B Cultural and Paleontological Resources Report

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT FOR THE MAVERIK FUELING STATION AND CONVENIENCE STORE PROJECT, CITY OF INDIO, RIVERSIDE COUNTY, CALIFORNIA

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Date
July 2024

Cogstone Project Number: 6078
Type of Study: Archaeological and paleontological resource assessment
Sites: None within Project Area
Paleontological Localities: None
USGS Quadrangle: Indio
Area: 8.6 acres
Key Words: Maverik Indio, archaeological and paleontological resources assessment; the Holocene Whitewater River deposits and the underlying Lake Cahuilla beds are assigned a low potential (PFYC 2) for fossil resources

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SUMMARY OF FINDINGS

This study was conducted to determine the potential impacts to archaeological and paleontological resources during the Maverik Fueling Station and Convenience Store Project (Project), City of Indio, Riverside County, California. The City of Indio is the lead agency under the California Environmental Quality Act (CEQA).

The Project proposes to construct a Maverik-branded fueling station which will include a commercial store, fuel pumps with associated equipment, parking area, and landscaping. The parcel is approximately 8.62 acres of which 3.37 acres will be developed as part of this Project. Vertical impacts are assumed to be approximately 30 feet deep for installation of the fuel tanks.

The Project is mapped as late Holocene Whitewater River sediments deposited less than 3,000 years ago. The Project is also mapped within the northern boundary of the middle to late Holocene Lake Cahuilla beds which are less than 6,000 years old.

A record search for paleontology was obtained from the Western Science Center and supplemented with relevant databases and literature. No fossils are known from the Whitewater River sediments; however, these deposits overlie the Lake Cahuilla beds. A fossil from an artiodactyl was recovered from Holocene sediments in northern Indio. Other nearby localities were recovered from the from Lake Cahuilla beds between three and six miles to the south and southwest of the study area. Fossils recovered include a bighorn sheep as well as small vertebrates and freshwater mollusk shells.

Cogstone archaeologist Logan Freeberg requested a search of the California Historical Resources Information System (CHRIS) from the Eastern Information Center (EIC) located at University of California, Riverside on April 30, 2024 which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that five previous studies have been completed within the Project Area while an additional 27 studies have been previously completed within a half-mile radius of the Project Area.

No cultural resources have been recorded within the Project Area. Outside of the Project Area, a total of four cultural resources have been previously documented within the half-mile search radius. All four of these resources are located within a quarter mile of the Project Area. One of these four resources, P-33-000676 (CA-RIV-676) is located adjacent to the western edge of the Project Area

P-33-000676 (CA-RIV-676)
This site was first identified as a pottery scatter with lithics and a midden by Jay von Werlhof of Imperial Valley College in 1975. Von Werlhof collected 121 indigenous pottery sherds. The boundaries of the resources shifted to possibly include a portion of the current Project Area between 1975 and 1996 as it underwent various reviews. Bruce Love of CRM-Tech conducted test pits, trenching, and surface scraping at the site in 1996 and found that the site was surficial.

Love collected 48 pottery sherds from surface. Based on his findings, Love recommended the site as not eligible for listing in the National Register of Historic Places (NRHP). T. Baurley and M. Sanka of L&L Environmental, Inc. were unable to re-identify the site when they returned in 2015.

Cogstone archaeologist Logan Freeberg requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on April 30, 2024. The NAHC responded on May 20, 2024, with negative search results and provided a list of Native American individuals and organizations to be contacted for additional information on the potential for tribal resources in the Project Area

Cogstone archaeologist and cross-trained paleontologist Michael Prout completed an intensive-level pedestrian survey of the entire Project Area on June 7, 2024. No archaeological or paleontological resources were observed over the course of the survey.

Paleontological Sensitivity and Conclusions

The County of Riverside paleontological sensitivity mapping gives the Project sediments a high (High A) potential for fossil resources in all within the Project Area. However, the sediments to be impacted during construction are reclassified to low potential based on the following:
A study of Lake Cahuilla beds in La Quinta produced radiometric ages of charcoal to between 5,890 + 60 and 1,080 + 80 years old from depths of 10.5 feet and 3.3 feet, respectively. No fossils of extinct animals were recovered from the 7,050 pounds of sediment that were washed from up to 13 feet below the surface.

- Typically geological units less than 11,700 years old (Holocene) are given a low sensitivity as they are too young to contain the remains of extinct Pleistocene animals.
- The snails and clams of the Holocene Lake Cahuilla beds are extremely common and are found throughout the area that this lake previously covered. They are not considered to be scientifically significant.
- No paleontological monitoring done by or reported to the San Bernardino County Museum in the valley areas of the northern Salton Trough from ~1980 through 2015 produced any fossils from extinct animals. This was during a period of intense building in the area so the lack of fossils recovered indicates that the Holocene deposits are at least 10 feet deep. Based on radiometric dating by Whistler et al. (1995) in La Quinta, the Holocene sediments may extend to a depth of 20 feet.

The Holocene sediments of the Whitewater River as well as the underlying Lake Cahuilla beds are assigned a low potential (PFYC 2) for fossil resources.

No Paleontological Resource Impact Mitigation Plan is required and no further work related to paleontology is anticipated for this Project. If unanticipated discoveries are made, all work must halt within 50 feet until a qualified paleontologist can evaluate the find. Work may resume immediately outside of the 50 foot radius.

Archaeological Sensitivity and Conclusions

Based on available data sources, the Project Area is considered to have low sensitivity for Post-Contact non-Native American resources and to have moderate sensitivity for Native American origin cultural resources. As the results of the SLF search were negative and the adjacent resource (P-33-000676 [CA-RIV-000676]) was found to be not eligible for listing in the NRHP or the California Register of Historical Resources (CRHR), Phase II testing of the Project Area is not warranted based on the information. However, the Project Area is considered moderately sensitive and fulltime Native American and archaeological monitoring is recommended in Holocene Age sediments (to a depth of 20 feet). Should information obtained during Assembly Bill (AB) 52 Native American consultations indicate greater sensitivity, development of a Phase II testing program to be completed prior to the start of construction is recommended.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during Project development, all work must cease near the find immediately.

INTRODUCTION

PURPOSE OF STUDY

This study was conducted to determine the potential impacts of archaeological and paleontological resources during the Maverik Fueling Station and Convenience Store Project (Project), City of Indio (City), Riverside County (County), California. The City of Indio is the lead agency under the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION AND LOCATION

Maverik ™ (Applicant) is proposing to develop a fueling station and convenience store on a portion of an 8.62-acre parcel in the City of Indio, California (Figures 1 and 2). The Project includes 10 fuel pumps (20 fueling positions) under a single canopy (totaling 7,214 square feet [SF]), a diesel fueling area with four (4) fueling stations, and a 5,951 square foot convenience store building. Additional improvements include three (3) underground storage tanks (USTs) for fuel storage, a certified automatic truck scale, trash enclosure, generator, a tire pressure air station, parking, landscaping, drainage, utility connections, and access improvements. The fueling station would provide a combined maximum throughput of 8.5 million gallons of gasoline, diesel, and biofuel annually. Vertical impacts are assumed to be approximately 30 feet deep for installation of the fuel tanks with more shallow disturbances throughout the Project Area.

The City of Indio is located in central Riverside County, California, south of San Bernardino County, north of San Diego and Imperial counties, and east of Orange County. Surrounding cities include Coachella to the southeast and La Quinta to the southwest. The cities of Palm Desert and Indio Wells occur further to the west and southwest. Properties in unincorporated Riverside County not yet incorporated into a city boundary are scattered in the area. The general area is known geographically as the Coachella Valley, a northwest-southeast trending desert valley that constitutes the western end of the Colorado Desert and which is surrounded by the Santa Rosa Mountains to the southwest, the San Bernardino Mountains and the San Gorgonio pass to the northwest, the Little San Bernardino Mountains to the north and northeast, and the San Jacinto Mountains to the west.

Access to the Project site is provided by Interstate 10 (I-10), with the nearest on- and off-ramps being at Interstate 10 (I-10)/Golf Center Parkway approximately 0.2 miles to the east. The Crown Aero (Bermuda Dunes Airport) is located four (4) miles northwest of the site. The regional and local vicinity of the Project Area are depicted on Figures 1 and 2.

Specifically, the Project site is vacant and undeveloped and is located on the northeast corner of Avenue 45 and Golf Center Parkway, south and west of the Whitewater River, which is the primary stormwater conveyance channel for the City Indio and the primary drainage course for the entire Coachella Valley from north of Palm Springs to the Salton Sea (Rincon 2019, Figure 3). The Project site is located on Assessor's Parcel Number (APN) 611-330-025 within Section 24 of Township 5 South, Range 7 East, San Bernardino Baseline and Meridian, on the Indio United States Geological Survey (USGS) 7.5-minute topographic quadrangle map. The Project would be developed on 3.37-acre portion of the parcel, with the remainder of the parcel (5.26 acres) remaining undeveloped (Figure 4).

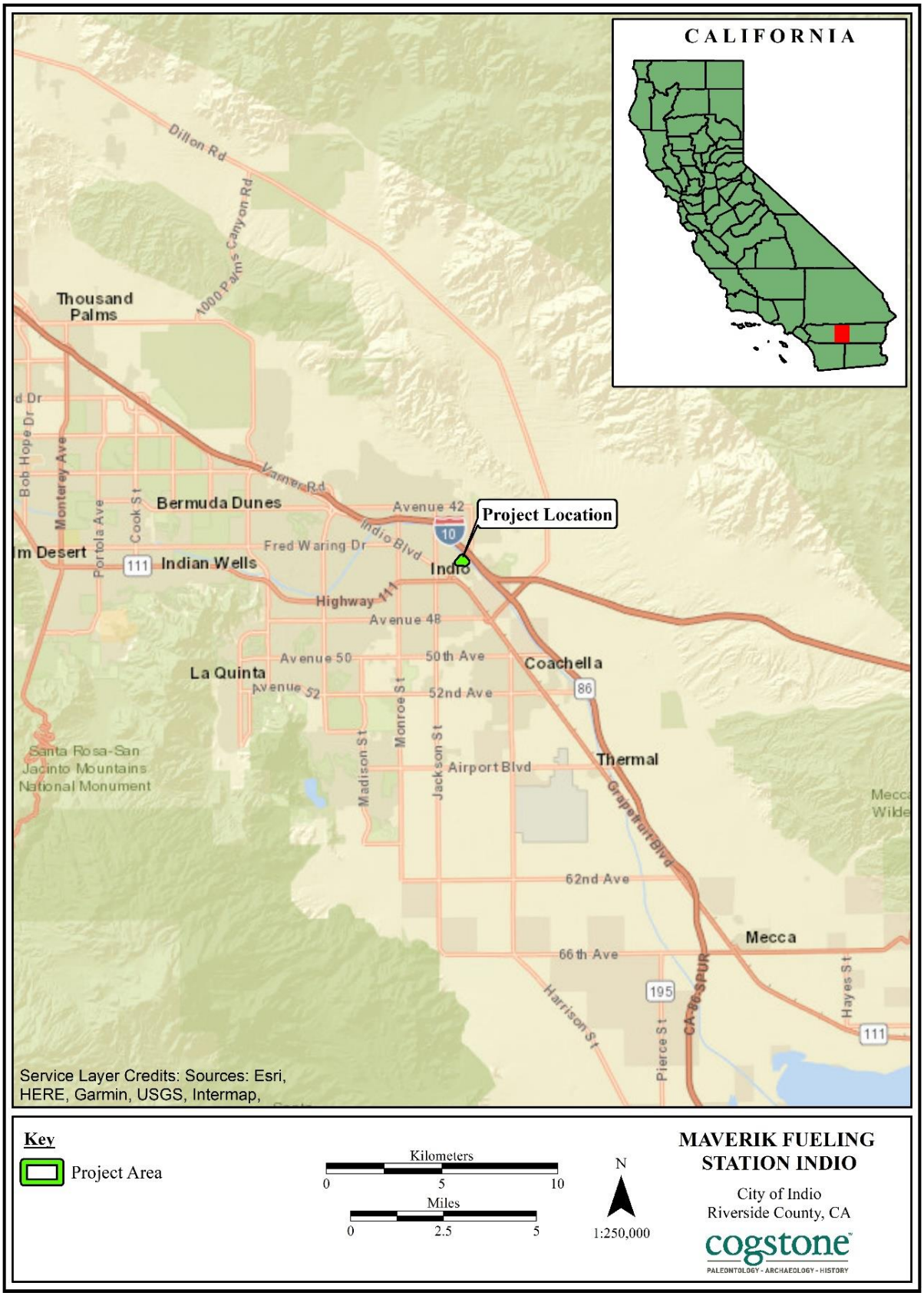

Figure 1. Project vicinity map

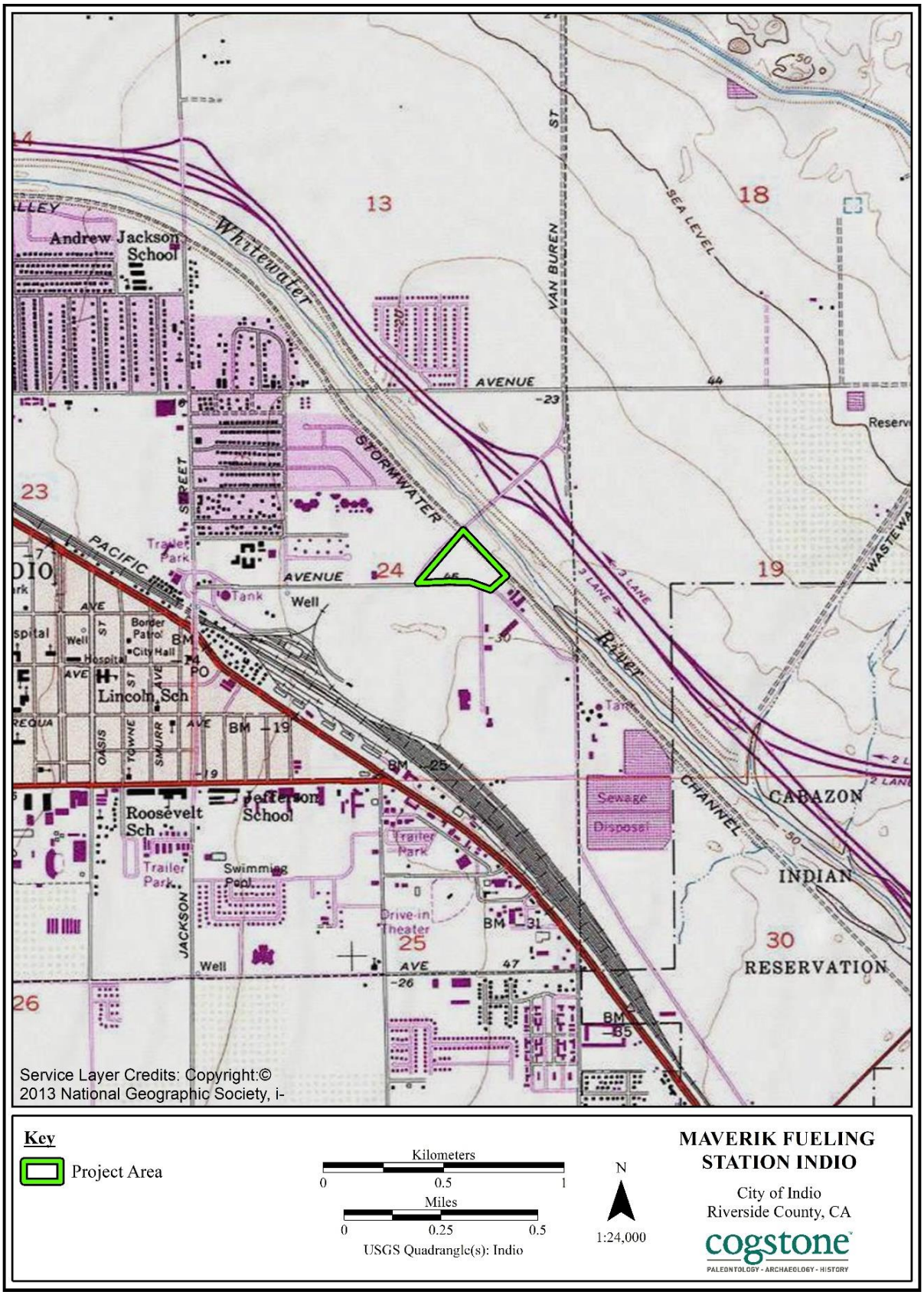

Figure 2. Project location map

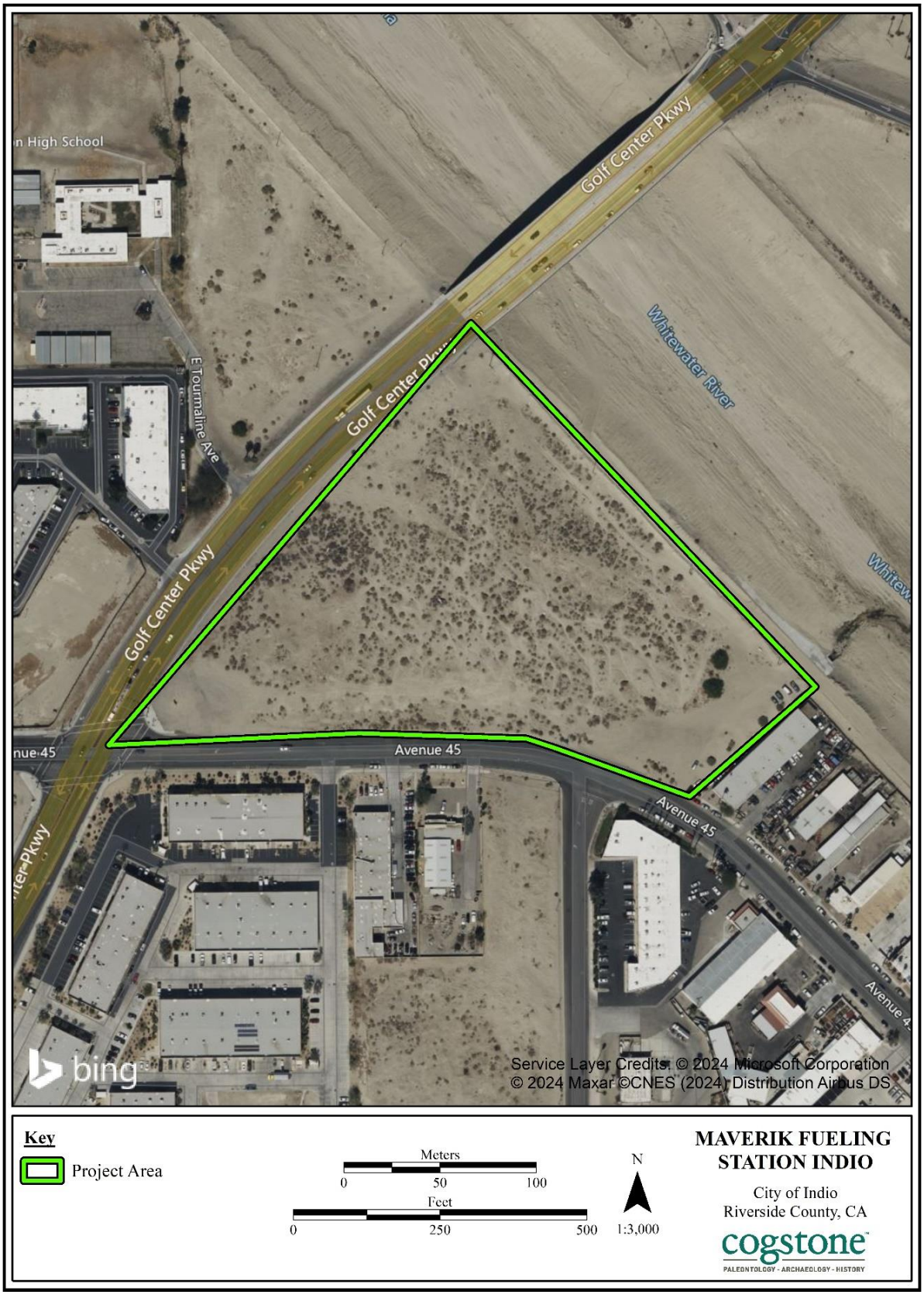

Figure 3. Project aerial map

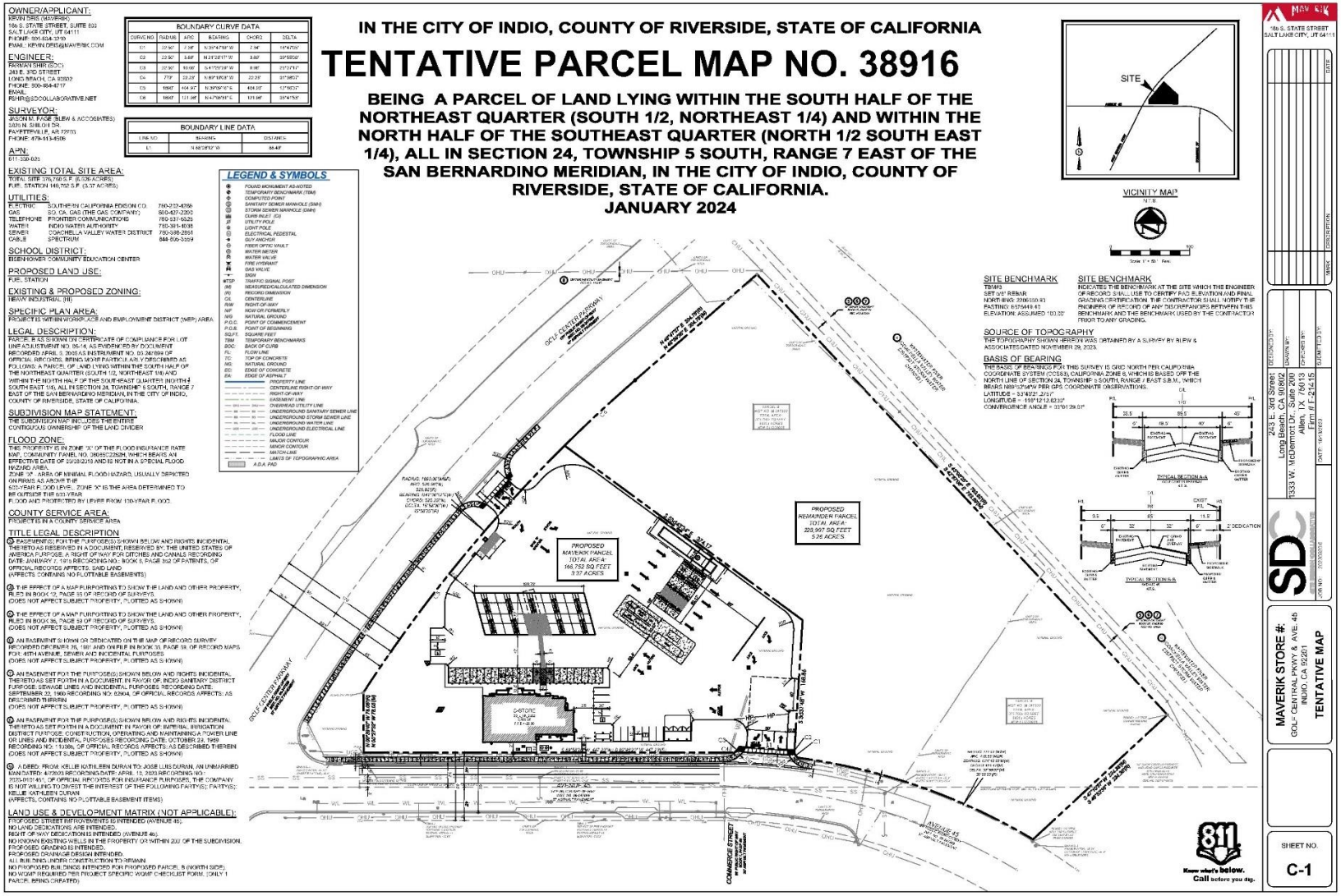

Figure 4. Tentative parcel map

PROJECT PERSONNEL

Cogstone Resource Management (Cogstone) conducted the cultural and paleontological resources assessment and authored this report. Resumes of key personnel are provided in Appendix A.

- John Gust, Registered Professional Archaeologist (RPA), served as the Task Manager, Principal Investigator for Archaeology, and co-authored this report. Dr. Gust has a Ph.D. in Anthropology from the University of California (UC), Riverside and more than 11 years of experience in archaeology.
- Kim Scott served as the Principal Investigator for Paleontology for the Project and wrote the geology, paleontology, environmental, and geoarchaeological sections of this report. Ms. Scott holds an M.S. in Biology with an emphasis in paleontology from California State University (CSU), San Bernardino. She is a qualified vertebrate paleontologist and sedimentary geologist with more than 28 years of experience in California paleontology and sedimentary geology.
- Pamela Gutierrez co-authored this report. Ms. Gutierrez has a B.A. in Anthropology from CSU Northridge and has over five years of experience in California Archaeology.
- Logan Freeberg conducted the archaeological and paleontological record searches and prepared the maps for the report. Mr. Freeberg has a certificate in Geographic Information Systems (GIS) from CSU Fullerton and a B.A. in Anthropology from UC Santa Barbara and has more than 20 years of experience in southern California archaeology.
- Molly Valasik, RPA, was Task Manager for the Project and provided overall QA/QC. Ms. Valasik has an M.A. in Anthropology from Kent State University in Ohio and over 15 years of experience in southern California archaeology.
- Eric Scott provided QA/QC of the paleontology and geology sections of this report. Mr. Scott has an M.A. in Anthropology, with an emphasis in biological paleoanthropology, from the University of California, Los Angeles (UCLA), and more than 40 years of experience in California paleontology.

REGULATORY ENVIRONMENT

STATE LAWS AND REGULATIONS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

TRIBAL CULTURAL RESOURCES

As of 2015, CEQA established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code, § 21084.2). In order to be considered a "tribal cultural resource," a resource must be either:

(1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
(2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

PUBLIC RESOURCES CODE

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic resources or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

1) It is 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) It is associated with the lives of persons important to local, California, or national history;
3) It 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; or
4) It 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 having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

NATIVE AMERICAN HUMAN REMAINS

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during Project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

CITY OF INDIO REQUIREMENTS

INDIO GENERAL PLAN (CITY OF INDIO 2019)

Cultural and Tribal Cultural Resources

Identifying and preserving significant cultural and historic resources strengthens community heritage and identity. These resources provide a constant reminder of the culture and history of Indio and the Coachella Valley, and serve as a valuable educational resource for residents and visitors.

Goal CE-8: Historic, Archaeological, and Paleontological Resources.

Historic, archaeological, and paleontological resources preserved for their scientific, educational, aesthetic, and cultural values.

- CE-8 Policies CE-8.1 Site plan review. Ensure adequate site plan review and mitigation measures are implemented for the development of sites with the potential to contain historic, archaeological, and paleontological resources.

- CE-8.2 Avoidance of impacts to historic resources. For projects that could affect historic resources, ensure adequate study to identify eligible resources and project-level review to avoid or lessen negative impacts through conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

- CE-8.3 Incentivize retention of historic landmarks. Explore opportunities to provide economic and regulatory incentives for the retention and sensitive upgrades and changes to historic landmarks and contributors to designated historic districts.

- CE-8.4 Monitoring. Require monitoring on sites where grading has the potential to impact subsurface cultural and paleontological resources during excavation and construction activities.

- CE-8.5 Public Education. Support opportunities to promote public awareness of the history and pre-history of the area as the oldest Valley City and the cultural center of the Coachella Valley.

- CE-8.6 Coordination with local tribes. Periodically meet with representatives from local tribes to: Obtain input prior to making decisions, taking actions, or implementing programs/projects that may impact cultural resources; Discuss methods to preserve and protect highly sensitive cultural resources; and Ensure that there is agreement regarding the protocol to be followed when cultural resources are discovered.

INDIO GENERAL PLAN UPDATE FINAL ENVIRONMENTAL IMPACT REPORT (RINCON 2019)

MM-CR-3:
In areas of moderate, moderate-high, and high sensitivity for cultural resources, as well as areas not current mapped for sensitivity, the City shall either require future project applicants to conduct an archaeological field survey or conduct construction monitoring by a qualified professional if ground disturbance is proposed. If surveys are conducted, the surveys shall be sent to the City of Indio for review and approval prior to issuance of project-specific development permits (Figure 5).

MM-CR-4:
In areas of high sensitivity for paleontological resources, as well as other areas in the City where no sensitivity mapping has occurred, the City shall either require future project applicants to conduct a paleontological field survey or conduct construction monitoring by a qualified

excavation may result in the accidental destruction or disturbance of paleontological resources. A mitigation measure has been developed requiring the conduction of a paleontological field survey or field monitoring in areas of high sensitivity as well as areas where no sensitivity mapping has occurred. professional if ground disturbance is proposed. If surveys are conducted, the surveys shall be sent to the City of Indio for review and approval prior to issuance of project-specific development permits

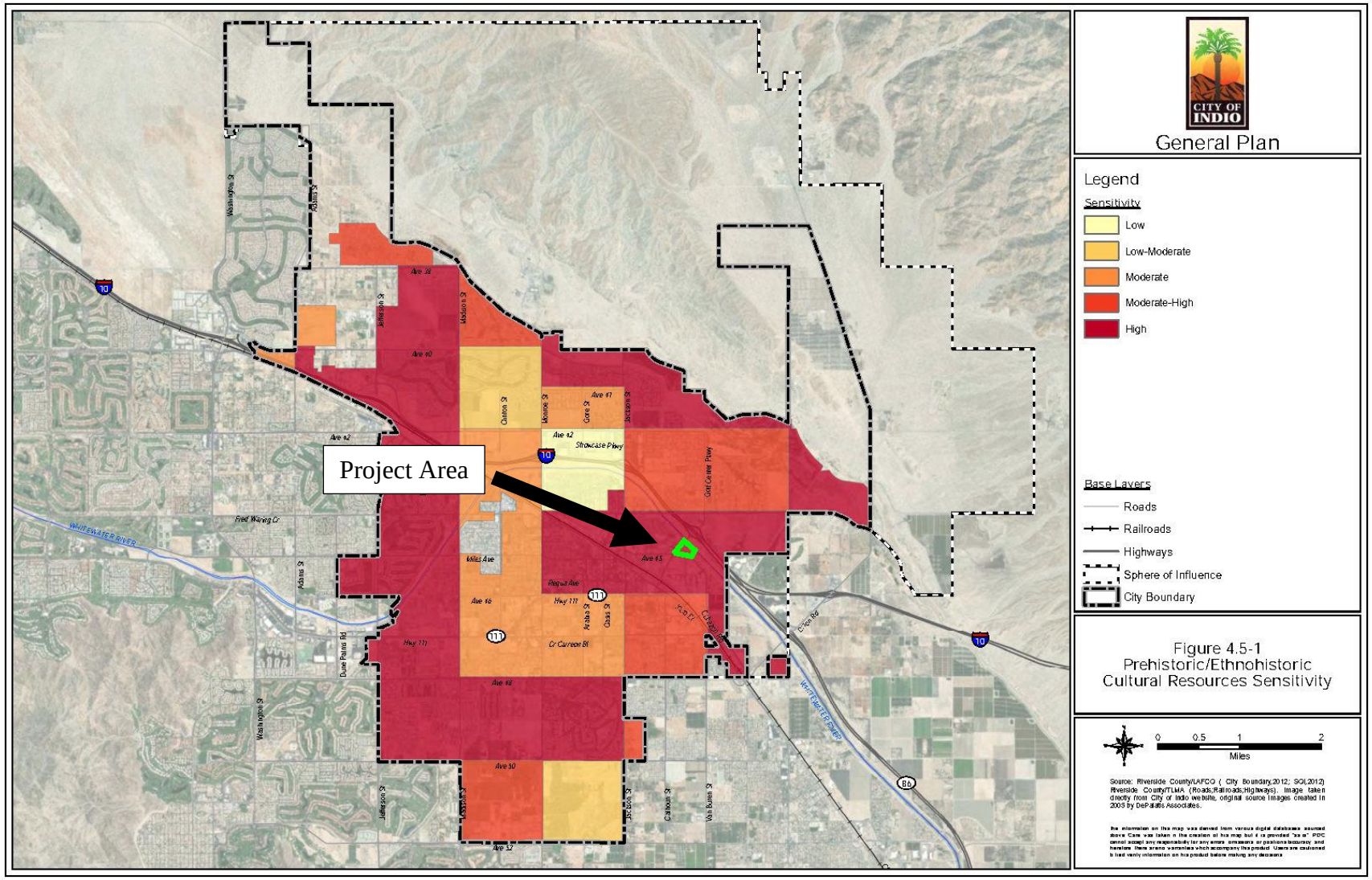

Figure 5. Cultural resource sensitivity map from General Plan Update Environmental Impact Report (Rincon 2019)

BACKGROUND

GEOLOGICAL SETTING

The Project Area is in the Coachella Valley at the northern end of the Salton Trough. Surrounded by mountains on all but the southeastern side, the Salton Trough is an extensional basin that parallels the San Andreas Fault Zone through the Coachella Valley from the Desert Hot Springs area to the Pacific Ocean south of the Gulf of California. The San Andreas Fault Zone lies near the center of the trough while the Pacific Plate is along the west side and the North American Plate is along the east. The northwesterly motion of the Pacific Plate relative to the North American Plate has formed this extensional basin and continues to cause the Salton Trough to widen and sink from the stretching of the continental crust. The San Andreas Fault Zone continues south through the Gulf of California which is also widening and sinking.

The Salton Trough has been periodically flooded by the Colorado River from ~6,000 years ago to ~470 years ago. Named Lake Cahuilla, this large lake formed after the Colorado River Delta blocked access of the marine waters of the Sea of Cortez about 11,700 years ago in Imperial County and northern Sonora, Mexico. Flood waters of the Colorado River could then accumulate, forming a large fresh water lake. The high-water line of this lake is actually visible in some of the rock outcrops in along the western side of the Salton Sea. The Salton Sea is the salt rich remnant of a man-made freshwater lake which lies in the same basin as Lake Cahuilla. The Project is mapped as late Holocene Whitewater River sediments deposited less than 3,000 years ago (Lancaster et al. 2012). The Project is also mapped within the northern boundary of the middle to late Holocene Lake Cahuilla beds which are less than 6,000 years old (Figure 6).

STRATIGRAPHY

Lake Cahuilla Deposits, middle to late Holocene

These deposits are present below the sands of the Lake Cahuilla beds. The Colorado River periodically filled the Salton Trough, forming Lake Cahuilla from 6,000 to 470 years before present (Sneed and Brandt 2008). At the greatest extent, Lake Cahuilla spanned from just north of the Project in Indio, to south of Mexicali, Mexico (Figure 6). Sediments of the Lake Cahuilla beds are generally composed of thin (1-2 cm thick), poorly sorted, fine-grained, light grayish-brown fluvial sands interbedded with massive, poorly sorted, bioturbated, silty to sandy, white-to-light-gray lacustrine beds (Whistler et al. 1995). These lacustrine sediments can be as much as 250 feet thick and were deposited during each of at least seven high stands of Lake Cahuilla, each high stand resulting from flooding of the Salton Trough by inflow from the Colorado River (Waters 1983). In the La Quinta area, charcoal from fluvial deposits interfingering with the Lake Cahuilla beds has been dated to 5,890 $\pm$ 60 years before present (ybp; Whistler et al. 1995).

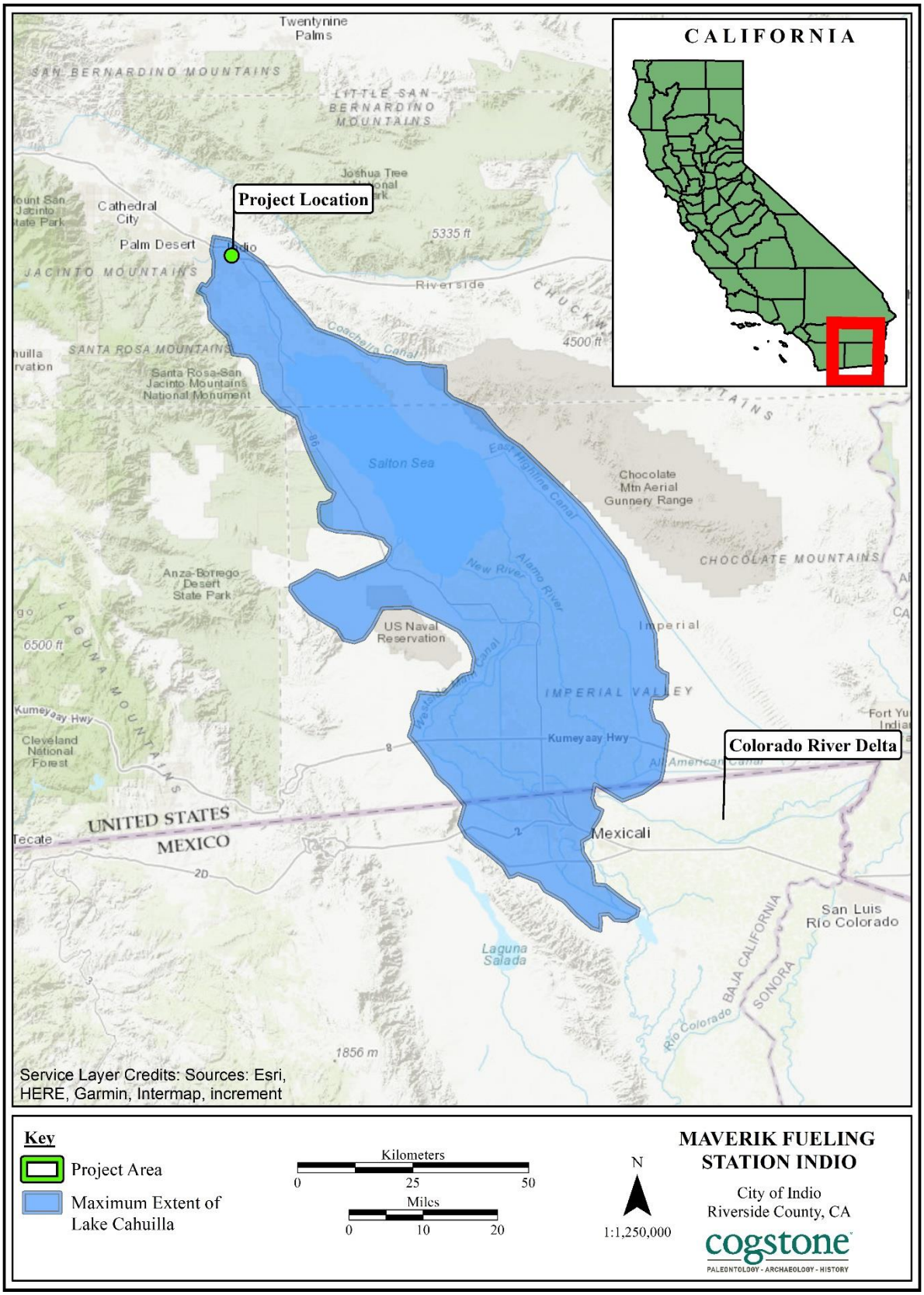

Figure 6. Project location relative to Lake Cahuilla when it was active

WHITEWATER RIVER DEPOSITS, LATE HOLOCENE
Unconsolidated, fluvial sands and gravels occur in the recently active channels of the Whitewater River. Older fluvial deposits locally interfinger with lake and dune sediments (Bedrossian et al. 2012; Lancaster et al. 2012).

PALEONTOLOGICAL SETTING

Fossils collected from the Holocene Lake Cahuilla beds in the past include the remains of terrestrial plants, freshwater invertebrates, fish, and terrestrial vertebrates that are native to the region today (Whistler et al. 1995).

ENVIRONMENTAL SETTING

The climate within Riverside County is a desert based on the lack of rainfall and temperature changes during the hot and cold seasons. Indio is part of the Colorado Desert, with temperatures ranging from 120 degrees Fahrenheit in summer to near freezing in winter, some areas can form frost. The Project area lies in the rain shadow created by the mountains between the trough and the coast. Precipitation primarily takes place during the summer as monsoonal storms move northward from the Gulf of Mexico. Winter storms rarely drop precipitation east of the coastal mountains.

Native vegetation is typically representative of the Sonoran Desert Scrub plant community. Mesquite, creosote saltbush and sage were vital prehistoric food resources as well as those of the desert riparian plant community which would have been present when this area was occupied by people.

PREHISTORIC CONTEXT

Lake Cahuilla was one of the largest freshwater lakes in North America. At its maximum, the lake would stretch from the Colorado River Delta in Mexico to the vicinity of Indio, California. Lake Cahuilla formed when sediment carried by the Colorado River formed a natural barrier in the Colorado River Delta, forcing the course of the river to turn northward into the Salton Basin. Over the course of centuries, it formed the massive lake.

Throughout the Pleistocene Epoch and recent Holocene, the course of the Colorado River alternated between flowing into the Gulf of Mexico and flowing into the Salton Basin. Each time Lake Cahuilla filled, it brought with it an entire ecosystem that included freshwater fish, mussels, waterfowl, and vegetation. Ethnographic accounts taken from Cahuilla Native Americans from the mid-nineteenth century were used to estimate A.D. 1600 as the latest date for the last time the Lake Cahuilla formed. Holocene fossil shell and vertebrates are commonly found throughout the ancient lakebed (Singer n.d.).

Prior to dam construction on the Colorado River, the slower flow of the river meanderings resulted in the deposition of a great deal of sediment in the lower channels of the delta. Accumulating silts raised the overall height of the delta and lowered stream channel margins to form a dam. River channels near the delta crest occasionally breaking through their natural levees and causing the full flow of the river to pour down the steeper northern slope of the delta into the low-lying Salton Trough. During large flood events, extensive head cutting and enlargement of the channel prevented the Colorado River from reestablishing a route back through the newly reworked surface of the delta. It is estimated that the Salton Trough filled with water in about 18 years to form Lake Cahuilla, the largest freshwater lake in California. At its maximum, it was 110 miles long, 32 miles wide, and more than 300 feet deep at the center, three times the area and six times the depth of the present Salton Sea (Schaefer 2001).

Eventually the Colorado River found its natural course through the delta again and the lake waters gradually receded from evaporation. This process is estimated to have taken up to 60 years if no new water recharged the lake. Radiocarbon dates from marsh deposits and archaeological sites around the lake indicate from three to four major infillings over the last 1,300 years, each lasting for up to several hundred years. Recent finds also indicate much earlier phases extending well over 2,000 years ago. The chronology of Lake Cahuilla's most recent phases continues to be refined with new archaeological investigations. Current data, including 85 radiocarbon dates, indicate a complete filling in the 13th century A.D., a recession in the late 14th or early 15th century, another infilling in the 15th century, a recession in the late 15th or early 16th century, and a final filling in the 17th century followed by the last recession that ended soon after A.D. 1700. There were also partial infillings and many fluctuations in lake levels over time (Schaefer 2001).

PREHISTORIC SETTING

Archaeological surveys along the relic shoreline of Lake Cahuilla have documented hundreds of sites varying in size, complexity, and topographic associations. House pits, hearths, trash middens, and artifact scatters mark the areas of human occupation. Especially favored locations include places where sand bars and landforms created resource-rich marshy coves and embayments, or where creeks or washes ran into the lake. Some of the largest population centers were at the north end of the lake where it met the Whitewater River. Some of these sites might be long-term village locations. Most other areas appear to have supported dispersed seasonal temporary camps. This was especially true along the eastern side of the lake where a wide expanse of barren desert separated the lake from the Colorado River. Proximity to land resources was also important and many sites have been recorded where alkali pans and mesquite-covered sand dunes bordered the lake. Fishing camps occur wherever alluvial fans gave access to the lake through the mountains. The gently sloping surfaces near the toe of each fan were often favored for the construction of stone fish traps in the shallow waters. Their precise method of

operation remains a mystery, but it is suggested that Native Americans exploited natural fish behavior to enter rocky enclosures when startled or during spawning. Parallel lines of these V-shaped structures and round pits follow the lakeshore contours where the indigenous population built new lines of traps as the waters receded. With increasing lower elevations, lines of successively later fish camps and habitation sites remain as they followed the receding shoreline until water salinity reached intolerable levels (Schaefer 2001).

Archaeological excavations at a select number of sites have yielded abundant fish bone from at least four species native to the Colorado River and Gulf of California. Two of the most common, razorback sucker and bonytail chub, are now rare or endangered. Among the most exploited of birds was the coot or mud hen, probably hunted with nets or bows and arrows. Commonly occurring mammals include black-tailed jackrabbit and Audubon cottontail, while bighorn sheep and deer were occasionally hunted. Carbonized remains and pollen of dozens of plant species attest to the diversity of seasonally available plants. Among the most important from the marshes were bulrush and cattail. The desert provided mesquite, saltbush, seepweed, and other chenopods (Schaefer 2001).

Archaeological sites contain a variety of remains from everyday life. Local clays were fashioned into ceramic jars, cooking pots, bowls, parching trays, spoons, tobacco pipes, figurines, and rattles. Stone for making tools came from a variety of sources, some obtained from miles away. Past volcanic activity in this active zone of earthquakes and hot springs provided several sources of raw material for tools. Among the most valued was obsidian glass from Obsidian Butte, but it lay under Lake Cahuilla's waters and could only be accessed during recessional phases. Two sources of a fine silicified volcanic tuff called Wonderstone were also widely distributed around the shoreline. Pumice stone found floating in Lake Cahuilla was used to make abraders. Outcrops of sandstone were fashioned into milling slabs and hand stones. Shell for making beads and ornaments came from as far away as the Gulf of California and the Pacific Ocean (Schaefer 2001).

Opinions differ on the effects of the lake's desiccation. Some argue that it caused major population shifts of large shoreline populations to the mountains on the west and the Colorado River to the east. Increased competition for resources may have caused increased conflicts in some areas and intensified exploitation of certain upland resources such as the agave plant. Others argue that Lake Cahuilla was principally occupied by small mobile groups on a seasonal basis because the shoreline habitats were unstable due to seasonal fluctuations in lake levels. During periods when the basin was dry, these groups merely rescheduled their seasonal rounds to include new resources on the exposed lakebed or elsewhere (Schaefer 2001).

Project Area Cultures

The latest cultural revisions for the Project Area define traits for time phases of the Greven Knoll Pattern of the Encinitas Tradition applicable to inland San Bernardino, Riverside, Los Angeles,

and Orange counties (Sutton and Gardner 2010). This pattern is subsequently replaced in the Project Area by the Peninsular Pattern of the Palomar Tradition (Sutton 2011; Table 1).

Greven Knoll sites tend to be in located in the inland valley areas. These inland people apparently did not switch from the use of manos and metates to the use of pestles and mortars that is seen in coastal sites dating to approximately 5000 years ago, possibly reflecting their closer relationship with desert cultural peoples who did not exploit acorns. The Greven Knoll toolkit is dominated by manos and metates throughout its 7,500-year extent. In Phase I, other typical characteristics were pinto dart points for atlatls or spears, charmstones, cogged stones, absence of shell artifacts, and flexed position burials (Table 1). In Phase II, Elko dart points for atlatls or spears and core tools are observed along with increased indications of gathering. In Phase III, stone tools including scraper planes, choppers and hammerstones are added to the tool kit, and yucca and plant seeds are staple foods, animals bones are heavily processed (broken and crushed to extract marrow), and burials tend to be marked by stone cairns (Table 1; Sutton and Gardner 2010).

Early Peninsular sites tend to be near sources of fresh water in valleys. The former Lake Cahuilla played a major role in the prehistory of the Colorado Desert. As detailed above, Lake Cahuilla formed periodically when the Colorado River broke its channel and flowed into the Salton Trough of the Coachella and Imperial Valleys, forming a large, deep body of fresh water. Sutton (2011) suggests that some San Luis Rey I people of Yuman descent split away and migrated east to the northern Peninsular Ranges and the northern Coachella Valley to exploit Lake Cahuilla, and in so doing became Peninsular I. The Peninsular Pattern then developed through the Peninsular I, II and III phases (Sutton 2011).

Table 1. Cultural Patterns and Phases

Phase	Dates B.P.	Material Culture	Other Traits
Greven Knoll I	8,500 to 4,000	Abundant manos and metates; Pinto dart points for atlatls or spears; charmstones, cogged stones, and discoidals rare; no mortars or pestles; and general absence of shell artifacts.	No shellfish; hunting important; flexed inhumations; and cremations rare.
Greven Knoll II	4,000 to 3,000	Abundant manos and mutates; Elko dart points for atlatls or spears; core tools; late discoidals; few mortars and pestles; and general absence of shell artifacts.	No shellfish; hunting and gathering important; flexed inhumations; and cremations rare.
Greven Knoll III (formerly Sayles complex)	3,000 to 900	Abundant manos and mutates; Elko dart points for atlatls or spears; scraper planes, choppers, and hammerstones; late discoidals; few mortars and pestles; and general absence of shell artifacts.	No shellfish; yucca and seeds as staples; hunting important but animal bones also processed; flexed inhumations beneath rock cairns; and cremations rare.

Phase	Dates B.P.	Material Culture	Other Traits
Peninsular I	900 to 750	Appearance of small points (Cottonwood and Desert Side-notched) for arrows; shaft straighteners; pottery; few stone ornaments or stone pipes; appearance of shell ornaments; use of obsidian glass from Coso, Obsidian Butte, Bagdad, and unknown sources; and use bedrock metates but few mortars and pestles.	Adoption of a lacustrine-based subsistence system; movement of people into the northern Coachella Valley from the interior valleys as Lake Cahuilla filled; establishment of major residential bases along the Lake Cahuilla shoreline; and primary pit cremations.
Peninsular II	750 to 300	Addition of brown ware pottery, ceramic pipes, and figurines; use of some obsidian sources; and the use of stone fish traps as levels of Lake Cahuilla fluctuated and eventually declined.	Lacustrine based subsistence; and the appearance of the Peninsular Funerary Complex, with secondary cremations placed in ceramic "containers" and associated mourning ceremonies.
Peninsular III	300 to 150	Continued use of Cottonwood and Desert Side-notched points; brown ware and buff ware pottery; primary use of Obsidian Butte as an obsidian source; addition of new figurine types and cultigens such as melons and squash, and the introduction of Euro-American material culture (e.g., glass beads and metal tools).	Adoption of terrestrial-based subsistence system; full-time villages near springs; movement of some people west into the northern Peninsular Ranges as Lake Cahuilla became desiccated; use of domesticated species obtained from Colorado River Yumans and Euro-Americans; primary pit cremation as the principal mortuary practice; and retention of mourning ceremonies.

Note: Adapted from Sutton and Gardner 2010 and Sutton 2011.

The Peninsular I phase is marked by small points for arrows, the appearance of bedrock mortars indicating use of acorns, pottery, the appearance of shell ornaments, and pit cremations are common. Hunting and gathering of terrestrial resources and the exploitation of Lake Cahuilla's lacustrine resources resulted in the development of new technologies for waterfowl decoys and fish traps and/or nets (Table 1). The Peninsular II phase has some important new material traits including brown ware pottery, ceramic pipes and figurines, and secondary burials in containers (Table 1). The Peninsular III phase reflects the archaeological signature of the ethnographic groups that had become established in Peninsular I and II phases with the addition of some Euro-American material culture (Table 1; Sutton 2011).

ETHNOGRAPHY

By the Late Prehistoric period, the Coachella Valley was home to peoples known as the Cahuilla. They occupied the San Gorgonio Pass (referred to as the Pass Cahuilla), San Jacinto and Santa Rosa Mountains (Mountain Cahuilla), and the Coachella Valley and the northern end of Imperial Valley (Desert Cahuilla; Figure 7). The Cahuilla are linked to other Takic language family groups such as the Serrano and Luiseño and share many aspects of culture and religion with those tribes.

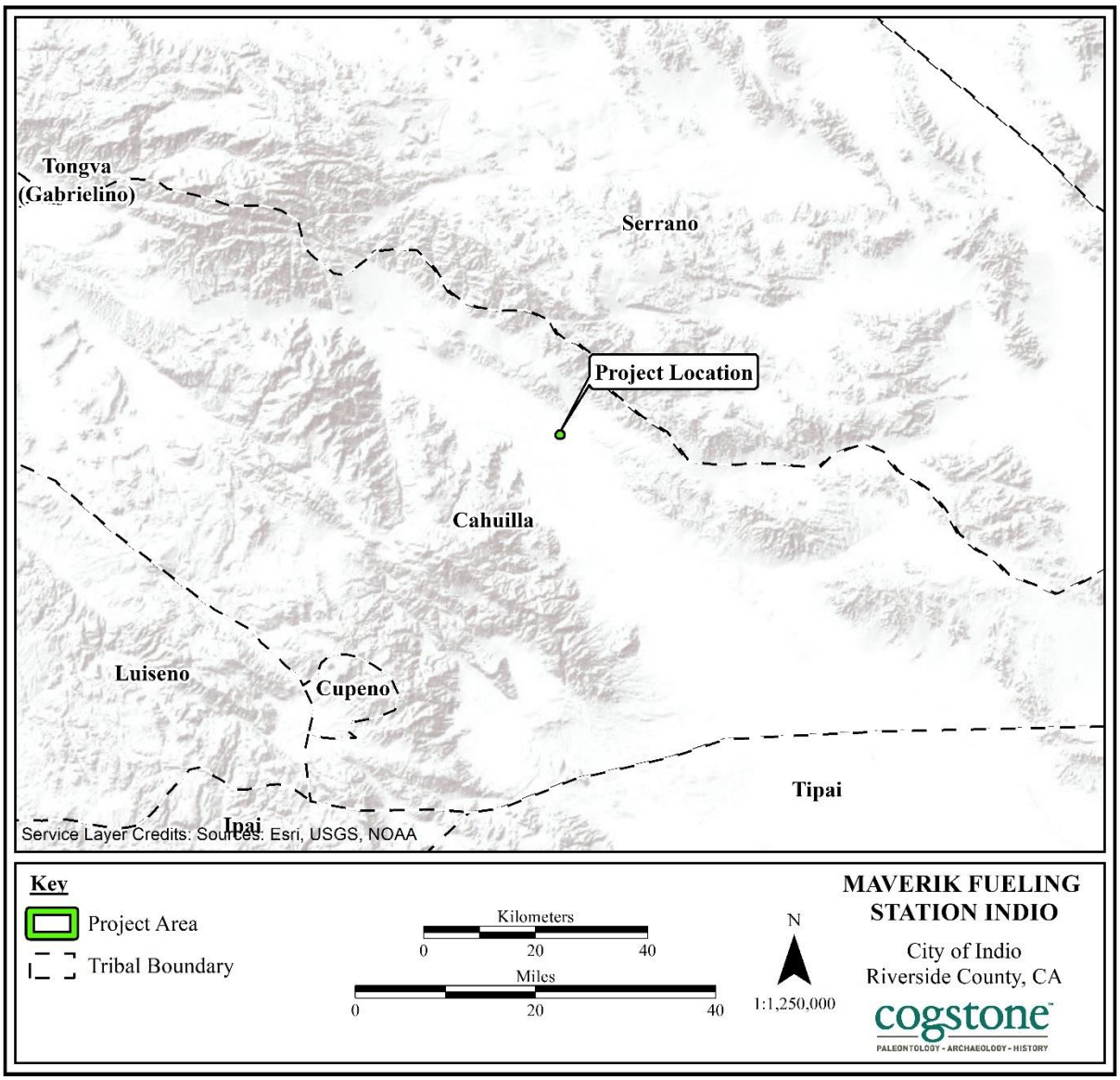

Figure 7. Cahuilla territory

These peoples spoke the Cahuilla language, but each person's primary identity was linked to clan lineage and moiety, rather than tribal affiliation. The two moieties of the Cahuilla were *Istam* (coyote) and *Tuktum* (wild cat). Affiliation was inherited from the father's moiety and members of one moiety had to marry into the other group. Each clan was an independent, politically autonomous land-holding unit (Bean 1972; Strong 1929).

In addition to lineage residence areas and clan territory owned in common with other clan members, each lineage had ownership rights to various food collecting and hunting areas. Individuals also "owned" specific areas rich in plant resources, as well as hunting grounds, rock quarry locations, and sacred spots used only by shamans, healers, and ritual practitioners.

Cahuilla clans varied in size from several family groups to those composed of several thousand people. Clans were generally situated so that each lineage or community was located near a reliable water source and in proximity to significant food resources. Within each community, house structures were spatially placed at some distance from each other. Often a community would spread over a mile or two in distance with each nuclear and extended family having homes and associated structures for food storage and shaded work places (*ramadas*) for tool manufacture and food processing. Each community also contained a house clan leader.

In more recent times, a ceremonial house (*kishumnawat*) was placed within each community and most major religious ceremonies of the clan were held there. In addition, house and ceremonial structures, storage granaries, sweat houses, and song houses (for recreational music) were present. Usually an area within one to three miles contained the bulk of materials needed for daily subsistence, although territories of a given clan might be larger and longer distances traveled to get precious exotic resources usually found in the higher elevations of the surrounding mountains.

While most daily secular and religious activities took place within the community, there were locations at some distance from the community where people camped for extended periods to harvest acorns or piñon nuts. Throughout the area, there were sacred places used primarily for rituals, intergroup or inter-clan meetings, caches for sacred materials, and locations for use by shamans or medicine men. Generally, hilly, rocky areas, cave sites, or walled cave sites were used for temporary camping, storage of foods, fasting by shamans, and as hunting blinds.

From the mid-1500s to the 1800s, Spanish explorers, Mexican ranchers, and later American settlers variously contacted the Cahuilla. By the 1860s, several epidemics devastated the Cahuilla population, and the increasing contact with Europeans continued to have a major impact on their traditional lifeway. Survivors of decimated Cahuilla clans joined villages that were able to maintain their ceremonial, cultural, and economic institutions (Bean 1972).

The Cahuilla were influenced by contact with the Patayan peoples of the lower Colorado River area. The Patayan were of the Yuman language family and introduced both floodplain agriculture, the use of ceramics, and bow-and-arrow technology to the Cahuilla approximately 1500 years ago. The Cahuilla were observed by early European explorers and settlers growing small plots of corn, pumpkin, melon, watermelon, barley, and wheat where there were reliable water sources (Schaefer and Laylander 2007:253).

HISTORIC CONTEXT

HISTORIC PERIOD

1850-1900

The Cahuilla retained control of their ancestral lands longer than most California tribes as they were somewhat distant from the established Spanish Missions. The first regular incursion into Cahuilla territory was Hank Brown's wagon road in the 1850s along what is now the route of I-10 (Lech 2004:137-8).

Because of competing economic and political considerations, it was not until the mid-1870s that a serious push to settle the Coachella Valley occurred when the Southern Pacific Railroad transected the western Colorado Desert through the Coachella Valley. This route connected the San Gorgonio Pass to the town of Yuma, Arizona, via the eastern shore of the Salton Sink. Within a decade, the Federal Government gave all the odd-numbered sections of land in the Coachella Valley to the Southern Pacific (now the Union Pacific) Railroad, which completed its line through the desert to the Pacific Ocean in 1877. When President U.S. Grant established the Cahuilla Indian Reservations beginning in 1875, only the even-numbered sections were still available, thus creating the present reservation checkerboard pattern. At the same time, ancestral Cahuilla lands were granted to American settlers, and Cahuilla peoples were being moved onto the newly established reservations (Caudel 2016).

1900-1950

Population in the Coachella Valley remained small with most population centers being small railroad towns, but various irrigation schemes brought agriculture resulting in increased settlement of the area. Indio became an agricultural center by 1907 due to date farming initiated by the United States Department of Agriculture (USDA). The All-American Canal was the largest and most successful attempt to bring water into the desert, and runoff from the canal feeds the Salton Sea. In 1930, Indio became the first city in the Coachella Valley to be incorporated (City of Indio 2019).

MODERN PERIOD 1950-CURRENT

Development was very slow and towns were small until relatively recently. However, tourism became the area's major industry leading to residential and commercial development (Lech 2004:142). Because of Palm Springs and other resort cities, and the valley's various festivals, tourism brings in over $7 billion a year, and provides nearly 52,000 jobs (Barkas 2018). With tourism also came other industries leading to a year-round population of 188,789 (Census Reporter 2017), although seasonal population varies wildly.

PROJECT AREA HISTORY

Cogstone reviewed USGS topographic quadrangle maps and USDAhistoric aerial photographs of the Project Area. Early maps including 1904 Indio (1:125, 000) and 1948 Indio (1:125,000) are

imprecise, placing everything east of the Sothern Pacific Railroad on the Cabazon Indian Reservation. The 1956 Coachella (1:62,500) map shows the Coachella Stormwater Channel and Avenue 45 in their current configurations. The 1972 USDA historic aerial photograph (NETR 1972) shows Golf Center Parkway under construction and the 1984 photograph (NETR 1984) shows building adjacent to the southeast corner of the Project Area. The 1991 Indio (1:24,000) map shows the Project Area in its current state. The Project Area appears to have never been previously developed.

RECORDS SEARCHES

PALEONTOLOGICAL RECORD SEARCH

A record search of the Project Area was obtained from the Western Science Center (Stoneburg 2024; Appendix B). Additional records from the University of California Museum of Paleontology database (UCMP 2024), the PaleoBiology Database (PBDB 2024), print sources (Jefferson 1991a, 1991b; Whistler et al. 1995), and previous record searches from the Natural History Museum of Los Angeles County (NHMLA; McLeod 2013, 2015), the San Diego Natural History Museum (SDNHM; Randall 2008), and the San Bernardino County Museum (SBCM; Scott 2004a, 2004b, 2006, 2010) were also reviewed for fossil records near to the Project. The personal knowledge of Eric and Kim Scott on several decades of San Bernardino County Museum monitoring projects in the northern Salton Trough is also included.

No fossils are known from the Whitewater River sediments, however these deposits overlie the Lake Cahuilla beds.

HOLOCENE LAKE CAHUILLA SEDIMENTS

Records of the Western Science Center (Stoneberg 2024) indicated fossils of Holocene freshwater mollusks were recovered approximately three miles to the south of the Project Area. McLeod (2013, 2015) and Whistler et al. (1995) report fossil localities from the Lake Cahuilla beds in La Quinta, about six miles southwest of the Project (Table 2). Paleontological mitigation sampling for a project in the Lake Cahuilla beds consisted of two pre-construction test trenches excavated to 13 feet deep. Approximately 7,050 pounds of sediments were processed from between depths of 3 and 13 feet. Relatively small samples were collected for micropaleontological and invertebrate analysis, while large samples were collected from where vertebrate fossils were present. Lithologies of the 13-foot-deep trenches consisted of alternating fluvial and lacustrine sediments. While a charcoal sample from approximately 10.5 feet deep in the lowest fluvial unit dated to 5,890 ± 60 years before present (ybp), a sample from approximately 7.5 feet deep in the middle fluvial unit dated 2,500 ± 50 ybp, and a sample from approximately 4 feet deep in the upper fluvial unit dated 1,080 ± 80 ybp (Whistler et al. 1995).

Freshwater mollusk shells were abundant on the surface and throughout almost every stratigraphic interval (Whistler et al. 1995). The upper fluvial unit had one horizon that was more than 50 percent composed of small snail shells. Most vertebrate fossils were recovered from fluvial, rather than lacustrine, strata. Overall, diverse freshwater diatoms, land plant pollen, sponges, ostracods, mollusks, fish, and small terrestrial vertebrates were recovered from this paleontological sampling program (Whistler et al. 1995:114; Appendix B, page 1, paragraph 3). In the La Quinta samples, the middle lacustrine unit contained mostly pollen, while the middle fluvial unit had sparse small land animals (Table 2). The upper lacustrine units had fish, mollusks, ostracods, sponges, diatoms, and land plant pollen. The upper fluvial unit had virtually no pollen or diatoms but abundant small invertebrate and vertebrates.

McLeod (2013, 2015) additionally reports the recovery of a jaw of a bighorn sheep (*Ovis canidensis*) from the La Quinta area. Scott and Scott (personal communication 2024) reports that a fossil of an artiodactyl, probably a deer or bighorn sheep, was recovered from Holocene sediments in northern Indio.

Table 2. Fossils from the Lake Cahuilla beds in La Quinta

Group	Taxon	Common Name	MLU (DPW 2467)	MFU (DPW 2468)	ULU1 (DPW 2469)	ULU2 (DPW 2470)	UFU (DPW 2471)
rabbits	*Sylvilagus* sp.	cottontail rabbit					x
squirrels	*Ammospermophilus leucurus*	antelope ground squirrel		x			x
mice and rats	*Perognathus longimenbris*	pocket mouse		x			x
	?*Dipodomys* sp.	kangaroo rat					x
	Neotoma lepida	desert wood rat					x
	Peromyscus sp.	white-footed mouse					x
bird	unlisted	songbirds					x
iguanid lizards	*Phrynosoma platyrhinos*	desert horned lizard					x
	Sceloporus magister	desert spiny lizard					x
	Uma inornata	fringe-toed lizard		x			x
	Urosaurus graciosus	long-tailed brush lizard					x
constricting snakes	*Chionactis occipitalis*	western shovel-nosed snake					x
	Hypsiglena torquata	night snake					x
	Pituophis melanoleucus	gopher snake				x	x
	Sonora semiannulata	western ground snake					x
rattlesnakes	*Crotalus cerastes*	sidewinder					x
	Crotalus sp.	large rattlesnake					x
fishes	*Cyprinodon maculartus*	desert pupfish					x
	Gila elegans	bonytail		x		x	x
	Xyrauchen texanus	razorback sucker					x
ostracods	*Cypridopsis vidua*	ostracod			x	x	
	Cyprinotus torosa	ostracod			x		
	Limnorythere cerioruberosa	ostracod			x	x	
clams	*Anodonta californiensis*	California floater			x	x	x
	Pisidium casertanum	ubiquitous pea clam			x	x	x
	Amnicola longinqua	dusky snail			x	x	x
	?*Ferrissia walker*	cloche ancylid					x

Group	Taxon	Common Name	MLU (DPW 2467)	MFU (DPW 2468)	ULU1 (DPW 2469)	ULU2 (DPW 2470)	UFU (DPW 2471)
snails	*Flumnicola* sp.	pebble snail					x
	Gyraulus parvus	ash gyro			x	x	x
	Helisoma trivolvis	rams horn			x	x	x
	Physella ampullacea	paper physa			x	x	x
snails	*Physella humerosa*	corkscrew physa			x	x	x
	Tryonia protea	desert tryonia			x	x	x
land plants	*Selaginella sinuites*	club-moss				x	
	Polypodiaceae	ferns				x	
	Pinus sp.	pine			x	x	
	Betulaoceae	alders, birches					
	Ceanothus sp.	mountain lilac					
	Chenopodiaceae	saltbushes	x			x	
	Onagraceae	evening primroses			x	x	
	Quercus sp.	oak		x			
	Compositae *(Ambrosia*-type)	ragweed			x		
	Compositae (*Helianthus*-type)	sunflower			x		

NOTES:
MLU = middle lacustrine unit (DPW 2467)
MFU = middle fluvial unit (DPW 2468 = LACM 6255; 2,500 ± 50 ybp)
ULU1 = upper lacustrine unit 1 (DPW 2469 = LACMIP 16830)
ULU2 = upper lacustrine unit 2 (DPW 2470 = LACM 6253, LACMIP 16830; 1,080 ± 80 ybp)
UFU = upper fluvial unit (DPW 2470 = LACM 6252, LACMIP 16831; 1,080 ± 80 ybp)
From Whistler et al. 1995; McLeod 2013, 2015

CALIFORNIA HISTORIC RESOURCES INFORMATION SYSTEM

Cogstone archaeologist Logan Freeberg requested a search of the California Historical Resources Information System (CHRIS) from the Eastern Information Center (EIC) located at University of California, Riverside on April 30, 2024 which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that five previous studies have been previously completed within the Project Area while an additional 27 studies have been completed within a half-mile radius of the Project Area (Table 3).

Table 3. Previous Studies within a half-mile radius of the Project Area

Report No. (RI-)	Author(s)	Title	Year	Distance (miles) from Project Area
00002	Rogers, Malcolm J.	Miscellaneous Field Notes - Riverside County. San Diego Museum of Man	1953	0-0.5
00161	Greenwood, Roberta S.	Paleontological, Archaeological, Historical, and Cultural Resources, West Coast-Midwest Pipeline Project, Long Beach to Colorado River	1975	0-0.5
00163	Von Werlohof, Jay, and Sherilee Con Werlohof	Heritage Resources Exploratory Excavation, Phases II-III, 11-Riv-111 Indio O.H. 11201-106401.	1975	0-0.5

Report No. (RI-)	Author(s)	Title	Year	Distance (miles) from Project Area
00256	Dominici, Debra, and Jan Kasper	Department Of Transportation, Negative Archaeological Survey Report, Dpd-Ep-25 (Rev 283)	1985	0-0.5
01955	Heller, Rod, Tim Tetherow, and C. White	An Overview of the Sundesert Nuclear Project Transmission System Cultural Resource Investigation	1977	0-0.5
02210	Underwood, J., J. Cleland, C.M. Wood, and R. Apple	Preliminary Cultural Resources Survey Report for the US Telecom Fiber Optic Cable Project, from San Timoteo Canyon to Socorro, Texas: the California Segment	1986	0-0.5
03245	Van Horn, David M., Laurie S. White, and Robert S. White	Cultural Resources Sensitivity Overview for the Coachella Valley Enterprise Zone	1990	Within
03489	Love, Bruce, Joan S. Schneider, Gwyn Alcock, Dawn Reid, Kevin Hallaran, and Tom Tang	Cultural Resources: La Quinta General Plan EIR	1992	0-0.5
03951	Dillion, Brian D.	Cultural Resources Overview for the Coachella Valley Water District Program Environmental Impact Study, Riverside, San Diego, and Imperial Counties, California	1995	0-0.5
03970	Love, Bruce	Letter of Findings - Archaeological Testing and Site Evaluation, CA-RIV-676, Coachella Valley Recycling and Transfer Station, City of Indio, California	1996	Within
03971	Mckenna, Jeanette A.	A Phase I Cultural Resources Investigation and Paleontological Overview for the Proposed Coachella Valley Recycling and Transfer Station, A 12 Acre Parcel in Indio, Riverside County, California	1996	0-0.5
03983	Hammond, Stephen	Expected Impact on Archaeological Resources from the South Indio Overhead and Separation	1973	Within
04292	Brant A. Brechbiel	Cultural Resources Records Search and Literature Review Report for a Pacific Bell Mobile Services Telecommunications	1998	0-0.5
04762	Barker, Leo R., and Ann E. Huston, Editors	Death Valley to Deadwood; Kennecott to Cripple Creek. Proceedings of the Historic Mining Conference, January 23-27, 1989, Death Valley National Monument	1990	0-0.5
04796	Farrell, Nancy, and James Toenjes	Cultural Resources Inventory and Assessment for Boulders West Development, Indio, California (A Portion of Ca-Riv-676; APN 611-340-034)	2004	0-0.5
04802	Farrell, Nancy, and Tom Hannahs	Archaeological Assessment for Boulders West Development, Indio, California (A Portion of CA-RIV-676) (APN 611-340-034)	2004	0-0.5
05094	Applied Earthworks	Phase-I Cultural Resources Survey Earth Systems Southwest Indio, Riverside County, Ca	2004	0-0.5
05163	Stevens, Nathan	Archaeological Monitoring and Evaluation of Three Prehistoric Features at CA-RIV-0676, Boulders West Development	2005	0-0.5
06204	Tang, Bai, Michael Hogan, Josh Smallwood, and Daniel Ballester	Historical/Archaeological Resources Survey Report, Shadow Hills Assessment District Wastewater and Street Improvements, City of Indio, Riverside County, California	2004	0-0.5

Report No. (RI-)	Author(s)	Title	Year	Distance (miles) from Project Area
06653	Hogan, Michael	Letter Report: Archaeological Monitoring, Shadow Hills Pipeline Project, City of Indio, Riverside County, California	2007	0-0.5
06750	Goodwin, Riordan, and Jodi Dalton	Cultural Resources Assessment: Avenue 44 and Golf Center Parkway, City of Indio, Riverside County, California	2006	0-0.5
06813	Nixon, Rachael A., and Julianne M. Toenjes	Phase I Cultural Resources Investigation, Regency Homes Property, City of Indio, Riverside County, California, A.P.N. 679-320-026	2006	0-0.5
08540	Tang, Bai "Tom," and Michael Hogan	Identification and Evaluation of Historic Properties Indio Water Authority Wastewater Treatment Project Cities of Indio and La Quinta Riverside County, California	2010	0-0.5
08975	Daniels Jr., James T.	Additional Intensive Survey for SCE Dpv2; Three Additional Helicopter Landing Zones and Two Alternate Construction Yards, Riverside County California	2011	0-0.5
09542	Sanka, Jennifer M., Thomas Baurley, and Leslie Nay Irish	Cultural Resources Assessment for the Requa Avenue Sewer Interceptor Project, +-107.50 Acre Study Area +-58 Acre Area of Potential Effects (APE) In the City of Indio, Riverside County, Ca	2016	0-0.5
09568	Goodwin, Riordan L.	Archeological Survey Report Avenue 44 Bridge Over the Coachella Valley Storm Water Channel City of Indio Riverside County, California BRLKS 5275 (024) 08-RIV-0-Indio	2015	0-0.5
10374	George, Joan, and Venessa Mirro	Phase 1 Cultural Resources Assessment for the Coachella Valley Water District's Whitewater River-Coachella Valley Stormwater Channel Project, Riverside County, California	2013	Within
10406	Mirro, Michael	Archaeological Sensitivity Model for the Whitewater River Stormwater Channel, Riverside County, California	2012	Within
10461	Eckhardt, William T., Matthew M. Decarlo, Doug Mengers, Sherri Andrews, Don Laylander, and Tony Quach	Archaeological Investigations and Monitoring for the Construction of the Devers-Palo Verde No. 2 Transmission Line Project, Riverside County, California	2015	0-0.5
10647	Becker, Stephen, and James Warner	Riverside County Historic Resources Survey Final Report	1981	0-0.5
10811	George, Joan	Historic Property Survey Report - Interstate 10 / Monroe Street Interchange Improvement Project, 08-Ea 0k730, Riverside County, California	2019	0-0.5
10812	George, Joan	Archaeological Survey Report for the Interstate 10/ Monroe Street Interchange Improvement Project, City of Indio, Riverside County, California E-Fis 0800-00368 (Ea 08-0k730)	2019	0-0.5

No cultural resources have been recorded within the Project area. Outside of the Project Area, a total of four cultural resources have been previously documented within the half-mile search radius. All four of these resources are located within a quarter mile of the Project Area (Table 4).

Table 4. Previously Recorded Cultural Resources within a half-mile radius of the Project Area

Primary No. (P-33-)	Trinomial No. (CA-RIV-)	Resource Type	Resource Description	Year Recorded	Distance (miles) From Project Area	NRHP/CRHR Status
000676	000676	Prehistoric Archaeological Site	Ceramic scatter; Hearths/pits	1975, 1990, 1996, 2004, 2015	0-0.25	Recommended not eligible
009498	006381	Historic Built Environment	Other, railroad	1996, 2003, 2005, 2009, 2012, 2015, 2016, 2017	0-0.25	NR – 5S
017259	010847	Historic Archaeological Site	Water conveyance system; Roads/trails/railroad grades; 1-3 story commercial building; Engineering structure; Engineering structure; Canal/aqueduct; Highway/trail	2008, 2009, 2012, 2016	0-0.25	NR – 6Z
024261	011918	Historic Archaeological Site	Other, man-made depression	2015	0-0.25	Unevaluated

P-33-000676 (CA-RIV-676)

This site was first identified as a pottery scatter with lithics and a midden by Jay von Werlhof of Imperial Valley College in 1975. Von Werlhof collected 121 indigenous pottery sherds. The boundaries of the resources shifted to possibly include a portion of the current Project Area between 1975 and 1996 as it underwent various reviews. Bruce Love of CRM-Tech conducted test pits, trenching, and surface scraping at the site in 1996 and found that the site was surficial. Love collected 48 pottery sherds from surface. Based on his findings, Love recommended the site as not eligible for listing in the NRHP. T. Baurley and M. Sanka of L&L Environmental, Inc. were unable to re-identify the site when they returned in 2015.

OTHER SOURCES FOR ARCHAEOLOGICAL RESOURCES

In addition to the CHRIS records search, a variety of sources were consulted in June 2024 to obtain information regarding the cultural context of the Project vicinity (Table 5). Sources included the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Specific information

about the Project Areaobtained from historic-era maps and aerial photographs is presented in the Project Area History section.

Table 5. Additional Sources Consulted

Source	Results
National Register of Historic Places (NRHP)	Negative.
Historic USGS Topographic Maps	See Project Area History.
Historic USDAAerial Photographs	See Project Area History.
California Register of Historical Resources (CRHR)	Negative.
Built Environment Resource Directory (BERD)	Negative.
California Historical Landmarks (CHL)	Negative.
California Points of Historical Interest (CPHI)	Negative.
Bureau of Land Management (BLM) General Land Office Records	Southern Pacific Land Company, July 1, 1892: Ex-Indian Reserve (27 Stat. 62) (BLM GLO 2024).

HISTORICAL SOCIETY CONSULTATION

Cogstone's Architectural Historian, Shannon Lopez, contacted the Coachella Valley Historical Museum on May 3, 2024. A museum representative responded on May 11, 2024 via electronic mail saying "We have checked with several people who have lived in the greater Indio area for over 50 years as well as checked our archives for any specific reference to the tract of land specified in your inquiry (3.8 acres Golf Center Parkway, Ave. 45 and the Whitewater Storm drain) and can find no evidence of historically significant buildings in this area…" (Appendix C).

SACRED LANDS FILE SEARCH

Cogstone archaeologist Logan Freeberg requested a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC) on April 30, 2024. The NAHC responded on May 20, 2024, with negative search results, and provided a list of Native American individuals and organizations to be contacted for additional information on the potential for tribal resources in the Project Area (Appendix D).

SURVEY

METHODS

The survey stage is important in a Project's environmental assessment phase to verify the exact location of each identified cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources sensitivity. All undeveloped ground surface areas within the ground disturbance portion of the Project Area were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the Project Area, including ground surface visibility and items of interest, were taken with a digital camera.

RESULTS

On June 7, 2024, Cogstone archaeologist Michael Prout completed the pedestrian survey using northwest-southeast running transects spaced five meters apart (Figures 8 to 11). Project sediments consist of fine to very fine sand (Figure 12). Native shrubs and weeds were present throughout the site. The surface of the area was cluttered with modern trash from illegal dumping and homeless encampments, and the southeast corner of the lot has been used as overflow parking for the automotive repair shop next door and the construction crew at the river basin.

No cultural or paleontological resources were identified during the survey.

Figure 8. Project Area overview of entire lot from westernmost point, facing east.

Figure 9. Typical modern trash within Project Area interspersed amongst shrubs and plants, facing east.

Figure 10. Project Area overview from northernmost point, facing southeast.

Figure 11. Overview of entire lot from southernmost point, facing northwest.

Figure 12. Typical sandy deposits within the Project Area.

PALEONTOLOGICAL SENSITIVITY

A multilevel ranking system was developed by professional resource managers within the Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016; Appendix E) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a Project Area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria.

Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 mm in diameter or less. Moreover, fossil preservation also greatly increases after natural burial in rivers, lakes, or oceans. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. So the sands, silts, and clays of rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

The County of Riverside paleontological sensitivity mapping gives the Project a high (High A) potential for fossil resources in all sediments within the Project Area. However, the sediments to be impacted during construction are reclassified to low potential based on the following:

- A study of Lake Cahuilla beds in La Quinta produced radiometric ages of charcoal from La Quinta produced dates of between 5,890 + 60 and 1,080 + 80 years old from depths of 10.5 feet and 3.3 feet respectively. No fossils of extinct animals were recovered from the 7,050 pounds of sediment were washed from sediment up to 13 feet below the surface (Whistler et al. 1995).

- The snails and clams of the Lake Cahuilla beds are extremely common and are found throughout area that this lake previously covered. They are not considered to be scientifically significant.
- Typically geological units less than 11,700 years old (Holocene) are given a low sensitivity as they are too young to contain the remains of extinct Pleistocene animals.
- No paleontological monitoring done by or reported to the San Bernardino County Museum in the valley areas of the northern Salton Trough from ~1980 through ~2010 produced any fossils from extinct animals. This was during a period of intense building in the area so the lack of fossils recovered indicates that the Holocene deposits are at least 10' deep. Based on radiometric dating by Whistler et al. (1995) in La Quinta, the Holocene sediments may extend to a depth of 20 feet.

The Holocene dunes are assigned a low potential (PFYC 2) for fossil resources.

ARCHAEOLOGICAL SENSITIVITY

Based on a review of the CHRIS records search results from the EIC, USGS topographic quadrangle maps, and the results of the pedestrian survey, there is no evidence of development or sustained activity in the Project Area after European Contact. The Project Area is assessed to have low sensitivity for non-Native American Post-European Contact resources.

While the SLF results were negative, the EIC results indicated an archaeological resource was recorded with a site boundary that conformed exactly to the western boundary of the Project Area. This resource was also noted as being incompletely recorded. It is likely that this resource continued into the Project Area. As subsurface testing within the resource found it to be surficial and not eligible for listing in the NRHP or CRHR, and no sign of the resource was found during the current Project's pedestrian survey, the Project Area is assessed to be moderately sensitive for Pre-European contact Native American resources.

CONCLUSIONS AND RECOMMENDATIONS

PALEONTOLOGY

The Project is mapped as late Holocene sands of the Whitewater River deposited less than 3,000 years ago. The Project is also just inside the northernmost boundary of the middle to late

Holocene Lake Cahuilla beds less than 6,000 years old. Excavation for the fuel tanks would extend approximately 30 feet below the final grade.

A record search for paleontology was obtained from the Western Science Center and supplemented with relevant databases and literature. No fossils are known from the Holocene dune sediments mapped within the Project or within a one-mile radius of it. The freshwater mollusk shells in the area are from Lake Cahuilla. These are well known and are not scientifically relevant.

Cogstone archaeologist Michael Prout completed an intensive-level pedestrian survey of the entire Project Area on June 7, 2024. No paleontological resources were observed during the survey.

The County of Riverside paleontological sensitivity mapping gives the Project a high (High A) potential for fossil resources in all sediments within the Project Area. However, the sediments to be impacted during construction are reclassified to low potential based on the following:
A study of Lake Cahuilla beds in La Quinta produced radiometric ages of charcoal from La Quinta produced dates of between 5,890 + 60 and 1,080 + 80 years old from depths of 10.5 feet and 3.3 feet respectively. No fossils of extinct animals were recovered from the 7,050 pounds of sediment that were washed from up to 13 feet below the surface (Whistler et al. 1995).
The snails and clams of the Lake Cahuilla beds are extremely common and are found throughout area that this lake previously covered. They are not considered to be scientifically significant. Typically geological units less than 11,700 years old (Holocene) are given a low sensitivity as they are too young to contain the remains of extinct Pleistocene animals.

No paleontological monitoring done by or reported to the San Bernardino County Museum in the valley areas of the northern Salton Trough from ~1980 through ~2010 produced any fossils from extinct animals. This was during a period of intense building in the area so the lack of fossils recovered indicates that the Holocene deposits are at least 10 feet deep. Based on radiometric dating by Whistler et al. (1995) in La Quinta, the Holocene sediments may extend to a depth of 20 feet. The Holocene dunes are assigned a low potential (PFYC 2) for fossil resources.

No Paleontological Mitigation Plan is required and no further work related to paleontology is anticipated for this Project. If unanticipated discoveries are made, all work must halt within 50 feet until a qualified paleontologist can evaluate the find. Work may resume immediately outside of the 50 foot radius.

ARCHAEOLOGY

Based on available data sources, the Project Area is considered to have low sensitivity for Post-Contact non-Native American resources and to have moderate sensitivity for Native American origin cultural resources. As the results of the SLF search were negative, the adjacent resource (P-33-000676 [CA-RIV-000676]) was found to be not eligible for listing in the NRHP or CRHR, Phase II testing of the Project Area is not warranted based on the information. However, the Project Area is considered moderately culturally sensitive and fulltime Native American and archaeological monitoring is recommended in Holocene Age sediments (to a depth of 20 feet). Should information obtained during Assembly Bill (AB) 52 Native American consultations indicate greater sensitivity, development of a Phase II program to be completed prior to the start of construction is recommended.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during Project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the NAHC by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

REFERENCES CITED

Barkas, S.
2018 Visitors in 2017 spent over $5.5B in the Coachella Valley. Here's How Tourism Managed to Rebound from the Recession. *The Desert Sun* [online magazine]. Available online at https://www.desertsun.com/story/money/business/tourism/2018/05/03/greater-palm-springs-tourism-7-billion-industry/575155002/. Accessed July 2024.

Bean, L. J.
1972 Mukat's People: The Cahuilla Indians of Southern California. University of California Press, Berkeley.

Bedrossian, T. L., P. Roffers, C. A. Hayhurst, J. T. Lancaster, and W. R. Short
2012 Geologic compilation of Quaternary surficial deposits in southern California (2012 Revision): California Geological Survey, Special Report 217, scale 1:100,000. Online at: https://ngmdb.usgs.gov/Prodesc/proddesc_115626.htm

BLM (Bureau of Land Management)
2016 *Potential Fossil Yield Classification* (*PFYC)* System. Online at https://www.blm.gov/policy/im-2016-124

BLM GLO (Bureau of Land Management Government Land Office)
2024 Land Grant Records Search Tool. Electronic resource available at http://www.glorecords.blm.gov/PatentSearch/Default.asp, accessed June 2024.

Caudel, Miranda
2016 *A People's Journey. Me Yah Whae*, Fall/Winter 2016-2017:20-55.

Census Reporter
2017 Coachella Valley, CCD, Riverside County, California. Available online at https://censusreporter.org/profiles/06000US0606590520-coachella-valley-ccd-riverside-county-ca/. Accessed July 2.

City of Indio
2019 General Plan, Adopted September 18, 2019. Indio, California.

Dibblee, T. W. Jr., and J. A. Minch
2008 Geologic Map of the Palm Desert and Coachella 15 minute Quadrangles Riverside County, California. Santa Barbara Museum of Natural History, Dibblee Geological Center Map # DF-373, 1:62,500 scale.

Jefferson, G. T.
1991a A Catalogue of late Quaternary Vertebrates from California: Part one, nonmarine lower vertebrate and avian taxa. *Natural History Museum of Los Angeles, Technical Report* #5.
1991b A Catalogue of late Quaternary Vertebrates from California: Part two, Mammals. *Natural*

History Museum of Los Angeles, Technical Report #7.

Lancaster, J. T., C. A. Hayhurst, and T. L. Bedrossian
2012 Preliminary map of Quaternary surficial deposits in southern California, Palm Springs 30' x 60' quadrangle. In Bedrossian, T. L., C. A. Hayhurst, J. T. Lancaster, and W. A. Short 2012 California Geological Survey Special Report 217, Plate 24, 1:100,000 scale.

Lech, S.
2004 Along the Old Roads: A History of the Portion of Southern California that Became Riverside County 1772-1893. Self-published, Riverside, California.

McLeod, S. A. (Collections Manager, Natural History Museum of Los Angeles County)
2013 Paleontological resources for the proposed 66th Avenue Grade Separation Project, in the Community of Mecca, Riverside County, Project. On file with Cogstone, Orange, California.
2015 Paleontological resources for the proposed Interstate 10 at Jackson Avenue Interchange Project, in the Community of Mecca, Riverside County, Project area. On file with Michael Baker Inc., Santa Ana, California.

NETROnline
1972 Historic Aerials. Online at www.historicaerials.com, accessed July 2, 2024.
1984 Historic Aerials. Online at www.historicaerials.com, accessed July 2, 2024.

PBDB
2024 Online records search of the PaleoBiology Database.

Randall, K.
2008 Paleontological Resources. Niland Group Project. On file with Cogstone, Orange, California.

Rincon Consultants
2019 Final Environmental Impact Report for the City of Indio General Plan Update Indio, California SCH# 2015081021. Report prepared for City of Indio Development Services Department, Indio, California.

Schaefer, J.
2001 Hydrology of Ancient Lake Cahuilla. Available online at www.saltonsea.ca.govltnavlibrary_contentHydrologyancient_lake_cahuilla.pdf, accessed July 2016.

Schaefer, J., and D. Laylander
2007 The Colorado Desert: Ancient Adaptations to Wetlands and Wastelands. In *California Prehistory: Colonization, Culture and Complexity*, edited by T. Jones and K. Klar, pp. 247-257. Altamira Press, Maryland.

Scott, E.
2004a Paleontology records review, "Indio 12 Property", City of Indio, Riverside County, California. On file with Cogstone, Santa Ana, California.
2004b Paleontology records review, "Indio 40 Property", City of Indio, Riverside County, California. On file with Cogstone, Santa Ana, California.
2006 Paleontology records review, "La Quinta II," City of Indio, Riverside County, California. On file with Cogstone, Santa Ana, California.
2013 Paleontology Records Review, SCE Seawest Transmission Project, Desert Hot Springs, Riverside County, California. On file with Cogstone, Orange, California.

Scott, Eric, and Kim Scott; formerly of the San Bernardino County Museum
2019 Personal knowledge concerning prior paleontological monitoring Projects in the valley areas of the northern Salton Trough completed by the San Bernardino County Museum from the 1980s to the early 2000s. Eric was a former supervisor curator at the museum from 1991 to 2015, while Kim served as both a monitor and assistant collections manager from 1995 to 1999.

Singer, E.
n.d. Chapter 10: Geology of California's Imperial Valley. *Volcanic Activity in the Imperial Valley.* Available online at http://www.sci.sdsu.edu/salton/VolcanicActivity.html. Accessed July 2019.

Sneed, M., and J. T. Brandt
2008 Detection and Measurement of Land Subsidence Using Global Positioning System Surveying and Interferometric Synthetic Aperture Radar, Coachella Valley, California, 1996–2005., *United States Geological Survey Scientific Investigations Report* 2007–5251.

Stoneburg, B. E.
2024 Paleontological records search by the Western Science Center. See Appendix B.

Strong, W. D.
1929 Aboriginal Society in Southern California. University of California Publications in American Archaeology and Ethnology 26:1-349.

Sutton, M. Q.
2011 The Palomar Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44: 1-74.

Sutton, M. Q., and J. Gardner
2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

UCMP
2024 Online records search of the University of California, Berkeley paleontology database.

U.S. Geological Survey
1904 Indio. Topographic Quadrangle 1:125,000 Map. Reston, VA. 1904.
1948 Indio. Topographic Quadrangle 1:125,000 Map. Reston, VA. 1948.
1956 Coachella. Topographic Quadrangle 1:62,500 Map. Reston, VA. 1956.
1991 Indio. Topographic Quadrangle 1:24,000 Map. Reston, VA. 1991.

Waters, M. R.
1983 Late Holocene lacustrine chronology and archaeology of ancient Lake Cahuilla, California; Quaternary Research, Vol. 19, p. 373-387.

Whistler, D. P., E. B. Lander, and M. A. Roeder
1995 A diverse record of microfossils and fossil plants, invertebrates, and small vertebrates from the late Holocene Lake Cahuilla beds, Riverside County, California. In Remeika, P. and A. Sturz eds., Paleontology and Geology of the Western Salton Trough Detachment, Anza Borrego Desert State Park, California, p. 109-118.

APPENDIX A. QUALIFICATIONS

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

MOLLY VALASIK
QA/QC

EDUCATION

2009 M.A., Anthropology, Kent State University, Kent, Ohio
2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

SUMMARY OF QUALIFICATIONS

Ms. Valasik is a Registered Professional Archaeologist (RPA) with more than 15 years of experience. She is a skilled professional who is well-versed in the compliance procedures of CEQA and Section 106 of the NHPA and regularly prepares cultural resources assessment reports for a variety of federal, state, and local agencies throughout California. Ms. Valasik has managed a variety of projects at Cogstone in the water, transportation, energy, development, and federal sectors. She meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*. She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation's Information Centers.

SELECTED EXPERIENCE

Creekside Specific Plan, City of San Juan Capistrano, Orange County, CA. Cogstone conducted a study to determine the potential impacts to cultural and paleontological resources for the proposed demolition of an existing 123,000 square-foot building and construction of 188 residential units on 15.3 acres. Services included records searches, background research, and an intensive-level pedestrian survey. Based on the results of the record search and ethnographic data, it was found likely that substantive archaeological deposits exist. The project area was considered moderately sensitive for cultural and paleontological resources and archaeological and paleontological monitoring during all ground-disturbing activities was recommended. The City of San Juan Capistrano acted as lead CEQA agency. Sub to PlaceWorks. Principal Investigator for Archaeology. 2019-2020

Fire Station 172 Project, Rancho Cucamonga Fire Protection District, San Bernardino County, CA. Cogstone determined the potential effects of paleontological, archaeological, and historical resources on the proposed project. The project involved relocation of the Fire Station from 9612 San Bernardino Road to 8870 San Bernardino Road. Services included the management of record searches, a Sacred Lands File search, a pedestrian survey, and completion the cultural resources assessment report. Sub to Michael Baker International. Principal Investigator for Archaeology. 2018

La Verne General Plan Update, City of La Verne, Los Angeles County, CA. Cogstone reviewed and summarized available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of La Verne to support an update of the City's General Plan. Cogstone conducted archaeological and paleontological record searches, extensive historical research at City Hall, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC), and a general analysis of impacts of future projects within the city that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to De Novo. Principal Investigator for Archaeology. 2018

Magnolia Avenue Improvements, Caltrans District 8, City of Riverside, Riverside County, CA. For this local assistance project on behalf of the City of Riverside, the project involved producing an Archaeological Survey Report (ASR), Historical Resources Evaluation Report (HRER), and Historical Property Survey Report (HPSR) for Section 106 of the NHPA compliance. The City proposed widening Magnolia Avenue between Buchanan and Banbury by narrowing the existing median. Managed record search, Sacred Lands File search, Native American consultations, intensive-level pedestrian archaeological and architectural surveys, as well as coordination and approval by District 8 of an Area of Potential Effects (APE) map. The HRER included DPR series 523 forms for the evaluation of six properties all of which were determined not eligible for listing in the National Register. Sub to Michael Baker/PMC. Principal Investigator. 2016-2017

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

ERIC SCOTT
Paleontology QA/QC

EDUCATION

1990 M.A., Anthropology (Biological), University of California, Los Angeles
1985 B.A., Anthropology (Physical), California State University, Northridge

SUMMARY OF QUALIFICATIONS

Mr. Scott is a professional vertebrate paleontologist with 39 years of experience in paleontological mitigation, fieldwork, curation, and research. He is an emeritus paleontology curator of the San Bernardino County Museum, an adjunct at California State University, San Bernardino, and a research associate of the Natural History Museum of Los Angeles County and the La Brea Tar Pits and Museum, where he was lead excavator of the Pit 91 excavation from 1985-1991. He is a 30+ year member of the Society of Vertebrate Paleontology, an international society of professional scientists where he currently serves on the Government Affairs Committee; he also holds membership in the Geological Society of America and other professional societies. Mr. Scott has published over 40 research articles in professional scientific journals.

SELECTED EXPERIENCE

Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, WEAP training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). Program Manager. 2016-*ongoing*

Los Angeles World Airports (LAWA) Ongoing Technical Support for Environmental, Mitigation Reporting, and Sustainability Issues Associated with LAWA Construction Projects, LAX, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring during proposed consolidation and modernization of existing facilities. The project involved redeveloping multiple facilities including hangars and associated structures for Delta Airlines and United Airlines, among others. Upon completion of monitoring, Cogstone prepared Cultural and Paleontological Resources Monitoring Compliance Reports. The City of Los Angeles acted as lead agency for the project. Sub to CDM Smith. Program Manager. 2019-2021

Deep Soil Mixing Pilot Project, Community of Pacific Palisades, Los Angeles County, CA. As part of an on-call contract with the Los Angeles Bureau of Engineering (LABOE), Cogstone provided cultural and paleontological resources monitoring as well as managed Native American monitoring during ground-disturbing activities. The City of Los Angeles was the lead agency under the California Environmental Quality Act (CEQA). Monitoring for the Project was conducted in compliance with the Contingency Plan conditions for the Coastal Development Permit (CDP) from the California Coastal Commission (CCC). No cultural or paleontological resources were identified. No further work was necessary. Sub to ICF. Principal Investigator for Paleontology. 2020

Gates Canyon Stormwater Capture Project, unincorporated area of Calabasas, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring for 31 days during proposed improvements to Gates Canyon Park that will allow the capture and storage of stormwater runoff from an adjacent 105-acre residential area. Monitoring complied with program mitigation measures and as defined by the County of Los Angeles, Department of Public Works (LACDPW). LACDPW was the project proponent and acted as the lead agency under CEQA. Sub to Aspen Environmental. Task Manager. 2019

Eastside Reservoir Project (Diamond Valley Lake), City of Hemet, Riverside County, CA. The project developed southern California's largest freshwater reservoir. Paleontological monitoring and mitigation provided by San Bernardino County Museum. Supervised fieldwork, conducted and supervised lab work, wrote weekly, annual, and final reports. Paleontology Curator, Field Supervisor, and Report Author. 1993-2003

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

JOHN GUST
Principal Investigator for Archaeology and Co-Author

EDUCATION

2016 Ph.D., Department of Anthropology, University of California, Riverside (UCR)
2011 M.A., Department of Anthropology, UCR
2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
2002 B.A., Department of Anthropology, minor in Geography/Environmental Studies, UCCS

SUMMARY OF QUALIFICATIONS

Dr. Gust is a Registered Professional Archaeologist (RPA) with over 11 years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Dr. Gust has managed a variety of projects at Cogstone in the water, development, residential, transportation, telecommunications, and public works sectors. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

SELECTED EXPERIENCE

Dogwood Road Project, City of El Centro, Imperial County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture (USDA) Part 70-B RD Funding assisted housing on a 2.2-acre parcel. Cogstone conducted a record search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. Principal Investigator for Archaeology. 2019-2020

Euclid Fueling Station Project, City of Santa Ana, Orange County, CA. Cogstone conducted a cultural resources assessment to determine the potential impacts to cultural and paleontological resources during the construction of a convenience store, associated parking, gas station, and underground fuel storage tank. The assessment was conducted to meet the requirements of CEQA with the City of Santa Ana acting as lead agency. Cogstone conducted record searches, a Sacred Lands File Search, an intensive pedestrian survey, gave mitigation recommendations, and produced a report. Sub to Sagecrest Planning + Environmental. Principal Investigator for Archaeology. 2019

Jackson St. HUD 58 EA Project, City of Riverside, Riverside County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Housing and Urban Development (HUD) assisted housing on a 3.58-acre parcel. This assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA). The City of Riverside was the lead agency. Cogstone conducted a records search, a Sacred Lands File Search, a pedestrian survey, and produced a report. Sub to Partner Science & Engineering. Principal Investigator for Archaeology. 2019

Heathercliff Malibu Development Project, City of Malibu, Los Angeles County, CA. Cogstone conducted a study to determine the potential impacts to cultural resources resulting from the construction of a single residence bounded by Heathercliff Road to the southeast and the Pacific Coast Highway to the northwest. This study included all information required by the City of Malibu Archaeology Guidelines. Cogstone conducted a record search, Sacred Lands File Search, pedestrian survey, and produced an assessment. Sub to ACS Construction. Principal Investigator for Archaeology. 2019

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

KIM SCOTT
Principal Investigator for Paleontology and Co-author

EDUCATION

2013 M.S., Biology with a paleontology emphasis, California State University, San Bernardino
2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles

TRAINING AND CERTIFICATIONS

Trained and certified in geomorphology techniques, National Park Service, National Center for Preservation Technology and Training

SUMMARY OF QUALIFICATIONS

Ms. Scott has 28 years of experience in California as a paleontologist and sedimentary geologist. She has worked extensively in the field surveying, monitoring, and salvaging fossils on hundreds of projects. In addition, she has special skills in jacketing large fossils, fossil preparation (cleaning and stabilization) and in the preparation of stratigraphic sections and other documentation for fossil localities. She frequently authors paleontological assessments, paleontological mitigation plans, and monitoring compliance reports to all agency requirements. She authors and conducts crew sensitivity training, serves as company safety officer, and has authored both the company safety and paleontology manuals.

SELECTED EXPERIENCE

Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, WEAP training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). Principal Investigator for Paleontology. 2014-*ongoing*

Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the Native American Heritage Commission, and an intensive-pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. Principal Investigator for Paleontology. 2019-2020

Corona Affordable Housing Monitoring Project, City of Corona, Riverside County, CA. Cogstone conducted cultural and paleontological resources monitoring, analyzed recovered artifacts, and prepared a monitoring compliance report during grading for the development of affordable multi-family apartment buildings. Conducted lab work and artifact analysis. Sub to C&C Development. Principal Investigator for Paleontology. 2018-2019

Fire Station 172 Project, Rancho Cucamonga Fire Protection District, San Bernardino County, CA. Cogstone determined the potential effects of paleontological, archaeological, and historical resources on the proposed project. The project involved relocation of the Fire Station from 9612 San Bernardino Road to 8870 San Bernardino Road. Services included the management of record searches, a Sacred Lands File search, a pedestrian survey, and completion the cultural resources assessment report. Sub to Michael Baker International. Principal Investigator for Paleontology. 2018

San Bernardino Countywide On-Call Services, San Bernardino, CA. As prime contractor, Cogstone provided cultural, historical, and paleontological resource services for short term projects. Task services included cultural resources assessments and monitoring in compliance with CEQA, NEPA, Section 106 of the NHPA, and County regulations. Short-term projects included Pioneertown and other roads, Bear Springs, Aldorf Road, Elder Creek, NTH Bridges, Marshall Boulevard, Cajon Creek, Dola Bridge, Lanzit Ditch, and Luna Road. Principal Investigator for Paleontology. 2016-2017

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

PAMELA GUTIERREZ
Archaeologist and Co-Author

EDUCATION

2017 B.A., Anthropology, California State University, Northridge

SUMMARY OF QUALIFICATIONS

Ms. Gutierrez is a qualified archaeologist and cross-trained paleontologist with over five years of experience in California archaeology and paleontology. Her experience includes archaeological and paleontological resources monitoring, archaeological site survey, site recordation, and artifact identification. Ms. Gutierrez is skilled in curatorial procedures and collections management.

SELECTED EXPERIENCE

Calabazas Creek Rehabilitation Project, Santa Clara Valley Water District, City of Cupertino, CA. Cogstone is conducting archaeological monitoring to support the repairs and rehabilitation work along Calabazas Creek between Miller Avenue and Bollinger Road in the City of Cupertino. The Santa Clara Valley Water District will repair and stabilize the damaged creek bank sections along portions of Calabazas Creek to their as-build or natural condition to reduce the risk of flooding to homes, businesses, and schools and to improve the environment along the creek. The work involves removing sediment buildup, managing vegetation, clearing trash and debris, and stabilizing banks that have eroded during high water flows. Cogstone will prepare a Cultural Resources Monitoring Compliance Report at the conclusion of ground disturbing activities for the project. Sub to Granite Construction. Monitor. 2022-*2023*

Native American Graves Protection and Repatriation Act (NAGPRA) Services for California State University, Fullerton (CSUF), Orange County, CA. Cogstone is providing NAGPRA services to support CSUF in meeting compliance with their obligations under NAGPRA and Cal NAGPRA. Cogstone prepared archaeological collections from CSUF for transportation to a new space on campus. The collections consisted of approximately 2,100 banker-sized archival boxes. Each box was inventoried, repackaged, and labeled. Some ancestral remains were identified from within faunal remains and removed and treated per the recommendations of consulting tribes. Cogstone will continue to identify ancestral remains from unsorted shell midden and soil samples. Technician. 2022-*ongoing*

Los Angeles County Museum of Art (LACMA) Building for the Permanent Collection Project, City of Los Angeles, Los Angeles County, CA. Cogstone is currently conducting cultural and paleontological resources monitoring and fossil recovery during construction of a 347,500 gross square foot Museum Building, which will replace four buildings (Ahmanson Building, Hammer Building, the Art of Americas Building, and the Bing Center) within LACMA East. The new building will be approximately 45,371 square feet smaller and the outdoor experience would be enhanced by including new outdoor landscaped plazas, public programming and educational spaces, sculpture gardens, and native and drought-tolerant plants would be integrated with the Museum Building and within Hancock Park. Upon completion of monitoring, Cogstone will prepare a Cultural and Paleontological Monitoring Compliance Report. Sub to Aurora Development. Monitor. 2021-*present*

Rose Hill Courts Redevelopment Project, City of Los Angeles, Los Angeles County, CA. Cogstone developed the Paleontological Resources Impact Mitigation Program for the project and is subsequently providing paleontological resources monitoring during the proposed demolition of 15 buildings with 100 existing public housing units and the construction of 185 new multi-family units contained within nine buildings, a 6,366 square-foot office/community building, and 174 parking spaces. Upon completion of monitoring, Cogstone will prepare a mitigation compliance report. Sub to Related California. Monitor. 2021-*ongoing*

Cold Canyon Landfill Expansion Module 11B, Arroyo Grande, San Luis Obispo County, CA. Cogstone conducted archaeological and paleontological resources monitoring for the expansion of an existing landfill. In addition, Cogstone provided Worker Environmental Awareness Program (WEAP) training for all construction personnel. Upon completion of monitoring, Cogstone prepared a Cultural and Paleontological Resources Monitoring Compliance Report. Sub to Waste Connections, Inc. Monitor. 2021

cogstone
PALEONTOLOGY - ARCHAEOLOGY - HISTORY

LOGAN FREEBERG
GIS Manager

EDUCATION

2018 Geographic Information Systems (GIS) Certificate, California State University, Fullerton
2003 B.A., Anthropology, University of California, Santa Barbara

SUMMARY OF QUALIFICATIONS

Mr. Freeberg has over 20 years of professional experience in cultural resource management, and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

SELECTED EXPERIENCE

New Cuyama Dump Sites 1, 2, and 3, BLM Bakersfield Office, Santa Barbara County, CA. The Project involved identifying archaeological and historical resources present within three illegal dump sites on BLM land. This study included an assessment of the historic potential of dump refuse and NRHP eligibility recommendations for debris demonstrating affirmative evidence for an age of greater than 45 years. A Class III Cultural Resources survey was conducted and included an intensive-level pedestrian survey of the APE and a total of three historic trash scatters were identified during the survey and a total of four historic isolates were identified. These resources were recorded on Department of Parks and Recreation 523 (DPR 523) forms. No archaeological sites or isolates were identified. No artifacts were collected. The deliverables were accepted by the BLM without revisions. Archaeologist and GIS Supervisor. 2020-2021

University of California Natural Reserve System San Joaquin Marsh Reserve Water Conveyance and Drainage Improvement Project, City of Irvine, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed long-term water management improvements and habitat value of the Marsh Reserve. Services included pedestrian survey, records searches, Sacred Lands File search from the NAHC, background research, and reporting. Due to the proximity of the project to the San Diego Creek, the project required a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE) and Section 106 NHPA compliance. University of California acted as the lead CEQA agency and USACE acted as lead agency under NEPA. Sub to Moffat & Nichol. GIS Supervisor. 2020-2021

Dogwood Road Project, City of El Centro, Imperial County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture (USDA) Part 70-B RD Funding assisted housing on a 2.2-acre parcel. Cogstone conducted a record search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. GIS Supervisor. 2019-2020

Jackson St. HUD 58 EA Project, City of Riverside, Riverside County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Housing and Urban Development (HUD) assisted housing on a 3.58-acre parcel. This assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA). The City of Riverside was the lead agency. Cogstone conducted a records search, a Sacred Lands File Search, a pedestrian survey, and produced a report. Sub to Partner Science & Engineering. Principal Investigator for Archaeology. 2019

APPENDIX B. PALEONTOLOGICAL RECORDS SEARCH

WESTERN SCIENCE CENTER

May 15th, 2024

Cogstone Resource Management
Logan Freeberg
1518 W. Taft Ave
Orange, CA 92865

Dear Mr. Freeberg,

This letter presents the results of a record search conducted for the Maverik Fueling Station Indio Project in the City of Indio, Riverside County, California. The project site is located along Avenue 45 and Golf Center Parkway on Township 5 South, Range 7 East, Section 24 the *Coachella, CA* USGS 7.5 minute quadrangle.

The geologic units underlying this project are mapped entirely as young alluvial sand and clay deposits from the Holocene epoch (Dibblee and Minch 2008). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius; however, the museum does have a locality three miles south of the project area in a similarly mapped unit. The Imagine Coachella Project resulted in mostly gastropods and bivalves; more information is available upon request.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed, especially considering the presence of the Imagine Coachella Project.

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

Sincerely,

Brittney Elizabeth Stoneburg, MSc
Collections Manager

2345 Searl Parkway ♦ Hemet, CA 92543 ♦ phone 951.791.0033 ♦ fax 951.791.0032 ♦ WesternScienceCenter.org

APPENDIX C. HISTORICAL SOCIETIES CONSULTATION

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

May 3, 2024

Coachella Valley History Museum
82616 Miles Ave.
Indio, CA 92201

RE: Request for Information regarding the Cultural Resources Assessment for the Maverik Fueling Station Indio Project, City of Indio, Riverside County, California

To Whom It May Concern:

Cogstone Resource Management, Inc. (Cogstone) is conducting a cultural resources assessment for the Maverik Fueling Station Indio Project (Project) located on 8.6 acres within Assessor Parcel Number (APN) 611-330-025 located in the City of Indio, Riverside County, California.

The Project proposes to construct a Maverik fueling station which will include a commercial store, fuel pumps with associated equipment, parking area, and landscaping. The parcel is approximately 8.6 acres, however, only 3.8 acres will be developed as part of this Project. The Project area is not currently developed, and a preliminary review of historical United States Geological Survey (USGS) topographic maps and United States Department of Agriculture (USDA) aerial photographs indicate that there is no history of development within the Project area.

We are contacting you because we would like to invite members of the Coachella Valley History Museum to provide input regarding the redevelopment of the Project area. We appreciate any information regarding the history of the Project area that you may have as well as any comments, issues, and/or concerns relating to the history of the Project area. Please contact me at slopez@cogstone.com. Thank you for your attention to this matter.

Sincerely,

Shannon Lopez

Shannon Lopez, M.A.
Architectural Historian
(714) 974-8300 x.108
slopez@cogstone.com

cogstone.com

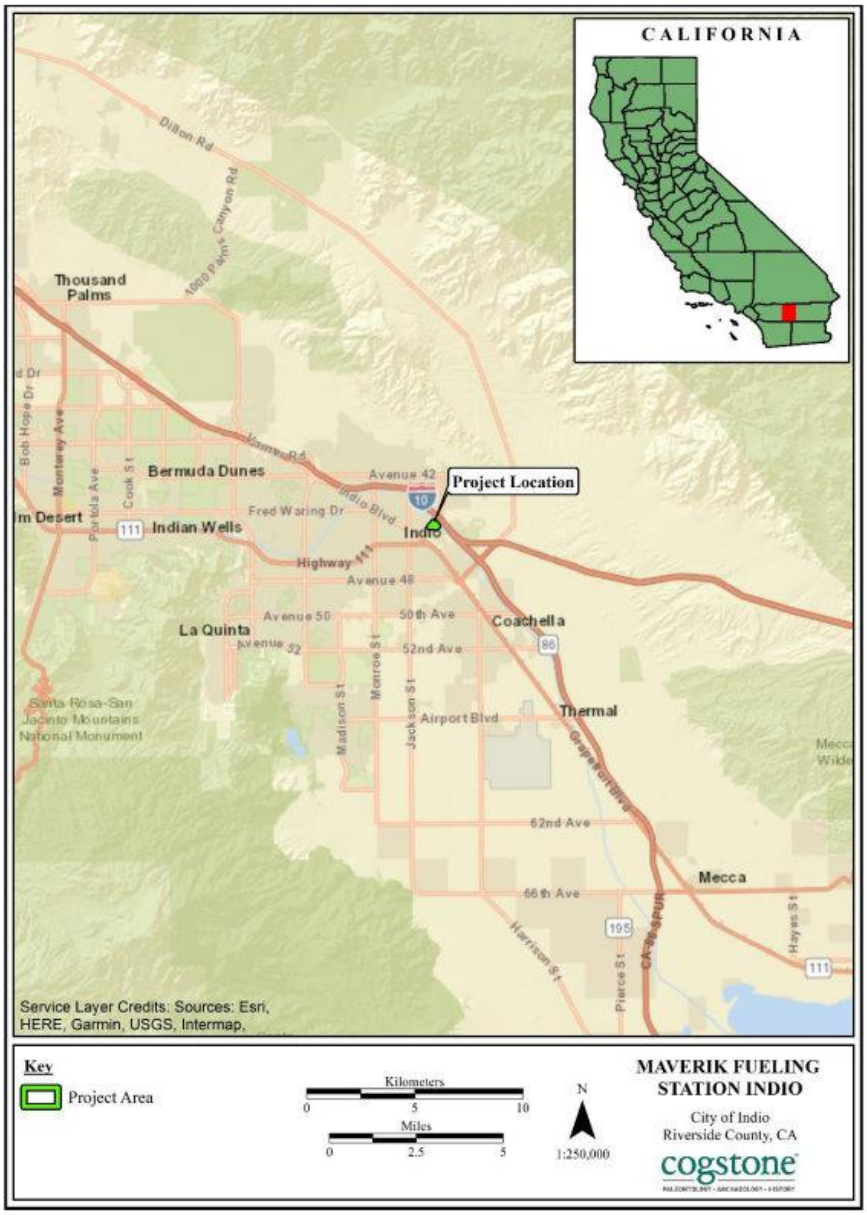


Figure 1. Project Vicinity Map

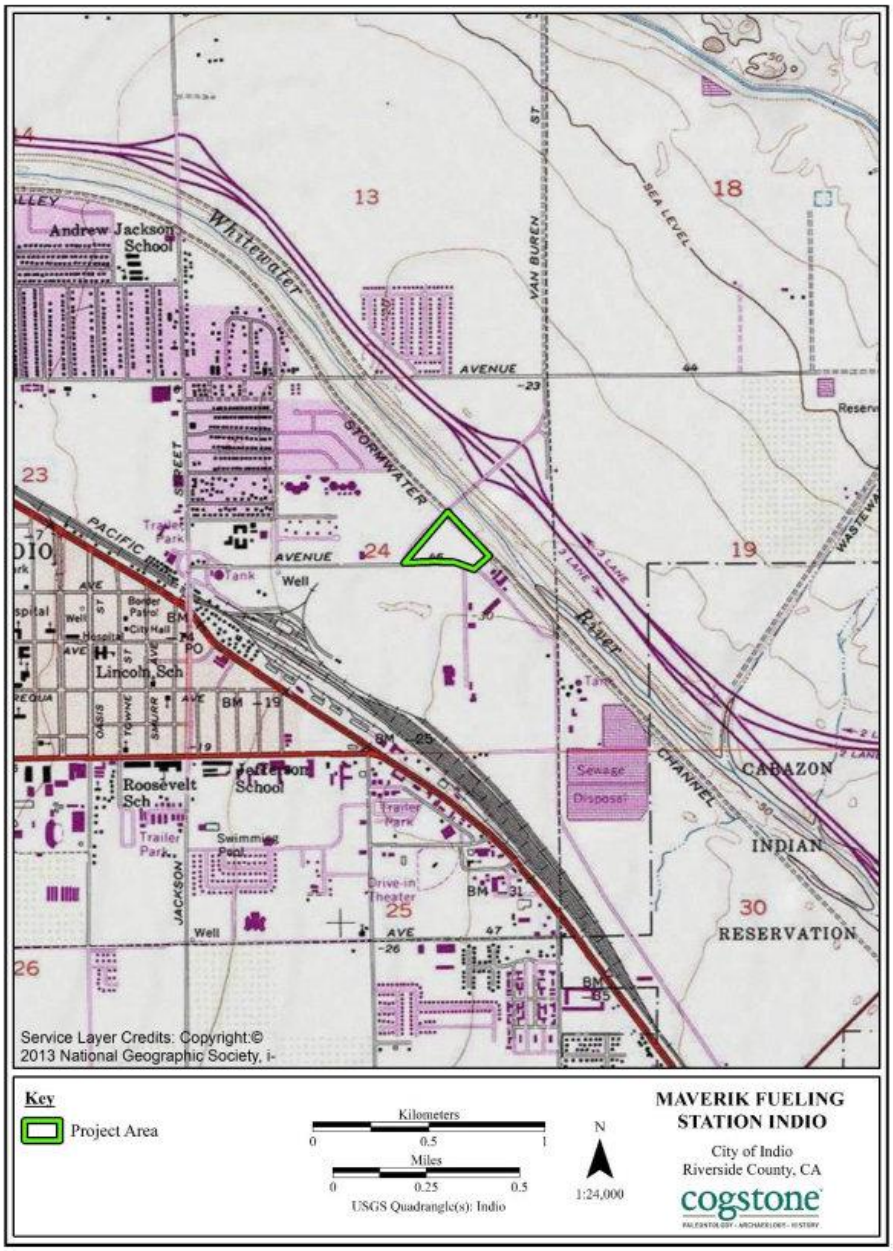


Figure 2. Project Location Map

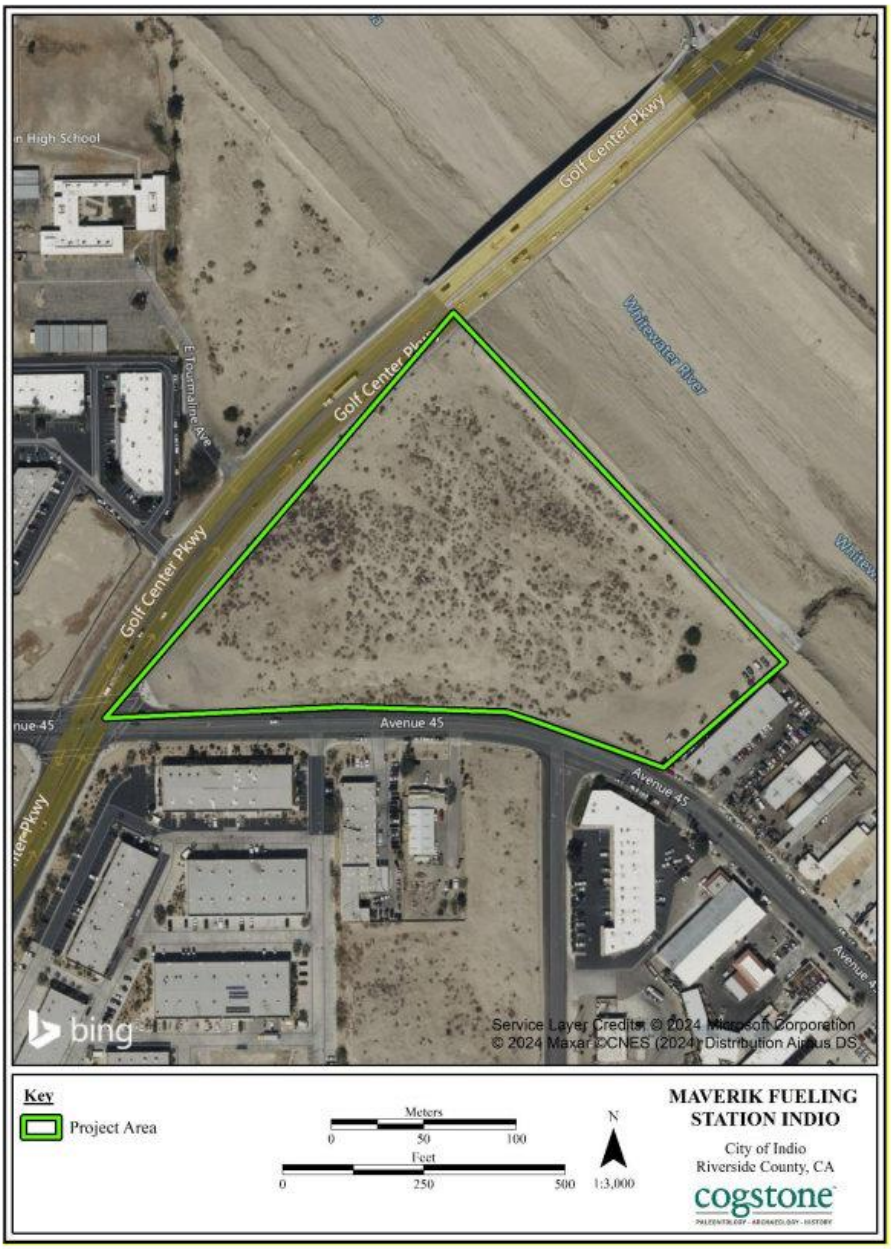


Figure 3. Project Aerial Map

APPENDIX D. SACRED LANDS FILE SEARCH

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Maverik Fueling Station Indio
County: Riverside

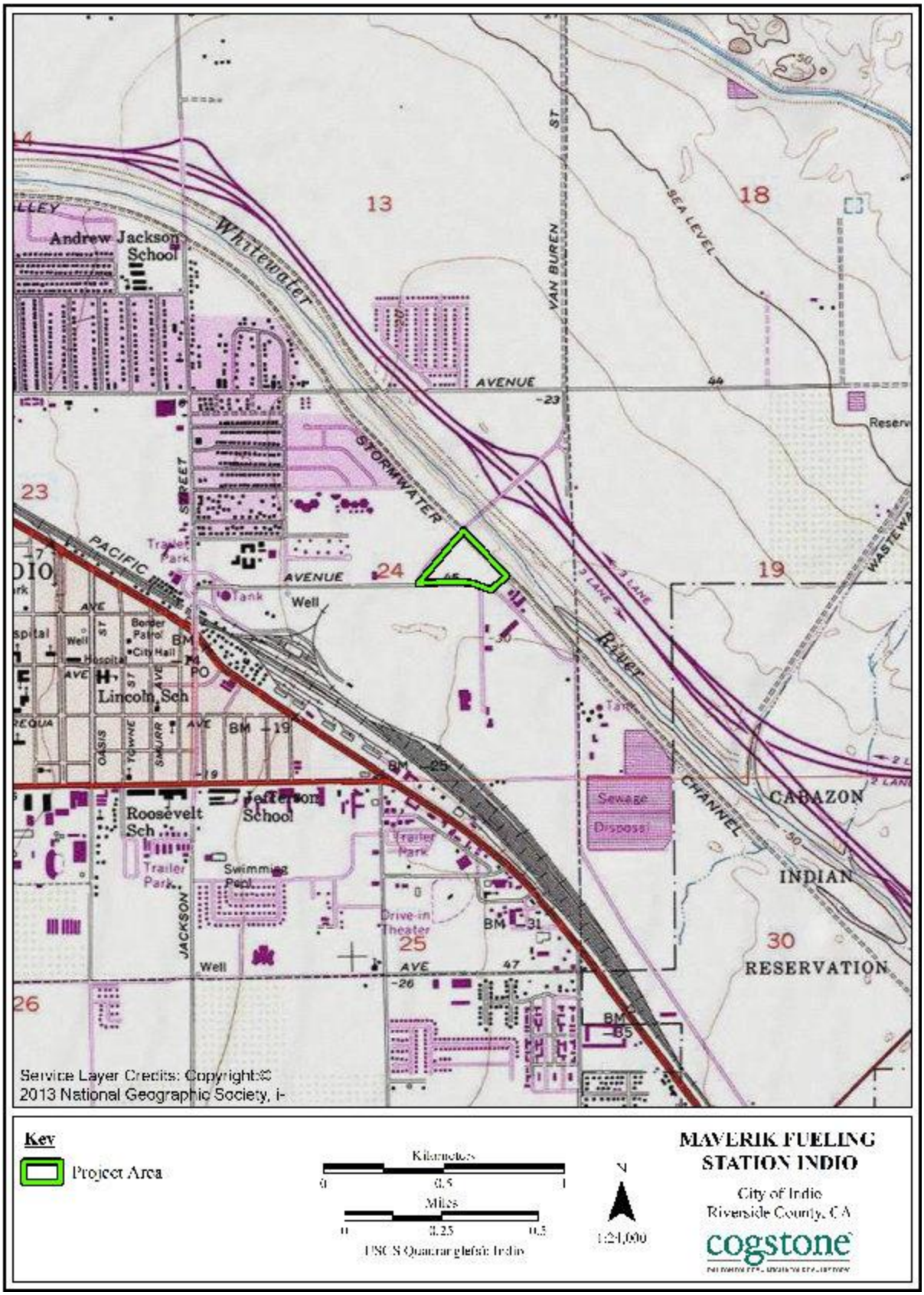
USGS Quadrangle
Name: Indio
Township: 5S Range: 7E Section(s): 24

Company/Firm/Agency:
Cogstone Resource Management
Contact Person:
Street Address: 1518 W. Taft Avenue
City: Orange Zip: 92865
Phone: (714) 974-8300 Extension:
Fax: (714) 974-8303
Email: cogstoneconsult@cogstone.com

Project Description:
The Project proposes to construct a Maverik fueling station which will include a commercial store, fuel pumps with associated equipment, parking area, and landscaping. The parcel is approximately 8.6 acres, however, only 3.8 acres will be developed as part of this Project.

☑ Project Location Map is attached

SLF&Contactsform: rev: 05/07/14


Andrew Jackson School
Whitewater
VAN BUREN ST
SEA LEVEL
AVENUE
STORMWATER
PACIFIC
Trailer Park
Tank
Well
Border Patrol
City Hall
PO
Lincoln Sch
Roosevelt Sch
Jefferson School
Swimming Pool
Drive-in Theater
JACKSON
Sewage Disposal
CHANNEL
CABAZON
INDIAN
RESERVATION
Service Layer Credits: Copyright© 2013 National Geographic Society, i-
Key
Project Area
Kilometers
Miles
USGS Quadrangle(s): Indio
1:24,000
MAVERIK FUELING STATION INDIO
City of Indio
Riverside County, CA
cogstone

STATE OF CALIFORNIA — Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

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

May 20, 2024

Cogstone Resource Management

Via Email to: CogstoneConsult@cogstone.com

Re: Maverik Fueling Station Indio Project, Riverside 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 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

Page 1 of 1

Native American Heritage Commission
Native American Contact List
Riverside County
5/20/2024

Tribe Name	Contact Person	Phone #	Fax #	Email Address	Cultural Affiliation
Agua Caliente Band of Cahuilla Indians	Lacy Padilla, Director of Historic Preservation/THPO	(760) 333-5222	(760) 699-6919	ACBCI-THPO@aguacaliente.net	Cahuilla
Augustine Band of Cahuilla Indians	Tribal Operations,	(760) 398-4722		info@augustinetribe-nsn.gov	Cahuilla
Cabazon Band of Mission Indians	Doug Welmas, Chairperson	(760) 342-2593	(760) 347-7880	jstapp@cabazonindians-nsn.gov	Cahuilla
Cahuilla Band of Indians	Erica Schenk, Chairperson	(951) 590-0942	(951) 763-2808	chair@cahuilla-nsn.gov	Cahuilla
Cahuilla Band of Indians	Anthony Madrigal, Tribal Historic Preservation Officer	(951) 763-5549		anthonymad2002@gmail.com	Cahuilla
Cahuilla Band of Indians	BobbyRay Esaprza, Cultural Director	(951) 763-5549		besparza@cahuilla-nsn.gov	Cahuilla
Los Coyotes Band of Cahuilla and Cupeño Indians	Ray Chapparosa, Chairperson	(760) 782-0711	(760) 782-0712		Cahuilla
Morongo Band of Mission Indians	Robert Martin, Chairperson	(951) 755-5110	(951) 755-5177	abrierty@morongo-nsn.gov	Cahuilla Serrano
Morongo Band of Mission Indians	Ann Brierty, THPO	(951) 755-5259	(951) 572-6004	abrierty@morongo-nsn.gov	Cahuilla Serrano
Quechan Tribe of the Fort Yuma Reservation	Jordan Joaquin, President, Quechan Tribal Council	(760) 919-3600		executivesecretary@quechantribe.com	Quechan
Quechan Tribe of the Fort Yuma Reservation	Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee	(928) 210-8739		culturalcommittee@quechantribe.com	Quechan
Quechan Tribe of the Fort Yuma Reservation	Jill McCormick, Historic Preservation Officer	(928) 261-0254		historicpreservation@quechantribe.com	Quechan
Ramona Band of Cahuilla	John Gomez, Environmental Coordinator	(951) 763-4105	(951) 763-4325	jgomez@ramona-nsn.gov	Cahuilla
Ramona Band of Cahuilla	Joseph Hamilton, Chairperson	(951) 763-4105	(951) 763-4325	admin@ramona-nsn.gov	Cahuilla
Santa Rosa Band of Cahuilla Indians	Vanessa Minott, Tribal Administrator	(951) 659-2700	(951) 659-2228	vminott@santarosa-nsn.gov	Cahuilla
Santa Rosa Band of Cahuilla Indians	Steven Estrada, Tribal Chairman	(951) 659-2700	(951) 659-2228	sestrada@santarosa-nsn.gov	Cahuilla
Soboba Band of Luiseno Indians	Jessica Valdez, Cultural Resource Specialist	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno
Soboba Band of Luiseno Indians	Joseph Ontiveros, Tribal Historic Preservation Officer	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno
Soboba Band of Luiseno Indians	Isaiah Vivanco, Chairperson	(951) 654-5544	(951) 654-4198	ivivanco@soboba-nsn.com	Cahuilla Luiseno
Torres-Martinez Desert Cahuilla Indians	Thomas Tortez, Chairperson	(760) 397-0300	(760) 397-8146	thomas.tortez@tmdci.org	Cahuilla
Torres-Martinez Desert Cahuilla Indians	Abraham Becerra, Cultural Coordinator	(760) 397-0300		abecerra@tmdci.org	Cahuilla
Torres-Martinez Desert Cahuilla Indians	Mary Belardo, Cultural Committee Vice Chair	(760) 397-0300		belardom@gmail.com	Cahuilla
Torres-Martinez Desert Cahuilla Indians	Gary Resvaloso, TM MLD	(760) 777-0365		grestmtm@gmail.com	Cahuilla
Torres-Martinez Desert Cahuilla Indians	Alesia Reed, Cultural Committee Chairwoman	(760) 397-0300		lisareed990@gmail.com	Cahuilla
Twenty-Nine Palms Band of Mission Indians	Sarah O'Brien, Tribal Archivist	(760) 863-2460		sobrien@29palmsbomi-nsn.gov	Chemehuevi
Twenty-Nine Palms Band of Mission Indians	Christopher Nicosia, Cultural Resources Manager/THPO Manager	(760) 863-3972		christopher.nicosia@29palmsbomi-nsn.gov	Chemehuevi
Twenty-Nine Palms Band of Mission Indians	Nicolas Garza, Cultural Resources Specialist	(760) 863-2486		nicolas.garza@29palmsbomi-nsn.gov	Chemehuevi

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.

Record: PROJ-2024-002660
Report Type: List of Tribes
Counties: Riverside
NAHC Group: All

APPENDIX E. PALEONTOLOGICAL SENSITIVITY RANKING CRITERIA

PFYC Description Summary (BLM 2016)	PFYC Rank
Very Low. The occurrence of significant fossils is non-existent or extremely rare. Includes igneous (excluding air-fall and reworked volcanic ash units), metamorphic, or Precambrian rocks. Assessment or mitigation of paleontological resources is usually unnecessary except in very rare or isolated circumstances that result in the unanticipated presence of fossils.	1
Low. Sedimentary geologic units that are unlikely to contain vertebrate or scientifically significant nonvertebrate fossils. Includes rock units less than 10,000 years old and sediments with significant physical and chemical changes (e.g., diagenetic alteration) which decrease the potential for fossil preservation. Assessment or mitigation of paleontological resources is not likely to be necessary.	2
Moderate. Units are known to contain vertebrate or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and/or of low abundance. Common invertebrate or plant fossils may be found and opportunities may exist for casual collecting. Paleontological mitigation strategies will be based on the nature of the proposed activity. Management considerations cover a broad range of options that may include record searches, pre-disturbance surveys, monitoring, mitigation, or avoidance. Surface-disturbing activities may require assessment by a qualified paleontologist to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.	3
High. Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrates or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability. Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.	4
Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate or scientifically significant invertebrate or plant fossils. Vertebrate fossils or scientifically significant invertebrate fossils are known or can reasonably be expected to occur in the impacted area. Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities. Paleontological mitigation may be necessary before or during surface disturbing activities. The area should be assessed prior to land tenure adjustments. Pre-work surveys are usually needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.	5
Unknown. An assignment of "Unknown" may indicate the unit or area is poorly studied and field studies are needed to verify the presence or absence of paleontological resources. The unit may exhibit features or preservational conditions that suggest significant fossils could be present, but little information about the actual unit or area is known. Literature searches or consultation with professional colleagues may allow an unknown unit to be provisionally assigned to another Class, but the geological unit should be formally assigned to a Class after adequate survey and research is performed to make an informed determination.	U
Water or Ice. Typically used only for areas which have been covered thus preventing an examination of the underlying geology.	W, I

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