

CULTURAL RESOURCES ASSESSMENT

Cottonwood and Pahute Project Victorville, San Bernardino County, California

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MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to United Engineering Group to complete a Cultural Resources Assessment of the proposed Cottonwood and Pahute Project (the project) located in Victorville, San Bernardino County, California. A cultural resources records search, intensive-level pedestrian field survey, Native American Heritage Commission (NAHC) Sacred Lands File Search, and vertebrate paleontological resources overview were conducted for the project in partial fulfillment of the California Environmental Quality Act (CEQA). The records search revealed that three previous cultural resource studies have taken place, and two cultural resources have been identified in the vicinity of the project site. None of the previous studies has assessed the project site and no cultural resources have been identified within its boundaries. No cultural resources of any kind (including historic-period or prehistoric archaeological resources, or historic-period architectural resources) were identified during the field survey. Therefore, no significant impact related to historical resources is anticipated and no further investigations are recommended for the proposed project unless:

- The proposed project is changed to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during project activities.

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register of Historic Places (National Register), plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

Findings were positive during the Sacred Lands File search with the NAHC. The NAHC has recommended contacting the Chemehuevi Indian Tribe and the San Manuel Band of Mission Indians for more information regarding this finding. To date, BCR Consulting has not contacted either tribe. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with

California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the City will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would “directly or indirectly destroy a unique paleontological resource”. The Paleontological Overview provided in Appendix B has recommended that:

The geologic units underlying this project are mapped entirely as alluvial deposits dating from the Pleistocene epoch (Dibblee & Minch, 2008). Pleistocene alluvial units are considered to be of high paleontological sensitivity and are well known throughout southern California to contain abundant fossil resources. The Western Science Center does not have localities within the project area or within a 1-mile radius, but does have numerous localities throughout the region in similarly mapped alluvial units associated with mastodon (*Mammuthus pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus* sp.), camel (*Camelops hesternus*) and many more.

Any fossil specimens recovered from the Cottonwood and Pahute Project (UEN2103) would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene sandstone units, and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils from the study area.

If human remains are encountered during any project activities, State Health and Safety Code Section 7050.5 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 NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to United Engineering Group to complete a Cultural Resources Assessment of the proposed Cottonwood and Pahute Project (the project) located in Victorville, San Bernardino County, California. A cultural resources records search, intensive-level pedestrian field survey, Native American Heritage Commission (NAHC) Sacred Lands File Search, and vertebrate paleontological resources overview were conducted for the project in partial fulfillment of the California Environmental Quality Act (CEQA). The project site, as identified in this report, will occupy a portion of Section 31, Township 5 North, Range 4 West, San Bernardino Baseline and Meridian. It is depicted on the United States Geological Survey (USGS) *Hesperia* (1980), *California* 7.5-minute topographic quadrangle (Figure 1).

Regulatory Setting

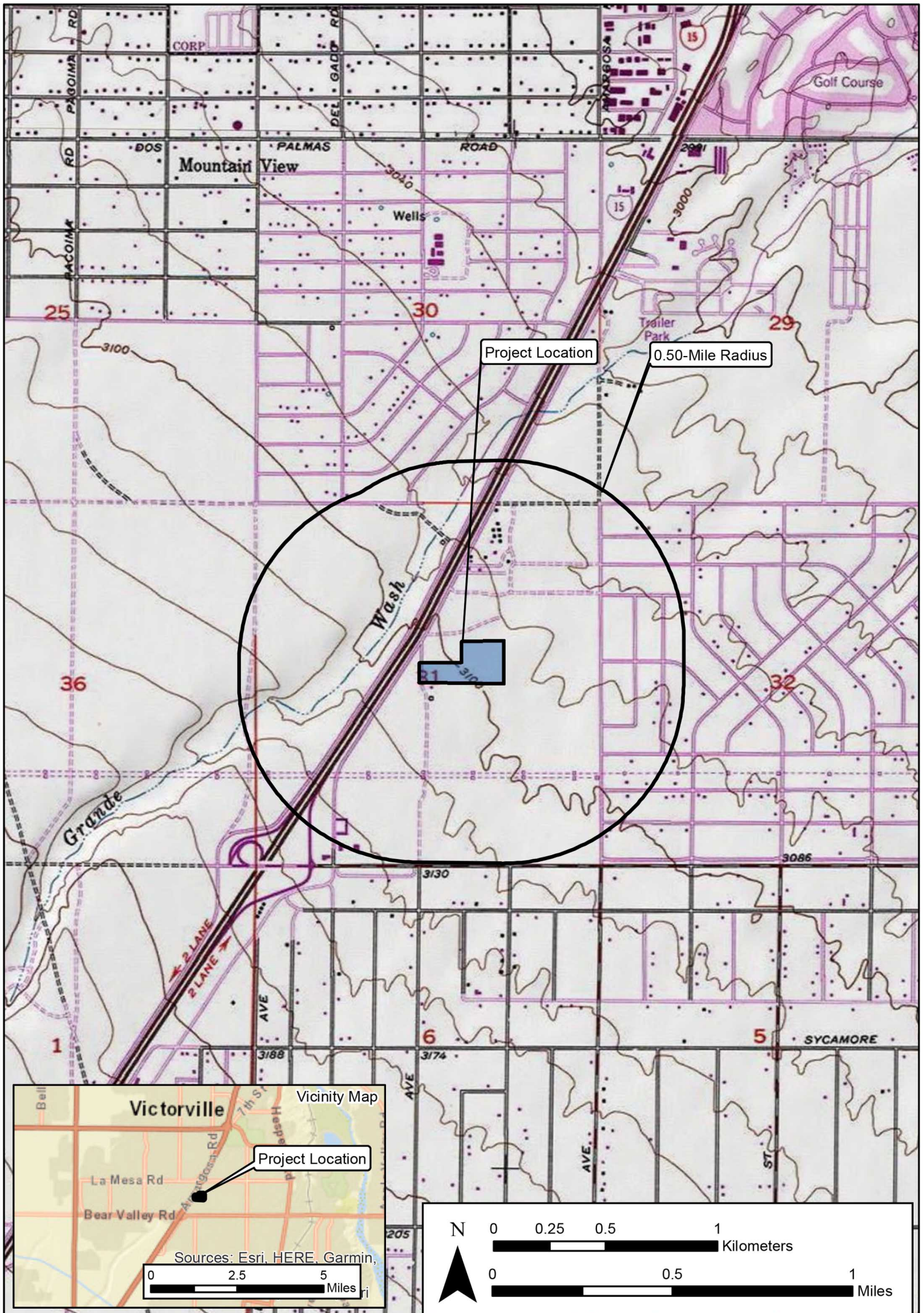
The California Environmental Quality Act. CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations 14(3), § 15002(i)). Under CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (Cal. Code Regs. tit. 14(3), § 15064.5(b)). State CEQA Guidelines section 15064.5(a) defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (California Register)
- Listed in a local register of historical resources (as defined at Cal. Public Res. Code § 5020.1(k))
- Identified as significant in a historical resource survey meeting the requirements of § 5024.1(g) of the Cal. Public Res. Code
- Determined to be a historical resource by a project's lead agency (Cal. Code Regs. tit. 14(3), § 15064.5(a))

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California...Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)).

The significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register. If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (State CEQA Guidelines § 15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource.

Section 5024.1 of the Cal. Public Res. Code established the California Register. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)).



The eligibility criteria for the California Register are similar to those of the National Register of Historic Places (National Register), and a resource that meets one or more of the eligibility criteria of the National Register will be eligible for the California Register.

The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA. Criteria for Designation:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Associated with the lives of persons important to local, California or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). Fifty years is normally considered sufficient time for a potential historical resource, and in order that the evaluation remain valid for a minimum of five years after the date of this report, all resources older than 45 years (i.e. resources from the "historic-period") will be evaluated for California Register listing eligibility, or CEQA significance. The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

Finally, CEQA requires that significant effects on unique archaeological resources be considered and addressed. CEQA defines a unique archaeological resource as any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

CEQA Guidelines Section 15064.5 Appendix G includes significance criteria relative to archaeological and historical resources. These have been utilized as thresholds of significance here, and a project would have a significant environmental impact if it would:

- a) cause a substantial adverse change in the significance of a historical resource as defined in section 10564.5;
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 10564.5;
- c) Disturb any human remains, including those interred outside of formal cemeteries.

Tribal Cultural Resources. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the City will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff are available to answer questions and address comments as necessary.

Paleontological Resources. CEQA provides guidance relative to significant impacts on paleontological resources, indicating that a project would have a significant impact on paleontological resources if it disturbs or destroys a unique paleontological resource or site or unique geologic feature. Section 5097.5 of the California Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources. CEQA documentation prepared for projects would be required to analyze paleontological resources as a condition of the CEQA process to disclose potential impacts. Please note that as of January 2018 paleontological resources are considered in the geological rather than cultural category. Therefore, paleontological resources are not summarized in the body of this report. A paleontological overview completed by the Western Science Center is provided as Appendix B.

NATURAL SETTING

Geology

The project is located in the southwestern portion of the Mojave Desert. Sediments within the project boundaries include a geologic unit composed of old alluvial deposits formed during the Pleistocene and young alluvial-fan deposits formed during the late Pleistocene and Holocene Epochs of the Quaternary Period (Miller and Matti 2006, Lambert 1994:17). The units are composed of “slightly consolidated, undissected to slightly dissected deposits of poorly sorted sand and silt containing scattered subangular pebbles” (Miller and Matti 2006). Field

observations during the current study are basically consistent with these descriptions, and are described further in Results, below.

Hydrology

The project elevation is approximately 3,100 feet above mean sea level (AMSL). Sheetwashing and some rilling occur from southwest to northeast, and water from the Oro Grande Wash flows from southwest to northeast approximately one quarter mile to the west of the project site. To the south, the peaks of the San Gabriel Mountains rise above 10,000 feet and are often capped with snow until late spring or early summer. The area currently exhibits a relatively arid climate, with dry, hot summers and cool winters. Rainfall ranges from five to 15 inches annually (Jaeger and Smith 1971:36-37). Precipitation usually occurs in the form of winter and spring rain or snow at high elevations, with occasional warm monsoonal showers in late summer.

Biology

The mild climate of the late Pleistocene allowed piñon-juniper woodland to thrive throughout most of the Mojave (Van Devender et al. 1987). The vegetation and climate during this epoch attracted significant numbers of Rancholabrean fauna, including dire wolf, saber toothed cat, short-faced bear, horse, camel, antelope, mammoth, as well as birds which included pelican, goose, duck, cormorant, and eagle (Reynolds 1988). The drier climate of the middle Holocene resulted in the local development of complementary flora and fauna, which remain largely intact to this day. Common native plants include creosote, cacti, rabbit bush, interior golden bush, cheese bush, species of sage, buckwheat at higher elevations and near drainages, Joshua tree, and various grasses. Common native animals include coyotes, cottontail and jackrabbits, rats, mice, desert tortoises, roadrunners, raptors, turkey vultures, and other bird species (see Williams et al. 2008).

CULTURAL SETTING

Prehistory

The prehistoric cultural setting of the Mojave Desert has been organized into many chronological frameworks (see Warren and Crabtree 1986; Bettinger and Taylor 1974; Lanning 1963; Hunt 1960; Wallace 1958, 1962, 1977; Wallace and Taylor 1978; Campbell and Campbell 1935), although there is no definitive sequence for the region. The difficulties in establishing cultural chronologies for the Mojave are a function of its enormous size and the small amount of archaeological excavations conducted there. Moreover, throughout prehistory many groups have occupied the Mojave and their territories often overlap spatially and chronologically resulting in mixed artifact deposits. Due to dry climate and capricious geological processes, these artifacts rarely become integrated in-situ. Lacking a milieu hospitable to the preservation of cultural midden, Mojave chronologies have relied upon temporally diagnostic artifacts, such as projectile points, or upon the presence/absence of other temporal indicators, such as groundstone. Such methods are instructive, but can be limited by prehistoric occupants' concurrent use of different artifact styles, or by artifact re-use or re-sharpening, as well as researchers' mistaken diagnosis, and other factors (see Flenniken 1985; Flenniken and Raymond 1986; Flenniken and Wilke 1989). Recognizing the shortcomings of comparative temporal indicators, this study synthesizes Warren and Crabtree

(1986), who have drawn upon this method to produce a commonly cited and relatively comprehensive chronology.

Paleoindian (12,000 to 10,000 BP) and Lake Mojave (10,000 to 7,000 BP) Periods. Climatic warming characterizes the transition from the Paleoindian Period to the Lake Mojave Period. This transition also marks the end of Pleistocene Epoch and ushers in the Holocene. The Paleoindian Period has been loosely defined by isolated fluted (such as Clovis) projectile points, dated by their association with similar artifacts discovered in-situ in the Great Plains (Sutton 1996:227-228). Some fluted bifaces have been associated with fossil remains of Rancholabrean mammals approximately dated to ca. 13,300-10,800 BP near China Lake in the northern Mojave Desert. The Lake Mojave Period has been associated with cultural adaptations to moist conditions, and resource allocation pointing to more lacustrine environments than previously (Bedwell 1973; Hester 1973). Artifacts that characterize this period include stemmed points, flake and core scrapers, choppers, hammerstones, and crescentics (Warren and Crabtree 1986:184). Projectile points associated with the period include the Silver Lake and Lake Mojave styles. Lake Mojave sites commonly occur on shorelines of Pleistocene lakes and streams, where geological surfaces of that epoch have been identified (Basgall and Hall 1994:69).

Pinto Period (7,000 to 4,000 BP). The Pinto Period has been largely characterized by desiccation of the Mojave. As formerly rich lacustrine environments began to disappear, the artifact record reveals more sporadic occupation of the Mojave, indicating occupants' recession to the more hospitable fringes (Warren 1984). Pinto Period sites are rare, and are characterized by surface manifestations that usually lack significant in-situ remains. Artifacts from this era include Pinto projectile points and a flake industry similar to the Lake Mojave tool complex (Warren 1984), though use of Pinto projectile points as an index artifact for the era has been disputed (see Schroth 1994). Milling stones have also occasionally been associated with sites of this period (Warren 1984).

Gypsum Period. (4,000 to 1,500 BP). A temporary return to moister conditions during the Gypsum Period is postulated to have encouraged technological diversification afforded by the relative abundance of resources (Warren 1984:419-420; Warren and Crabtree 1986:189). Lacustrine environments reappear and begin to be exploited during this era (Shutler 1961, 1968). Concurrently a more diverse artifact assemblage reflects intensified reliance on plant resources. The new artifacts include milling stones, mortars, pestles, and a proliferation of Humboldt Concave Base, Gypsum Cave, Elko Eared, and Elko Corner-notched dart points (Warren 1984; Warren and Crabtree 1986). Other artifacts include leaf-shaped projectile points, rectangular-based knives, drills, large scraper planes, choppers, hammer stones, shaft straighteners, incised stone pendants, and drilled slate tubes. The bow and arrow appears around 2,000 BP, evidenced by the presence of a smaller type of projectile point, the Rose Spring point (Rogers 1939; Shutler 1961).

Saratoga Springs Period (1,500 to 800 BP). During the Saratoga Springs Period regional cultural diversifications of Gypsum Period developments are evident within the Mojave. Basketmaker III (Anasazi) pottery appears during this period, and has been associated with turquoise mining in the eastern Mojave Desert (Warren and Crabtree 1986:191). Influences from Patayan/Yuman assemblages are apparent in the southern Mojave, and include buff and brown wares often associated with Cottonwood and Desert Side-notched projectile points (Warren 1984:423). Obsidian becomes more commonly used throughout the Mojave and characteristic artifacts of the period include milling stones, mortars, pestles, ceramics, and

ornamental and ritual objects. More structured settlement patterns are evidenced by the presence of large villages, and three types of identifiable archaeological sites (major habitation, temporary camps, and processing stations) emerge (McGuire and Hall 1988). Diversity of resource exploitation continues to expand, indicating a much more generalized, somewhat less mobile subsistence strategy.

Shoshonean Period (800 BP to Contact). The Shoshonean period is the first to benefit from contact-era ethnography –as well as be subject to its inherent biases. Interviews of living informants allowed anthropologists to match artifact assemblages and particular traditions with linguistic groups, and plot them geographically (see Kroeber 1925; Gifford 1918; Strong 1929). During the Shoshonean Period continued diversification of site assemblages, and reduced Anasazi influence both coincide with the expansion of Numic (Uto-Aztecan language family) speakers across the Great Basin, Takic (Uto-Aztecan language family) speakers into southern California, and the Hopi across the Southwest (Sutton 1996). Hunting and gathering continued to diversify, and the diagnostic arrow points include desert side-notch and cottonwood triangular. Ceramics continue to proliferate, though are more common in the southern Mojave during this period (Warren and Crabtree 1986). Trade routes have become well established across the Mojave, particularly the Mojave Trail, which transported goods and news across the desert via the Mojave River, to the west of the current project. Trade in the western Mojave was more closely related to coastal groups than others.

Ethnography

The Uto-Aztecan “Serrano” people occupied the western Mojave Desert periphery. Kroeber (1925) applied the generic term “Serrano” to four groups, each with distinct territories: the Kitanemuk, Tataviam, Vanyume, and Serrano. Only one group, in the San Bernardino Mountains and West-Central Mojave Desert, ethnically claims the term Serrano. Bean and Smith (1978) indicate that the Vanyume, an obscure Takic population, was found along the Mojave River at the time of Spanish contact. The Kitanemuk lived to the north and west, while the Tataviam lived to the west. The Serrano lived mainly to the south (Bean and Smith 1978). All may have used the western Mojave area seasonally. Historical records are unclear concerning precise territory and village locations. It is doubtful that any group, except the Vanyume, actually lived in the region for several seasons yearly.

History

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period. The first European to pass through the project area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). This is the first recorded group crossing of the Mojave Desert and, according to Father Garces’ journal, they camped at the headwaters of the Mojave River, one night less than a day’s march from the mountains. Today, this is estimated to have been approximately 11 miles southeast of Victorville (Marenczuk 1962). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the western Mojave region in 1772. Searching for San Diego Presidio deserters, Fages had traveled north through Riverside to San Bernardino, crossed over the mountains into the

Mojave Desert, and then journeyed westward to the San Joaquin Valley (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. The Gold Rush had attracted huge numbers of American settlers and in 1850, California was accepted into the Union. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep and cattle from the eastern U.S. When the beef market collapsed, many California ranchers lost their ranchos. A series of disastrous floods in 1861–1862, followed by a significant drought diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (Beattie and Beattie 1974; Cleland 1941).

Local Sequence. The city of Victorville, located in Victor Valley, was first settled in 1858 by Ex-army captain Aaron G Lane during a mass exodus of Mormons from San Bernardino back to Utah. Lane set up a ranch on the west bank of the Mojave River which became a popular stop for travelers coming through the area (Marenczuk 1962; Gutglueck 2015a). The railway connecting San Bernardino and Barstow, which traveled through present day Victorville, was completed in 1884. The completion of the railway brought many travelers through the town and allowed mining in the area, which was already known for its rich silver and gold mines, to flourish and expand into granite, limestone, and marble (Gutglueck 2015a). The town of Victor, later to be renamed Victorville, was founded in 1885 and named for Jacob N Victor, a general manager of operations for the California Southern Railroad, a subsidiary of the Atchison, Topeka and Santa Fe Railway who were responsible for the newly constructed railway (Gudde 1962; Wallenfeldt 2020).

The town's name was changed to Victorville in 1904 because many were confusing the town for another of the same name in Colorado (Wallenfeldt 2020; Gutglueck 2015b). Population, commerce, and development continued growing throughout the early 20th century and the town established the Victorville Chamber of Commerce in 1911 in response. The first high school in Victorville was opened in 1914 and cement plants were being opened throughout the larger area during the initial few decades of the 20th century. The Mojave River provided relatively plentiful water, which allowed local agriculture to flourish alongside mining operations until its decline in 1972 (Nordyke 1974). Canals distributed runoff water for farms near the river (Turner and Presswood 1963:86), and a shallow water table encouraged well drilling for various remote agricultural endeavors. Local crops included alfalfa, onions, watermelon, cantaloupe, non-citrus fruits, and other produce (Marenczuk 1962; Turner and Presswood 1963:86). Farming, mining, cement manufacturing, and business brought in by travelers, continued to be one of the main drivers of Victorville's budding economy throughout much of the 20th century. George Air Force Base, initially named Victorville Air Base, was

completed in 1943 in response to World War II (Colton Courier 1943). It was later renamed George Air Force Base and was decommissioned in 1992. The former air base is now the Southern California Logistics Airport and is used mainly for business, military, and freight use (Wallenfeldt 2020).

The town of Oro Grande, Spanish for “Big Gold”, represents the most significant historic settlement in the region, and is located in the Victor Valley approximately ten miles north by northeast of the project. As the town’s name suggests local prospecting resulted in the establishment of several mines that produced silver and gold refined by the Oro Grande gold mill during the 1880s. The historic Mojave Trail and later the California Southern Railway provided convenient transport for the minerals via stagecoach and train across the desert between Salt Lake City and San Bernardino. Subsequent enormous discoveries of silica and lime deposits punctuated the development of a new mining industry, and by 1907 cement plants began operating along the railroad. With the exception of brief hiatus periods during the great depression and World War II, the cement industry has remained vital to this day (Thompson 2000; Gudde 1975; Marenczuk 1962:9).

PERSONNEL

David Brunzell, M.A., RPA acted as the Project Manager/Principal Investigator for the current study, and authored the technical report with contributions from BCR Consulting Staff Historian and Archaeological Field Technician George Brentner, B.A. Mr. Brunzell summarized the records search results from a previous study through records of the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. BCR Consulting Archaeological Crew Chief Nicholas Shepetuk and Mr. Brentner carried out the pedestrian field survey.

METHODS

Research

SCCIC staff completed an archaeological records search using SCCIC records of California State University, Fullerton for a nearby study that has been summarized for the current project. This archival research reviewed the status of all recorded historic and prehistoric cultural resources, and survey and excavation reports completed within the project site boundaries and within one half-mile to the north, northeast, and east. Additional resources reviewed included the National Register of Historic Places (National Register), the California Register, the Built Environmental Resource Directory (BERD), and documents and inventories published by the California Office of Historic Preservation. These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Field Survey

An intensive-level cultural resources field survey of the project site was conducted on October 21, 2021. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across the project site. Digital photographs were taken at various points within the project site.

RESULTS

Research

Data from the South Central Coastal Information Center (SCCIC) revealed three previous cultural resource studies have taken place, and two cultural resources have been identified in the vicinity of the project site. None of the previous studies have assessed the project site and no cultural resources have been identified within its boundaries. The records search is summarized as follows:

Table A. Cultural Resources and Reports in the Vicinity of the Project Site

USGS Quad	Cultural Resources	Studies
<i>Hesperia</i> (1980), <i>California</i>	P-36-4269: Canal Lane Historic-Period Road (1/8 Mile W) P-36-6821: Historic-Period Refuse Scatter (1/2 Mile NE)	SB-2577, 4973, 5217

Field Survey

During the field survey, BCR Consulting archaeologists identified no cultural resources (including historic-period or prehistoric archaeological sites, or historic-period architectural resources) of any kind within the project site boundaries. The project has been subject to severe artificial disturbances associated with modern refuse dumping and offroad vehicle use. Vegetation consisted of creosote scrub and afforded surface visibility of approximately 90 percent.

RECOMMENDATIONS

BCR Consulting conducted a cultural resources assessment of the Cottonwood and Pahute in the City of Victorville, San Bernardino County, California. No cultural resources of any kind (including historic-period or prehistoric archaeological resources, or historic-period architectural resources) were identified. Therefore, no significant impact related to historical resources is anticipated and no further investigations are recommended unless:

- The proposed project is changed to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during project activities.

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register of Historic Places (National Register), plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

Findings were positive during the Sacred Lands File search with the NAHC. The NAHC has recommended contacting the Chemehuevi Indian Tribe and the San Manuel Band of Mission Indians for more information regarding this finding. To date, BCR Consulting has not contacted either tribe. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the City will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would “directly or indirectly destroy a unique paleontological resource”. The Paleontological Overview provided in Appendix B has recommended that:

The geologic units underlying this project are mapped entirely as alluvial deposits dating from the Pleistocene epoch (Dibblee & Minch, 2008). Pleistocene alluvial units are considered to be of high paleontological sensitivity and are well known throughout southern California to contain abundant fossil resources. The Western Science Center does not have localities within the project area or within a 1-mile radius, but does have numerous localities throughout the region in similarly mapped alluvial units associated with mastodon (*Mammuthus pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus* sp.), camel (*Camelops hesternus*) and many more.

Any fossil specimens recovered from the Cottonwood and Pahute Project would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene sandstone

units, and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils from the study area.

If human remains are encountered during any project activities, State Health and Safety Code Section 7050.5 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 NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 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 NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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APPENDIX A

NATIVE AMERICAN HERITAGE COMMISSION CORRESPONDENCE

NATIVE AMERICAN HERITAGE COMMISSION

November 17, 2021

BCR Consulting LLC

Via Email to: BCRLLC2008@gmail.com

Re: Cottonwood and Pahute (UEN2103) Project, San Bernardino County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Chemehuevi Indian Tribe and the San Manuel Band of Mission Indians on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological 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. Please contact all of those listed; if they cannot supply information, they may 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 the NAHC. 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
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Atebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
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Luiseño

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**Native American Heritage Commission
Native American Contact List
San Bernardino County
11/17/2021**

Chemehuevi Indian Tribe

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Havasu Lake, CA, 92363
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Fax: (760) 858-5400
chairman@cit-nsn.gov

San Fernando Band of Mission Indians

Donna Yocum, Chairperson
P.O. Box 221838 Kitanemuk
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Phone: (503) 539 - 0933 Tataviam
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Morongo Band of Mission Indians

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San Manuel Band of Mission Indians

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Highland, CA, 92346
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Morongo Band of Mission Indians

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Serrano Nation of Mission Indians

Mark Cochrane, Co-Chairperson
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Quechan Tribe of the Fort Yuma Reservation

Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 Quechan
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scottmanfred@yahoo.com

Serrano Nation of Mission Indians

Wayne Walker, Co-Chairperson
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serranonation1@gmail.com

Quechan Tribe of the Fort Yuma Reservation

Jill McCormick, Historic
Preservation Officer
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Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Twenty-Nine Palms Band of Mission Indians

Darrell Mike, Chairperson
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 863 - 2444
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29chairman@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 Cottonwood and Pahute (UEN2103) Project, San Bernardino County.

**Native American Heritage Commission
Native American Contact List
San Bernardino County
11/17/2021**

***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

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This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Cottonwood and Pahute (UEN2103) Project, San Bernardino County.

APPENDIX B

PALEONTOLOGICAL RESOURCES OVERVIEW



October 26, 2021

BCR Consulting LLC
David Brunzell
505 West 8th Street
Claremont, CA 91711

Dear Mr. Brunzell,

This letter presents the results of a record search conducted for the Cottonwood and Pahute Project (UEN2103) Project in the city of Victorville, San Bernardino County, California. The project area is located west of Balsam Avenue, east of Cottonwood Avenue, north of Pahute Avenue, and south of Mariposa Road in Section 31, Township 5 North, Range 4 West on the *Hesperia, CA* USGS 7.5-minute quadrangle.

The geologic units underlying this project are mapped entirely as alluvial deposits dating from the Pleistocene epoch (Dibblee & Minch, 2008). Pleistocene alluvial units are considered to be of high paleontological sensitivity and are well known throughout southern California to contain abundant fossil resources. The Western Science Center does not have localities within the project area or within a 1-mile radius, but does have numerous localities throughout the region in similarly mapped alluvial units associated with mastodon (*Mammut pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus sp.*), camel (*Camelops hesternus*) and many more.

Any fossil specimens recovered from the Cottonwood and Pahute Project (UEN2103) would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene sandstone units, and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils from the study area.

If you have any questions, or would like further information, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,



A handwritten signature in black ink, appearing to read 'Darla Radford', written in a cursive style.

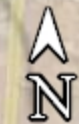
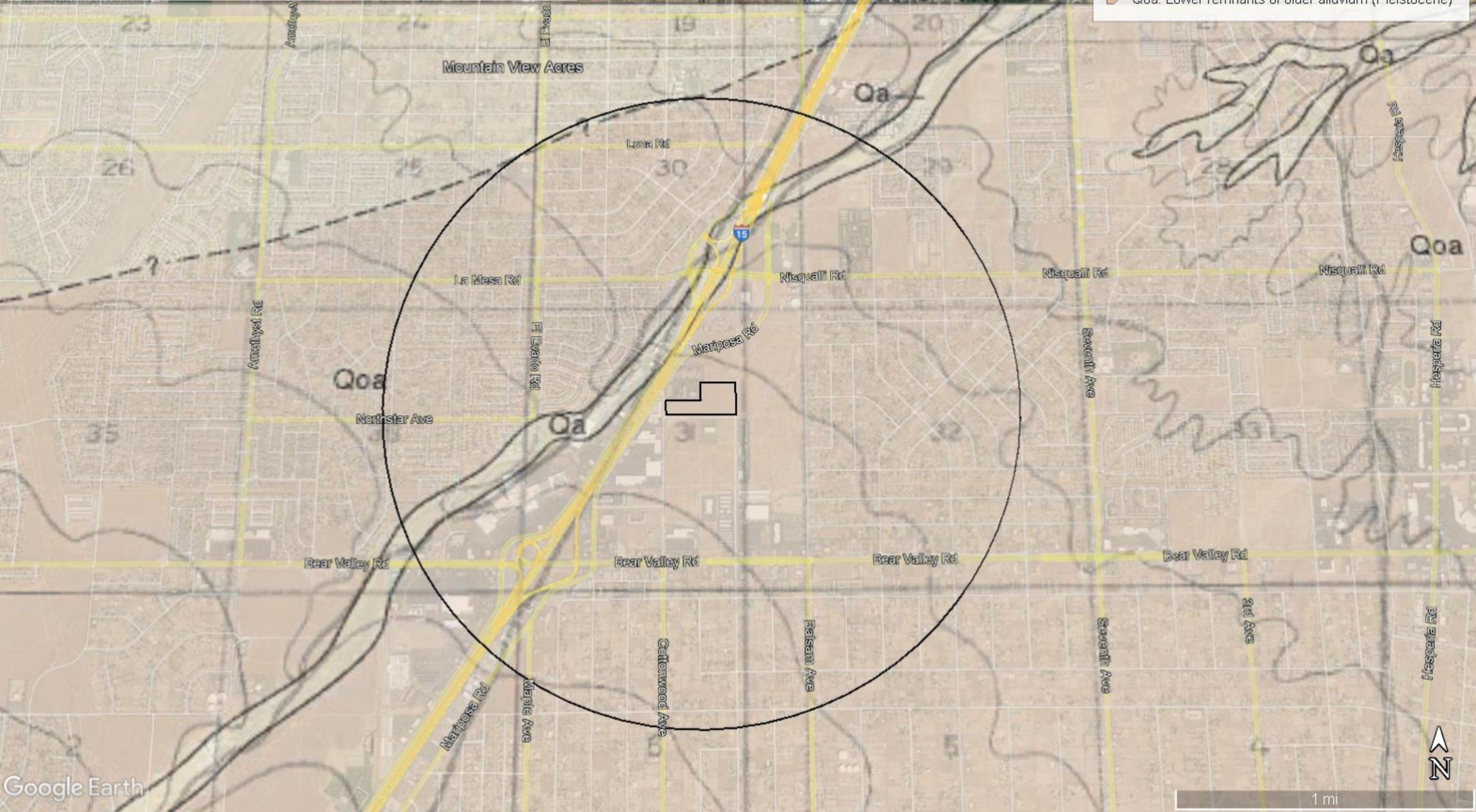
Darla Radford
Collections Manager

Cottonwood and Pahute Project (UEN2103) Project

Project area, one mile radius, geologic mapping, and any WSC fossil localities.

Legend

-  Project area and one mile radius
-  Qoa: Lower remnants of older alluvium (Pleistocene)



APPENDIX C
PROJECT PHOTOGRAPHS



Photo 1: Project Overview (View W/NW)



Photo 2: Project Overview (View N/NE)



Photo 3: Project Overview (View W/SW)