterized by Rosegate Series points; and Late Kings Beach (700-150 B.P.), characterized by Desert Series Points (Elston 1971; Drews 1986; Zeier and Elston 1986). Early Kings Beach is thought to represent the initial phase of the Washoe ethnographic pattern.

Alteration of the relatively stable cultural patterns associated with the Martis Complex seems to be associated with both climatic change and increases in population size. At around 2,000 B.P.

the climate of the region begins to change from cool/moist conditions to warm/arid conditions. This change obviously affected local cultural groups (i.e., the Martis Complex) and altered their settlement and subsistence strategies. An evident shift in subsistence strategy is the intensification of the exploitation of plant resources. The intensification process probably included expanded use of various seeds, acorns, and piñon seeds. In fact, piñon appears to reach the eastern limits of the distribution of Martis Complex sites at the beginning of the Early Kings Beach Period. Elston (Zeier and Elston 1986:19) has also tied the incipient use of nut hullers, associated with piñon exploitation, to this time period.

A return to drier conditions in the north-central Sierra Nevada also reduced the size of the resource rich, mixed-forest environment exploited by the Martis Complex and other similar archaeological cultures. Environmental change coupled with a general increase in population size, probably due to both natural growth and an influx of other groups, seems to have pushed groups exploiting mid-elevation habitats of the Sierra Nevada into closer proximity. This "packing together" of different groups of people probably fueled competition among them, particularly related to access to potentially critical resources. This combination of conditions favored modifications to previous settlement and subsistence patterns. These modifications probably included intensification of the exploitation of certain plant resources (e.g., acorns and piñon) and development of demarcated territorial boundaries. Indeed, these cultural patterns are evident among the ethnographic groups resident in the region.

3.2 ETHNOGRAPHY

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber (1925, 1936), and others (i.e., Murdock 1960; Driver 1961), recognized the uniqueness of California Native Americans and classified them as belonging to the California culture area. Kroeber (1925, 1936) further subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the current project area and includes the Nisenan or Southern Maidu. The Washoe also occupy the project area, but are included in the Great Basin culture area. Kroeber (1925:916), however, states that California and the Great Basin are regions of close cultural kinship that should be joined into a larger culture area with the Sacramento River Delta area as a center of major cultural development.

Nisenan inhabit the drainages of the Yuba, Bear, and American rivers, and also the lower reaches of the Feather River, extending from the east banks of the Sacramento River on the west to the mid to high elevations of the western flank of the Sierra Nevada (Wilson and Towne 1978). Washoe historically inhabited the region east of the crest of the Sierra Nevada into Carson Valley, extending from the Walker River in the south to Honey Lake in the north, with peripheral territory extending to the mid-elevations of the west Sierran slope (d'Azevedo 1986). The two ethnographic groups fully exploited their territories by following a pattern of seasonal transhumance, acquiring different resources across a range of altitudes and environments.

Nisenan are members of the Maiduan Family of the Penutian stock and are generally divided into three groups based on dialect differences: the Northern Hill Nisenan in the Yuba River drainage; the Valley Nisenan along the Sacramento River; and the Southern Hill Nisenan along the American River (Kroeber 1925; Beals 1933; Wilson and Towne 1978). Washoe, on the other hand, speak a Hokan language and are the only Great Basin group to speak a non-Numic language (Kroeber 1925; d'Azevedo 1986). Kroeber (1925:569, 1955) and Downs (1966:70)

postulate an early relationship, prior to 4,500 years ago, between the Hokan speaking Washoe and other Hokan speakers in California.

Nisenan and Washoe share overall cultural similarities, but characteristics specifically associated with a particular group will be highlighted. Detailed information regarding these groups is presented in several sources. These sources include: Powers' (1877) *Tribes of California*; Kroeber's (1925) *Handbook of the Indians of California* which forms the core of the ethnographic data for Nisenan; and Wilson and Towne's (1978:387-397) summary description of the Nisenan; Washoe lifeways are most completely described by Downs (1966); d'Azevedo's (1986:466-498) summary description of Washoe; Littlejohn's (1928) *Nisenan Geography*; Faye's (1923) *Notes on the Southern Maidu*; Beals' (1933) *Ethnology of the Nisenan*; Kroeber's (1929) *The Valley Nisenan*; Ritter and Schulz (1972) on Nisenan ecology; Powers' (1876) *Life and Culture of the Washo and Paiutes*; Barrett's (1917) *The Washo Indians*; Siskin's (1938) *Washo Territory*; Lowie's (1939) *Ethnographic Notes on the Washo*; and d'Azevedo's (1963) *The Washo Indians of California and Nevada*.

3.2.1 Social Organization

The basic social and economic group for the Nisenan and Washoe was the family or household unit. The nuclear and/or extended family formed a corporate unit. For the Nisenan these basic units were combined into distinct, named village or hamlet groups. Each village was largely composed of consanguine relatives (Littlejohn 1928:21; Beals 1933:358). Lineage groups were important political and economic units that combined to form tribelets, which were the largest sociopolitical unit identified for Nisenan (Wilson and Towne 1978). Each tribelet had a chief or headman who exercised political control over all villages within it. The role of chief seems to be an advisory role with little direct authority (Beals 1933:359). Tribelets assumed the name of the head village where the chief resided (Beals 1933:358-359; Levy 1978:410). The office of tribelet chief was hereditary, with the chieftainship being the property of a single patrilineage within the tribelet.

Tribelet populations of Valley Nisenan were as large as 500 persons (Wilson and Towne 1982:6), while foothill and mountain tribelets ranged between 100 and 300 persons (Littlejohn 1928:21; Levy 1978:410). Each tribelet possessed at least one ceremonial roundhouse (*kum*). Each tribelet owned a bounded tract of land and exercised control over its natural resources (Littlejohn 1928:33-34). Beals (1933:359) estimates that Nisenan tribelet territory averaged approximately 10 miles along each boundary, or 100 square miles, with foothill territories tending to encompass more area than mountain territories. Littlejohn (1928:23) notes that these boundaries were in many instances indicated by piles of stones. Regardless, Nisenan tended to stay within their village areas except during the summer season when groups of people would move up into the mountains to hunt and gather (Littlejohn 1928:24).

Washoe households were somewhat loosely combined to form villages, referred to as *bunches* by Downs (1966:44-46). The size and composition of bunches varied considerably, depending on environmental and interpersonal conditions. Downs (1966:44-46) states that the winter camp or village of several households seemed to be the basis for the bunch, but several villages located in close proximity to one another might also be considered a bunch. Each bunch had a headman or chief (*te_be´y*), which seems to have been a hereditary position passed on through either parent (Downs 1966:41). During aboriginal times, however, there was never a single chief for all Washoe (Downs 1966:45).

The household may be considered the minimal political and economic unit for the Washoe, while the bunch represents the minimal number of families necessary to cooperatively accomplish tasks that individual households could not complete (e.g., stage rabbit drives, form

hunting parties, and form defensive units) (Downs 1966:45). In contrast to the Nisenan, larger village groups or the bunch did not control natural resources. Property rights to piñon gathering areas, fishing traps and platforms, and the right to hunt certain animals were passed down within an individual family (Downs 1966:41).

3.2.2 Settlement and Subsistence Patterns

Nisenan and Washoe practice seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting lifezones that are in relatively close proximity to each other. Valley Nisenan generally did not range beyond the valley and lower foothills. Conversely, foothill and mountain groups of Nisenan and Washoe ranged across a rather more extensive area that included jointly shared territory whose entry was subject to traditional understandings of priority of ownership and current relations between the groups (d'Azevedo 1986:467).

Nisenan usually lived in permanent villages that generally had a southern exposure, were surrounded by an open area, and were located above, but close to water courses (Littlejohn 1928:13). Beals (1933:363) notes that permanent villages in the foothills and mountains were usually located on high ground between rivers. Valley villages were also usually located on raised areas to avoid flooding. Littlejohn (1928:13) states that at one time or another there were settlements located on every small stream within Nisenan territory, but permanent villages were not located in steep and dark narrow canyons of large rivers, or at altitudes where deep snows persisted throughout the winter. In fact, permanent occupation sites above 3,500 feet were only located in protected valleys (Littlejohn 1928:20).

During most of the year, Nisenan generally occupied permanent villages located below about 2,500 feet. The rather large uninhabited region between the 3,000-foot contour and the summit of the Sierra Nevada was considered "open ground" which was only used by communities living along its edge (Littlejohn 1928:20). The availability of resources influenced the location of Nisenan permanent villages, since they acquired a proportion of their food resources from the general area surrounding them (Littlejohn 1928; Wilson and Towne 1978). Other essential and critical food resources, however, were obtained during the summertime when groups left, but did not abandon, permanent villages at lower elevations and traveled east into their "mountain territories" following streams and rivers (Littlejohn 1928:24; Wilson and Towne 1978:389). During the summer small "base camps" were established at higher altitudes in proximity to a water source. Individuals would stage expeditions to acquire natural, faunal, and plant resources from these camps.

Communally organized Nisenan task groups exploited a wide variety of resources (Faye 1923:409-410; Beals 1933:347-350; Wilson and Towne 1978:389-390). Communal hunting drives were undertaken to obtain deer, quail, rabbits, and grasshoppers. Bear were hunted in the winter when their hides were at their best condition. Runs of salmon in the spring and fall provided a regular supply of fish, while other fish such as suckers, pike, whitefish, and trout were obtained with snares, fish traps, or with various fish poisons such as soaproot. Birds were caught with nooses or large nets, and were also occasionally shot with bow and arrow. Acorns were gathered in the fall and stored in granaries for use during the rest of the year. Buckeye, pine nuts, hazelnuts, and other edible nuts further supplemented the diet. In addition, key resources such as acorns, salmon, and deer were "ritually managed" through first fruit and other ceremonies to facilitate successful exploitation and equitable distribution of resources (Beals 1933:347-348; Swezey 1975:15-29; Swezey and Heizer 1977:12, 19-20).

The Washoe subsistence calendar is divided into three "years": the fishing year, the gathering year, and the hunting year (Downs 1966:12). As soon as the snows began to leave the lower

foothills of the eastern Sierra Nevada, young men and boys, often accompanied by young women, would leave winter villages located in the basin valleys and travel to Lake Tahoe. At the lake they would live in caves and other natural shelters while fishing for whitefish. The beginning of the fishing year followed a period of winter hunger, and sometimes the young members of the group would travel back to the winter villages with fish so that other group members would have enough food to allow them to travel to Lake Tahoe. With the advent of spring weather, more people would move up into the lake area, and by early June most of the Washoe were encamped along the shores of Lake Tahoe. At about this time large numbers of other fish species, including trout and large suckerfish, would leave deeper portions of the lake and enter streams to spawn. This abundance of fish was sometimes celebrated with first fish ceremonies (Downs 1966:14).

The spring fishing period was a time of increased social interaction between Washoe since they were all drawn to the concentration of resources around Lake Tahoe (Downs 1966:14). Dances and games were held, courtships were initiated and consummated, the availability of food and other resources was discussed, and news of the activities of neighbors was exchanged. This was the one time of the year when Washoe were gathered as a single people, engaged in the same set of activities (Downs 1966:15). As the snows melted in the higher valleys, family groups would move away from Lake Tahoe, and refocus subsistence activities on hunting and fishing in smaller lakes, and the harvesting of plant resources. As summer progressed, Washoe begin to move toward the lowlands along the western slope of the Sierra Nevada where many valley grasses were ripening and seeds could be harvested (Downs 1966:16).

The gathering year focused on the variety of plant foods available in the various environmental zones inhabited by the Washoe. Contrary to the fishing year, which facilitated the gathering of Washoe in one place, plant collection during the gathering year demanded the constant movement of relatively small family units. This was necessary to take advantage of various plants that occurred in relatively small quantities at widely dispersed locales that ripened at different rates and times and were only available for limited periods. As Downs (1966:19) describes

> The usefulness of plant foods depended on the ability of a family to take advantage of opportunities as they occurred. While some species of plants were widely distributed in the lowlands, they seldom were ripe at the same time. Grass seeds might be ready for harvest in one place while they were still green only a few miles away. Thus, to take advantage of the many plants, the Washo had to be almost continually on the move.

Toward the end of summer most Washoe on the west Sierra slopes would begin to drift back toward Lake Tahoe. Some family groups, however, would remain on the west slope and in the lower foothills where they would gather chokecherries and wild grass seeds and hunt deer while waiting for the acorn harvest (Downs 1966:19). Other family groups might participate in an annual acorn trek (d'Azevedo 1986:474). These groups would head west in the fall, obtain quantities of acorns, and carry them back over the crest of the Sierra to supplement their winter diet. Many acorn trek trails followed by the Washoe are subsequently used by Euroamericans as routes across the Sierra Nevada. For Washoe returning east, fall brought with it the culmination of the gathering year and the piñon harvest. Piñon provided the staple food for all Washoe, and if the harvest was good, winter starvation could be avoided (Downs 1966:21).

The piñon harvest also brought family units back together after being separated throughout the summer. The summer was a time of relatively constant movement for the Washoe, and by the beginning of fall they were anxious for a period of sedentism and social interaction. The size of the fall social gathering, however, was not nearly as large as those witnessed during spring and early summer fishing at Lake Tahoe. The size of the social grouping was smaller in the fall

because piñon groves were more widely dispersed and did not facilitate the aggregation of very large groups of Washoe. Regardless, piñon harvest time was a period of abundance. Food was plentiful, people were well fed and healthy, and there was time for ceremonial activity before larger family groups splintered into smaller units for the winter. For example, "Big Times" were held near piñon harvest spots, sometimes lasting for as long as two weeks (Downs 1966:24).

The hunting year began as soon as animals appeared in the spring; however, the main focus of hunting occurred in the late summer and lasted until the first snows of winter. Hunting was the exclusive domain of men, and required training and skill, as well as thorough knowledge of associated ritual and magic in order to achieve continued success (Downs 1966:26). Rabbits and deer were taken primarily in the fall, with groups of six to eight men traveling into California to hunt intensively for deer. Occasionally larger groups of Washoe would gather in the early fall and drive deer into the open by firing the brush. Antelope were also taken with the surround or corralling method, although less frequently due to their limited numbers within Washoe territory. Mountain sheep were taken even less frequently, and bear might be taken for food in times of extreme emergency, although bear hunting was more a ritual then an economic pursuit (Downs 1966:33). Many species of birds were also taken including waterfowl, quail, sage hens, prairie chickens, and doves. Bird hunting was more of an opportunistic rather than a planned activity. If large quantities of birds were locally available, Washoe would take advantage of their presence, but bird hunts were not scheduled (Downs 1966:34).

3.2.3 Technology and Material Culture

The technology and material culture of the Nisenan and Washoe are very similar, with only minor differences often resulting from the preference for locally available raw materials. This correspondence is not unexpected given the interaction of the three groups, including intermarriage (Beals 1933:366; Downs 1966:51), and the general similarity of their economic pursuits. This is not a complete compendium of the technology of these groups, but highlights similar elements that may be representative of adaptational strategies and are useful as ethnographic analogies in attempting to understand regional prehistory.

Nisenan built residential dwellings, ceremonial structures, semi-subterranean sweat lodges, and menstruating huts (Wilson and Towne 1978). The typical hill and mountain dwelling was the conical bark house made by overlapping three or four layers of bark with no interior support. A thatched house was used at lower elevations, consisting of a conical framework of poles that was covered by brush, grass, or tules. Semi-subterranean earth lodge roundhouses were also built by both groups and used for ceremonial gatherings, assemblies, local feasts, and for housing visitors (Beals 1933:344; Levy 1978:409).

The Washoe built two basic structures: the winter house (similar to typical Nisenan residential structures), which consisted of a conical framework of poles covered by overlapping slabs of cedar and/or other conifer bark, with a short covered doorway or vestibule; and the summer brush house which varied from a simple low enclosure resembling a windbreak to a completely covered, dome-shaped house (Barrett 1917:10-11). Washoe also constructed covered fishing platforms over streams that were often described as floating houses by observers (d'Azevedo 1986:473). Washoe also built sweat lodges and large earth-covered dance houses, similar to those of the Nisenan, but there is disagreement regarding whether or not these structures were regularly constructed prior to the historic period (d'Azevedo 1986:481).

Flaked and ground stone tools were common among the Nisenan and Washoe and included: knives; arrow and spear points; club heads; arrow straighteners; scrapers; rough cobble and shaped pestles; bedrock mortars; grinding stones (metates); pipes; charms (Barrett 1917; Beals 1933:340-341; Wilson and Towne 1978:391), and "short spears" (Beals 1933:341; Voegelin 1942:73;

Wilson and Towne 1982:11). Beals (1933:341) also notes that certain colored stone points were considered "lucky", and could be traded for four or five other projectile points. In addition, obsidian was highly valued and imported by all three groups. Nisenan informants stated that obsidian only came from a place to the north, outside of Nisenan territory (Littlejohn 1928:32). Littlejohn (1928:31) also notes that soapstone was used for (bowl?) mortars, although informants of Wilson and Towne (1978:391) claimed that neither they nor their ancestors made mortars. The two groups also made a variety of bone tools.

Wood was used for a variety of tools and weapons, including both simple and sinew-backed bows, arrow shafts and points, looped stirring sticks, flat-bladed mush paddles, pipes, and hide preparation tools. Cordage was made from plant material, and was used to construct fishing nets and braided and twined tumplines. Soaproot brushes were commonly used during grinding activities to collect meal and/or flour. Both Nisenan and Washoe engaged in fishing activities, but fishing formed a very large component of overall Washoe subsistence activity. Consequently, Washoe used an extensive assemblage of fishing-related implements and facilities including: spears; cordage lines with bone fishhooks; harpoons with detachable points; dams for stream diversion; nets of cordage and basketry; weirs; and an array of fish traps (d'Azevedo 1986:473). In addition, both groups made tule, lashed log, and bark rafts to acquire resources and facilitate travel (Wilson and Towne 1978; d'Azevedo 1986).

Specialized food processing and cooking techniques included: the grinding and leaching of ground acorn and buckeye meal; burning of *umbelliferae*, a plant with cabbage-like leaves, to obtain salt; and roasting various foods in earth ovens (Wilson and Towne 1978; d'Azevedo 1986). Both groups used the bedrock mortar and pestle (i.e., both rough cobble and shaped) to grind acorns, pine nuts, seeds and other plant foods, and meat. A soaproot brush was used to sweep "meal" into mortar cups and collect flour. Fist-sized, heated stones were used to cook and/or warm "liquid-based" foods such as acorn gruel and pine nut meal. Whole acorns were stored in granaries and pine nuts were stored in large brush and pine bough covered caches.

Many wild plants may also have been "managed", primarily by controlled burning which removed underbrush and encouraged growth of edible grasses, seed producing plants, and other useful plant resources (e.g., basketry materials) (Blackburn and Anderson 1993). The use of fire for environmental modification and as an aid in hunting is frequently mentioned in the ethnographic literature relating to the Nisenan and Washoe. Littlejohn (1928:5-6) notes that the lower foothills in the valley oak zone were thickly covered with herbaceous vegetation that was annually burned by the Nisenan to remove and limit its growth while facilitating the growth of oaks, and the harvest of acorns. The annual fires destroyed seedlings, but did not harm established oak trees. Beals (1933:363) also notes that the Nisenan regularly burned the land, primarily for the purpose of driving game, and consequently created much more open stands of timber than currently exist in the area. Beals (1933:363) informants state that before their traditional burning regimes were halted by Euroamericans, "it was often a mile or more between trees on the ridges. Nisenan patterns of annual burning removed underbrush, improved travel conditions, enhanced hunting conditions, and encouraged the growth of eatable grasses, herbs, and other useful plants (e.g., basketry materials) (Kroeber 1925:396). In addition, burning may also have improved areas of deer forage, potentially altering migratory patterns of deer populations by lessening their need to seek fresh forage on a seasonal basis (Matson 1972).

Washoe primarily used brush and grass fires to drive insects into ditches where they could be easily gathered (Downs 1966:35), and also to drive deer toward hunters (d'Azevedo 1986:478). It appears that Washoe only used fire to facilitate the exploitation of particular prey species and not to improve plant reproduction. The constant summer movement of groups of Washoe probably was not conducive to manipulation of their environment by the use of fire.

Clothing of the Nisenan and Washoe was similar (Wilson and Towne 1978; d'Azevedo 1986). Men commonly wore breechclouts of deerskin or other prepared hide, and women wore aprons or dresses made of skin. Nisenan women reportedly wore aprons made of shredded maple or willow bark, tule, or wire grass (Wilson and Towne 1978:390). Washoe wore leggings made of skins, and occasionally moccasins made of untanned deer hide with a lining of sage bark, during the winter (d'Azevedo 1986:481). Rabbit skin blankets or robes were also commonly worn by members of both groups during cold weather. Each rabbit skin robe required at least 30 to 40 rabbit skins that were cut into strips and then woven together. Other skins used for robes and capes included bear, mountain lion, deer, and coyote. All three groups used snowshoes made of circular loops of willow or redbud with sinew crosspieces to facilitate resource exploitation or travel during the winter. Personal ornaments included stone, shell, bone, pine nut and seed beads, and shell ornaments and beads that were obtained through trade with neighboring groups to the west.

Nisenan and Washoe used baskets for a variety of tasks, including storage, cooking, serving and processing foods, burden baskets, traps, cradles, hats, cages, seed beaters, and winnowing trays. Basket manufacturing techniques included both twining and coiling, and baskets were decorated with a variety of materials and designs. Other woven artifacts include tule matting and netting made of milkweed, sage fibers, or wild hemp.

3.2.4 Intergroup Relations

Nisenan and Washoe peoples frequently interacted as trading partners, at ceremonial gatherings, and in armed conflict primarily due to perceived territorial encroachment. In fact, the ethnographic literature, particularly in reference to the Nisenan, reports rather regular hostilities between Hill and Valley Nisenan and Nisenan and Washoe (cf., Littlejohn 1928:13, 18, 24, 48; Beals 1933:367). Most interactions between the two groups, however, appear to have been civil and friendly in nature. For example, Beals (1933:366) states that Nisenan and Washoe along the South Fork of the American River frequently interacted and often met for "Big Times" near Kyburz and Myers Station.

Both Beals (1933) and Littlejohn (1928) state that the Nisenan did not travel extensively beyond their village, usually not going beyond 25 miles in any direction from their place of birth. Regardless, groups of men seem to have traveled more extensively to both trade and fish (Wilson and Towne 1978:388). Washoe, however, did travel over the Sierra Nevada (e.g., to Nisenan and Miwok territory) during the summer, and often wintered on the west side of the Sierra Nevada. This scenario is not surprising considering the extreme mobility of the Washoe during their seasonal subsistence "round". In fact, Downs (1966:37) states that Washoe often made long trading trips to the Pacific Coast and San Diego to obtain shellfish and particularly fine obsidian knives.

3.2.5 Euroamerican Contact

Spanish exploration of the Central Valley did not begin until the late 1700s, and the eastern edges of the Central Valley and the Sierra Nevada were not explored until the early 1800s. In 1808 Gabriel Moraga explored the Mokelumne, Cosumnes, and American Rivers, passing near modern day Folsom (Beck and Haase 1974). Subsequent exploration of the general project area is credited to mountain men such as Jedediah Smith who crossed the Sierra Nevada into California in 1826 (Beck and Haase 1974). Smith traveled along the American, Sacramento, and Cosumnes Rivers, and also probably passed through current Pleasant Valley (Brooks 1977). Other explorers such as Ewing Young, Joseph Walker, John Fremont, and Christopher "Kit" Carson soon followed Smith. Indeed, in 1844 Fremont crossed the Sierra Nevada near Lake Tahoe and descended the west slope in proximity to the American River, which he eventually followed to Sutter's Fort. Many of the trails, however, used by these early explorers and

subsequent immigrants were not newly discovered routes, but rather Native American trails that were already in use.

Early explorations of the Sierra Nevada and its flanks were soon followed by groups of Euroamerican immigrants moving west. The first of these immigrant groups was the Bartleson-Bidwell party that crossed the Sierra Nevada in 1841 and followed the Stanislaus River into the Central Valley (Beck and Haase 1974). The Joseph Chiles and Joseph Walker parties followed the crossing of the Sierra Nevada by the Bartleson-Bidwell party in 1843 (Beck and Haase 1974). Chiles crossed the Sierra Nevada following the Malheur and Pit Rivers into the Central Valley, and then traveled south along the Sacramento River. Walker, on the contrary, traveled south along the eastern front of the Sierra Nevada to Walker Lake where he crossed into Owens Valley, and eventually the Central Valley using what is now known as Walker's Pass. Subsequently, in 1844 the Stevens-Murphy party crossed the Sierra Nevada and probably is the first immigrant group to enter California via the Truckee and Bear Rivers. The route followed by this group became known as the California Trail, and developed into a popular trail into California during the Gold Rush. The successful crossing of the mountains by the Stevens-Murphy party, however, was followed by the 1846 disaster of the Donner Party.

The Mexican-American War, which began in 1846, also affected the exploration of the project area, including the identification of new trails across the Sierra Nevada. The exploits of the Mormon Battalion and the establishment of the Mormon Emigrant Trail (MET) highlight these activities. After serving in the Mexican-American War, members of the Mormon Battalion worked at both Sutter's Fort and Coloma. The Mormons, however, in 1848 decided to return to Salt Lake City following a route through current Pleasant Valley, Sly Park and Jenkinson Lake, Leek Springs, Carson Pass, and Hope Valley (Owens 1990). This route eventually became known as the Carson Wagon Road, and provided an alternative trail across the Sierra Nevada to the California Trail along the Truckee River. This route, however, was not popular until the onset of the Gold Rush.

The discovery of gold at Sutter's Mill in Coloma in 1848 caused a dramatic alteration of cultural and economic patterns in California. The latter half of the nineteenth century witnessed an ongoing and growing immigration of Anglo-Americans into the area who were attempting to "strike it rich" in the goldfields of the north-central Sierra Nevada. Some "argonauts" arrived by ship in San Francisco, while others came over the Sierra Nevada. Early arrivals to the gold fields began prospecting in the more accessible placer deposits. Recovery of gold from these deposits required only simple tools and techniques (e.g., panning). In the 1850s, as these relatively easily accessed gold deposits became scarce and more miners entered the area, gold extraction techniques became more complicated and intensive. For example, sluiceboxes, flumes, dams, and eventually hydraulic operations soon became standard facilities for placer mining. As gold deposits continued to dwindle, drift mining, requiring tunneling to reach gold deposits, became a widespread extraction technique. Finally, hard rock mining, the use of explosives, and the use of stamp mills and arrastras to extract gold from quartz were employed. Many of these mining techniques, particularly hydraulic mining, required the use of large quantities of water. Consequently, extensive water diversion systems including dams and miles of ditches were constructed to supply the water necessary to "wash out" huge amounts of gravel. Eventually this activity polluted and/or clogged many waterways in the foothills and Central Valley, leading to the banning of hydraulic mining in 1884.

Gold mining attracted people to the Sierra Nevada, and also opened the region to new business enterprises and occupations. The growth of many of these businesses and occupations is directly related to mining. For example, miners generated a need for a wide variety of supplies and services. Some of the most successful people in the region were not miners, but

rather businessmen who supplied the miners. Discouraged miners who were not very successful in the gold fields established many of these businesses. Consequently, new businesses and occupations, including logging, farming, dairying, and ranching were established in the region, and continue today.

Logging in particular became a viable industry in the region soon after the establishment of mining operations (Supernowicz 1983). Logging operations supplied miners and businessmen with wood for houses, stores, mining operations, and fuel. Farming, dairying, and ranching supplied food to local populations and also provided another familiar occupational outlet for discouraged miners. Many immigrants to the area originally abandoned these occupations to come to California to prospect for gold, and consequently it was a relatively smooth transition for these individuals to return to these occupations if they were not successful gold miners. By the 1860s agriculture, including the introduction of new crops, and logging dramatically affected and modified the landscape of the foothills of the Sierra Nevada. In fact, by the 1870s, grazing of both sheep and cattle was one of the largest industries in Placer and El Dorado Counties, and by the 1880s commercial fruit orchards covered a large expanse of the foothills in the region (Supernowicz 1983). Both mining and agriculture placed water at a premium. Water companies were established to construct dams, reservoirs, and ditch systems to both satisfy and profit from the demand for water. In many areas across the foothills of the Sierra Nevada these water conveyance systems, such as the Combie Ophir Canal, are still in use as part of local water supply systems.

The establishment and the history of the City of Auburn is related to the discovery of gold in California. Auburn became one of the earliest mining camps in California, and was originally known as Woods Dry Diggings. This name was changed to Auburn in 1849 by a group of miners who came to the area from Auburn, New York. In 1850 Auburn became the county seat of Sutter County and a year later it became the county seat of newly established Placer County. During the 1860s and 1870s Auburn continued to grow, primarily because it served as a supply center for mining camps and a hub for regional transportation. Agriculture and ranching eventually replaced mining in the local and regional economy. In the last half of the 20th century, Auburn continued to grow, and the development of the Timberline at Auburn Project is a direct result of the continued population growth and economic vitality of Auburn and the surrounding area.

4.0 RESULTS OF ARCHAEOLOGICAL AND HISTORICAL INVESTIGATIONS

Archaeological and historical investigations for the Timberline at Auburn Project are complete. These investigations included: a record search at the North Central Information Center at California State University, Sacramento; archival research; a sacred lands search conducted by the Native American Heritage Commission; consultation with the Native American community; pedestrian surface survey within the project APE; and excavation at sites CA-PLA-296 and CA-PLA-963-H (P-31-1171). Archaeological and historical investigations identified three previously recorded sites, CA-PLA-296 (P-31-422), CA-PLA-1368-H (P-31-1748), and CA-PLA-963-H (P-31-1171). These sites are documented using appropriate Department of Parks and Recreation site record forms (Appendix A, Site Records). All three sites will be affected by construction of the Project. Therefore, the eligibility of these sites for inclusion in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) will be determined using the appropriate criteria and with regard to their historic context.

4.1 SITE CHARACTERIZATION and ELIGIBILITY for the NRHP and CRHR

The Code of Federal Regulations (CFR) Title 36 Part 60.4 [a-d] presents criteria for determining the significance and eligibility of prehistoric and historic sites for inclusion in the National Register of Historic Places (NRHP). The significance and eligibility for inclusion in the NRHP of the sites located within project boundaries will be considered following those criteria and in relation to appropriate historic themes. The criteria at 36 CFR Part 60.4 [a-d] include the following:

> The quality of significance in American history, architecture, archaeology, culture, and engineering 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; or
> b. that are associated with the lives of persons significant in our past; or
> c. that embody the distinct 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.

Similarly, CEQA presents guidelines at §15064.5 and §21083.2 for the identification of historical resources and determining their historical significance. Section 15064.5(a)(3) presents the following criteria for determining the eligibility of prehistoric and historic sites for inclusion in the CRHR:

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 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
4. Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA also presents criteria at §21083.2(g) for the identification of unique archaeological resources. These criteria include:

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

In addition to the eligibility criteria at CEQA §15064.5(a)(3), the California Code of Regulations (CCR), Title 14, Division 3, Chapter 11.5 § 4852 (c) also states that integrity of historical resources should be considered when addressing their eligibility for inclusion in the CRHR. This section of the CCR describes integrity as the

> ...authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must...retain enough of their historic character to be recognizable as historical resources and to convey the reasons for their significance.
>
> Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

4.1.1 CA-PLA-1368-H

The site consists of cement foundations from demolished buildings and structures (Appendix A, Site Records). The buildings and structures were demolished in the 1980s and nearly all the building debris has been removed. Indeed, there are minimal remnants of the former buildings and structures on the site. It also appears that the area has been graded. Regardless, three 50 centimeter (cm) x 50 cm shovel probes were excavated within site boundaries to identify any subsurface deposits of cultural material at the site. The shovel probes were excavated to a depth of 50 cm and did not uncover any diagnostic artifacts, but rather uncovered miscellaneous debris from demolition of the buildings and structures formerly located at the site.

Research did not identify the date of the construction of the foundations, and could not associate it with significant events in national, state, and local history. Therefore, site CA-PLA-1368-H does not appear to meet eligibility Criterion a for inclusion in the NRHP or Criterion 1 for inclusion in the CRHR.

Research did not identify the date of the construction of the foundations, and could not associate it with the lives of individuals significant in national, state, or local history. Therefore, site CA-PLA-1368-H does not appear to meet eligibility Criterion b for inclusion in the NRHP or Criterion 2 for inclusion in the CRHR.

Current survey of the site only identified cement foundations. There are no standing buildings/structures associated with the foundations at the site. Therefore, site CA-PLA-1368-H does not appear to meet eligibility Criterion c for inclusion in the NRHP or Criterion 3 for inclusion in the CRHR.

Current and previous research and site recording documented site CA-PLA-1368-H, and it is unlikely that additional research regarding the site would yield any information important in history. Therefore, the site CA-PLA-1368-H does not appear to meet eligibility Criterion d for inclusion in the NRHP or Criterion 4 for inclusion in the CRHR.

In summary, site CA-PLA-1368-H within the Project APE does not appear to meet any of the criteria for inclusion in either the NRHP or the CRHR. The site is adequately recorded and does not require any additional historical investigation.

4.1.2 Site CA-PLA-963-H, Combie Ophir Canal

The Combie Ophir Canal is part of the active water supply system operated by the Nevada Irrigation District (NID) (Appendix A, Site Records). The NID was formed in 1921, and it currently services an area extending from Nevada City to Lincoln. The Combie Ophir Canal begins at Lake Combie, passes through Auburn, and continues further to the west and north toward Lincoln. The development of the NID and the Combie Ophir Canal is related to the history of gold mining, construction of water ditches, growth of water companies, and agriculture in the region. The ditch system has been updated and maintained over time, which has affected its integrity of design and workmanship. In addition, development in the area serviced by NID has affected the integrity of setting, feeling, and association of the ditch system. Currently, the Combie Ophir Canal only carries water for irrigation purposes. Implementation of the Project will not affect operation of the ditch or operations of NID.

Research did not identify a specific date of the construction for the ditch segment in the Project APE, but its construction is associated with significant events in national, state, and local history (i.e., gold mining, growth of water companies, and regional agricultural development). Therefore, the segment of site CA-PLA-963-H in the Project APE appears to meet eligibility Criterion a for inclusion in the NRHP and Criterion 1 for inclusion in the CRHR.

Research did not identify a specific date of the construction for the ditch segment in the Project APE, and could not associate it with the lives of individuals significant in national, state, or local history. Therefore, the segment of site CA-PLA-963-H in the Project APE does not appear to meet eligibility Criterion b for inclusion in the NRHP or Criterion 2 for inclusion in the CRHR.

Current survey of the ditch segment in the Project APE confirmed its description in the previous site record. The site is a narrow and shallow earthen ditch that is not associated with any features. Indeed, the ditch segment is well maintained and is accessed by a graded dirt road that runs parallel to the ditch segment. There are no structures or features associated with the ditch segment. Therefore, the segment of site CA-PLA-963-H in the Project APE does not appear to meet eligibility Criterion c for inclusion in the NRHP or Criterion 3 for inclusion in the CRHR.

Current and previous research and site recording documented the segment of site CA-PLA-1368-H in the Project APE, and it is unlikely that additional research regarding the ditch segment would yield any information important in history. Therefore, the segment of site CA-PLA-1368-H in the Project APE does not appear to meet eligibility Criterion d for inclusion in the NRHP or Criterion 4 for inclusion in the CRHR.

In summary, the segment of site CA-PLA-963-H within the Project APE appears to meet Criterion a for inclusion in the NRHP and Criterion 1 for inclusion in the CRHR. The ditch segment, however, is well maintained and appears to have been modified over time to facilitate its continued use and lacks integrity of design, workmanship, setting, feeling, and association. In addition, the ditch will not be affected by implementation of the Project. Therefore, the segment of site CA-PLA-963-H within the Project APE lacks integrity and does not meet the criteria for inclusion in either the NRHP or the CRHR. Supernowicz (1993) also determined that the ditch segment did not meet the criteria for inclusion in the CRHR (see Appendix A, Site Records). The site is adequately recorded and does not require any additional historical investigation.

4.1.3 CA-PLA-296

The site was originally recorded by Peak (1979) and subsequently by Supernowicz (1993) (Appendix A, Site Records). Peak (1979) identified a "light" lithic scatter, bedrock mortars, house pits, and a rock shelter at the site. Supernowicz (1993) identified a sparse lithic scatter and bedrock mortars at the site. He identified the area of the site previously recorded by Peak as

Locus A and another area approximately 0.2 miles from Locus A as Locus B. Locus B consisted of three flakes. Supernowicz included Locus B with site CA-PLA-296 because he identified flakes between Locus A and Locus B. Supernowicz did not relocate any house pits at Locus A and determined that the rock feature described by Peak as a rock shelter is not associated with Native American occupation and use of the area.

Current research at site CA-PLA-296 included a review of previous site records, pedestrian surface survey of the site and the area immediately surrounding it, and excavation of shovel probes. Pedestrian surface survey of site CA-PLA-296 and the area immediately surrounding it identified a sparse lithic scatter (i.e., 1-2 flakes per square meter) that primarily consists of secondary basalt and chert flakes, five bedrock milling stations identified as Features A-E, and the rock feature identified by Peak (1979) as a rock shelter. Surface survey did not identify any evidence of house pits at Locus A, any evidence of flakes or flaking activity at Locus B, or any evidence of flakes between Locus A and Locus B. The bedrock milling features include: Feature A, which consists of six well-defined mortars on a low bedrock outcrop; Feature B, which consists of thirteen well-defined mortars on a low bedrock outcrop; Feature C, which consists of a possible mortar on a small boulder adjacent to Feature B; Feature D, which consists of a well-defined mortar on a large boulder northeast of Feature B; and Feature E, which consists of a well-defined mortar and two possible mortars that are very poorly defined. The rock feature is not a rock shelter, but rather a large rock with an indented base (Appendix A, Site Record). The indented base of the rock is relatively small and there is no evidence that the rock was used as a shelter or any other purpose associated with Native American occupation or use of the area.

Excavation of twenty shovel probes within boundaries of the site recovered 29 flakes primarily from 0-20 cm in depth and determined that the cultural deposit and soils are relatively shallow at the site (Figure 3 and Table 1). Indeed, most of the shovel probes could not be excavated beyond a depth of 30-40 cm because of rocks or very rocky soils. The strategy for excavation of the shovel probes followed the *California Archaeological Resource Identification and Data Acquisition Program: Lithic Scatters* (CARIDAP) and a similar CARIDAP approach used by the Eldorado National Forest (ENF) and approved by the Office of Historic Preservation (OHP) for combination lithic scatters/milling features and isolated milling sites (cf., Jackson et al. 1994: Unit I, Volume A). The CARIDAP program for lithic scatters and for combination lithic scatters/milling features uses site area to determine the number of shovel probes that must be excavated to comply with the CARIDAP. The area of CA-PLA-296 is approximately 7,000 square meters, which includes the southwestern end of the site away from the area of the lithic scatter and the reported location of house pits. The CARIPAD for lithic scatters requires excavation of a minimum of eight shovel probes for a site of this size. The CARIDAP for combination lithic scatters/milling features requires excavation of a minimum of fourteen shovel probes for a site of this size. The strategy for excavation at CA-PLA-296 incorporated the elements of all three CARIDAP approaches.

Site CA-PLA-296 does not strictly comply with requirements for use of a CARIDAP, but the excavation strategy was designed to follow CARIDAP guidelines to facilitate determining the eligibility of the site for inclusion in the NRHP. Consequently, twenty 50cm x 50cm shovel probes were excavated at the location of the lithic scatter, reported location of house pits, and other areas of the site to identify and recover the data potential of the site (Figure 3 and Table 1). Seventeen shovel probes were excavated at the northwest end of site CA-PLA-296 to identify the presence/absence and nature of any subsurface deposits of artifacts in the area of the site with the highest archaeological sensitivity. Three shovel probes were excavated at the southeast end of the site near Features B-E. The shovel probes were excavated until rocks prevented further excavation, there was a lack of artifacts, or a lack of evidence to suggest the presence of a cultural deposit. Excavation of shovel probes at the southeast end of the site was

limited because site boundaries were primarily extended toward the southeast to include Features B-E, no artifacts were identified in this area during previous or current surface survey of the site, and current excavations did not identify any artifacts or evidence to suggest that subsurface deposits of cultural material are present in this area.

Shovel probes were excavated in the most sensitive areas of the site (i.e., the location of a lithic scatter and reported location of house pits) and near Features B-E. A total of 1.90 cubic meters of soil was excavated and all excavated soils were passed through ¼ inch wire mesh screen. Excavation of the shovel probes did not identify soils typical of habitation sites and only recovered a total of 29 primarily secondary flakes. All but three of the flakes were recovered from 0-20 cm in depth and 41% or 12 of the total number of flakes were recovered from two shovel probes (Table 1). Shovel probes in proximity to these two probes did not yield any artifacts or only 1-2 flakes. Excavation of the shovel probes did not identify any areas that would suggest the presence of an activity area or an area with a significant concentration of artifacts. None of the artifacts were collected.

The results of the excavation of the shovel probes indicate that a significant subsurface component is not associated with site CA-PLA-296. Indeed, several shovel probes were abandoned at relatively shallow depths because of encountering rocks or rocky soils. The site consists of shallow soils and it is highly unlikely that there are any significant, intact deeply buried deposits of cultural material associated with the site. Site CA-PLA-296 does not contain any unique features and excavation did not yield any unique or diagnostic artifacts. The site appears to represent seasonal use of the area for acorn processing. Similar sites consisting of lithic scatters and bedrock milling features are relatively common across the foothills of the north-central Sierra Nevada. Therefore, site CA-PLA-296 does not appear to possess the potential to yield any additional information important in regional or local prehistory.

Site CA-PLA-296 does not meet eligibility criteria a-c for inclusion in the NRHP or criteria 1-3 for inclusion in the CRHR. The excavation of shovel probes at the site did not identify a significant subsurface component or diagnostic artifacts and did not identify any potential for significant buried deposits at the site. Excavation of the shovel probes appears to have exhausted the data potential of the site and it does not appear to possess the potential to yield additional information important in regional or local prehistory. In addition, bedrock milling sites and lithic scatters are associated with both prehistoric and historic Native American occupation of the area, but without diagnostic artifacts it is not possible to associate site CA-PLA-296 with a particular time period or Native American group. Therefore, the site does not appear to possess the potential to yield any additional information in regional or local prehistory and does not appear eligible for inclusion in the NRHP or CRHR.

In summary, site CA-PLA-296 is not associated with any unique features or diagnostic artifacts and the excavation of shovel probes at the site did not identify a significant subsurface deposit or the potential for deeply buried deposits. This type of site (i.e., a site consisting of a sparse lithic scatter and bedrock milling features) is relatively numerous and widely distributed in the foothills of the north-central Sierra Nevada. Site CA-PLA-296 does not appear to possess the potential to yield any information important in regional or local prehistory. In addition, the integrity of setting, feeling, and association of the site is compromised by construction of private residences surrounding the site and its use for recreational purposes (e.g., hiking and off-road vehicle use). Indeed, Supernowicz (1993) describes the impacts to the site as "vandalism" and a regularly used trail passes through the site and over Feature B. Therefore, site CA-PLA-296 does not appear to meet eligibility Criterion d for inclusion in the NRHP or Criterion 4 for inclusion in the CRHR.

4.2 SITE MANAGEMENT RECOMMENDATIONS

Sites CA-PLA-963-H, CA-PLA-1368-H, and CA-PLA-296 are adequately recorded and do not appear eligible for inclusion in the NRHP and CRHR. No additional archaeological or historical investigations are necessary for these sites and they do not require any special mitigation measures prior to or during implementation of the Project. Sites CA-PLA-963-H lacks integrity and does not appear to possess the ability to yield any additional information important in regional or local history. The site does not appear eligible for inclusion in the NRHP and CRHR. Site CA-PLA-1368-H is adequately recorded and survey and excavations at the site did not identify a significant subsurface deposit or any diagnostic artifacts. The site does not appear to possess the ability to yield any additional information important in regional or local history and does not appear eligible for inclusion in the NRHP and CRHR. Site CA-PLA-296 is adequately recorded and survey and excavations at the site did not identify a significant subsurface deposit or any diagnostic artifacts. The excavation of shovel probes at the site appears to have exhausted its data potential. The site does not appear to possess the ability to yield any additional information important in regional or local prehistory and does not appear eligible for inclusion in the NRHP and CRHR. Regardless of this determination, Western Care Construction Company is respectful of Native American heritage represented by site CA-PLA-296 and is concerned about the protection and preservation of Native American sites. Consequently, Western Care Construction Company will attempt, to the extent feasible, to preserve areas of the site and its features and consider interpretive opportunities related to the site and its features. Western Care Construction Company also plans to have an inadvertent discovery plan in place for the Project prior to any ground disturbing Project activities and will consider monitoring of ground disturbing activities within site boundaries if requested by the Native American community.

Archaeological and historical investigations for the Project are complete and adequate for Project needs. Regardless of the findings of the archaeological and historical resources investigations, it is always possible to inadvertently uncover cultural resources (e.g., prehistoric sites, historic sites, historic buildings, and isolated artifacts) during ground disturbing Project activity. Therefore, if any cultural resources are uncovered during ground disturbing Project activity all activity shall cease in proximity to the discovery and a qualified archaeologist shall be retained to determine the significance of the discovery. Similarly, if any human remains are uncovered during Project implementation all activity shall cease in proximity to the discovery and the County Coroner shall be contacted following Health and Human Safety Code 7050.5. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and follow the procedures outlined in the CEQA Guidelines §15064.5(e).