Phase I Cultural Resources Assessment Project, Parcel Map 11985, San Antonio Heights, San Bernardino County, California

(Township 1 North, Range 7 West, Section 19, Mount Baldy, California, 1995, 7.5' USGS Quadrangle)

Prepared for:

Atabak Youssefzadeh &
Wruir Arabian
San Antonio Heights Project
1401 Westwood Boulevard, Suite 320
Los Angeles, California 90024

Prepared by:

Dr. Alan P. Garfinkel Gold, RPA #989105
Cultural Resources Consultant
2800 San Pablo Avenue
Bakersfield, California
93306

Type of Study: Phase 1 Cultural Resources Assessment, San Bernardino County,

May 16, 2021

TABLE OF CONTENTS

EXECUTIVE SUMMARY……3

INTRODUCTION……...5

NATURAL SETTING……6

CULTURAL SETTING……...6

Prehistory……....….6

Cultural Sequence……....……....8

Ethnography……...…18

History……26

PERSONNEL……29

METHODS…….……...30

Research …….…….30

Field Survey……...……...…30

RESULTS……..30

Native American Consultation ……..30

Cultural Resources Records Search …..……....31

Field Survey ...…….…….……...…..38

Shovel-test Pits……...……38

CONCLUSION AND CULTURAL RESOURCES RECOMMENDATIONS……39

REFERENCES.……41

Appendix A- Figures / Photographs (Project Map - Area Surveyed, Project Overviews, and Shovel Test Pits)

Appendix B- Native American Consultations

Appendix C- Resume

EXECUTIVE SUMMARY

Dr. Alan Garfinkel Gold, RPA 989105 was contracted by Atabak Youssefzadeh, Project Architect, to conduct a Phase 1 Cultural Resources Assessment for a Parcel Map Project in San Antonio Heights, California (**Appendix C: Resume**). The Project involves the subdivision of a 7.01 acre site and the establishment of four independent parcels of about the same size (1.72-1.79 acres). The Project when mapped appears within Township 1 North, Range 7 West, Section 19, as depicted on the 1996 Mount Baldy, California, 7.5' United States Geological Survey Topographic Map (**Figure 1**).

The Project is further located along the southeastern border of the San Bernardino National Forest and is near the confluence of West 26th Street and Holly Drive (**Figures 2 and 3**). The study was performed pursuant to the California Environmental Quality Act (CEQA) and is an approval requirement. A cultural resources records search, pedestrian field survey, shovel test pits, and Native American consultation and coordination were all elements of this project and were included within the Scope of Work.

Native American individuals and tribal groups were contacted for their input. These communications and the results of the outreach program are provided in **Appendix B**. Field survey investigations were initially conducted on September 7, 2020 by Ryan Gerstner, B.S. and were supervised by Alan Garfinkel Gold, Ph.D., Registered Professional Archaeologist (RPA # 989105). Two shovel test pits (STPs) were excavated in two areas within the proposed project footprint - selecting areas with high potential for subsurface cultural materials. Both probes were negative for subsurface midden or artifacts **(Figures 4 and 5)**.

A cultural resources record search was conducted by the South Central Coastal Information Center (SCCIC) and received on October 6, 2020. The archival records search included a one-mile buffer and incorporates the Project area itself. Within this search area there were nine prior cultural resources surveys and excavation reports. Also, a total of 11 cultural resources sites had been previously documented within the Project area itself and within its one-mile buffer.

The Native American Heritage Commission (NAHC) was contacted regarding the Project and a Sacred Lands File Search was completed. That research yielded negative results for Sacred Sites. The NAHC provided a list of potentially interested and affiliated Native American individuals and groups. All 15 of these parties, identified by the NAHC, were contacted for further information and potential concerns regarding cultural resources within the project area (**Appendix B**). This effort was completed during the Covid-19 pandemic and many Native American Tribal offices were closed or their staff was sheltered in place and working offsite from their homes. Native American consultation, coordination, and outreach indicated that the area is culturally sensitive and the Gabrielino/Tongva San Gabriel Band of Mission Indians were especially concerned about this area. They requested participation in consultation regarding the Project and also requested that a Native American Monitor be retained.

No cultural resources were identified during the pedestrian survey. Further, no buried cultural materials or anthropic soils were identified in the subsurface probes. Therefore, we recommend cultural resources compliance approval under the provisions of CEQA.

If cultural resources are identified during construction activities, a qualified archaeologist must be contacted to assess the nature and significance of the find. Construction activities shall be diverted until the significance of the find is assessed. If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.

The County Coroner must be notified immediately when human remains are discovered. If the remains are determined to be prehistoric or protohistoric human remains of Native American origin, the Coroner will notify the NAHC. The NAHC shall determine and identify a Most Likely Descendant (MLD) and this individual or group will consult with the Project Cultural Resources Manager and recommend the manner of treatment and disposition for any human remains and associated offerings.

INTRODUCTION

Dr. Alan Garfinkel Gold, RPA 989105 was contracted by Atabak Youssefzadeh, Project Architect, to conduct a Phase 1 Cultural Resources Assessment for a Parcel Map Project in San Antonio Heights, California (**Appendix C: Resume**). The Project involves the subdivision of a 7.01 acre site and the establishment of four independent parcels of about the same size (1.72-1.79 acres). The Project when mapped appears within Township 1 North, Range 7 West, Section 19, as depicted on the 1996 Mount Baldy, California, 7.5' United States Geological Survey Topographic Map (**Figure 1**).

This study was performed pursuant to requirements and protocols of the California Environmental Quality Act. (CEQA).

Regulatory Context

The California Environmental Quality Act (CEQA) requires consideration of project impacts on archaeological or historical sites deemed to be "historical resources." Under CEQA, a substantial adverse change in the significant qualities of a historical resource is considered a significant effect on the environment. For the purposes of CEQA, a "historical resource" is a resource listed, or determined to be eligible for listing, in the California Register of Historical Resources [Title 14 CCR §15064.5(a)(1)-(3)]. Historical resources may include, but are not limited to, "any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" [PRC §5020.1(j)].

The eligibility criteria for the California Register are the definitive characteristics for assessing the significance of historical resources for purposes of CEQA (California State Office of Historic Preservation). Generally, a resource is considered "historically significant" if it meets one or more of the following criteria for listing on the California Register:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
(2) Is associated with the lives of persons important in our past.
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
(4) Has yielded, or may be likely to yield, information important in prehistory or history (PRC §5024.1(c)).

NATURAL SETTING

The project area lies in a portion of the Transverse Ranges and south of the southernmost portion of the San Joaquin Valley. The project is also located very near the margins of the Mojave Desert.

Transverse Ranges

Within California, the orientation of most of its mountain ranges is a north-south direction. Only within the geomorphic province known as the Transverse Ranges are the mountain chains decidedly east-west. These mountains run for 500 kilometers and separate central from southern California. The Transverse Ranges connect the Coast Ranges and Sierra Nevada to the north. They also terminate on the border of the Mojave Desert on the north and east. They are contiguous with the Peninsular Ranges and the Salton Trough on the south.

The Transverse Ranges include the Santa Ynez, Santa Monica, San Gabriel, San Bernardino, Eagle, and Orocopia mountains - just to identify a few. The mountain chain extends westward into the sea and exists as the nearly submerged San Miguel, Santa Rosa, and Santa Cruz – Channel Islands. These mountains are intensely folded and faulted Cenozoic sediments. Extensive erosion has rendered deep valleys with high narrow ridges and peaks. In its western portion the mountains crest at 1000 to 2000 meters high. On the eastern margins ridges ascend to 2500 meters or even higher. San Antonio Peak in the San Gabriel Mountains looms at 3072 meters. The summit of San Gorgonio reaches 3500 meters. The latter being the highest prominence in southern California. Streams are modest, yet heavy rainstorms can change these minor drainages into raging rivers for several days or even a few weeks.

The dominant flora of the Transverse ranges include coastal sage scrub, oak woodland and savanna, with pinyon-juniper woodland at lower elevations, and yellow pine forest, Lodgepole Pine, and subalpine forest at higher elevations. The Angeles and Los Padres National Forests cover portions of the ranges. The ranges are part of the California chaparral and woodlands ecological region, but its eastern points touch two desert regions, the Mojave Desert and the Colorado Desert provinces of the Sonoran Desert

Native animals in the region include three large mammals, black bear (*Ursus americanus)*) mule deer (*Odocoileus hemionus*), and bighorn sheep (*Ovis canadensis*) and also a variety of smaller animals and indigenous birds.

Mojave Desert

The Mojave Desert incorporates an immense area of eastern California covering 31,000 square miles. This northern desert interfaces with the Sonoran Desert to the south and the Yuma Desert to the southeast. It is separated from the Great Basin along the Garlock Fault that traverses the base of the El Paso Mountains. Throughout the Mojave Desert there exists numerous broad playas or dry lake beds that drain internally. These playas can become shallow ephemeral lakes when occasional heavy rains fall. However, in general, the Mojave Desert is a water impoverished region with only four to 13 inches of rain annually. In Death Valley, in certain years, virtually no

measurable rainfall appears (less than one inch of precipitation annually). Temperatures vary greatly in the Mojave Desert, but summers can be exceedingly hot - with the highest ground temperature ever recorded on earth posted for Death Valley at 130 degrees Fahrenheit. However, night-time temperatures drop dramatically, and snow fall occurs regularly at higher elevations.

The Mojave Desert characteristically exhibits large land areas containing grey-green shrubs of creosote bush (*Larrea tridentata*). Other areas exhibiting alkaline soils containing expressions of saltbush (*Atriplex* spp.). Plant species present in the general vicinity of the Project include juniper (*Juniperus californica*), annual bursage (*Ambrosia acanthicarpa),* Nevada joint fir (*Ephedra nevadensis*), bladder sage (*Scutellaria mexicana*), rabbitbrush (*Ericameria nauseosa*), and Joshua tree (*Yucca brevifolia*). Other plants noted in the general area include schismus (*Schismus barbatus*), cholla (*Cylindropuntia echinocarpa),* bunchgrass (*Phleum pratense*), white bursage (*Ambrosia dumosa),* California buckwheat (*Ambrosia dumosa),* Great Basin sagebrush (*Artemisia tridentata*), willow (*Salix* spp.), California poppy (*Eschscholzia californica*), mariposa lily (*Calachortus* spp.), Scotch broom (*Cistus scoparius*), brome grasses *(Bromus* sp.), and Fremont's cottonwood *(Populus fremontii)* .

Typical Mojave Desert fauna includes bighorn sheep (*Ovis canadensis*), mule deer (*Odocoileus hemionus*), jackrabbit (*Lepus californicus*), cottontail, coyote, pronghorn (locally extinct), various reptiles (including the venomous Western Mojave rattlesnake and the notable chuckwalla) and rodents. Other animals include various species of waterfowl and numerous birds.

CULTURAL SETTING

Prehistory

Synthetic treatments of the prehistory of the Transverse Ranges and Mojave Desert are found in a number of academic references. The latter sources include topical treatments in Basgall (1993), Basgall and Hall (1994), Basgall et al. (1988), Bettinger and Taylor (1974), Garfinkel (2007), Garfinkel and Williams (2011, 2015), Garfinkel et al. (2010), Gilreath and Hildebrandt (1997), Grayson (2011), Lengner (2013), Schneider et al. (2000), Sutton et al. (2007), Ugan and Rosenthal (2015), Van Tilburg et al. (2012), Warren (1984), Warren and Crabtree (1986), Whitley (1998), Ugan and Rosenthal (2015) and Yohe (1992).

Research into the prehistory of these regions has a lengthy pedigree. Perhaps some of the earliest scientific investigations were those conducted by the husband-wife team of William and Elizabeth Campbell working out of the Southwest Museum (Campbell 1931; Campbell and Campbell 1935; Campbell et al. 1935). During this same general time period Malcolm Rogers conducted studies during his association with the San Diego Museum of Man. His research emphasized the identification of the flaked stone artifacts and prehistoric cultures found in the Colorado Desert but overlapping into the Mojave Desert as well (Rogers 1939). Another early researcher was Mark Raymond Harrington. Harrington conducted archaeological studies at the Stahl Site, Stahl Site Cave, and Fossil Falls sites in the Coso Range while engaged by the Southwest Museum (1948a, 1948b, 1949, 1950, 1951, 1952, 1953, 1957).

In the 1960's Edward Lanning, working with the University of California, Berkeley, wrote up the previous research completed at Rose Spring (CA-INY-372) in the Coso Range and this work serves as a critical benchmark and anchor to develop the regional chronology for the Great Basin. Robert Yohe returned to the site much later and provided an even more detailed and well-supported chronology bolstered by a suite of precise radiocarbon dates for this physically and culturally stratified site (Yohe 1992).

Perhaps the most intensive early studies were at China Lake completed by Emma Lou Davis. Her work continued from the 1960s into the mid to late 1970s and included extensive surface explorations and pioneering geo-archaeological research (Davis 1978). Although her assertions of very early pre-Clovis occupations have been widely rejected, her multidisciplinary methods provided well-grounded insights on late Pleistocene and early Holocene aboriginal land use. Excavations at China Lake also uncovered fluted points in putative association with burned, extinct megafaunal remains (Davis 1978). However, recent reassessments (Basgall 2007a, 2007b; Garfinkel et al. 2008) of Davis' findings failed to support the idea that artifacts and megafauna bones were related or that aboriginal activity was contemporaneous with extinct megafauna.

Much of the scholarly research in the Mojave Desert has been completed under the umbrella of cultural resources management studies. Many federal and state agencies (Bureau of Land Management, California Department of Transportation, California Department of Parks and Recreation, National Park Service, and United States Forest Service) and private developers (relating to the construction of renewable energy initiatives employing both solar and wind) have been the major proponents and financial underwriters for these investigations.

The Mojave Desert has seen more archaeological study than perhaps many other areas of California. It has also spawned some of the more contentious debates in professional archaeology with respect to competing models attempting to illuminate the nature and antiquity of various prehistoric cultural manifestations. The focus of these discussions relate to the nature and timing of various cultural transformations. Such discussions hinge on the age and character of technological shifts, settlement-subsistence changes, economic developments, artistic and ideological transitions, prehistoric population movements, and reconstructions of linguistic prehistory (cf. Garfinkel 2006, 2007; Garfinkel and Austin 2011; Garfinkel et al. 2007, 2009, 2010; Grant et al. 1968; Goldsmith and Garfinkel 2013; Gilreath 2007; Gilreath and Hildebrandt 2008, 2011; Hedges 2001; Hildebrandt and McGuire 2002; McGuire and Hildebrandt 2005; Stewart et al. 2005; Van Tilburg et al. 2012; Whitley 1987, 1998, 2003; Whitley and Dorn 1987, 2011). Given the central importance of chronological controls, the prehistoric cultural sequence and related temporal periods remain a salient topic for continuing research.

Prehistoric Cultural Sequence

Transverse Ranges

The following archaeological summary and synthesis has been extracted from the works of Horne (1981), Moratto (1984), and King (1990). Archaeological evidence for Paleoindian (13,500 – 7,500 calibrated radiocarbon years before present (BP) and Early Period (7,500-3,500 BP) occupations is very limited. These early occupations appear to have been spatially restricted to areas associated with Late Pleistocene and Early Holocene water features (lakes, rivers, streams) and other mesic environments in the nearby southern San Joaquin Valley (see discussion below).

During the transition between the Early (7500 – 3500 BP) and Middle Period (3500 - 900 BP) aboriginal populations expanded and trade increased. Additionally craft specialization is first recognized. During the Middle Period (3500 - 900 BP) use of the inland region is first recognized. Long-term residential sites are regularly situated in drainages. In these areas both villages and specialized satellite sites can be identified. Seasonal settlements in the uplands include a variety of sites focused on both the gathering of key plant resources and the hunting of upland game animals.

The Middle Period (3500-900 BP) sees continued use of handstones and milling slabs in inland settlements but mortars and pestles are introduced and become abundant. This pattern is thought to indicate a change from a former intensive focus on hard seeds to the inclusion of and greater emphasis on softer seeds including acorns and other seeds and nuts. During the Middle Period Our Lord's Candle (*aka* Spanish Bayonet or *Yucca whipplei*) roasting ovens also begin to occur (Horne 1981).

The Late Period (900 BP - Historic times) settlement pattern seems to have followed a similar pattern to that of the Middle Period, with indications of a further increase in population, as attested by increasing numbers of archaeological sites. Also recognized is an increase in exotic trade goods, especially imported shell beads, that suggests further elaboration in a growing and more formalized exchange system. Such data seems to support a strengthening of the relationships between the California Interior and Coast.

During the Late Period (900 BP – Contact) mortars and pestles become the dominant technology largely replacing the former emphasis on handstones and milling slabs. Associated grave wealth, occurring in formalized cemeteries, suggests to prehistorians the existence of variation in social identities. Role differentiation and ascribed status are indicated by the spatial differentiation of various classes of persons within residential settlements and also within their cemeteries.

Mojave Desert

Late Pleistocene: Paleo-Indian / Western Fluted Period

Basally fluted and concave basally thinned projectile points appearing to related to the Clovis Tradition (also known as [aka] Western Fluted) are generally considered to be the most dominant,

hallmark of prehistoric occupation during the Late Pleistocene era. These points and their associated cultural materials have been the focus of intensive study and the general consensus is that they date from about 13,500 to 12,500 calibrated radiocarbon years before present (BP). Some researchers have tried to pinpoint the duration of the Clovis tradition to an even more exacting and narrower time span (12,800 to 13,200 cal BP) but recent critiques of that perspective support the notion that at least a millennium of time was necessary for the wide-ranging Clovis tradition to have developed and spread within the continental United States (cf. Goebel et al. 2008; Waters and Stafford 2007).

Until recently, the Clovis complex was considered the basement cultural expression in the Americas. However, reports from sites like Monte Verde (Chile), Paisley Cave (Oregon), the Schaefer and Hebior sites (Wisconsin), Meadowcroft Shelter (Pennsylvania), Page-Ladson (Florida), and the Debra L. Friedkin Site (Texas), have now provided substantial and persuasive evidence for pre-Clovis occupations dating to a period from about 16,000 to 14,000 cal BP. The latter archaeological complex appears to have occurred some two to three thousand years before the beginning of the Clovis expression (Gilbert et al. 2008; Goebel et al. 2008; Waters et al. 2011).

Unfortunately, as of yet, there is no substantive, tangible, and compelling evidence within California or the Great Basin for such early pre-Clovis discoveries. Yet, there have been a number of claims (Davis 1978; Leakey et al. 1968) based on heavily weathered and crude cobble and core tools as part of a pre-projectile point tradition (cf. Moratto 1984:29-73). However, such claims have not withstood the test of time.

Nevertheless, although the Mojave Desert has posted early claims of great human antiquity, Clovis-like fluted point discoveries themselves are fairly rare (cf. Rondeau et al. 2007). When such finds are identified, they most frequently occur as isolates and are typically found in association with now dry Pleistocene lakebeds. Besides the discovery of fluted points, we have little in the way of related diagnostic elements of Clovis technology that would provide a more complete picture of the entire archaeological assemblage. Complementary artifacts, such as prismatic blades, cores, and bone tools are commonly described from the Clovis heartland in the American Southwest and Plains (however cf. Fenenga 2015). Yet those artifact classes are rarely described or noted in California.

Further, there is long-standing ambiguity in the age and sequence of terminal Pleistocene cultural complexes in eastern California and the Great Basin generally (Beck and Jones 2009). Some researchers have expressed doubts as to whether the Clovis Complex *per se* has a temporally or geographically extensive presence in California and the Great Basin. Further, researchers question the true antiquity of these putative earliest California and Great Basin projectile point forms. Finally, other confounding issues remain with respect to the chronological relationship of one point type to another (e.g. Western Fluted vs. Concave Base vs. Western Stemmed).

China Lake Basin and the adjacent Rose Valley are home to some of the largest concentrations of fluted and concave base points in California. The sites in Rose Valley are located on relict terraces of the Lower Pleistocene Owens River. The Rose Valley sites were initially recognized and studied by Ferris Borden and the Archaeological Survey Association (Borden 1971; Moratto et al. 2018). Some China Lake sites were researched by Emma Lou Davis (Davis 1978). A number of fluted and unfluted concave base points have been discovered in the Coso Basin and have yielded putatively ancient obsidian hydration dates that would provide a tentative late Pleistocene age determination (cf. Garfinkel et al. 2008; Moratto et al. 2018). Yet, no direct associated radiocarbon determinations exist that demonstrate the age of these early points and there are only a handful (n = 4) of radiocarbon determinations dating to the Clovis age for any archaeological expressions in all of prehistoric California.

Nevertheless, recent obsidian hydration data provides a growing number of very large hydration rim measurements (greater than 16.0 microns) from several sites in the China Lake Basin and vicinity. These obsidian hydration measurements do support an age for both Western Fluted and Basally Thinned Concave Base points dating to a time from about 12,000 to 13,500 cal BP. (Giambastiani and Bullard 2010; Rogers 2011; Garfinkel and Hopkins 2008; Moratto et al. 2018). If those ages are further substantiated, that would imply a prehistoric California Paleoindian complex of roughly equivalent to the age of the Clovis Tradition of the American Southwest and Plains. Significantly, the technological and typological elements for these early California projectile points appear slightly different and may represent a somewhat distinctive tradition - a bit different from their kindred artifacts in other areas of the United States. Further, it appears that the early fluted and unfluted Clovis era points may have continued in time post-dating the terminus of the Clovis expression in the American Southwest and on the Plains.

In contradistinction to the above discussion, Beck and Jones (2009, 2010; see also Bryan 1988) argue, that Western Stemmed Points are characteristic of the terminal Pleistocene and would be contemporaneous with the Clovis Complex in the Desert West. While it is widely assumed that fluted and unfluted concave-base points date to the terminal Pleistocene in the Mojave Desert, this has rarely been demonstrated radiometrically or chrono-stratigraphically. Nevertheless, recent finds at China Lake have noted that Fluted and Concave Base points have a different overall spatial distribution than Western Stemmed points. Finally, all three projectile point styles (Western Stemmed, Fluted, and Concave Base) do often occur in the same microenvironments, in closely similar depositional contexts, and frequently at the very same sites (Basgall 1988, 2007; Basgall and Hall 1991; Giambastiani 2008, 2010; Giambastiani and Bullard 2010).

Early Holocene: Mojave or Lake Mojave Period

Significant environmental changes, correlating with broad shifts in regional temperature, occurred in the post-Pleistocene with only minor changes in rainfall. Increased runoff from glacial melting resulted in the infilling of valleys and basins by streams, marshes, and lakes. Initially these large bodies of water supported great amounts of biota – including big game animals (e.g., deer, antelope, and bighorn). During this time there exists an ancient, well-established, and wide-ranging prehistoric tradition in the Mojave Desert dating from ca. 12,000 to 8,000 BP. This archaeological complex received its geographic referent from the landmark studies of the Campbells and their research associates (Campbell et al. 1937).

The Campbells and their collaborators worked along the relict shorelines of Pleistocene Soda Lake and Silver Lake in the eastern Mojave Desert near Baker, California. These early Holocene assemblages were recognized for their distinctive formalized flaked stone tool kits. The Lake Mojave flaked stone tools include large stemmed points (identified as either larger Lake Mojave or smaller Silver Lake forms) that are considered as chronological diagnostics. Associated with these temporally sensitive point/tool forms are other stone tools including bifacial crescents, heavily worked domed (steep-sided) unifaces (end scrapers and side scrapers), knives, bifaces, gravers, plano-convex limaces, and large core-cobble tools (cf. Beck and Jones 1997).

Throughout southern California, and especially in eastern California, Lake Mojave era sites have been recognized with a variety of other identifiers. In the Colorado Desert, Malcolm Rogers calls similar traditions as his Playa Complex (Rogers 1939, 1966). In the San Diego area, the related assemblages have been designated as San Dieguito (Warren 1967; Warren and True 1961). William Wallace (1962) employs the Lake Mojave moniker for all such expressions throughout southern California and into Death Valley.

Significantly, the majority of the Lake Mojave sites are exclusively surface expressions making them difficult to date, and only infrequently are they dated directly by employing radiocarbon assays. Nonetheless, Beck and Jones (1997, 2010; Willig et al. 1988) have assembled a series of radiocarbon dates for the Lake Mojave stemmed points. Their research indicates that the Lake Mojave-related materials are older than 9,500 BP and are possibly as ancient as 13,200 BP. If such dates were to apply in California they would be contemporaneous with the ages applied to the Clovis Tradition in the American Southwest and on the Plains. Yet, perhaps contrary to expectations, dates for the Lake Mojave materials at Fort Irwin in the Mojave Desert cluster from 9,500 to 11,000 BP (Basgall 1993; Sutton et al. 2007). Source-specific, temperature-adjusted obsidian hydration dates on Western Stemmed points from China Lake are overall more recent than the older Clovis materials.

Claude Warren and his colleagues (Warren 1967, 1984, 1986, 2008; Warren and Crabtree 1986; Warren and Schneider 2003; Warren et al. 1986) and other researchers (cf. Bedwell 1970)

recognize that Western Stemmed point sites of the Lake Mojave Tradition were most often associated with extinct lakes. Since these materials were clustered around ancient shorelines the logical conclusion was that this early lifeway was lacustrine based and that artifacts would best be interpreted as representing a hunting emphasis associated with lakeshore resources. Further, since few artifacts were discovered that could be interpreting as milling equipment, only a very minor expression of plant food exploitation was indicated.

However, more recent research in the central and western Mojave Desert attests to a different perspective with a wider range of habitats outside of lakeshore settings (Basgall 1993; Basgall and Hall 1994; Basgall et al. 1988; Sutton et al. 2007). Further, the faunal remains recovered from such sites attest to a dominant expression of small mammals (especially lagomorphs [rabbits]) and reptile exploitation rather than large game such as deer, pronghorn, and bighorn sheep. Additionally, milling equipment, although evidently only a minor element in the Lake Mojave archaeological assemblages, are indeed a regular part of the documented cultural materials at such sites. The latter perhaps indicates that plant food was of some importance in the diet of these early Holocene peoples. Nevertheless, use-wear studies suggest that corms and bulbs, especially marshland taxa rather than small seeds, were the predominant plant foods processed during this time period (Basgall 1993, 2000).

Most researchers agree that a high diversity of toolstone material and extensive curation and maintenance of Lake Mojave-age tools supports the conclusion that very large foraging areas and frequent residential moves were typical (Basgall 1989; Basgall and Hall 1994; Basgall and McGuire 1988; Delacorte 1999; Delacorte and McGuire 1993). It is posited that at this early time foraging groups were limited to a small number of family units and the aggregate groups themselves were still quite small. The food resources that were extracted would have been exhausted quickly causing people to move about the landscape often. Considering these frequent moves, the stone tool assemblages were modest in size and relatively homogenous (Kelly 1983, 1985, 1988; Shott 1986, 1989; Thomas 1983a, 1983b).

Middle Holocene: Pinto or Little Lake Period

In the Middle Holocene during the time from ca. 8,000 to 4,000 cal BP temperatures and aridity peaked. Lowland bodies of water shrank in size and associated plant communities dwindled - reaching a point that was incapable of supporting the former abundance of large game (Sutton et al. 2007). With the exception of certain rare refuge areas, human land use shifted to upland areas where only a few relict streams and lakes remained. Correlating with these changes was the inception of a cultural expression known as the Pinto Complex.

Researchers have recognized that it has been challenging to clearly articulate the Middle Holocene cultural-historical traditions and settlement systems since few prehistoric sites date within this specific time frame. The latter circumstance may owe to a lack of geological visibility (Basgall

2009; Meyer and Rosenthal 2010) or alternatively may reflect that this heightened aridity led to a corollary demographic collapse (Elston 1982; Grayson 2011; Sutton et al. 2007; Warren 1986). From any perspective, researchers agree that there is a paucity of radiocarbon assays that fall within the Middle Holocene time and that these expressions are especially absent during the waning years of this period - ca. 5000 to 4000 cal BP (Sutton et al. 2007).

The Pinto Complex, rather than representing a different cultural group, is posited as an outgrowth of the preceding tradition of the Lake Mojave Complex of the Early Holocene. Such a model was based on similarities in the two traditions. Spatial and temporal overlap in projectile point forms, the continued use of difficult-to-reduce toolstone (basalt and igneous fine-grained lithic materials) for bifacial tools - distinctly different from the use of cryptocrystalline and obsidian materials so common to later periods, continuity in the character of flaked stone production emphasizing percussion flaking in contrast with a later emphasis on pressure flaking, and the continued popularity of specialized tool forms (biface knives, ovate domed and keeled scrapers, and engravers) - all suggest a pattern of continuity.

Pinto Complex sites decline in number during the driest portion of the Middle Holocene era from 6500 to 4000 cal BP and are largely restricted to spring-side localities. Besides the differing land use patterns, the stone tool assemblage changes at this time from the formalized stone tool forms of the Early Holocene being replaced by more perfunctory flake scrapers, handstones, and milling slabs. Ground stone implements signal an important distinction and are thought to represent a growing emphasis on small seed use. Since hunting equipment persists, Claude Warren and others (Warren 1967, 1984, 1986) have suggested that large game procurement continued despite deteriorating climatic conditions and declining big game populations.

However, archaeofaunal assemblages from Pinto sites may attest that artiodactyls by this time are almost completely absent with small game, including tortoise, becoming the norm. Pinto populations, originally geared towards hunting, would have been hard-pressed to accommodate the changing environmental conditions and their adaptation may have ultimately failed. Populations may have either suffered extinction or perhaps migrated to more well-watered areas, abandoning their desert homes.

A few Middle Holocene sites in the southern Owens Valley and Rose Valley on the northwestern edge of the Mojave Desert have produced assemblages similar to those in the Mojave Desert and appear to be consistent with generalized adaptations of highly mobile foragers with wide-ranging settlement patterns. However, substantial house floors discovered at Lubkin Creek (CA-INY-30) and the diverse array of occupational debris at the Stahl Site (CA-INY-182) at Little Lake (in the Coso Range) has led some to posit much greater residential stability and a degree of permanence in settlement patterns in some exceptional instances.

The hallmark and defining diagnostics for this period are large, heavy, bifurcate-stemmed dart points known as the Little Lake Series (Basgall and Hall 1992, 1994, 2000; Bettinger and Taylor 1974; Fitzgerald et al. 2005; Harrington 1957; Lanning 1963; Vaughan and Warren 1987). Researchers have recognized that these Pinto-like points were most frequent at the Stahl site near Little Lake (Harrington 1957).

The Pinto-like points that were discovered at Little Lake were originally thought to be morphologically distinct from Pinto points identified at the type site in the Pinto Basin in Riverside County in the southern Mojave Desert (Amsden 1937; Campbell and Amsden 1934; Campbell and Campbell 1935; Schroth 1994). In-depth research (Basgall and Hall 2000) relating to the questions of chronology and point classification suggests that the Little Lake points are largely indistinguishable from Mojave Desert examples typically identified as Pinto points.

The Basgall-Hall research redefined the Pinto Series indicating that there existed a larger, heavier, and more robust variant of this point style that has an age from 7500-4000 radiocarbon years before present (rcybp). A smaller, lighter, and more gracile form, more characteristic of the northern Great Basin, is equivalent with the Gatecliff Split-stem type previously identified by David Hurst Thomas (1981). Those latter artifacts are argued to date to a more recent vintage, consistent with a temporal range from ca. 5000-3200 rcybp. A further result of the Basgall-Hall Study was the discovery that there is considerable spatial overlap between both the robust and gracile variants with both forms having substantial representation in eastern California.

Other researchers disagree with the Basgall and Hall Pinto point chronology. Haynes (2004) argues that Pinto points range in age from 9,500 to 5,500 rcybp. Perhaps an age range of 11,000 to 3,500 BP is a more accurate representation for the full span of use of this rather enigmatic point form. Recent studies have led many researchers to conclude that Pinto points have a much longer duration than has been typically applied. Pinto points, based on their most recent re-evaluation, are sometimes considered contemporaneous with Western Stemmed points (as above). However, Pinto points were infrequent during the earliest years of their introduction but flourished and endured for a much longer period time after Western Stemmed points ceased.

Heavily worn stone tools crafted from exotic toolstone suggests that prehistoric Middle Holocene Natives were still highly mobile. These patterns led Basgall and Hall (1992, 1994) to conclude that both early and middle Holocene adaptations in the Mojave Desert represent a more generalized subsistence orientation than conventionally portrayed by Warren (1967, 1984, 1986) and others.

Late Holocene: Newberry Period or Gypsum Complex

In the Late Holocene, beginning ca. 4000 / 3500 BP and continuing to about 2000 BP, significant interregional variability in aboriginal land use can be recognized. With respect to the local environmental conditions, Mehringer and Sheppard (1978), based on lake-core sampling at Little

Lake, identify that available water increased about 3000 BP, with a subsequent dry period at about 2000 BP. Hence, cool winters and relatively wet intervals were characteristic of what is known as the Neo-Pluvial Period that occurred between 4000 and 2000 rcybp (Wigand and Rhode 2002).

In the Mojave Desert, Basgall and Hall (1992, 1994) identified cultural deposits from Fort Irwin that include a full complement of milling equipment, flaked stone tools, and the replacement of basalt and rhyolite by cryptocrystalline silicate toolstone. The frequency of bifaces rises dramatically during this time. Nonetheless, prehistoric sites are often small, and it has been argued that these settlements represent wide-ranging mobility oriented to short-term occupations rather than targeted procurement of specialized resources.

Many radiocarbon assays from houses and features are documented from the southern Owens Valley (Basgall and Delacorte 2012; Basgall and McGuire 1988; Byrd and Hale 2003). These well-built houses and associated remains provide robust data for chronological controls. These remains indicate an emphasis on cached and curated articles (including bifaces, bone tools, and milling equipment) and lend credence to the premise that these particular sites were seasonally re-occupied. Obsidian tool/debitage sources appear to indicate a wide-ranging and extremely expansive yet regularized annual settlement round. From food remains (faunal material and plant macrofossils) one may infer that forays were made to long-distance upland settings to procure specialized resources (pinyon nuts, bighorn sheep, and marmots) that were brought back to the base camp.

Warren et al. (1984) provide a contrasting view for this period and argue for the prominence of large game hunting due in part to their natural abundance based on ameliorating climatic conditions. Additional intensification in the use of plant foods is represented by increased numbers of milling artifacts. Warren and others identify a change in social organization from the smaller family-band units in earlier eras to multi-family groups. William Hildebrandt and Kelly McGuire (2002) similarly argue that settlements during the Late Holocene (Middle Archaic also known as the Newberry Period) were less mobile than originally implied and may be best interpreted as year-round occupations. They also argue that the characteristic settlement pattern appears to have incorporated sedentary occupations of ecological sweet spots where women remained at hamlets while men ranged to distant outlying areas for artiodactyl hunting.

One implication of this emphasis on artiodactyl exploitation was the necessity of serviceable hunting equipment. Stone tool reduction and particularly obsidian biface manufacture became critically important from about 2500 to 1500 cal BP. Amy Gilreath and William Hildebrandt (1997, 2011) argue that in the Coso Basin, obsidian stone tool reduction reached a peak level of task specialization where early stoneworkers produced stone bifaces in enormous numbers both for domestic use but mostly as surplus - exports intended for trans-Sierran trade. During this same time span, an enormous number of rock drawings (petroglyphs) are recognized and appear to be

associated with increase rites, revealing a level of socio-ceremonial complexity exceeding that of earlier and later periods (Garfinkel 2006; Garfinkel et al. 2009; Yohe and Garfinkel 2012).

Prehistoric settlements dating to the Late Holocene are marked by the occurrence of medium-sized to large, stemmed and notched points. The most frequent forms are variants of the Elko, Humboldt (Concave Base and Basal-notched), and Gypsum Series. Heizer and Baumhoff (1961) were the first to define Elko points. This series is composed of large, heavy, notched points with variable stem characteristics (Heizer et al. 1968; O'Connell 1967). These include eared, corner-, and side-notched specimens. Elko Contracting stem forms are often assigned to the Gypsum type having the same general chronological frame. In the western Great Basin, Elko points have often been found in contexts dating from 3750-1290 cal years B.P. (Basgall and McGuire 1988; Bettinger and Taylor 1974; Gilreath and Hildebrandt 1997; Heizer and Hester 1978; Justice 2002; Thomas 1981). Such a chronological position is supported by a plethora of radiocarbon, stratigraphic, and obsidian hydration data. However, it is becoming increasingly apparent that large, corner-notched, and side-notched variants of this Elko form sometimes occur in earlier contexts.

Gilreath and Hildebrandt (1997) observed that more robust Elko points, especially those thicker than 6.5 mm, regularly produce obsidian hydration dates that are more ancient than the Newberry Period. One explanation for this problem is the difficulty in identifying between earlier Pinto and the more recent look-alike Elko forms (Basgall and Hall 2000; Vaughan and Warren 1987). Finally, the Rose Spring site (CA-INY-372) on the western edge of the Coso Range is a culturally and naturally stratified deposit. Five separate successive units provided cultural material amenable to dating. The lower three strata range in age from ca. 4000 to 1700 cal BP and as such fall within the Newberry Period (Clewlow et al. 1970; Yohe 1992).

Late Holocene: Haiwee, Rose Spring, Saratoga Springs Period

The Mojave Desert witnessed a significant series of adaptation shifts beginning in this time period (ca. 2000 to 700 cal BP). During the onset of the period, a dramatic set of subsistence-settlement changes were documented. These changes include: the introduction of the bow and arrow replacing the dart and atlatl, a dramatic decrease in large game hunting, increased reliance on dryland hard seeds, the beginning of intensive green-cone piñon pine nut exploitation, and the development of sites emphasizing the acquisition of easily procured and abundant small game animals (especially with respect to large numbers of lagomorphs [rabbits] and grebes). These cultural changes may reflect a Numic (Great Basin Paiute-Shoshone) in-migration. Certain technological innovations and labor-intensive adaptive strategies are also broadly consistent with those of intrusive Numic groups (Bettinger and Baumhoff 1982; Delacorte 1994, 1995).

In the western Mojave Desert, specialized sites first occur that are single component (time restricted) loci targeting small, easily harvested, game animals obtained through communal hunts and mass capture that focus on jack rabbits, brush rabbits, and grebes (Garfinkel 2006; Gold 2005;

McGuire et al. 1982). These sites often contain abundant portable milling equipment, rock ring structures, bedrock milling, and plant-food threshing features. These data reflect a shift to more intensive use of small game and local plants (dryland hard seeds) perhaps as a means of mitigating increasing human population pressure – consistent with the model presented by Bettinger and Baumhoff for Numic adaptations (1982).

Such an adaptation would have provided Numic peoples with a competitive advantage over existing pre-Numic populations since it would have enabled them to exploit a wider range of resources that were more costly to collect and process. Hence, resources with high extractive and processing costs would have been exploited only after the arrival of Numic groups in the area (cf. Bettinger and Baumhoff 1982; Delacorte and McGuire 1993; Garfinkel 2007).

From a careful study of the archaeological record, a pattern of lowland, intensive small-game hunting camps appears to have occurred simultaneously with the development of large-scale, intensive, upland green-cone piñon pine nut exploitation. This pattern is also contemporaneous with an initial focus on the acquisition, mass processing, and storage of dryland seeds (Basgall and Delacorte 2003; Basgall and Giambastiani 1995). These seed camps routinely include rock rings, thought to be the foundations of brush structures. Many of these rock structures contain doorways facing east toward the rising sun and are associated with numerous handstones, milling slabs, and bedrock grinding features.

Single-component Haiwee-age hunting camps are frequently located in "geographically isolated areas" (Delacorte 1994). Such localities provided access to a limited range of biotic communities and appear to have a rather specialized focus on a narrow array of subsistence resources. Hence, these settlements are a distinctly different group of sites from earlier or later occupations that tend to overlap at the same locations and therefore evince a lack of continuity from earlier settlements.

Gilreath and Hildebrandt (1997) note that Coso obsidian lithic production shifts to major obsidian outcrops in Late Newberry times (500 B.C. to A.D. 600) and this pattern continues into the Haiwee interval (A.D. 600 to 1300). Obsidian quarrying during this time is confined to a few massive exposures rather than the less plentiful but more widespread secondary deposits. In the Haiwee Period, nearly exclusive use of the massive Sugarloaf Mountain Coso obsidian exposure occurs with other deposits largely ignored.

On the margins of Koehn Lake in Fremont Valley, south of the Indian Wells Valley and the Coso Range, Sutton (1987, 1991) reports on a village site (CA-KER-875) dating to this period. House structures with juniper center posts (*Juniperus* sp.) were documented. The site is well-dated with radiocarbon assays and Coso obsidian hydration dates and appears to have been associated with a standing lake. The site was abandoned during the drying up of the area correlating with the initiation of a series of epic droughts known as the Medieval Climatic Anomaly (ca. AD 970 to

1350).

Rose Spring arrow points are one of the key hallmarks of the Haiwee Period. These points were originally recognized and described from the type-site of that same name, located in southern Owens Valley (also known as Rose Valley) on the western edge of the Coso Range (Lanning 1963: Yohe 1992, 1999, 2000). The Rose Spring point is a small, narrow, triangular arrow point with a variety of stem forms. Rose Spring points are time markers and date primarily to the interval from ca. 2000-650 cal B.P. in the western Great Basin (Basgall and McGuire 1988; Bettinger and Taylor 1974; Garfinkel 2007; Gilreath and Hildebrandt 1997; Thomas 1981; Yohe 1992, 1999, 2000).

Recent Holocene: Marana, Late Prehistoric

This final cultural period (700 cal BP to the historic) represents the ethnographically described occupation in the Mojave Desert by the Kawaiisu, Panamint Shoshone, Serrano, Cahuilla, Chemehuevi, and Mohave Native Americans. Desert Side-notched and Cottonwood arrow points are characteristic of this chronological frame. Also brownware ceramics, imported soapstone beads, and pictographs date to this time frame. Many archaeological sites dating to this period are associated with systematic and intensive upland piñon exploitation (Bettinger 1978; Garfinkel and McGuire 1980; McGuire and Garfinkel 1976, 1980).

Resource intensification that began in the prior period continues and strengthens with settlements tied to seasonal differences in resource availability. The most spatially confined seasonal movement and the smallest foraging ranges occur during this time period. Region-wide expansion of diet breadth and intensification of small seed resources involved a change in the technology used in the collection and processing of these resources. It is argued that mass collecting of green, dryland, hard seeds provided a considerably higher return than was possible using the former method of seed-beating. This pattern begins about 1300 cal BP but increases substantially throughout the Late Prehistoric (650 cal BP – Contact) and into the Protohistoric era. Direct flotation evidence from archaeological sites dating to the Marana Period indicate mass harvesting and threshing of Indian rice grass (*Achnatherum hymenoides*), cattail (*Typha* spp.), goosefoot (*Chenopodium* spp.), and blazing star (*Mentzelia* spp.).

This time period also sees the final collapse of trans-Sierran trade in Coso obsidian. The early emphasis (ca. 8000-1000 cal B.P.) on biface preform and flake blank technology gives way to flake-based reduction. Large bifaces decrease in abundance and also diminish in size and formality ultimately being replaced by more numerous flake-based tools. Artiodactyl exploitation is dramatically reduced and replaced by procurement of small game including a tremendous increase in desert tortoise and reptile use. Evidence of increased contact with outside populations (e.g., the American Southwest) and the expansion of Numic-affiliated populations out of eastern California into most areas of the Great Basin and much of the Mojave Desert is recognized during the last

1000 years of prehistory (Bettinger and Baumhoff 1982; Fowler 1972; Lamb 1958).

Table 1. Prehistoric Cultural Sequence for the Transverse Ranges and Mojave Desert Region

Cultural Complex	Approximate Time Period in Calibrated Radiocarbon Years Before Present (cal B.P.) and Calendar Years Approximated as AD/BC	Artifact Characteristics
Late Pleistocene Period **(Paleoindian)**	13,500 – 12,000 cal B.P.; 10,000 BC to 11,500 BC	Fluted and Concave Base points (Western Fluted)
Lake Mojave Period **(Paleoindian)**	12,000 – 8,000 cal B.P.; 10,000 BC to 6,000 BC	Western Stemmed points (Lake Mojave and Silver Lake)
Little Lake (Pinto) Period **(Early)**	8,000 – 4,000 cal B.P.; 6,000 BC to 2000 BC	Pinto and Leaf-shaped points
Newberry (Gypsum) Period **(Middle)**	4,000 – 2000 cal B.P.; 2000 BC to AD 1	Gypsum, Elko, and Humboldt points
Haiwee (Saratoga Spring) Period **(Middle)**	2000 – 700 cal B.P.; A.D. 1 – 1300	Rose Spring, Eastgate, and Saratoga Springs points
Marana (Late Prehistoric) Period **(Late)**	700 cal B.P. – Historic; AD 1300 – Contact with European explorers ca. AD 1770	Desert Series (Cottonwood and Desert Side-notched) points and ceramics

Based on discussions in Bettinger and Taylor (1974), Garfinkel (2007), and Warren (1980, 1984). Period names for the Transverse Ranges are highlighted in bold and bracketed.

Ethnography

Recent research by Earle (1990, 1997, 2004a, 2004b, 2005a, 2005b), King (2003), and Johnson and Lorenz (2006) have helped to clarify the ethnic identification of Mojave Desert and Transverse Range Native Americans. Their work with the John Peabody Harrington notes combined with analysis of the Franciscan sacramental mission registries testify that Transverse Ranges and Mojave Desert dwellers in the Project area and vicinity represent a variety of different tribal groups including: Serrrano, Cahuilla, Gabrielino/Tongva, and Luiseño. Brief overviews of the ethnographic data pertaining to these groups are provided below.

Vanyume Serrano

The Vanyume were speakers of a dialect of Serrano. Surviving vocabularies and word lists support the identification of desert groups known as Vanyume (Garces' term was Beneme) as related to the Serrano. It has been further verified that Native groups occupying villages on the Mojave River near Victorville and in the region east of Barstow maintained marriage ties to downriver communities and were Vanyume Serrano in ethnic and linguistic affiliation.

Earle (1990, 1997) supports King's revisions of earlier territorial boundaries asserting that Serrano territory included the northern slopes of the San Gabriel Mountains, the Mojave River, and Antelope Valley. It also appears from their research that both the south and north slopes of the San Gabriel Mountains were "owned" and occupied by Serrano speakers.

Early 20th century ethnographic fieldwork among the Serrano was conducted by Gifford (1918), Benedict (1924), Kroeber (1925), Strong (1929), and Harrington (1986). More recent research by Bean (1972), Bean and Smith (1978), and Bean, Vane, Lerch, and Young (1981) has helped to focus attention on key research questions in an attempt to clarify the relationship of Serrano land use patterns, territorial attributions, subsistence-settlement, and social, ceremonial, and political organization.

The economic resource base of the Serrano was determined in part by the seasonal availability of key animals and plants (Earle 1992). Hunting supplemented a diet emphasizing plants. Hunting was often an individual affair but also incorporated communal drives and trap lines to snare small animals (e.g., squirrels, rodents, tortoise, and chuckwalla). Some desert hunting areas to the east in the Mojave Desert and in the vicinity of the Mojave River may have been shared with adjacent groups (e.g., Chemehuevi and Mojave).

Mule deer were available in the San Gabriel and San Bernardino Mountains. Deer would migrate to lower elevations during the winter and would be available in the lower foothills. Pronghorn frequented the valley floor year-round but were not consistently abundant and were hunted only occasionally using communal surrounds and group drives. The latter technique was also used to ensnare large numbers of jackrabbits during the fall when they were abundant. Bighorn sheep were available in the higher mountains but would be rarely procured. Waterfowl could be captured using bows and arrows and special nets. Ducks, quail, geese, and grebes would have been available in considerable numbers during their breeding seasons and in association with riparian settings.

Abundant stands of acorns, juniper, mesquite, and pinyon were available to extended gathering expeditions. These might involve several lineages collaborating under one leader's authority and would have entailed accessing the resource base of surrounding groups (Bean and Smith 1978; Benedict 1924:391-392; Drucker 1937). Cattail / bulrush seeds (*Typha* spp. and *Scirpus* spp.), various roots, shoots, bulbs, and other hard seeds were all principal plant foods. The most likely plants of significant importance were Indian rice grass (*Achnatherum hymenoides*), chia (*Salvia columbariae*), blazing star (*Mentzelia* spp.), and goosefoot (*Chenopodium* spp.)

Edward W. Gifford conducted a detailed study of the marriage practices and sociopolitical organization of southern California Natives from 1916 through 1917 (Gifford 1918). Based on these studies, he developed a model of Serrano social organization (Earle 2004a, 2004b). William Duncan Strong (1929: 5-35) conducted even more extensive studies among the Serrano, Cahuilla, Luiseño, and Cupeño in 1925. His record is significant as a very early observer of the Serrano kinship system. He indicated that the Serrano were an unusual California group possessing true

patrilineal clans. A clan is a kin group based on descent from a common ancestor, as traced through the male or the female line. Clans are normally exogamous - marriage within the clan being regarded as incest.

Patrilineal clans are patterned such that all males, their descendants, and their wives were part of a single group. Clans may be segmented into subclans or lineages. A woman retained her own lineage name but upon marriage was incorporated into the clan of her husband. The transfer of women from one ceremonial affiliation to another, upon marriage, was characteristic of all southern California Takic (the linguistic subfamily of the larger Utoaztecan Stock) groups.

King's research provides compelling evidence that the Serrano exhibited a totemic moiety structure (*contra* Blackburn and Bean 1978). A moiety is either of two kinship groups based on unilateral descent that together make up a tribe or society. Totemic moieties are two-fold divisions of society with subgroups that identify themselves as descended from a prominent religious figure (mostly animal-humans) that are identified as an element of their sacred oral traditions. In the Serrano case, their society was divided into two parts identified with Coyote or Wildcat. The Coyote moiety had the most important political leaders. Moiety out-marriage excluded partners from half the neighboring Serrano settlements. Hence, only settlements of opposing moieties were interrelated through marriage.

Serrano villages were generally more dispersed in the Mojave Desert. This dispersed pattern resulted in marriages linking very large areas. Many of the settlements had marriage ties with villages over 50 miles away and counter-intuitive was the fact that the closest relationships were not necessarily with the nearest villages – but rather with settlements affiliated with opposing moieties located further distant.

Ethnographic data attests that a major native trade and travel corridor facilitated a long-distance exchange system. Recent research has supported the importance of long-distance trade linking coastal southern California Chumash tribes with inland groups including the Yokuts, Kawaiisu, Serrano, Chemehuevi, and the Mohave in California and the Walapai, Havasupai, and Hopi in Arizona (Earle 2005a). Shell bead trade was one of the mediums of exchange and was used as a kind of currency. This system was significant since it involved trade, travel, and exchange covering hundreds of miles and was a system of exchange of native goods that linked various ethnic groups politically and economically.

This trade and travel route ran from the American Southwest (principally the Hopi territory in Arizona), and thence along the Colorado River to the Mojave River through the central Mojave Desert into the Antelope Valley and east to the Pacific Coast (Davis 1961; Farmer 1935; Sample 1950). These circuits of exchange cut across political and cultural boundaries. A number of researchers have argued that such an exchange system may have been an influential factor in facilitating semi-sedentary settlement and complex sociopolitical organization (Earle 2005a; Robinson 1977; Sutton 1980).

Cahuilla

Cahuilla territory was near the geographic center of Southern California. The Cahuilla aboriginal homeland was bounded on the north by the San Bernardino Mountains, to the south by Borrego Springs and the Chocolate Mountains, to the east by the Colorado Desert, and to the west by the San Jacinto Plain and the eastern slopes of the Palomar Mountains (Bean 1978). Cahuilla traditional areas dominated the Peninsular and Transverse Mountain Ranges and the San Jacinto Plain, ranging east into the Colorado Desert and south into areas beyond the Salton Sea (Bean and Shipek 1978:550-575).

Cahuilla settlements were generally located at high elevations in well-watered canyons or on fans near streams and springs and when situated at lower elevations near natural springs (Moratto 1984). Hence, Cahuilla villages occupied both high-altitude locations as well as low desert lands. In general they were positioned in close proximity to canyons with high precipitation levels or plentiful water sources (mountainous locations). Such settlements were typically also situated near fresh water sources or at the terminus of alluvial fans where the high water table provided abundant mesquite and shallow wells could be dug. House structures ranged from brush shelters to dome-shaped or rectangular structures - some 15-20 feet long (Bean 1978).

Cahuilla social structure revolved around clans and exogamous moieties (components connected through inter-marriage). Hunting, in conjunction with the exploitation of a variety of available natural plant resources governed the Cahuilla subsistence strategy. The Cahuilla used a great range of wild resources, such as acorns and piñon, deer, bighorn sheep, rabbits, fish, and quail. Agricultural techniques were present within the Cahuilla, particularly among those groups living near the Colorado River.

The material culture of the Cahuilla was extensive and varied, and included pottery, ornamental items, charmstones, and a variety of flaked stone implements. Unlike other Native American populations in Southern California, the Cahuilla were able to retain their autonomy even after the arrival and increasing control of European explorers and the Euroamerican government that followed. It was not until 1891 that Cahuilla Native culture and the indigenous population began to succumb to the pressures and impacts of European displacements and, later, were adversely affected by the United States governing bodies (Bean 1978; Bean and Smith 1978).

The Cahuilla also had well-developed trade networks with neighboring Serrano and Diegueño groups (Bean 1978).

Gabrielino/Tongva

The Gabrielino lived in mainly present-day Los Angeles and Orange counties. They also occupied the southern channel islands including Santa Catalina. Historians named the people after the San Gabriel Mission. Contemporary Gabrielino prefer to call themselves Tongva, or "earth."

Most information about the Tongva is based on the writings of rancher and journalist Hugo Reid who gathered data during the mid-1800s, and sociologist and anthropologist, C. Hart Merriam, who studied the tribe in the early 1900s. Reid and Merriam gained much of their knowledge from two women, *Bartolomea de Comicrabit*, who married Reid in 1837, and *Narcissa Higuera*, who provided Merriam with a language list.

The number of Tongva in precontact times is estimated at nearly 5,000 people. Normally, each group had a small village and its own leader. However, when several small villages were grouped near a large one, one powerful chief became the leader. The chief was in charge of protecting religious objects, settling disputes, and collecting taxes.

Like most California Indians, Tongva men and children did not wear clothing during mild weather. If the men wore anything, it was just an animal skin around the hips. The women wore skirts made of thin strips of bark, tule grasses, or leather. During colder seasons, women and men wore capes made of animal hides or fur. Usually, they went barefoot. However, if they lived in the mountains, they wore sandals made from yucca fiber. Lastly, in order to appear more beautiful, they sported tattoos of blue-black lines on their foreheads and chins. The women often wore flowers in their hair.

The Tongva built dome-shaped houses. Some measured 59 feet in diameter and sheltered three to four families. The frames were made from willow branches planted into the ground in a circle. The tops of these poles were then bent toward the center creating a domed ceiling. Tule rushes and other stiff grasses were layered and tied to the frame. The homes had at least one door and sometimes a window. Tongva sweathouse was also dome-shaped structures and they were covered with tule reeds and packed dirt. Men went inside to sweat away illnesses and to talk.

The Tongva relied on the ocean for much of their subsistence. This included marine foods like kelp, shark, and clams. On land, they hunted with boomerangs, or *makanas*, and bows and arrows. This work provided squirrel, rabbit, and deer meat. Women gathered acorns, cattails, and chia plants to be ground up and made into cakes.

Building canoes was another specialized job. The craftsman tied wooden planks together and layered them with tar to prevent leaks. This occupation was very important, because reliable boats were needed for fishing on the ocean and for conducting trade. The Tongva of Santa Catalina Island managed a soapstone quarry, an open pit in which chunks of the relatively soft rock could

be removed. This commodity was very valuable. It was needed to carve bowls, beads, fishhooks, shovels, and smoking pipes. The Tongva traded soapstone with other tribes in the region. The Tongva also traded seeds, fish, furs, and animal skins. Sometimes they used money made from discs of clam or Olivella shells.

The Tongva believed in a singular creator deity whose sacred name was *Qua-o-ar* or Chinigchinich. Artists designed sand portraits representing the universe in front of altars dedicated to their creator. Both women and men could be medicine or Indian doctors (aka shamans). The latter were the religious leaders and healers of the tribe. It was believed that they had special powers to heal the sick and to change their shape from human to animal.

Luiseño

Kroeber (1925) estimates that during the pre-contact era there existed a population of some 5,000 Luiseño. White (1963) estimates that, at the time of Spanish contact, there were on the order of 50 Luiseño rancherias with an average population of some 200 people, for a total Luiseño population of about 10,000. Shipek (1977), using independent data, corroborates White's estimate. Strong (1929), building on the earlier work of Gifford (1918), reconstructs the names of 96 clans, most of whom may have had independent villages or rancherias.

The Luiseño occupied semi-permanent villages commonly known as rancherias. Most rancherias were the seat of a clan, although it is thought that some clans had more than one rancheria. As described in the ethnographic literature, rancheria territories were restricted, closely managed, and intensively used. There are some references to the names and locations of a number of major villages in ethnographic and ethnohistorical accounts (White 1959), although in many cases there are errors and conflicts.

Mission records also document marriage ties between village and other communities, providing its inhabitants with access to a variety of resource areas (McCawley 1996).

History

The historic era of California is divided into the Mission or Spanish Period (1769 to 1831), Mexican or Rancho Period (1831 to 1848), and American Period (1848 to present).

Mission or Spanish Period (1769-1831)

The first known European explorers to pass through the Mojave Desert and travel into the San Bernardino Mountains were Lieutenant Pedro Fages and a party of soldiers in 1769. This group of explorers were led by a Spanish priest, Francisco Garces, who guided Juan Bautista de Anza

through the high desert region. In 1771, De Anza led a group from Arizona to create headquarters at Mission San Gabriel near Pasadena. Mission San Gabriel Archangel was formally established in 1771 and proved to be the most economically successful of all the California missions. Its outlying ranch lands, grain fields, orchards, and vineyards constituted a vast pastoral empire, eventually extending many miles inland into the San Bernardino Valley. From the time of the Anza expedition until the Mexican Rancho Period (see below), the land surrounding Ontario in San Bernardino County was employed as grazing land by the Mission. Cattle ranching during this time became a thriving industry. Cattle bred rapidly in the favorable Mediterranean climate and soon herds composed of hundreds of thousands animals were ranging across the verdant pasture lands.

In 1772, Pedro Fages, a military commander, tracked "deserters" from the Mission system throughout San Bernardino County. In 1774, Juan Bautista de Anza led another expedition from Mexico and set up camp along San Antonio Creek. The Anza camp site was near present day Ontario. Anza named that place Arroyo de los Osos, or "Bear Gulch." The Spanish explorer and missionary Father Jose Maria Zalvidea followed the Mojave River Indian Trail and explored the general area for mission sites (while accompanying the Ruiz expedition) in 1806.

Mexican or Rancho Period (1831-1848)

The notable Old Spanish Trail was established between southern California and Santa Fe, New Mexico in the 1830s (Beck and Haase 1974). Traders from New Mexico traveled for two months to cross the rugged terrain bringing woolen goods on mules and pack horses. These merchants traded their wares for horses, mules, silks, and Chinese goods from California.

Spanish rule was overthrown by Mexico in 1791 and eventually the missions lost their land holdings as the Mexican government passed the Secularization Act in 1833 (Beattie and Beattie 1974). Following mission secularization, large land grants were provided to the most prestigious and well-connected citizens. This change in land tenure ultimately led to European settlement of the ranchos for raising cattle in the San Bernardino Valley.

The Rancho Period lasted from 1834 until the Mexican War of 1846. Colonists were encouraged to settle in the San Bernardino Valley to help protect the region from local Indian raids. Recipients of the land grants included Spanish gentlemen (dons) from many of what came to be known as the first families of California, such as the Lugos, Sepulvedas, Yorbas, Bandinis, Tapias, Palomares, and Picos.

American Period (1848- Present)

After the Mexican American War in 1848 and the discovery of gold in California, the Old Spanish Road was an even more widely used trade route for the shipment of goods, Mexican mules, and horses. The Road allowed travelers from Salt Lake City to Las Vegas to travel through the Cajon Pass to reach the cities of San Bernardino and Los Angeles. In 1853 the County of San Bernardino was created and divided into three townships: San Bernardino, San Salvador, and Chino. The city of San Bernardino was designated as the county seat, with the Mormon Council House serving as the first courthouse.

Beginning in 1873, San Bernardino County saw many new railroad lines and train depots constructed. By 1886, the San Bernardino Valley had two transcontinental railroad systems. In the 1870s and 1880s, cowboys continued to lead herds of cattle over trails through the valley to the railroads. In the 1870s and afterward, small towns in the high desert region and near the Calico Mountains were established as rail stops on the Santa Fe Railroad (Kyle 1990). A silver strike in the Calico Mountains brought about a mining boom in 1881 (Schuiling 1984:95).

Another impetus to growth was the growing importance of citrus agriculture. The area exhibited especially favorable circumstances for citrus. These factors included the decomposed granite soil, good drainage, ready water, abundant sunshine, and cool winter nights. The completion of the railroads and the growing citrus industry facilitated a land boom. During the interval of the last two decades of the nineteenth century (1880 to 1900) 30 new communities were initiated in the greater San Bernardino County Region.

PERSONNEL

Dr. Alan Garfinkel Gold, RPA No. 989105 requested an archival research from the South Central Coastal Information Center (SCCIC), California State University, Fullerton (CSUF). CSUF provided the results of their cultural resources records search on October 6, 2020. Following collection of this information, a systematic pedestrian field survey was conducted (**Figure 1)**. Upon completion of the field survey, this report was prepared based on the results of the data search and field investigations. Ryan Gerstner completed the initial pedestrian survey and Dr. Gold crafted the report. Hannah Gold facilitated the Native American consultation and coordination for the Project and performed additional outreach to local and regional specialists on the heritage values noted for the Project.

METHODS

Research

A cultural resources records search was provided on October 6, 2020. The results of this archival records search are summarized in this report. The records search details the previously documented cultural resources in the Project area and employs a one-mile buffer surrounding it. A Sacred Lands File Search was also conducted through the Native American Heritage Commission (NAHC). This search offers valuable contextual information regarding Native American traditional land use in the high desert region. The search indicated a negative response for the presence of sensitive properties in the Project and vicinity. NAHC provided a list of 14 interested parties representing seven Native American groups that were identified as being associated with the area and all were contacted for consultation. A copy of the transmittal letters and full and complete documentation of the character of the Native American outreach are provided in **Appendix B**.

Field Survey and Shovel Test Pits (STPs)

An archaeological field survey was conducted by Ryan Gerstner on September 7, 2020. The survey was conducted by examining the area within the Project boundaries The entire area of the Project was reviewed.

RESULTS

Native American Consultation

The NAHC conducted a Sacred Lands File Search and returned negative results for Sacred Lands near the proposed Project area. All potentially interested tribes identified by the NAHC were contacted for information regarding their knowledge of cultural resources that were within or near the Project area. These groups include: Brandy Kendricks (Kern Valley Indian Community), Kern Valley Indian Community (Chairperson and Secretary), Morongo Band of Mission Indians (Chairperson and Cultural Resources Manager), Quechan Tribe of the Fort Yuma Reservation (Acting Chairman and Historic Preservation Officer), Serrano Nation of Mission Indians (Co-Chairpersons [2]), Tubatulabals of Kern Valley (Chairperson), and the 29 Palms Band of Mission Indians (Tribal Heritage Preservation Officer and Chairperson).

The results of the outreach effort and the responses and input are documented and audited in **Appendix B.**

Cultural Resources Records Search

The South Central Coastal Information Center (SCCIC) at California State University, Fullerton conducted a records search of previously documented cultural resources sites and cultural resources reports archived for the Project area and within a one-mile radius (buffer) surrounding the subject property. The search included a review of all historic and prehistoric archaeological resources and any built-

environment resources as well. Additionally, this review includes an archival search of the existing cultural resources reports on file with the Information Center. The California Points of Historical Interest (CPHI), California Historical Landmarks (CHL), California Register of Historical Resources (CALREG), National Register of Historic Places (NRHP), and California State Historic Properties Directory (CHPD) were all reviewed for the project site.

According to the Information Center results, 14 cultural resources reports have been previously completed within the Project area and its one mile buffer. Eleven cultural resources sites have also been identified within that same area – all of these resources are located and mapped in areas outside of the Project boundaries. **Table 2** lists the known cultural resources sites documented within the Project area's one-mile buffer. **Table 3** lists the previous cultural resources survey reports filed with the Information Center that have been completed within the Project area and the buffer.

Table 2. Known Cultural Resources Within the Project Area and a One Mile Buffer

Primary Number	Trinomial/Resource Name	Age	Type	Evaluations and Records*
P-36-000896	CA-SBr-896	Prehistoric	Flaked Stone Scatter and Bedrock Milling Feature	1976 (Crowley and Weaver)
P-36-007153	CA-SBr-7153H	Historic	Privy Pit / Trash Scatter/Dump, Road/Trail/ Railroad Bed, Engineering Structure, Highway/Trail	1992 (ACS)
P-36-007694	CA-SBr-7694H	Historic	LADWP Boulder Transmission Lines, Lytle Canyon Transmission Lines, Boulder Transmission Line 1, 2, and 3 segment; SRI-4008; LSA's Site #8; Cingular ES-130-01, DWP Almond No. 22316 Transmission Tower	1986 (John F. Elliott, ECOS); 1993 (D. Powers, Dames & Moore); 1995 (J. Brock, Archaeo Advisory Group); 1997 (Neal Neuenschwander, Peak & Associates, Inc); 2000 (Stephen Van Wormer, KEA Env.); 2001 (Jeffrey Wedding, Harry Reid Center for Environmental Studies); 2004 (S. Hogan-Conrad, Earth Tech Inc); 2006 (K. Crawford); 2007 (Daneil Ballester, CRM Tech); 2007 (Daniel Ballester, CRM Tech);

				2008 (Jeremy Hollins, URS); 2011 (S. Kremkau, SRI); 2011 (W. Jones, ECORP); 2011 (Michael Dice, MBA); 2011 (D. Winslow, ASM); 2012 (Steph Velasquez); 2012 (Candace Ehringer, ESA); 2012 (Katherine Anderson, ESA); 2013 (G. Granger, Chambers roup); 2013 (Brad Comeau, Dudek); 2013 (C. Higgins, Far Western); 2013 (T. Fuerstenberg, Pacific Legacy); 2014; 2015 (M. Vader, ESA); 2015, 2016 (M. Vader, ESA); 2017 (Dicken Everson, Caltrans); 2018 (M. Connelly, HDR);
P-36-007844	CA-SBr-007844	Prehistoric	Ceramic Scatter/ Rockshelter/Cave	1994 (Joplin and Holcomb)
P-36-007846	CA-SBr-7846H	Historic	Foundation/Structure/Pad, Wells/Cisterns, Water Conveyance System, Standing Structure	1994 (ACS)
P-36-007847	CA-SBR-7847H	Historic	Water Conveyance System	1994 (Knell et al.)
P-36-008977	CA-SBr-8977H	Historic	Water Conveyance System	1997 (Duke, C.)
P-36-008978	CA-SBr-8978H	Historic	Landscaping/Orchard, Foundation/Structure/Pad, Water Conveyance System, Road/Trail/ Railroad Bed, Engineering Structure, Standing Structure	1997 (Duke, C.)
P-36-015982		Historic	Euclid Ave, Upland & Ontario; OHP Property Number - 092971	1979 (Alexander, V. K.); 1987 (Denton, Bryce, City of Ontario); 1988 (Parks, B. , Caltrans); 1994 (Smith, Francesca, Myra

				L. Frank & Associates)
P-015983		Historic	Resource Name - Mule Car; PHI - SBR-033; Road/Trail/Railroad Bed	1974 (Kathryn Kaiser, DPR)
P-36-020786		Prehistoric	Flaked Stone Scatter	2009 (CalFire)

Key: ACS = Archaeological Consulting Services, ACS = Archeological Consulting Services, DPR = Department of Parks and Recreation, SRI = Scientific Resources Investigations, URS = United Research Services

Site P-36-000896 (CA-SBr-896)

This site record dates to 1976 and was filed by Suzanne Crowley and Richard Weaver. I believe at the time they were working for either the U.S. Forest Service or the Bureau of Land Management. They indicate that the site was partially destroyed by a powerline road and that it could be potentially further disturbed by a proposed flood control project. The site is described as a scatter of groundstone and flaked stone artifacts. The artifacts included three fragmentary milling slabs, two fragmentary handstones, five cores of a grey lithic material, and a number of flakes that are both of gray and red toolstone. They noted a possible spring in the vicinity of the site as well.

Site P-36-007153 (CA-SBr-7153H)

The site is situated on the Leslie and Dorothy Guengerich property, 643 East 24th Street, Upland, San Bernardino County. J. Stephen Alexandrowicz recorded the site for ACS in 1992. The site is an early to late 20th century residential agricultural site. The raising of chickens and hogs, as well as citrus farming represent the main commercial activities at the site. Secondary activities include vehicle maintenance within two structures within the fourplex. The main Bungalow style house (F-7), ca. 1930s, is in excellent condition. This house exemplifies its original setting, location, design, setting, craftsmanship, feeling and association. The Bungalow is the easternmost house in a row of antiquated structures on the north side of 24th Street. The rustic cabin, ca. 1920s-1930s, appears to represent a rare early 20th century vernacular residential building. The recorder recommended the main building as potentially eligible for the National Register of Historic Places (NRHP).

P-36-007694 (CA-SBr-7694H)

This historic site was recorded by Dicken Everson of Caltrans in 2017. The record documents three historic Los Angeles Department of Water and Power transmission towers that cross State Route 18. The towers date to the 1930s and were considered an engineering marvel within their day.

P-36-007844 (CA-SBr-7844)

This prehistoric site is a small rock shelter in a volcanic landscape. The site dimensions are about four by eight meters and the artifactual assemblage includes seven milling slabs, a handstone, some *Phragmites* spp. material (perhaps arrow or dart shafts), and opalite flaked stone artifacts. The site is on the eastern skirt of the Piute Range and about one mile south of the ruins of Fort Piute.

P-36-007846 (CA-SBr-7846H)

This historic site was recorded in 1994 by ACS. J. S. Alexandrowicz and E. J. Knell documented the site as an early 20th century construction of a waterworks complex associated with the San Antonio Water Company. There are six sets of features including concrete pads, an extensive set of water pipes, a wood framed building, and a water turbine.

P-36-007847 (CA-SBr-7847H)

This historic site (early 20th century) was recorded in 1994 by ACS. J. S. Alexandrowicz and E. J. Knell documented the site as three sections of a water flume possibly associated with the San Antonio Water Company.

P-36-008977 (CA-SBr-8977H)

This is an historic site recorded by Curt Duke of LSA Associates in 1997. The historic site is an irrigation canal that is lined with cement and granite cobbles and runs some 720 feet in length. It is located southwest of the community of San Antonio Heights. The site record does not state its age but would likely date to the early 20th century.

P-36-008978 (CA-SBr-8978H)

This site record was filed by Curt Duke in 1997 – at that date he was working for LSA Associates. The site is a 1930s era home with related features including farming equipment and a cobble retaining wall. It is located in the community of San Antonio Heights at the intersection of 25th Street and Mountain Avenue.

P-36-015982 (Euclid Avenue)

This site record documents part of the National Register of Historic Places property of Euclid Avenue. It is located at the juncture of the communities of Upland and Ontario. This was the main thoroughfare in a "model colony". The element within the buffer of the Project is a non-contributing element of the district a recently renovated and replaced bridge. No contributing elements to the significance of the district exist within the bridge area. The site record was crafted by Francesca Smith in 1997 who was affiliated with the firm of Myra L. Frank and associates. The Euclid Avenue thoroughfare originally dates to the inception of this community and is historically attested to have been established in the 1880s.

P-36-015983 (Mule Car)

This site record documents a local Point of Historical Interest. The description on the record reads as follows.

"The cities of Ontario and Upland were developed by the Chaffey Brothers in 1882. Connecting the two cities was a very wide north/south street named Euclid Avenue… As the land along Euclid Avenue sold quickly, need for transportation developed. Mr. J. H. Tays, a mining man from Mexico, developed the historic Mule Car transportation system like those he had seen in operation in the mines in Mexico.

Railroad tracks were laid and the two mule cars were built in 1887. The mules would pull the car north up Euclid Avenue and then would be placed on a small car behind the trolley car to ride back down-hill."

P-36-020786 (SBr-13400)

This is a prehistoric site located near Camp Oakes in the San Bernardino National Forest. The site's prehistoric artifacts include two Pinto, two Humboldt, and one Desert Side-notched points. Additionally, the site contains eight untyped points, ten bifaces, two cores, five edge-modified flakes, one modified quartz crystal, one scraper, five milling slabs, and a minimum of 450 pieces of flaked stone waste (debitage). The site received an updated recording by several associates affiliated with the firm of SRI in 2017.

Table 3. (below) provides a list of the cultural resources reports identified by the Information Center within the Project area and its one-mile buffer.

Table 3. Cultural Resources Reports in the Project and within the One-mile Buffer

InfoCenter Number	Authors	Title	Year
SB-00546	Martz, Patricia, Archaeological Research Unit, University of California, Riverside	Description and Evaluation of the Cultural Resource within Brea, Carbon, Fullerton, and San Antonio Reservoirs, Santa Ana River Basin, Los Angeles, and San Bernardino Counties, California.	1977
SB-00675	Hearn, Joseph E., San Bernardino County Museum	Archaeological-Historical Resources Assessment of Lot 10 of Block 10, San Antonio Subdivision, Tentative Parcel Map No. 4663	1978
SB-00836	San Bernardino County Museum	Cultural Resources Assessment Tentative Map Tract No. 11072, Upland Area	1979
SB-01248	Lerch, Michael, San Bernardino County Museum	Cultural Resources Assessment of a Proposed 5.0 MG Reservoir Site, San Antonio Water Company, Upland, San Bernardino County, California	1982
SB-01601	Hatheway, Roger and Roger D. Mason, Scientific Resource Surveys	Historic Property Survey Report: Euclid Avenue Improvement Project, City of Upland, California, Project 3645	1986
SB-01924	Hatheway, Roger and Jeannette A. McKenna, Hatheway & McKenna	Historical, Architectural, and Archaeological Resources Report for the Tays Residence/Bible Fellowship Property	1989
SB-02632	Alexandrowicz, Steven, J., Susan R. Alexandrowicz, and Arthur A. Kuhner, Archaeological Consulting Services	A Cultural Resources Investigation for the Proposed Construction Site at the Guengerich Property, Tentative Tract No. 15351, 643 East 24th Street, County of San Bernardino, California	1992
SB-02753	White, Robert S., Archaeological Associates	An Archaeological Assessment of a 10 Acre Property Located Adjacent to Holly Drive in Upland, San Bernardino County, CA	1993
SB-02754	Alexandrowicz, Steven, J., Susan R. Alexandrowicz, and Arthur A. Kuhner,	A Cabin Bungalow on the Hill – Historic Preservation in San Antonio Heights, County of San Bernardino, CA	1989

	Archaeological Consulting Services		
SB-02823	Hall, Mathew C., Archaeological Research Unit, University of California, Riverside	Archaeological Monitoring of New Construction at the Tays Residence/Life Bible Fellowship Property	1993
SB-02921	Alexandrowicz, Steven, J., Susan R. Alexandrowicz, and Edward Knell, Archaeological Consulting Services	Historic Preservation Investigations at Lot 10, Block 22, San Antonio Heights, County of San Bernardino, California: The Identification Program	1994
SB-02997	Alexandrowicz, Steven, J., Susan R. Alexandrowicz, Edward Knell, and Arthur Kuhner, Archaeological Consulting Services	Historic Preservation Investigations at Lot 10, Block 22, San Antonio Heights, County of San Bernardino, California: The Mitigation Program.	1994
SB-03283	Duke, Curt and Deborah McClean, LSA Associates	Cultural Resources Assessment of the San Antonio Heights Project, City of Upland, San Bernardino County, CA	1998
SB-03373	Bonner, Wayne	Cultural Resources Record Search and Survey Report for a PBMS Facility CM172-05 in the City of Upland, CA	1998
SB-04857	Thai, Sean	Historic Consultation for NexTel of California Wireless Telecommunications Service (WTS) Facility Project Aceyalon/CA-5542A. Upland, San Bernardino County, California	2006
SB-05356	Bilat, Lorna	Aceylone/CA-5342A.	2006
SB-05742	Budinger, Fred E.	Proposed Wireless Device Light Standard and Associated Equipment; Mount Baldy Road Site, Mountain Avenue and 24th Street	2005
SB-05820	Thornton, Mark V.	A Survey and Historic Significance Evaluation of the CDF Building Inventory.	1994

Field Survey

At the Project location, transects were walked at 10 meter spacing across the Project survey area. The ground surface visibility at the time of survey was ~80%. All areas were examined for the potential for cultural remains. Special attention was given to rodent holes, animal burrows, and exposed subsurface ground such as might be exposed in drainage channels.

Shovel Test Pits

Two shovel test pits (STPs) were excavated in two areas within the proposed project footprint, selecting areas with high potential for subsurface. STP 1 (34.569366, -117.457427) was terminated at 50 cm due to sterile findings and STP 2 (34.566132, -117.454366) was terminated at 20 cm due to soil compaction and residual soils. The soil across the project area is loamy sand. The pedestrian survey and STPs were negative for cultural resources.

CONCLUSION AND CULTURAL RESOURCES RECOMMENDATIONS

This cultural study was completed pursuant to CEQA. Field survey investigations were conducted on September 7, 2020 which resulted in negative findings with no historic or prehistoric cultural resources within the Project area.

Native American Consultation

The NAHC was contacted to complete a Sacred Lands File Search of the property, which returned negative results. The NAHC provided a list of potentially interested parties and affiliated Native American individuals and groups. These individuals were all contacted for further outreach and to identify if there are any concerns related to cultural values and resources for the proposed project area.

Native Americans made certain requests regarding who to consult with specifically and what actions should be taken. We have memorialized that information into this report (**Appendix B**).

Archival Records Search

A request to the SCCIC was executed and an archival records search for the Project was conducted. The search included a one-mile buffer surrounding the Project. Fourteen cultural resources survey reports were identified as having been completed within the Project area and buffer and ten cultural resource sites were previously documented. None of these sites were located within the Project area.

Cultural Resources Recommendations

If cultural resources are discovered during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the finds. Project construction activities shall be diverted from the location of the discovery until the finding's significance is established.

If human remains are encountered during the undertaking, State Health and Safety Code Section 70.50.2 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her representative, the MLD may inspect the site of discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD shall make recommendations as the manner in which to treat the human remains and any associated offerings.

REFERENCES

Barras, Judy
1973 *Tehachapi, the Formative Years*. Private Printing.

1976 *The Long Road to Tehachapi*. Bakersfield: Sierra Printers.

1984 *Their Places Shall Know Them No More*. Tehachapi: Privately Printed by Judy and Bud Barras.

Basgall, Mark E.
1988 Archaeology of the Komodo Site, an Early Holocene Occupation in Central Eastern California. In *Early Human Occupation in Far Western North America: The Clovis-Archaic Interface*, edited by Judith A. Willig, C. Melvin Aikens, and John L. Fagan, pp. 103–119. Nevada State Museum Anthropological Papers, Vol. 21. Nevada Department of Cultural Affairs, Division of Museums and History, Carson City, Nevada.

1993 *Early Holocene Prehistory of the North-central Mojave Desert*. Ph.D. dissertation, Department of Anthropology, University of California, Davis.

2007a Another Look at the Ancient Californians: Resurvey of the Emma Lou Davis Stake Areas and Reassessment of Collections, Naval Air Weapons Station, China Lake, Kern County, California. On file, Naval Air Weapons Station, China Lake, California.

2007b Prehistoric People in an Evolving Landscape: A Sample Survey of the China Lake Basin and its Implications for Paleoindian Land Use. On file, Naval Air Weapons Station, China Lake, California.

2012 Middle Archaic Cultural Adaptations in the Eastern Sierra Nevada: Data Recovery Excavations at CA-INY-1384/H, INY-6249/H, INY-6250, and INY-6251/H. Submitted by Archaeological Research Center, Department of Anthropology, California State University, Sacramento. On file, California Department of Transportation, District 9, Bishop.

Basgall, Mark E. and Mark A. Giambastiani
1995 Prehistoric Use of a Marginal Environment: Continuity and Change in Occupation of the Volcanic Tablelands, Mono and Inyo Counties, California. *Center for Archaeological Research at Davis Publication* 12.

Basgall, Mark E. and Matthew C. Hall
1991 Relationship between Fluted and Stemmed Points in the Mojave Desert. *Current Research in the Pleistocene* 8:61–63.

1992 Fort Irwin Archaeology: Emerging Perspectives on Mojave Desert Prehistory. *Society for California Archaeology Newsletter* 26(5):1–7.

1994 Status Report on Cultural Resources Management at the National Training Center, Fort Irwin, 1993–1994: An Addendum to the Fort Irwin Historic Preservation Plan. Submitted by Far Western Anthropological Research Group, Inc., Davis, California. On file United States Department of Defense, National Training Center, Fort Irwin, California.

2000 Morphological and Temporal Variation in Bifurcate-Stemmed Dart Points of the Western Great Basin. *Journal of California and Great Basin Anthropology* 22(2):237–276.

Basgall, Mark E. and Kelly R. McGuire
1988 The Archaeology of CA-INY-30: Prehistoric Culture Change in the Southern Owens Valley, California. On file, California Department of Transportation, Office of Environmental Analysis, Sacramento.

Bean, Lowell John
1972 *Mukat's People: The Cahuilla Indians of Southern California*. University of California Press, Berkeley.

1978 Cahuilla. In Handbook of North American Indians, Volume 8, *California*, Robert F. Heizer, editor, pp.575-587. Washington: Smithsonian Institution.

Bean, Lowell John, and Katherine Siva Saubel
1972 *Temalpakh: Cahuilla Indian Knowledge and Usage of Plants*. Banning: Malki Museum Press.

Bean, Lowell John and Charles Smith
1978 Serrano**.** In Handbook of North American Indians, Volume 8, *California*, Robert F. Heizer, editor, pp. 570-574. Washington: Smithsonian Institution.

Bean, Lowell John, Sylvia Brakke Vane, Michael Lerch, and Jackson Young
1981 Native American Places in the San Bernardino National Forest. On file Department of Agriculture, United States Forest Service, South Zone Office, Arcadia, California.

Beattie, George W. and Helen P. Beattie
1939 *Heritage of the Valley: San Bernardino's First Century*. Pasadena, California: San Pasqual Press.

Beck, Warren A. and Ynez D. Haase
1974 *Historical Atlas of California*. University of Oklahoma Press, Oklahoma City.

Beck, Charlotte and George T. Jones
1997 The Terminal Pleistocene/Early Holocene Archaeology of the Great Basin. *Journal of World Prehistory* 11(2):161–236.

2009 The Archaeology of the Eastern Nevada Paleoarchaic, Part I: The Sunshine Locality. *University of Utah Anthropological Papers* No. 126.

2010 Clovis and Western Stemmed: Population Migration and the Meeting of Two Technologies in the Intermountain West. *American Antiquity* 75(1):81–116.

Bedwell, Stephen F.
1970 *Prehistory and Environment of the Pluvial Fork Rock Lake Area of South-Central Oregon*. Ph.D. dissertation, Department of Anthropology, University of Oregon, Eugene.

Benedict, Ruth
1924 A Brief Sketch of Serrano Culture. *American Anthropologist* 26(3):366-392.

Bettinger, Robert L.
1978 Alternative Adaptive Strategies in the Prehistoric Great Basin. *Journal of Anthropological Research* 34(1):27–46.

Bettinger, Robert L. and Martin A. Baumhoff
1982 The Numic Spread: Great Basin Cultures in Competition. *American Antiquity* 47(3):485–503.

Bettinger, Robert L. and R. Ervin Taylor
1974 Suggested Revisions in Archaeological Sequences of the Great Basin and Interior Southern California. *Nevada Archaeological Survey Research Papers* 5:1–26.

Blackburn, Thomas C. and Lowell John Bean
1978a Kitanemuk. In Handbook of North American Indians, Volume 8, *California*, Robert F. Heizer, editor, pp. 564-569. Smithsonian Institution, Washington, DC.

1978b Serrano. In Handbook of North American Indians, Volume 8, *California*, Robert F. Heizer, editor, pp. 570-574. Smithsonian Institution, Washington, DC.

Borden, Ferris W.
1971 The Use of Surface Erosion Observations to Determine Chronological Sequence in Artifacts from a Mohave Desert Site. *Archaeological Survey Association of Southern California Papers* 7.

Bryan, Alan L.
1988 The Relationship of the Stemmed Point and Fluted Point Traditions in the Great Basin. *Nevada State Museum Anthropological Papers* 22:53–74.

Byrd, Brian F., and Micah Hale
2003 Lacustrine Lifestyles along Owens Lake: National Register Historic Places (NRHP) Evaluation of 15 Prehistoric Sites for the Olancha/Cartago Four-Lane Project, United States Route 395, Inyo County, California. On file, California Department of Transportation, District 6, Fresno.

Campbell, Elizabeth W. Crozer
1931 An Archaeological Survey of the Twenty-Nine Palms Region. *Southwest Museum Papers* 7:1-93.

Campbell, Elizabeth W. Crozer and William H. Campbell
1935 The Pinto Basin Site: An Ancient Aboriginal Camping Ground in the California Desert. *Southwest Museum Papers* 9:1-51.

Campbell, Elizabeth W. Crozer, William H. Campbell, Ernst Antevs, Charles E. Amsden, Joseph A. Barbieri, and Francis D. Bode
1937 The Archaeology of Pleistocene Lake Mohave: A Symposium. *Southwest Museum Papers* 11.

Cappannari, Stephen C.
1950 *The Concept of Property Among Shoshoneans*. Ph.D. dissertation, Department of - Anthropology, University of California, Berkeley.

1960 The Concept of Property Among Shoshoneans in *Essays in The Science of Culture*, edited by G. E. Cole and R. l. Carneiro, pp. 133-144. New York: Thomas Crowell Company.

Clewlow, C. William, Jr., Robert F. Heizer, and Rainer Berger
1970 An Assessment of the Radiocarbon Dates for the Rose Spring Site (CA-Iny-372), Inyo County, California. In Papers on Anthropology in the Great Basin, pp. 19-27. - *University of California Archaeological Research Facility Contributions* 7.

Coues, Elliott (editor)
1900 *On the Trail of a Spanish Pioneer: The Diary and Itinerary of Francisco Garces (Missionary Priest) in his Travels through Sonora, Arizona and California 1775-1776*. Two Volumes. New York: Francis P. Harper.

Davis, Emma Lou
1978 *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*. Natural History Museum of Los Angeles County, Science Series 29. Los Angeles.

Davis, James T.
1996 Trade Routes and Economic Exchange among the Indians of California. *University of California Archaeological Survey Reports* No. 54.

Delacorte, Michael G.
1994 Late Prehistoric Resource Intensification in the Numic Heartland. Paper presented at the 24th Annual Great Basin Anthropological Conference, Elko, Nevada.

1995 Desert Side-notched Points as a Numic Population Marker in the West-Central Great Basin. Paper presented at the 29th Annual Meeting of the Society for California Archaeology, Eureka, California.

Driver, Harold E
1937 Culture Element Distributions, VI: Southern Sierra Nevada. *University of California Anthropological Records* 1(2):53–154. Berkeley.

Drucker, Philip
1937 Culture Element Distributions V: Southern California. *University of California Anthropological Records* 1(1):1-52. Berkeley.

Earle, David D.
1990 New Evidence on the Political Geography of the Antelope Valley and Western Mojave Desert at Spanish Contact. In Archaeology and Ethnohistory of Antelope Valley and Vicinity, edited by Bruce Love and William H. DeWitt, pp. 87-104. *Antelope Valley Archaeological Society Occasional Papers* Number 2.

1997 Final Cultural Resources Overview and Management Plan for Edwards AFB, California. Volume 1: Overview of Prehistoric Cultural Resources. On file Southern San Joaquin Valley Archaeological Information Center, California State University, Bakersfield

2004a Native Population and Settlement in the Western Mojave Desert in the Eighteenth and Nineteenth Centuries. In *The Human Journey and Ancient Life in California's Deserts: Proceedings from the 2001 Millennium Conference*, Mark W. Allen and Judyth Reed, eds., pp. 173-186. Maturango Museum Press, Ridgecrest, California.

2004b Ethnohistorical and Ethnographic Overview and Cultural Affiliation Study of the Fort Irwin Region and the Central Mojave Desert. Report prepared for TRC Solutions Inc., Salt Lake City, Utah. On file with author.

2005a The Mojave River and the Central Mojave Desert: Native Settlement, Travel, and Exchange in the Eighteenth and Nineteeth Centuries. *Journal of California and Great Basin Anthropology* 25(1):1-38.

2005b Chemehuevi Population Movements and the Numic Frontier in the Western and Central Mojave Desert after European Contact. In Papers in Antelope Valley Archaeology and Anthropology edited by Roger W. Robinson, pp. 135-146. *Antelope Valley Archaeological Society Occasional Papers* Number 4.

2005c Chemehuevi Occupation and Traditional Land Use in the Barstow-Daggett Area, the Mojave River Region, and the Western Mojave Desert During the Nineteenth Century: Substantiation of a Traditional Association of the Chemehuevi Tribe within the Barstow-Daggett Area. Unpublished report in author's possession.

Eerkens, Jelmer W.
2004 Privatization, Small-Seed Intensification, and the Origins of Pottery in the Western Great Basin. *American Antiquity* 69:653-670.

Elston, Robert G.
1982 Good Times, Hard Times: Prehistoric Culture Change in the Western Great Basin. In Man and Environment in the Great Basin, edited by David B. Madsen and James F. O'Connell, pp. 186–206. *Society for American Archaeology Papers* No. 2, Washington, D.C.

Engelhardt, Zephyrin
1927 *San Gabriel Mission and the Beginning of Los Angeles*. San Gabriel, California: Mission San Gabriel.

Farmer, Malcolm F.
1935 The Mojave Trade Route. *Masterkey* 9(5):154-157.

Fenenga, Gerrit
2013 Clovis Blade Technology at the Witt Site, Tulare Lake, California. Paper presented to the -Sacramento Archaeology Society, West Sacramento California.

Fitzgerald, Richard T., Terry L. Jones, and Adella Schroth
2005 Ancient Long-distance Trade in Western North America: New AMS Radiocarbon Dates from Southern California. *Journal of Archaeological Science* 32(3):423–434.

Forbes, Jack D.
1965 *Warriors of the Colorado: The Yumas of the Quechan Nation and their Neighbors.* Norman: University of Oklahoma Press.

Fowler, Catherine
1972 Some Ecological Clues to Proto-Numic Homelands. In Great Basin Cultural Ecology: A Symposium, Don D. Fowler, editor, pp. 105-122. *Desert Research Institute Publication in the Social Sciences* 8, Reno.

Garfinkel, Alan P.
2006 Paradigm Shifts, Rock Art Theory, and the Coso Sheep Cult of Eastern California. *North American Archaeologist* 27(3):203-244.

2007 Archaeology and Rock Art of the Eastern Sierra and Great Basin Frontier. *Maturango Museum Publication* 22. Maturango Museum, Ridgecrest, California.

Garfinkel, Alan P. and Donald R. Austin
2011 Reproductive Symbolism in Great Basin Rock Art: Bighorn Sheep Hunting, Fertility, and Forager Ideology. *Cambridge Archaeological Journal* 21(3):453-471.

Garfinkel, Alan P., Donald R. Austin, David Earle, and Harold Williams
2009 Myth, Ritual and Rock Art: Coso Decorated Animal-Humans and the Animal Master. *Rock Art Research* 26(2):179-197.

Garfinkel, Alan P., Jerry N. Hopkins, and Craig E. Skinner
2008 Ancient Stones of Black Glass: Tracing and Dating Paleoindian Obsidian Artifacts from China and Tulare Lakes. In *Contributions to Tulare Lake Archaeology IV: Ice-*

age Stone Tools from the San Joaquin Valley, edited by Jerry N. Hopkins and Alan P. Garfinkel, pp. 59-97. Coyote Press Publications, Salinas, California.

Garfinkel, Alan P., Geron Marcom, and Robert A. Schiffman
2007 Culture Crisis and Rock Art Intensification: Numic Ghost Dance Paintings and Coso Representational Petroglyphs. *American Indian Rock Art* 33:83-103.

Garfinkel, Alan P., Robert A. Schiffman and Kelly R. McGuire
1980 Archaeological Investigations in the Southern Sierra Nevada: The Lamont Meadow and Morris Peak Segments of the Pacific Crest Trail. *Cultural Resources Publications, Archaeology*. Department of the Interior, Bureau of Land Management, Bakersfield District, Bakersfield, California.

Garfinkel, Alan P. and Harold Williams
2011 *Handbook of the Kawaiisu: A Sourcebook and Guide to Primary Resources on the Native Peoples of the far southern Sierra Nevada, Tehachapi Mountains, and southwestern Great Basin*. Wa-hi Sina'avi Publications, Bakersfield, California.

2015 *The Handbook of the Kawaiisu: A Sourcebook and Guide to Primary Resources on the Native Peoples of the far southern Sierra Nevada, Tehachapi Mountains, and southwestern Great Basin*. Revised Second Edition. Wa-hi San'avi Publications and the Tehachapi Heritage League, Tehachapi, California.

Garfinkel, Alan P., David A. Young, and Robert M. Yohe
2010 Rock Art, Resource Depression, and Ritual Bighorn Hunting in the Coso Range of Eastern California: A Simulation Model. *Journal of Archaeological Science* 37:42-51.

Giambastiani, Mark A.
2008 An Archaeological Survey of 10,121 Acres in the Spangler Hills Open Area and on Adjacent Lands within Searles Valley, Inyo County, California. On file Bureau of Land Management, Ridgecrest, California.

2011 An Archaeological Inventory of Approximately 2,700 Acres in the Lost Cabin, Water Canyon, and Pyramid Point Areas, North and South Ranges, Naval Air Weapons Station, China Lake, Inyo and San Bernardino Counties, California. Submitted by ASM Affiliates, Inc., Reno, Nevada. On file Environmental Planning and Management Department, Naval Air Weapons Station, China Lake, California.

Giambastiani, Mark A. and Thomas Bullard
2010 Terminal Pleistocene-Early Holocene Occupations on the Eastern Shoreline of China Lake, California. *Pacific Coast Archaeological Society Quarterly* 43(1-2):50-70.

Gifford, Edward
1918 Clans and Moieties in Southern California. *University of California Publications in American Archaeology and Ethnology* 23(1):1-122.

Gilreath, Amy J.
2007 Rock Art in the Golden State: Pictographs and Petroglyphs, Portable and Panoramic. In *California Prehistory: Colonization, Culture and Complexity* edited by Terry L. Jones and Kathryn A. Klar, pp. 273-290. Alta Mira Press, New York.

Gilreath, Amy J. and William R. Hildebrandt
1997 Prehistoric Use of the Coso Volcanic Field. *Contributions of the University of California No*. 56. University of California, Berkeley.

2008 Coso Rock Art within its Archaeological Context. *Journal of California and Great Basin Anthropology* 28(1):1–22.

2011 Current Perspectives on the Production and Conveyance of Coso Obsidian. In *Perspectives on Prehistoric Trade and Exchange in California and the Great Basin*, edited by Richard E. Hughes, pp. 171–188. University of Utah Press, Salt Lake City.

Goebel, Ted, Michael R. Waters, and Dennis H. O'Rourke
2008 The Late Pleistocene Dispersal of Modern Humans in the Americas. *Science* 319(5869):1497–1502.

Gold, Alan (Garfinkel)
2005 *Linguistic Archaeology: Prehistoric Population Movements and Cultural Identity in the Southwestern Great Basin and far southern Sierra Nevada*. Ph.D. dissertation. Department of Prehistoric Forager Ecology. University of California, Davis.

Goldsmith, Paul and Alan P. Garfinkel
2013 *Talking Stone: Rock Art of the Cosos*. E-book, documentary film and photographic archive. Bradshaw Foundation, London.

Grant, Campbell, James. W. Baird, and J. Kenneth. Pringle
1968 Rock Drawings of the Coso Range, Inyo County, California: An Ancient Sheep-hunting Cult Pictured in Desert Rock Carvings. *Maturango Museum Publication* 4, China Lake, California.

Grayson, Donald K.
2011 *The Great Basin: A Natural Prehistory*. Revised and expanded edition. University of California Press, Berkeley.

Harrington, John P.
1986 *John P. Harrington Papers, Volume 3: Southern California / Basin*. Smithsonian Institution, National Anthropological Archives, Washington, DC. [Microfilm edition, Millwood, New York, Kraus, International Publications].

Harrington, Mark R.
1948a An Ancient Site at Borax Lake, California. *Southwest Museum Papers* 16.

1948b A New Pinto Site. *Masterkey* 22(4):116-118.

1949 A New Pinto Site at Little Lake. *Masterkey* 23(5):135-136.

1950a Pinto Man at Little Lake. *Desert Magazine* 13(11):22-24.

1950b A Storage Cave Near Walker Pass. *Masterkey* 24(3):89-90.

1951 A Colossal Quarry. *Masterkey* 25(1):15-18.

1952 The Fossil Falls Site. *Masterkey* 26(6):191-195.

1953 A Cave Near Little Lake. *Masterkey* 27(3):77-82.

1957 A Pinto Site at Little Lake, California. *Southwest Museum Papers* No. 17.

Haynes, Gregory M.
2004 An Evaluation of the Chronological Relationship between Great Basin Stemmed and Pinto Series Projectile Points in the Mojave Desert. In Proceedings of the Millennium Conference: The Human Journey and Ancient Life in California's Deserts: Proceedings from the 2001 Millennium Conference, edited by Mark W. Allen and Judyth Reed, pp. 117–128. *Maturango Museum Publication* Number 15, Ridgecrest, California.

Hedges, Ken
2001 Traversing the Great Gray Middle Ground: An Examination of Shamanistic Interpretations of Rock Art. *American Indian Rock Art* 27:123–136.

Heizer, Robert F. and Martin A. Baumhoff
1961 The Archaeology of Wagon Jack Shelter. *University of California Anthropological Records* 20(4):119-138. Berkeley.

Heizer, Robert F., Martin A. Baumhoff, and C. William Clewlow, Jr.
1968 Archaeology of South Fork Shelter (NV-EL-11), Elko County, Nevada. *University of California Archaeological Survey Reports* 71:1-58. Berkeley.

Heizer, Robert F. and Thomas R. Hester
1978 Great Basin. In *Chronologies in New World Archaeology,* edited by R. Ervin Taylor and Clement W. Meighan, pp. 147-199. Academic Press, New York.

Hildebrandt, William R. and Kelly R. McGuire
2002 The Ascendance of Hunting during the California Middle Archaic: An Evolutionary Perspective. *American Antiquity* 67(2):231–256.

Johnson, Boma
2006 Hi, "Jay". In A Festschrift Honoring the Contributions of California Archaeologist Jay Von Werlhof edited by Russel L. Kaldenberg, pp. 41-62. *Maturango Museum Publication* Number 20. Maturango Press, Ridgecrest, California.

Johnson, John R. and Joseph G. Lorenz

2006 Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages. *Journal of California and Great Basin Anthropology* 26(1):33-64.

Justice, Noel D.
2002 *Stone Age Spear and Arrow Points of California and the Great Basin*. Indiana University Press, Bloomington, Indiana.

Kelly, Robert L.
1983 Hunter-Gatherer Mobility Strategies. *Journal of Anthropological Research* 39:277–306.

1985 *Hunter-Gatherer Mobility and Sedentism: A Great Basin Study*. Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.

1988 Three Sides of a Biface. *American Antiquity* 53:717–734.

Kelly, Isabel T. and Catherine S. Fowler
1986 Southern Paiute. In Handbook of North American Indians, Volume 11, *Great Basin*, Warren L. d'Azevedo, editor, pp. 525-557. Washington, D.C., Smithsonian Institution

King, Chester
2003 *Japchibit Ethnohistory*. On file, United States Department of Agriculture, Angeles National Forest.

Kroeber, Alfred. L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Washington, D.C.

Kyle, D.E.
1990 *Historic Spots in California*. Stanford University Press, Palo Alto.

Laird, Carobeth
1976 *The Chemehuevi*. Banning, California: Malki Museum Press.

Lamb, Sydney
1958 Linguistic Prehistory in the Great Basin. *International Journal of American Linguistics* 24(2):95–100.

Lanning, Edward P.
1963 The Archaeology of the Rose Spring Site (INY-372). *University of California Publications in American Archaeology and Ethnology* 49(3):327–336.

Leakey, Louis S. B., Ruth D. Simpson, and Thomas Clements
1968 Excavations at Nine Prehistoric Sites in in the Calico Mountains, California: Preliminary Report. *Science* 160:1022–1033.

Lengner, Kenneth R.
2013 *A Prehistory and History of the Death Valley Region's Native Americans and the Environments in Which They Lived*. Deep Enough Press, Pahrump, Nevada.

McGuire, Kelly R. and Alan P. Garfinkel
1976 The Development of Pinyon Exploitation in Central Eastern California. *The Journal of California Anthropology* 3(2):83–85.

1980 Archaeological Investigations in the Southern Sierra Nevada: The Bear Mountain Segment of the Pacific Crest Trail. *Cultural Resources Publication, Archaeology*. Bureau of Land Management, Bakersfield, California. Reprinted by Coyote Press, Salinas, California.

McGuire, Kelly R., Alan P. Garfinkel, and Mark E. Basgall
1982 Archaeological Investigations in the El Paso Mountains of the Western Mojave Desert: The Bickel and Last Chance Sites, CA-Ker-250, -261. On file, Bureau of Land Management, Ridgecrest, California.

McGuire, Kelly R. and William R. Hildebrandt
2005 Re-thinking Great Basin Foragers: Prestige Hunting and Costly Signaling During the Middle Archaic Period. *American Antiquity* 70:695–712.

Mehringer, Peter J., Jr. and J. C. Sheppard
1978 Holocene History of Little Lake, Mojave Desert, California. In *The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country*, edited by Emma Lou Davis, pp. 153-166. Natural History Museum of Los Angeles County, Science Series 29.

Meyer, Jack and Jeffrey S. Rosenthal
2010 Filling the Middle Holocene Gap. *California Archaeology* 2(2):279–283.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, New York.

Moratto, Michael, Alan P. Garfinkel, Robert M. Yohe, II, Alexander K. Rogers, Tim R. Carpenter, Craig Skinner, Jeff Rosenthal, Michael F. Rondeau, and Jon M. Erlandson
2018 Clovis in the Far West: Classification and Chronology of Western Fluted and End-thinned Points from the Rose Valley Sites, Inyo County, California. *Journal of California Archaeology* 10(1):27-60.

O'Connell, James F.
1967 Elko Eared/Elko Corner-notched Projectile Points as Time Markers in the Great Basin. *University of California Archaeological Survey Reports* 70:129-140. Berkeley.

Powers, Stephen
1877 Tribes of California. *Contributions to North American Ethnology* 3. United States Geographical and Geological Survey of the Rocky Mountain Region, Washington.

Robinson, Roger
1977 The Prehistory of the Antelope Valley, California. An Overview. *Kern County Archaeological Society Journal* 1:43-48.

Rogers, Malcolm J.
1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. *San Diego Museum of Man Archaeological Papers* 3. San Diego, California.

1966 How Stones Became Tools and Weapons. In *Ancient Hunters of the Far West*, pp. 139–192. Union-Tribune Publishing Company, San Diego.

Rondeau, Michael, Jim Cassidy, and Terry L. Jones
2007 Colonization Technologies: Fluted Projectile Points and the San Clemente Island Woodworking/ Microblade Complex. In *California Prehistory: Colonization, Culture and Complexity* edited by Terry L. Jones and Kathryn A. Klar, pp. 63-70. Alta Mira Press, Lanham, Maryland.

Sample, L. L.
1950 Trade and Trails in Aboriginal California. Berkeley: *University of California Archaeological Survey Reports* 8.

Schneider, Joan S., H. C. L. Brewer, and Matthew C. Hall
2000 Research, Inventory, and Management Strategies for At-Risk and Other Prehistoric Cultural Resources, Death Valley National Park, California: Program Design Report. On file, Eastern California Information Center, University of California, Riverside.

Schroth, Adella B.
1994 *The Pinto Point Controversy in the Western United States*. Ph.D. dissertation, Department of Anthropology, University of California, Riverside, California.

Schuiling, Walter C.
1984 *San Bernardino County: Land of Contrasts*. Windsor Publications, Woodland Hills, California.

Shott, Michael J.
1986 Technological Organization and Settlement Mobility: An Ethnographic Examination. *Journal of Anthropological Research* 42(1):15–51.

1989 On Tool-Class Use Lives and the Formation of Archaeological Assemblages. *American Antiquity* 54(1):9–30.

Steward, Julian H.
1938 Basin-Plateau Aboriginal Sociopolitical Groups. *Bureau of American Ethnology Bulletin* 116. Washington.

Stewart, Richard, Russell Kaldenberg, and Alexander Rogers
2005 Petroglyphs as Story-Boards: Providing Text for Ritual and Tradition and Recounting the "Power" Experience. In Something Resembling an Archaeologist: Papers in Memory of Paul H. Ezell, edited by Russell Kaldenberg. *San Bernardino County Museum Quarterly* 54(4):209-220. San Bernardino County Museum, Redlands,

Strong, William Duncan
1929 Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26(1):1-358.

Sutton, Mark Q.
1980 Some Aspects of Kitanemuk Prehistory. *Journal of California and Great Basin Anthropology* 2(2):214-225.

Sutton, Mark Q., Mark E. Basgall, Jill K. Gardner, and Mark W. Allen
2007 Advances in Understanding Mojave Desert Prehistory. In *California Prehistory: Colonization, Culture and Complexity* edited by Terry L. Jones and Kathryn A. Klar, pp. 229-246. Alta Mira Press, New York.

Thomas, David H.
1981 How to Classify the Projectile Points from Monitor Valley, Nevada. *Journal of California and Great Basin Anthropology* 3(1):7-43.

1983a The Archaeology of Monitor Valley 1: Epistemology. *Anthropological Papers of the American Museum of Natural History* 58(1). American Museum of Natural History, New York.

1983b The Archaeology of Monitor Valley 2: Gatecliff Shelter. *Anthropological Papers of the American Museum of Natural History* 59(1). American Museum of Natural History, New York.

Ugan, Andrew S. and Jeffrey S Rosenthal
2013a Archaeological Testing and National Register Evaluations of 40 Sites within Airport Lake, Charlie, and George Target Ranges, Naval Air Weapons Station China Lake, Inyo and Kern Counties, California. Submitted by Far Western Anthropological Research Group, Inc., Davis, California. On file, Naval Facilities Engineering Command, Southwest Division, San Diego, California.

Underwood, Jackson
2005 Discovering the Desert Kawaiisu. In a Festschrift Honoring the Contributions of California Archaeologist Jay Von Werlhof edited by Russel L. Kaldenberg, pp. 179-192. *Maturango Museum Publication* Number 20. Maturango Press, Ridgecrest, California.

Van Tilburg, Jo Anne, Gordon E. Hull, and John C. Bretney (editors)
2012 *Rock Art at Little Lake: An Ancient Crossroads in the California Desert*. Cotsen Institute of Archaeology, University of California, Los Angeles.

Vaughan, Sheila J. and Claude N. Warren
1987 Toward a Definition of Pinto Points. *Journal of California and Great Basin Anthropology* 9:199–213.

Wallace, William J.
1962 Prehistoric Cultural Development in the Southern Californian Deserts. *American Antiquity* 28(2):172–180.

Warren, Claude N.
1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32(2):168–185.

1984 The Desert Region. In *California Archaeology*, by Michael J. Moratto, pp. 339–430. Academic Press, Orlando, Florida.

1986 Projectile Points. *In Flood, Sweat, and Spears in the Valley of Death: Site Survey and Evaluation in Tiefort Basin, Fort Irwin, California*, edited by Dennis L. Jenkins, pp. 195–218. Coyote Press, Salinas, California.

2008 The Age of Clovis Points at China Lake, California. In Avocados to Millingstones: Papers in Honor of D. L. True, edited by Georgie Waugh and Mark E. Basgall. *Monographs in California and Great Basin Anthropology* Vol. 5, Archaeological Research Center, Department of Anthropology, California State University, Sacramento.

Warren, Claude N. and Robert H. Crabtree
1986 Prehistory of the Southwestern Area. In *Great Basin*, edited by Warren L. d'Azevedo, pp. 183–193. Handbook of North American Indians, Vol. 11, William C. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

Warren, Claude N. and Joan S. Schneider
2003 Pleistocene Lake Mojave Stratigraphy and Associated Cultural Material. *Proceedings of the Society for California Archaeology* 16:61–74.

Warren, Claude N., Delbert Leroy True, and A. A. Eudey
1961 Early Gathering Complexes of Western San Diego County: Results and Interpretations of an Archaeological Survey. *University of California, Los Angeles, Archaeological Survey Annual Report* 1960-1961:1-106.

Waters, Michael R. and Thomas W. Stafford
2007 Redefining the Age of Clovis: Implications for the Peopling of the Americas. *Science* 315:1122–1126.

Waters, Michael R., Thomas W. Stafford, H. G. McDonald, C. Gustafson, M. Rasmussen, E. Cappellini, J. V. Olsen, D. Szklarczyk, L. J. Jensen, M. Thomas P. Gilbert, and E. Willerslev
2011 Pre-Clovis Mastodon Hunting 13,800 Years Ago at the Manis Site, Washington. *Science* 334:351–353.

Whitley, David S.
1987 Comment on the Signs of All Times by J. D. Lewis-Williams and T. A. Dowson. *Current Anthropology* 29(2):238.

1998 History and Prehistory of the Coso Range: The Native American Past on the Western Edge of the Great Basin. In *Coso Rock Art: A New Perspective*, edited by Eva Younkin, pp. 29-68. Ridgecrest: Maturango Press.

2003 What is Hedges Arguing About? *American Indian Rock Art* 29:83-104.

Whitley, David S. and Ronald I. Dorn
1987 Rock Art Chronology in Eastern California. *World Archaeology* 19:150-164.

2010 The Coso Petroglyph Chronology. *Pacific Coast Archaeological Society Quarterly* 43: 135-157.

Wigand, Peter E. and Rhode, David
2002 Great Basin Vegetation History and Aquatic Systems: The Last 150,000 years. In *Great Basin Aquatic Systems History*, edited by R. Hershler, David R. Madsen, and D. R. Currey. Smithsonian Contributions to the Earth Sciences 33.

Willig, Judith A. and C. Melvin Aikens
1988 The Clovis-Archaic Interface in Far Western North America. In Early Human Occupation in Western North America: The Clovis-Archaic Interface, edited by Judith A. Willig, C. Melvin Aikens, and John L. Fagan, pp. 1–40. *Nevada State Museum Anthropological Papers* Volume 21. Carson City, Nevada.

Yohe, Robert, II
1992 *A Re-evaluation of Western Great Basin Cultural Chronology and Evidence for the Timing of the Introduction of the Bow and Arrow to Eastern California Based on New Excavations at the Rose Spring Site (CA-INY-372).* Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Zigmond, Maurice
1938 Kawaiisu Territory. In Tribal Distribution in the Great Basin edited by W. Z. Park (et al.). *American Anthropologist* 40:634-638.

1941 *Ethnobotanical Studies Among California and Great Basin Shoshoneans*. Ph.D. Dissertation, Anthropology Department, Yale University.

1971a Kawaiisu Plant Name Categories. In Great Basin Anthropological Conference 1970: Selected Papers edited by C. Melvin Aikens, pp. 155-165. *University of Oregon Anthropological Papers* 1.

1971b Some Mythological and Supernatural Aspects of Kawaiisu Ethnography and Ethnobiology. In Great Basin Cultural Ecology: A Symposium edited by D. D. Fowler, pp. 129-134. *Desert Research Institute Publications in the Social Sciences* No. 8. Reno.

1977 The Supernatural World of the Kawaiisu. In *Flowers of the Wind: Papers on Ritual, Myth, and Symbolism in California and the Southwest* edited by Thomas C. Blackburn, pp. 59-95. Socorro: Ballena Press.

1978 Kawaiisu Basketry. *Journal of California Anthropology* 5(2):199-215.

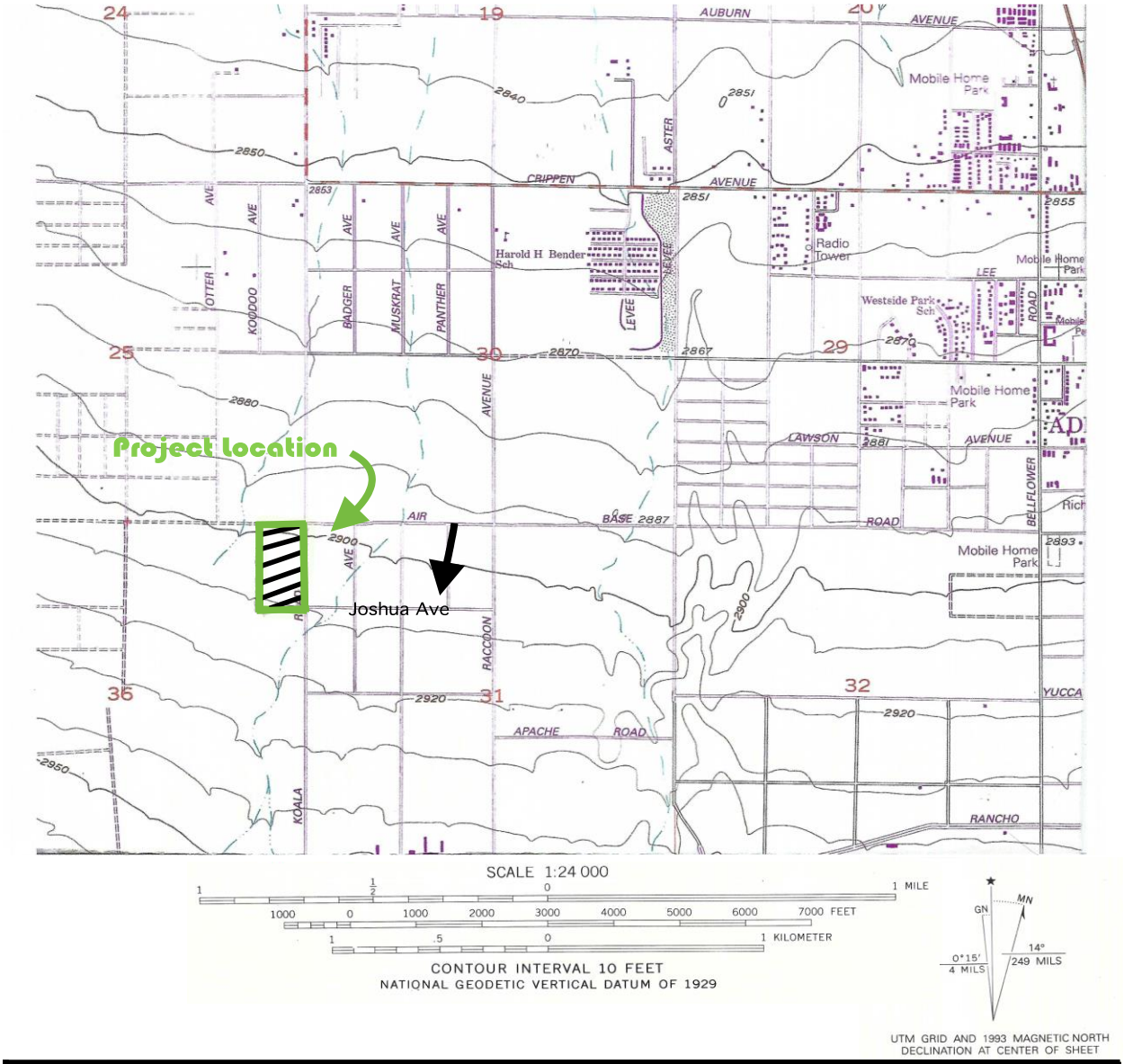
1980 Kawaiisu Mythology, An Oral Tradition of South-central California. *Ballena Press Anthropological Papers* No. 18.

1981 *Kawaiisu Ethnobotany*. Salt Lake City: University of Utah Press.

1986 Kawaiisu. In Handbook of North American Indians, Volume 11, *Great Basin*, edited by Warren L. d'Azevedo, pp. 398-411. Washington, D. C.: Smithsonian Institution.

Appendix A

Figures and Photographs



- Area Surveyed

Figure 1
Project Map

Figure 2.
Overview of Adelanto Project Area, view to northeast

Figure 3.
Overview of Adelanto Project Area, view to northwest

Figure 4.
Shovel Test Pit 1, view to the south.

Figure 5.
Shovel Test Pit 2, view to the northwest.

Appendix B

Native American Consultation

Sacred Lands File & Native American Contacts List Request

To

Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 (Facsimile)
nahc@nahc.ca.gov

Current Date: September, 16, 2020

Project: Adelanto

County: San Bernardino

USGS Quadrangle Name: Adelanto

Location: Township 6 North, Range 6 West, Section 36

Company/Firm/Agency: Dr. Alan Garfinkel Gold, RPA No. 989105, Cultural Resources Consultant

Street Address: 2800 San Pablo Avenue

City: Bakersfield, California **Zip:** 93306

Phone: 805.312.2261

Fax: none

Email: avram1952@yahoo.com

Project Description: Seeking to approval to establish nine 63,000 square foot facilities for cannabis uses on 17.69 acres – south of Air Expressway on the west side of Koala Road.

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

September 21, 2020

Alan Garfinkel Gold
Cultural Resources Consultant

Via Email to: avram1952@yahoo.com

Re: Adelanto Project, San Bernardino County

Dear Dr. Gold:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
9/21/2020

Kern Valley Indian Community
Brandy Kendricks,
30741 Foxridge Court — Kawaiisu
Tehachapi, CA, 93561 — Tubatulabal
Phone: (661) 821 - 1733 — Koso
krazykendricks@hotmail.com

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010 — Kawaiisu
Lake Isabella, CA, 93283 — Tubatulabal
Phone: (760) 378 - 2915 — Koso
bbutterbredt@gmail.com

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010 — Kawaiisu
Lake Isabella, CA, 93240 — Tubatulabal
Phone: (661) 340 - 0032 — Koso

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Quechan Tribe of the Fort Yuma Reservation
Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838 — Kitanemuk
Newhall, CA, 91322 — Vanyume
Phone: (503) 539 - 0933 — Tataviam
Fax: (503) 574-3308
ddyocum@comcast.net

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
jmauck@sanmanuel-nsn.gov

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

Tubatulabals of Kern Valley
Robert L. Gomez, Chairperson
P.O. Box 226 — Tubatulabal
Lake Isabella, CA, 93240
Phone: (760) 379 - 4590
Fax: (760) 379-4592

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Adelanto Project, San Bernardino County.

Native American Heritage Commission
Native American Contact List
San Bernardino County
9/21/2020

Twenty-Nine Palms Band of Mission Indians
Darrell Mike, Chairperson
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 863 - 2444
Fax: (760) 863-2449
29chairman@29palmsbomi-nsn.gov

Twenty-Nine Palms Band of Mission Indians
Anthony Madrigal, Tribal Historic Preservation Officer
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 775 - 3259
amadrigal@29palmsbomi-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Adelanto Project, San Bernardino County.

Dr. Alan Garfinkel Gold RPA No. 989105
Cultural Resources Management Consultant

Dr. Alan Garfinkel Gold
Ms. Hannah Gold
2800 San Pablo Avenue
Bakersfield, CA, 93306

September 26, 2020

Anthony Madrigal, Tribal Historic
Preservation Officer
Twenty-Nine Palms Band of Mission Indian
46-200 Harrison Place
Coachella, CA 92236

Dear Mr. Madrigal,

We are contacting you regarding a project, a tentative parcel map, and the related cultural resources clearance effort to support the development of nine 63,000 square foot, two-story facilities for *Cannabis* use. The project is planned for development on a 17.69 acre lot in the City of Adelanto in San Bernardino County, California (Project Site).

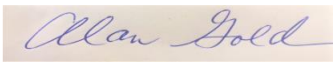
This letter is intended to inform you of the Adelanto Project and to help ensure compliance with the California Environmental Quality Act (CEQA). Please see the attached Project location map.

As part of the cultural resources study for the project, we are requesting your insight on potential Native American cultural properties and resources in or near the Project. Please respond at your earliest convenience if you have any information to consider for this study.

We would greatly appreciate it, if you could review the attached map and indicate to us if you have any concerns or input with regard to potentially sensitive cultural values or resources in the Project area and vicinity.

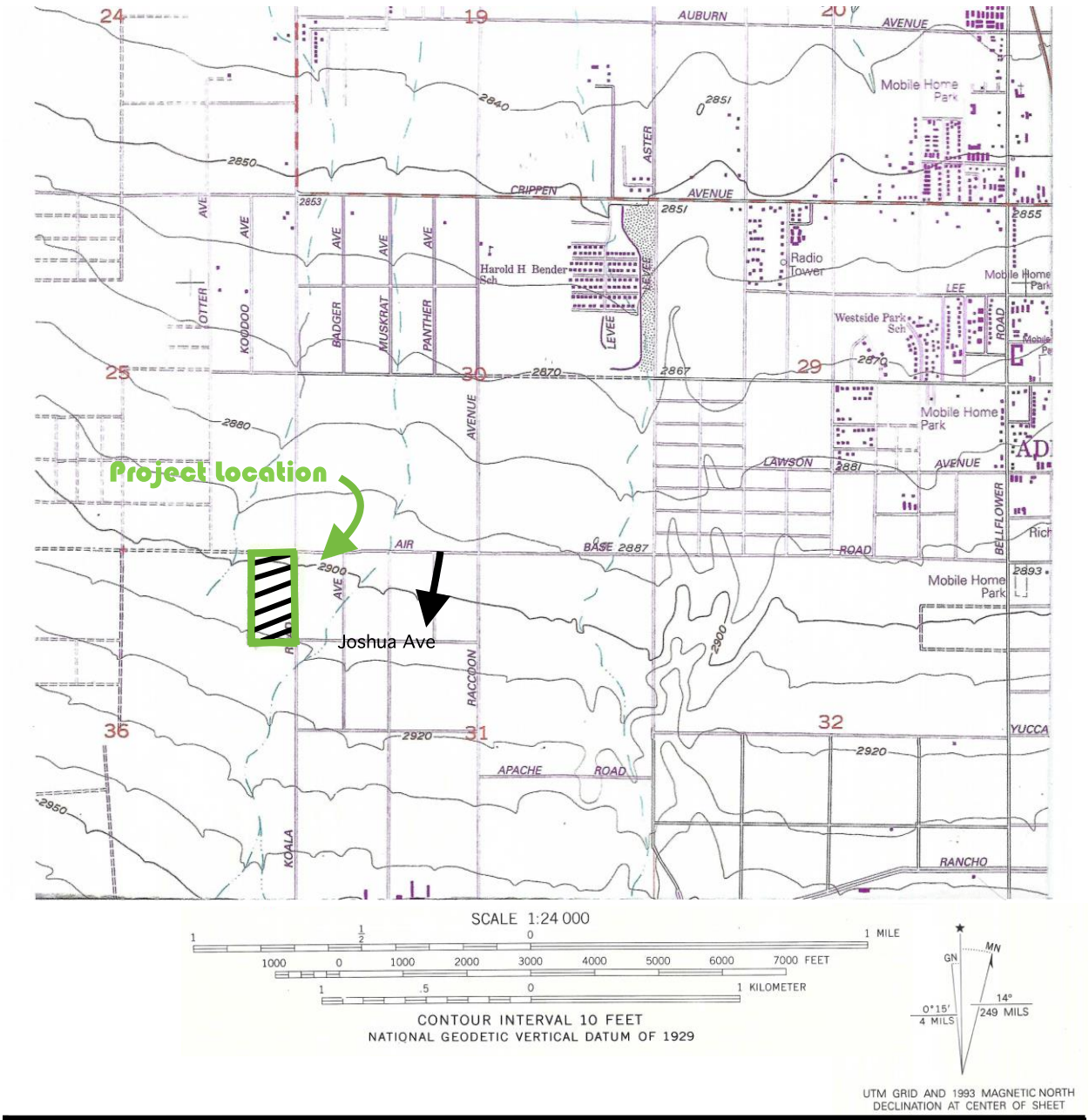
Thank you. Feel free to contact me by email (avram1952@yahoo.com) or phone (805.312.2261).

Sincerely,



Dr. Alan Garfinkel Gold, RPA
Cultural Resources Consultant

ADELANTO QUADRANGLE
CALIFORNIA-SAN BERNARDINO CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



- Area Surveyed

Tuesday, September 22, 2020

Adelanto

Contacting Results

- **Kern Valley Indian Community**
  Brandy Kendricks:
- Emailed Map and Letter: September 26, 2020
- Mailed Map and Letter: September 26, 2020
- Called: Left a Voicemail October 1, 2020

- **Kern Valley Indian Community**
  Robert Robinson, Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Voicemail October 1, 2020

- **Kern Valley Indian Community**
  Julie Turner, Secretary:
- Emailed Letter and Map: Email not Listed
- Mailed Letter and Map: September 26, 2020
- Called: Left a Voicemail October 1, 2020

Tuesday, September 22, 2020

- **Morongo Band of Mission Indians**
  Robert Martin, Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Not a working number

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager:

Emailed Letter and Map: September 26, 2020

Mailed Letter and Map: September 26, 2020

Called: Not a Working Number

- **Quechan Tribe of the Fort Yuma Reservation**
  Jill McCormick, Historic Preservation Officer:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: No comments or involvement for the project October 1, 2020

- **Quechan Tribe of the Fort Yuma Reservation**
  Manfred Scott, Acting Chairman:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: No comments or involvement for the project October 1, 2020

Tuesday, September 22, 2020

- **San Fernando Band of Mission Indians**
  Donna Yocum, Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Message October 1, 2020

- **San Manuel Band of Mission Indians**
  Jessica Mauck, Director of Cultural Resources:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Voicemail October 1, 2020

- **Serrano Nation of Mission Indians**
  Wayne Walker, Co-Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Message October 1, 2020

- **Serrano Nation of Mission Indians**
  Mark Cochrane, Co-Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Will have a reply later October 1, 2020

Tuesday, September 22, 2020

- **Tubatulabals of Kern Valley**
  Robert L. Gomez, Chairperson:
- Emailed Letter and Map: Email not Listed
- Mailed Letter and Map: September 26, 2020
- Called: Not a working number

- **Twenty-Nine Palms Band of Mission Indians**
  Darrell Mike, Chairperson:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Message October 1, 2020

- **Twenty-Nine Palms Band of Mission Indians**
  Anthony Madrigal, Tribal Historic Preservation Officer:
- Emailed Letter and Map: September 26, 2020
- Mailed Letter and Map: September 26, 2020
- Called: Left a Message October 1, 2020

From: HC Gold <hannahchun.gold@gmail.com>
Subject: Re: Native American Consultation and Coordination for the Adelanto Project
Date: October 8, 2020 at 2:35:35 PM PDT
To: donna <ddyocum@comcast.net>

Hello Ms. Donna,

I apologize for the late reply. The survey information will not be available until we start on the report. We will make sure to update you on any new developments of the area and the project. But if you need specific and/or crucial information on the project, please contact Dr. Alan Gold and he will present the request to the client. Alan Gold's email is: avram1952@yahoo.com

Sincerely,

Hannah

On Oct 1, 2020, at 3:31 PM, donna <ddyocum@comcast.net> wrote:
Hello Hannah,

The San Fernando Band of Mission Indians (SFBMI) Tribal Historical Cultural Preservation (THCP) liaison has reviewed the information you provided regarding Adelanto Project at Joshua Ave and Koala Ave. Because this project falls within SFBMI Tribal traditional or ancestral territory with our direct lineage to Village of Topipabit near Victorville and Adelanto vicinity. Could you tell me if you have any current survey information on this location? SFBMI appreciates your time and consideration regarding this proposed project. Cultural preservation is always our priority.

Respectfully,

<9E94D7580F854360B87EE5EBF763DD7A.png>
Donna Yocum, Chairwoman
SFBMI

P.O. Box 221838
Newhall, CA. 91322
www.sfbmi.org

From: donna <ddyocum@comcast.net>
Subject: RE: Native American Consultation and Coor dination for the Adelanto Project
Date: October 1, 2020 at 3:31:54 PM PDT
To: HC Gold <hannahchun.gold@gmail.com>

Hello Hannah,

The San Fernando Band of Mission Indians (SFBMI) Tribal Historical Cultural Preservation (THCP) liaison has reviewed the information you provided regarding Adelanto Project at Joshua Ave and Koala Ave. Because this project falls within SFBMI Tribal traditional or ancestral territory with our direct lineage to Village of Topipabit near Victorville and Adelanto vicinity. Could you tell me if you have any current survey information on this location? SFBMI appreciates your time and consideration regarding this proposed project. Cultural preservation is always our priority.

Respectfully,

Donna Yocum, Chairwoman
SFBMI

P.O. Box 221838
Newhall, CA. 91322
www.sfbmi.org
503-539-0933

Th San Fernando Band of Mission Indians(SFBMI) acknowledges the location of the Adelanto Project between Joshua Ave and Koala Ave are within the Tribal Boundaries of our Vanyume Territory. With our direct lineage to the Village of Topipabit located near Victorville

Adelanto vicinity. SFBMI would like further informa>on regarding any

Sent from Mail for Windows 10

From: HC Gold
Sent: Saturday, September 26, 2020 1:19 PM
To: donna
Subject: Na>ve American Consulta>on and Coordina>on for the Adelanto Project

Hello, my name is Hannah Gold and I am assisting Dr. Alan Gold on various cultural resources projects.

I am sending this email with the attachment below that includes a cover letter and map with regard to the Adelanto Project. As part of the cultural resources study for the project, we would greatly appreciate for you to review the letter and map attached and to identify if there is any input that you would have with respect to cultural values and resources in the area.

Sincerely,

Hannah

From: "Quechan Historic Preservation Officer" <historicpreservation@quechantribe.com>
Subject: RE: Native American Consultation and Coordination for the Adelanto Project
Date: September 28, 2020 at 8:39:10 AM PDT
To: "'HC Gold'" <hannahchun.gold@gmail.com>

This email is to inform you that we have no comments on this project. We defer to the more local Tribes and support their decisions on the project.

From: HC Gold [mailto:hannahchun.gold@gmail.com]
Sent: Saturday, September 26, 2020 1:18 PM
To: Quechan Historic Preservation
Subject: Native American Consultation and Coordination for the Adelanto Project

Hello, my name is Hannah Gold and I am assisting Dr. Alan Gold on various cultural resources projects.

I am sending this email with the attachment below that includes a cover letter and map with regard to the Adelanto Project. As part of the cultural resources study for the project, we would greatly appreciate for you to review the letter and map attached and to identify if there is any input that you would have with respect to cultural values and resources in the area.

Sincerely,

Hannah

From: Ryan Nordness <Ryan.Nordness@sanmanuel-nsn.gov>
Date: October 5, 2020 at 3:24:31 PM PDT
To: "avram1952@yahoo.com" <avram1952@yahoo.com>
Cc: Jessica Mauck <JMauck@sanmanuel-nsn.gov>
Subject: RE: Adelanto Two Story Cannabis Project, City of Adelanto, San Bernardino County, California

Hello Dr. Alan Gold,

Thank you reaching out to San Manuel Band of Mission Indians (SMBMI) for this information request, we have reviewed our maps and land files for existing artifacts, features, landscapes and places of significance. Within one mile of the proposed project there are lithic resources to the northwest, north, and south and one quarry site to the northwest. There is significant concern for this area.

If you have any questions or concerns please reach out to me at your earliest convenience. Have a great day.

Respectfully,
Ryan Nordness

Ryan Nordness

CULTURAL RESOURCE ANALYST

O: (909) 864-5050 x50-2022

Internal: 50-2022

M: 909-838-4053

26569 Community Center Dr Highland CA 92346

SAN MANUEL BAND OF MISSION INDIANS

Appendix C

Resume

Alan Garfinkel Gold, Ph.D., R.P.A. avram1952@yahoo.com
Cultural Resources Manager, 805.312.2261

Years of Experience
20

Education
- Ph.D., Prehistoric Forager Ecology, University of California, Davis
- M.A., Anthropology, University of California, Davis
- B.A., Anthropology, California State University, Northridge, (magna cum laude)

Awards
- California Governor's Historic Preservation Awards 2008 & 2011

Publications
- 16 Books and Monographs
- 51 Journals/Articles
- 2 Documentary Films
- 3 Public Outreach Campaigns
- 350+ Cultural Resources Compliance Reports
- 61 Public Presentations

Professional Registrations
- Register of Professional Archaeologists
- Society of American Archaeology
- Society for CA Archaeology

Areas of Expertise
- NHPA
- NRHP
- Ph.I/II/III
- Section 106

PROFESSIONAL SUMMARY

Dr. Gold has more than 20 years of experience as a cultural resource specialist in the Great Basin and in California. He has researched and written on archaeology, ethnography, rock art, and history. Dr. Gold has been a principal investigator and has managerial experience in National Register Nominations, archaeological excavations, surveys, monitoring, and laboratory analysis. Much of this work has been on Native American prehistoric and historic archaeological sites. His project management experience includes private and public consultations and contracts with municipal, county, state, and federal agencies for Section 106 and 110 surveys, test excavations and data recovery operations, and for Cultural Resources monitoring and Native American monitoring projects. He has a wide range of expertise in cultural resources inventories, archaeological and historical survey assessments, and extensive work on cultural background studies for various development projects with Section 106 National Historic Preservation Act and eligibility evaluation and nominations for the National Register of Historic Places. Dr. Gold has worked for private cultural resource management firms as well as government agencies and as a consultant for federally recognized and non-federally recognized Native American tribes. He has prepared numerous simple and also highly complex technical reports as well as published journal articles and books including those studies featured in American Antiquity, Journal of California and Great Basin Anthropology, California Archaeology, Cambridge Archaeological Journal, North American Archaeology, and Journal of Archaeological Science.

He also has extensive experience with the ethnography of Native California people. His work has entailed the use of interviews with Native community members as well as archival research. Dr. Gold has particular expertise in public outreach, Native American training in cultural resource monitoring and the identification and documentation of Sacred Sites and Traditional Cultural Properties. He is also competent in ethnobotany, rock art, obsidian source determination and obsidian hydration dating, lithic analysis, and archaeofaunal analysis.

Under his direction supervisions, Mr. Gold recently completed cultural resource management updates to the Integrated Cultural Resources Management Plans of ten Naval and Army installations in central and southern California, providing data for their prehistoric, ethnographic, and historic resources. Mr. Gold has worked for cultural resource management firms as well as government agencies and Native American entities including:

- 2014-present Cultural Resources Management
- 2010 2014 AECOM
- 2000-2009 California Department of Transportation (Caltrans)

SELECT PROJECT EXPERIENCE

National Register Nominations, Research and Documentation for Three Rock Art Districts in the National Mojave Preserve Managed by the National Park Service in San Bernardino County in the Eastern Mojave Desert, California. 2019-2021

Cultural Resources Director for identification, documentation and evaluation of three rock art districts (with multiple sites) for National Register of Historic Places Nominations. All three districts are located in the National Mojave Preserve under the direction and management of the National Park Services. The three districts were world class rock art districts including pictographs, petroglyphs, bedrock mortar concentrations, open air campsite, vulviform petroglyph, bedrock milling basins, rock features, natural tanks (tinajas). The sites included rock art expressions dating from the early Holocene, the Archaic, through the Late Prehistoric and into the fully historic era. The sites had archival data and research articles made available to the contractors that included interpretations of the sites relating to archaeo-astronomical significance, associations with ethnographically documented sacred narratives (oral traditions), fertility, increase rites, hunting rituals, archaeo-acoustic relationships, and shamanistic explanatory platforms. $80,000 contract to the California Rock Art Foundation. David Nichols, Archaeologist, National Mojave Preserve, California.

Ten Integrated Cultural Resource Management Plan Updates for Military Facilities throughout California: 2014-2020

Cultural Resources Project Director. Ten updates for the existing Integrated Cultural Resource Management Plans for following military installations throughout California: Detachment Corona, Naval Base Coronado, Detachment Fallbrook, Naval Base Point Loma, Naval Support Activity Monterey, Detachment Norco, Marine Corps Recruit Depot San Diego, Naval Outlying Field San Nicolas Island, and Naval Weapons Station Seal Beach. Developed new, internet-ready, user-friendly document format for Updates to the Integrated Cultural Resource Management Plans. Field visits conducted for all ten installations. Integrated and updated extensive GIS data base of cultural resource survey reports, cultural resource site records, cultural resource site locations, National Register of Historic Places Individual Properties and Districts. Developed synopsis of all relevant state and federal cultural resource environmental compliance laws and Navy/Marines Standard Operating Procedures. Tailored each document to the specific needs of each installation including current cultural resource management concerns, historic preservation plans, and pending issues. $450,000 contract.

North Sky River Wind Energy Project, Kelso Valley, Kern County, California: 2011

Cultural Resources Project Director. Recorded, excavated, and surface collected 101 archaeological sites. Full and complete mitigation program included data recovery on several sites resulting in an assemblage of 5,000 artifacts. Managed and trained 50 Native American Monitors (Kawaiisu and Tubatulabal Native Californians) for the 15,000 acre project with the installation and activation of 104 wind turbines. Resulted in on-time project approval through NHPA and CEQA compliance with approved federal tax credit. Senior author for the 2,853 page report that included oversight by the Bureau of Land Management and Kern County. $6.5 million dollar contract.

Red Rock Canyon Bridge Replacement Project, Kern County, California: 2009

Cultural Resources Project Director. Identified and evaluated historic properties, and developed historic background for Red Rock Railroad. Completed historic property survey report, prehistoric archaeological and historic archaeological survey, and geo-archaeological study. Consulted with local museums, Red Rock Canyon State Park, Native American Heritage Commission (NAHC), and interested Native American groups. The area is listed as a Sacred Site by the NAHC. Result no historic properties within area of potential effects (APE).

East Sonora Bypass Cultural Resource Studies, Calaveras County, California: 2009

Historic Preservation Coordinator. Developed program to mitigate adverse effects on eligible historic and prehistoric archaeological sites. Consulted with Mi-Wuk on Caltrans projects regarding pattern of late discoveries and lack of thorough consultation with Native Americans. Coordinated with State Historic Preservation Office concerning Memorandum of Agreement, data recovery program, Programmatic Agreement, Treatment Plan, and Supplemental Historic Property Survey Report.