Archaeological Resources Inventory and Historic Built Environment Evaluation Report for the Yeager Well Replacement Project

San Bernardino County, California

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MANAGEMENT SUMMARY

Golden State Water Company retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Yeager Well Replacement Project in San Bernardino County, California. Golden State Water Company proposes to decommission the existing 300-foot-deep water well located on Assessor's Parcel Number (APN) 0583-261-07-000 and drill a new water well to the south on APN 0583-261-08-0000.

The inventory included a records search, literature review, and field survey. The records search results indicated that no previous cultural resources studies have been conducted within the Project Area. The records search indicated one site had been recorded within the Project Area: P-36-561, the Big Morongo Spring Site, a multicomponent site with a Native American component and the historic component consisting of the Warren family homestead. However, no surface evidence of the resource was found within the Project Area during the field survey.

As a result of the field survey, ECORP recorded one resource over 50 years old in the Project Area, YW-1, Yeager Well #2. This resource has been evaluated using the California Register of Historical Resources eligibility criteria and found not eligible for listing under any criteria. Therefore, no historical or unique archaeological resources were found in the Project Area. ECORP recommends the Project Area be tested for archaeological site presence to support the CEQA impact findings for cultural and tribal cultural resources.

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AB	Assembly Bill

LIST OF ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
APN	Assessor's Parcel Number
BERD	Built Environment Resource Directory
BLM	Bureau of Land Management
BP	Years before present
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	California Department of Parks and Recreation
ECORP	ECORP Consulting, Inc.
GLO	General Land Office
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OHP	California Office of Historic Preservation
PRC	Public Resources Code
RPA	Registered Professional Archaeologist
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
SR	State Route
SWRCB	State Water Resources Control Board
TCR	Tribal cultural resource
USGS	U.S. Geological Survey

1.0 INTRODUCTION

Golden State Water Company retained ECORP Consulting, Inc. in 2023 to conduct an archaeological resources inventory for the Yeager Well Replacement Project in the unincorporated community of Morongo Valley, San Bernardino County, California. A survey of the Proposed Project Area was required to identify potentially eligible cultural resources (i.e., archaeological sites and historic buildings, structures, and objects) that could be affected by the Project.

1.1 Project Location and Description

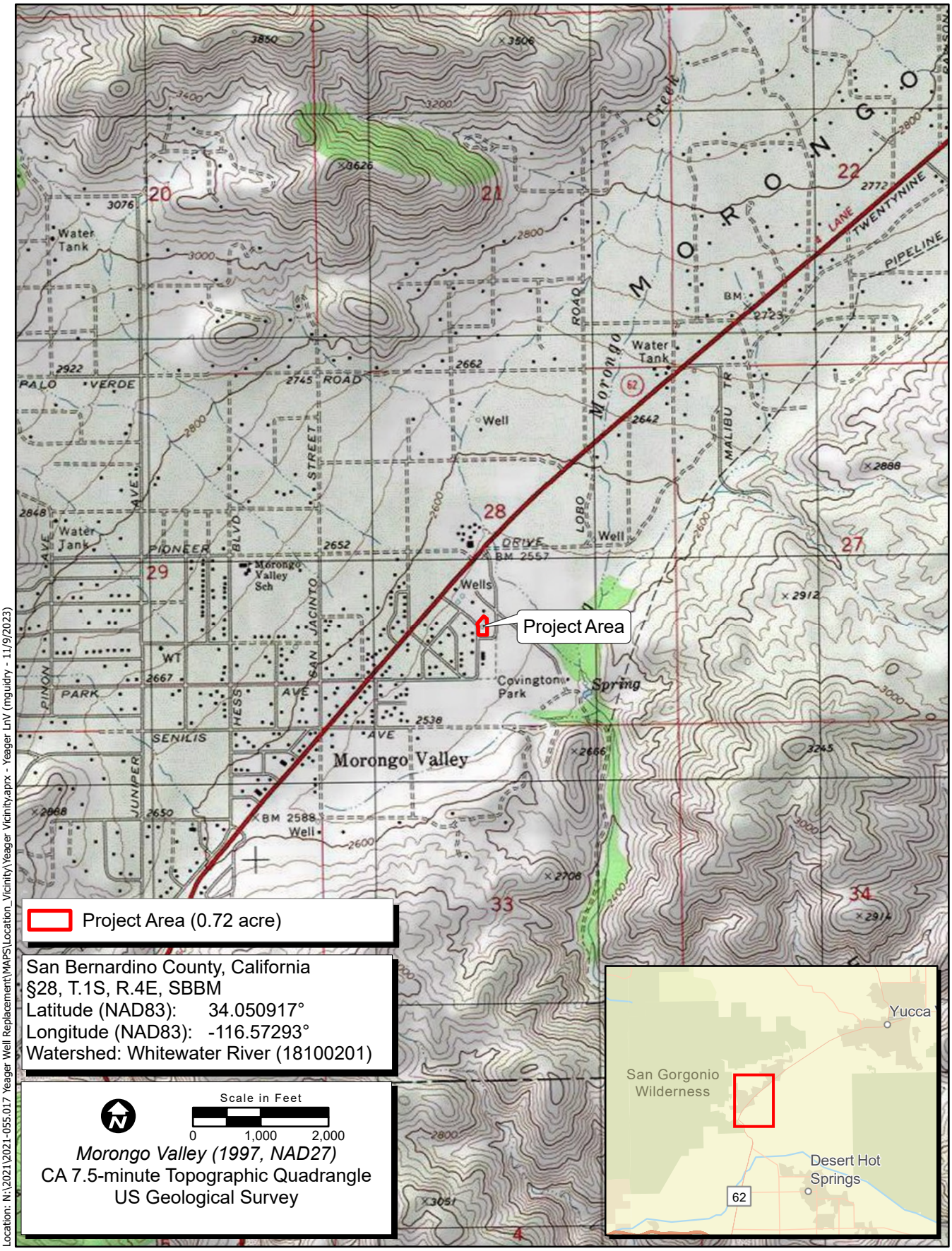
The Project Area consists of approximately 0.72 acre of property located in the northwestern quarter of the southeastern quarter of Section 28 of Township 1 South, Range 4 East, San Bernardino Base and Meridian, as depicted on the 1997 U.S. Geological Survey (USGS) Morongo Valley, California 7.5-minute topographic quadrangle map (Figure 1). It is also known as Assessor's Parcel Numbers (APNs) 0583-261-07-000 and 0583-261-08-0000. The parcels are both located east of Vale Drive and north of Mojave Drive, where Vale Drive and Mojave Drive intersect. The Project proposes to decommission the 300-foot-deep water well on APN 0583-261-08-0000 and drill a new 600-foot-deep water well on APN 0583-261-07-0000. The plans for connecting the new well to existing water infrastructure are still in development but may involve digging trenches to install underground pipelines within the Proposed Project Area.

1.2 Project Area

The Project Area consists of the horizontal and vertical limits of a project that could impact historical resources.

The horizontal Project Area consists of all areas where activities associated with a project are proposed and, in the case of this Project, equals the Project Area subject to environmental review under CEQA. This includes areas proposed for construction, vegetation removal, grading, drilling, trenching, stockpiling, staging, paving, backfilling, and other elements in the official Project description. The horizontal Project Area is illustrated in Figure 1.

The vertical Project Area is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical Project Area for this Project includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical Project Area varies across the Project Area but will extend as deep as 600 feet below the current surface for the well and up to 6 feet for underground pipeline connections to existing infrastructure; therefore, a review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.



Location: N:\2021\2021-055.017 Yeager Well Replacement\MAPS\Location_Vicinity\Yeager Vicinity.aprx - Yeager LnV (mguidry - 11/9/2023)

Map Date: 11/9/2023
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

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The vertical Project Area also is described as the maximum height of structures that could impact the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. For this Project, it is assumed the above-surface Project Area will not exceed 10 feet above the surface.

1.3 Regulatory Context

The CEQA lead agency for this Project is the State Water Resources Control Board.

1.3.1 California Environmental Quality Act

CEQA is the state law that applies to a project's impacts on cultural resources. A project is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to historical resources be identified and, mitigation measures applied to reduce potentially significant impacts.

A historical resource is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), or 3), and has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g) (California Code of Regulations [CCR] Title 14, Section 15064.5(a)).

The eligibility criteria for the CRHR are as follows (CCR Title 14, Section 4852(b)):

(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, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)). Resources that have been determined eligible for the National Register of Historic Places (NRHP) are automatically eligible for the CRHR.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(b)). Demolition or

alteration of eligible buildings, structures, and features that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features in the Project Area could also result in significant impacts.

Tribal cultural resources (TCRs) are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of TCRs and impacts thereto.

1.4 Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports: Recommended Contents and Format*. Appendix A includes a confirmation of the records search with the California Historical Resources Information System (CHRIS) and historical society coordination. Appendix B contains documentation of a search of the Sacred Lands File. Appendix C presents photographs of the Project Area. Appendix D contains built environment resource locations and site records.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Likewise, the regional Information Centers of the CHRIS maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of this cultural resource investigation were prepared as a confidential document, which is not intended for public distribution.

2.0 SETTING

2.1 Environmental Setting

Elevations within the Project Area range from 2,541 to 2,559 feet above mean sea level. The Project Area is in Morongo Valley, which is a semi-arid valley in the western Mojave Desert. The portion of the valley that contains the Project Area is home to the Big Morongo Canyon Preserve, which contains marshland and riparian habitats that are fed by ephemeral drainages in the nearby mountains. Morongo Valley is bounded by the Little San Bernardino Mountains to the southeast and San Gorgonio Mountain to the northwest.

2.2 Geology and Soils

The National Resources Conservation Service (NRCS) has not compiled any digital data for the central portion of the California Mojave Desert Area, which includes the Project Area; therefore, the NRCS does not have any soils data available online for the Project Area (NRCS 2023).

According to Bortugno and Spittler (1986), the Morongo Valley surface consists primarily of undifferentiated Quaternary deposits of Holocene age and is assumed to be underlain by older undifferentiated quaternary alluvium from near the Pleistocene/Holocene division. The surrounding hills are Mesozoic plutonic rocks, either Jurassic Quartz Diorite or Cretaceous or Jurassic Quartz Monzonite. The Project Area is situated within an earthquake fault zone of the Morongo Valley Fault, which is a contact fault that is surrounded by conspicuous foliation strike and dip features.

There is potential for buried pre-contact archaeological sites to exist within the Project Area due to the presence of Pleistocene/Holocene alluvium throughout Morongo Valley and the likelihood of pre-contact archaeological sites to be located along perennial waterways such as Big Morongo Canyon Creek, which is located to the southeast of the Project Area.

2.3 Vegetation and Wildlife

The dominant plant community within the Project Area includes honey mesquite (*Prosopis glandulosa* var. *torreyana*), golden bush (*Isocoma* sp.), California croton (*Croton californica*), ragweed (*Ambrosia* sp.), Russian thistle (*Salsola tragus*), cottonwood (*Populus* sp.), white sweetclover (*Melilotus albus*), and ornamental trees (ECORP 2023).

Wildlife species that may occur within the Project Area include California ground squirrel (*Otospermophilus californica*), side-blotched lizard (*Uta stansburiana*), greater road runner (*Geococcyx californianus*), California scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), black-headed grosbeak (*Pheucticus melanocephalus*), California thrasher (*Toxostoma redivivum*), and house finch (*Haemorhous mexicanus*) (ECORP 2023).

3.0 CULTURAL CONTEXT

3.1 Mojave Pre-Contact History

The Mojave Desert chronology is based on studies by Earle et al. 1998, Sutton et al. 2007, and Warren 1984. The temporal units used by Sutton et al. (2007) for the Mojave Desert were termed complexes because it was thought each complex represented a specific cultural adaptation or even a cultural group. However, cultural characteristics may vary within a temporal unit, both temporally and spatially. In the greater Mojave Desert region, the juxtaposition of different foothill- and desert-based adaptive systems and, apparently, of different cultural groups, makes the identification of a single complex as being characteristic of a temporal unit problematic. The temporal units used here are periods based on shifts in projectile point types. Such projectile point changes are used to mark temporal units, since this class of artifacts is the only one that can be said to be characteristic of each temporal unit (period) from the Pleistocene to Spanish contact (Sutton 2017). Dates for the periods are from Sutton (2016). The Mojave Desert chronology is shown in Table 1, and each period is discussed below.

Table 1. Mojave Desert Chronology

Period	Years
Clovis Period	12000 to 9500 BC
Lake Mojave Period	9500 to 7000 BC
Pinto Period	8250 to 2500 BC
Gypsum Period	2500 BC to AD 225
Rose Spring Period	AD 225 to 1100
Late Prehistoric Period	AD 1100 to 1769
Mission Period	AD 1769 to 1835

Although there is archaeological evidence for human occupation before 12000 BC elsewhere in the Americas, no cultural material dating to the time before the Clovis Period has been found in the Mojave Desert.

3.1.1 Late Pleistocene/Early Holocene

3.1.1.1 Clovis Period (Fluted Point Complex) (12000 to 9500 BC)

The Clovis Period was an era of environmental transition between the late Pleistocene and early Holocene. The Clovis Period within the Mojave Desert is represented by fluted projectile points that were used by big game hunters. Fluted projectile points, including both Clovis points and Great Basin Corner-Notched points, were hafted to the end of a throwing spear. Fluted points have been discovered along the shores of former pluvial lakes at China Lake Naval Weapons Station and Edwards Air Force Base. There are two sites at China Lake with Clovis points, as well as Lake Mojave points. Thus, it is not known if other artifacts

at these sites are associated with Clovis Period or Lake Mojave Period, or both. All other Clovis points in the Mojave Desert occur as isolated surface finds (Sutton 2018). It is thought that the Clovis groups consisted of small bands of hunters who followed big game herds.

3.1.1.2 Early and Middle Holocene

The people who occupied the Mojave Desert during the Early and Middle Holocene are thought to be descended from the Clovis megafauna hunters, who adapted to warming and drying conditions after the ice age ended. During the Early Holocene, the focus was on hunting artiodactyls around the remnant lakes. During the warm arid conditions of the Middle Holocene, these groups became more generalized foragers, who hunted and trapped large, medium, and small mammals and added plant foods to the diet.

3.1.1.3 Lake Mojave Period (9500 to 7000 BC)

During the Early Holocene, the climate became warmer and drier, resulting in a changing distribution of floral and faunal communities. However, there were still remnant pluvial lakes at this time. Lake Mojave Period sites are typically (but not exclusively) found around the margins of ancient lakes. The Lake Mojave tool assemblages include Great Basin Stemmed series projectile points, including Lake Mojave and Silver Lake points. The shift from fluted points to stemmed points may indicate a shift from hunting megafauna to hunting artiodactyls (deer and mountain sheep). Sutton (2018) says that the fluted points were used on thrusting spears in an intercept hunting strategy, while the stemmed points of the Lake Mojave period were likely used on smaller spears launched with a spear-thrower (atlatl). Other flaked-stone tools include crescents (eccentrics), leaf-shaped bifaces (cutting and piercing tools), formed unifaces including large-domed scrapers and small beaked engravers, and cores from which flakes could be removed as needed. The cores were also used as tools (Sutton 2018). Ground stone implements occur in small numbers during this time (Warren 2002) and indicate the addition of hard seeds in the diet. It appears that Lake Mojave groups gradually adapted to a desiccating environment, resulting in shifts in technology and subsistence, with exploitation of additional ecozones.

3.1.1.4 Pinto Period (8250 to 2500 BC)

Pinto points first appear about 8250 BC. The Pinto Period overlaps in time with the Lake Mojave Period because both Great Basin Stemmed points and Pinto points occur during the overlapping period of time (8250 to 7000 BC). The Pinto Period was a time of increasing aridity culminating in the Mid-Holocene Warm Period, circa 5500-2500 BC. The disappearance of lakes was followed by a great reduction in streams and springs. By the end of the period, water could be obtained only at a small number of springs. The desert vegetation community similar to that of today developed during this period. Sites associated with this era are usually found in open settings, in relatively well-watered locales representing isolated oases of high productivity, such as fossil stream channels and springs. Increasing amounts of ground stone tools suggest increasing use of small seeds. Artiodactyl hunting continued, but increasing aridity reduced the number of deer available. Small animals such as rabbit, rodent, reptile, and fresh water mussel resources are present in significant quantities. The artifact assemblage is similar to the Lake Mojave assemblage. Pinto projectile points replaced Lake Mojave points and Silver Lake points, and

crescents and engravers were no longer used. Drills were added to the assemblage and the number of ground stone tools increased (Warren 2002). Warren (2002) sees the shift in projectile point types and the increasing use of plant foods during the Pinto Complex as resulting from decreasing numbers of artiodactyls (deer and mountain sheep) during this warm, dry period. Pinto points may have been more efficient in taking artiodactyls because the shouldered Pinto points stayed inside the animal after it was shot (Warren 2010).

3.1.1.5 Late Holocene

Annual rainfall increased, and resource productivity improved significantly at the beginning of the Late Holocene after about 4,500 BP (circa 2500 BC). During the Late Holocene, there was an increase in population, along with increasing sedentism and intensification of resource use in and around the Mojave Desert. Three periods were defined within the Late Holocene in the Mojave Desert: the Gypsum Period (ca. 2500 BC to AD 225), the Rose Spring Period (roughly equivalent to Warren's Saratoga Springs Period, ca. AD 225 to 1100), and the Late Prehistoric Period (ca. AD 1100 to 1769) (Sutton 2016; Sutton et al. 2007; Warren 1984). Each period has characteristic projectile point types. The settlement system seen in the Mission Period with permanent villages, especially along the valley margins, and temporary camps for collecting resources within the village's territory likely began to develop during the Gypsum Period.

3.1.1.6 Gypsum Period (ca. 2500 BC to AD 225)

During the Gypsum Period, the artifact assemblage included Elko and Gypsum dart points and bifaces. Ground stone milling tools became relatively commonplace. The subsistence pattern, based on material found in temporary camps in the desert, included generalized hunting activities (large, medium, and small mammals and desert tortoise), and seed processing, indicated by more numerous milling stones than in previous periods. Mesquite, located in high water table areas, may have been an important resource during Gypsum times. Quartz crystals, paint, and rock art indicate ritual activities (Sutton 2017).

3.1.1.7 Rose Spring Period (ca. AD 225 to 1100)

The Rose Spring Period is also known as the Saratoga Spring Period. The bow and arrow were introduced in the Mojave Desert at the beginning of the Rose Spring Period circa AD 225. Rose Spring and Eastgate arrow points were used, along with Cottonwood Triangular points beginning around AD 900. Other artifacts include stone knives and drills, bone awls, and ground stone tools.

3.1.1.8 Late Prehistoric Period (ca. AD 1100 to AD 1769)

Desert Side-Notched and Cottonwood Triangular arrow points were used during the Late Prehistoric Period. The rest of the Rose Spring artifact assemblage continued into the Late Prehistoric period with the addition of pottery. Bedrock mortars, indicating intensive acorn use, may have been used earlier in the late Holocene, but were numerous in the residential bases and villages in the desert margin. Some desert floor sites also featured bedrock mortars or portable mortars and pestles.

3.1.1.9 Mission Period (AD 1769 to AD 1835)

The Mission Period begins with the Portolá Expedition in AD 1769, which established the first permanent Spanish presence in California. Franciscan friars established missions at San Gabriel (AD 1771) and San Fernando (AD 1797) (Castillo 1978). The first written historical information about Native Americans in the Mojave Desert region dates from the 1770s, during the Mission Period. Ethnohistorical documentation from this period includes mission records and the accounts of Spanish friars and soldiers.

3.1.1.10 Other Temporal Units

Sutton (2018) recently proposed new temporal units consisting of patterns and phases with dating based on BP, rather than BC, for the Late Pleistocene through the Middle Holocene. In Sutton's new scheme, the Clovis Period is now the Lakebed Pattern, which is divided into Lakebed I (11,600 to 11,000 BP) Phase and Lakebed II (11,000 to 10,200 BP) Phase. The Lake Mojave Period is the Lake Mojave Pattern with Lake Mojave I (10,200 to 9,300 BP) and Lake Mojave II (9,300 to 8,500 BP) Phases. The Pinto Period is the Pinto Pattern with Pinto I (8,500 to 7,500 BP), Pinto II (7,500 to 5,000 BP), and Pinto III (5,000 to 4,000 BP) Phases. Note that in this new chronology, the Lake Mojave Pattern does not overlap in time with the Pinto Pattern. Sutton's new chronology is not used in this research design since it has not yet been evaluated by other archaeologists who specialize in the Late Pleistocene and Early Holocene of the Mojave Desert.

3.4 Ethnohistory

The Project Area lies close to the recognized border between Serrano and Cahuilla territories. Morongo Valley would likely be considered the territory of "Pass" Cahuilla. Both Serrano and Cahuilla are believed to have entered into nearby areas for several purposes.

3.4.1 Cahuilla

Ethnographic accounts of Native Americans indicate that the Project Area lies predominantly within the original territory of the Cahuilla. The Cahuilla spoke a Takic language. The Takic group of languages is part of the Uto-Aztecan language family. The Cahuilla occupied a territory ranging from the San Bernardino Mountains in the north to the Chocolate Mountains and Borrego Springs in the south, and from the Colorado Desert in the east to Palomar Mountain in the west. They engaged in trade, marriage, shared rituals, and war with other groups of Native Americans whose territories they overlapped, primarily the Serrano and Gabrieliño (Bean 1972, 1978; Kroeber 1925).

Cahuilla subsistence consisted of hunting, gathering, and fishing. Villages were often located near water sources, most commonly in canyons or near drainages on alluvial fans. Major villages were fully occupied during the winter, but during other seasons task groups made periodic forays to collect various plant foods, with larger groupings from several villages organizing for the annual acorn harvest (Bean and Saubel 1972). Bean and Saubel (1972) have recorded the use of several hundred species of plants used for food, building/artifact materials, and medicines. The major plant foods included acorns, pinyon nuts, and various seed-producing legumes. These were complemented by agave, wild fruits and berries, tubers, cactus bulbs, roots and greens, and seeds.

Hunting focused on both small to medium-sized mammals such as rodents and rabbits, and large mammals such as pronghorn sheep, mountain sheep, and mule deer. Hunting was done using the throwing stick or the bow and arrow, though nets and traps were also used for small animals (Bean 1972).

Cahuilla buildings consisted of dome-shaped or rectangular houses, constructed of poles covered with brush and above-ground granaries (Bean 1978; Strong 1929). Other material culture included baskets, pottery, and grinding implements; stone tools, arrow shaft straighteners and bows; clothing (loincloths, blankets, rope, sandals, skirts, and diapers); and various ceremonial objects made from mineral, plant, and animal substances (Bean 1972).

As many as 10,000 Cahuilla may have existed at the time of European contact in the 18th century (Bean 1978). Circa 1900, Cahuilla lived in the settlements of La Mesa, Toro, and Martinez on the Augustin and Toro Indian Reservations. As of 1974, approximately 900 people claimed Cahuilla ancestry (Bean 1978).

3.4.2 Serrano

The Project Area is located within the territory known to have been occupied by the Serrano group of Native Americans at the time of contact with Europeans, around 1769 C.E. The Serrano occupied an area in and around the San Bernardino Mountains and northward into the Mojave Desert. Their territory also extended west along the north slope of the San Gabriel Mountains, east as far as Twentynine Palms, north into the Victorville and Lucerne Valley areas, and south to the Yucaipa Valley and San Jacinto Valley (Cultural Systems Research 2005). The Serrano speakers in the Mojave Desert who lived along the Mojave River were known as Vanyume. Serrano is a language within the Takic family of the Uto-Aztecan language stock.

The Serrano were mainly hunters and gatherers who occasionally fished. Game hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, pinyon nuts, bulbs and tubers, shoots and roots, juniper berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978).

A variety of materials were used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978).

Settlement locations were determined by water availability, and most Serrano lived in villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

Serrano social and political units were clans, patrilineal exogamous territorial groups. Each clan was led by a chief who had both political and ceremonial roles. The chief lived in a principal village within the clan's territory. The clans were part of a moiety system such that each clan was either a wildcat or coyote clan and marriages could only occur between members of opposite moieties (Earle 2004). On the north side of the San Bernardino Mountains, clan villages were located along the desert-mountain interface on Deep Creek, on the upper Mojave River, in Summit Valley, and in Cajon Pass. The principal plant food available

near these villages was juniper berries. These villages also had access to mountain resources, such as acorns and pinyon nuts.

Partly due to their mountainous and desert inland territory, contact between Serrano and Euro-Americans was minimal prior to the early 1800s. In 1819, an *asistencia* (mission outpost) was established near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. By the late 1970s, most Serrano lived either on the Morongo or San Manuel reservations (Bean and Smith 1978).

3.5 Southern California History – Spanish and Mexican Periods

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was an excellent location for a port (Castillo 1978). Vizcaíno also named San Diego Bay to commemorate Saint Didacus. The name began to appear on European maps of the New World by 1624 (Gudde 1998).

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterrey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and towns were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. Mission San Diego was established to convert the Native Americans that lived in the area, known as the Kumeyaay or Diegueño. Mission San Gabriel Archangel was founded in 1771 east of what is now Los Angeles to convert the Tongva or Gabrielino. Mission San Fernando, also in Tongva/Gabrielino territory, was established in 1797. Mission San Juan Capistrano was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the Agjachemem or Juaneño. Mission San Luis Rey was established in 1798 on the San Luis Rey River (in what is now northern San Diego County) to convert the Luiseño. Missions San Buenaventura and Santa Barbara were founded in Chumash territory in 1782 and 1786, respectively (Castillo 1978).

Some missions later established outposts in inland areas. An asistencia (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810 (Pourade 1961). A chapel administered by Mission San Gabriel Archangel was established in the San Bernardino area in 1819 (Bean and Smith 1978). The present asistencia within the western outskirts of present-day Redlands was built circa 1830 (Haenszel and Reynolds 1975). The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto (Gunther 1984). The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a

pueblo, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portola expedition and ended in 1821 with Mexican independence.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos" (Robinson 1948). During the Mexican period there were small towns at San Diego (near the presidio), San Juan Capistrano (around the mission), and Los Angeles. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American taxes on the thousands of acres they owned. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans (Cleland 1941).

3.6 Morongo Valley History

Morongo Valley is a census-designated place located at the southern border of the San Bernardino Valley, south of Pioneertown and west of Yucca Valley. This area of the valley is home to the Morongo Canyon River and the Big Morongo Canyon Preserve, which was established to protect the area's natural marshland and riparian habitat that provides an oasis for wildlife, including many migratory birds (Friends of Big Morongo Canyon Preserve 2023; San Bernardino County 2020).

Morongo Valley was named for John Morongo, who was born there in 1846. Through the 1850s, the area was called "Marrenga pass". John Morongo had become a prominent figure in the valley by the 1860s as leader of the Serrano Native American tribe that resided in the area. He later became a justice of the peace and led the Morongo Band of Mission Indians through their transition from Morongo Valley to the Morongo Reservation (Banning Library District 1890; The Historical Marker Database n.d.; Morongo Cultural Heritage 2023; Morongo Basin Historical Society n.d.).

The tribe's transition to the reservation came after a devastating 1862 smallpox epidemic brought by European settlers wiped out about half of the Serrano population in Morongo Valley. Prior to the arrival of Europeans in the valley, Serrano, Cahuilla, and Cupeño bands lived in this area, making use of the marshlands for hunting and foraging. However, what native population remained after the smallpox outbreak was forced out of the valley by settlers who later converted most of Morongo Valley to a working ranch (Friends of Big Morongo Canyon Preserve 2023; Morongo Cultural Heritage 2023).

Hans Frederick Briand De Crevercoeur was one of the earliest ranchers, establishing his operations in Morongo Valley around 1873, showing that cattle and sheep could be raised on natural vegetation. By 1876, several settlers in Morongo Valley had established successful ranching operations and grown their families there (The Historical Marker Database n.d.; San Bernardino County 2020).

By 1885, Mark Warren, having made a successful living by developing Warren's Well, purchased the Crevercoeur ranch in Morongo Valley and built an adobe hotel on the site. The hotel served as a stage stop for passengers on their way to the Dale Mining District. The Big Morongo Canyon trail became a major thoroughfare between the high desert and the low desert. Today this route is followed by the alignment of Highway 62 (Hansen and Rosen 2018).

Homesteading in Morongo Valley peaked in the 1930s (San Bernardino County 2020). In 1937, Harry Hess, owner of the Virginia Dale mine, made the first housing subdivision in Morongo Valley. Growth was slow until the mid-1940s. By 1946, the Morongo Valley Chamber of Commerce formed, and in 1949, they deeded the local recreational area Covington Park to the people of Morongo Valley (Pollack 1988). The mid-twentieth century, low-cost housing attracted retirees to Morongo Valley. By 1958, the Morongo Valley Community Services District was established to better oversee street lighting, the Morongo Valley Fire Department, the Morongo Valley Unified School District, and the Morongo Valley Library. In 1963, the Native Sons of the Golden West erected a monument to honor John Morongo and early settlers of the Morongo Valley (The Historical Marker Database n.d.; San Bernardino County 2020).

In 1968, the Nature Conservancy bought eighty acres from J. L. Covington, beginning the Big Morongo Canyon Preserve. San Bernardino County and the Bureau of Land Management joined the Nature Conservancy, expanding and eventually preserving Big Morongo Canyon as part of the 3,100-acre Sand-to-Snow National Monument (Friends of Big Morongo Canyon Preserve 2023). Business and residential development has continued in Morongo Valley in the decades since, and today it is home to numerous businesses and approximately 3,000 residents.

3.7 Golden State Water Company and American States Water Company

The Golden State Water Company (known as Southern California Water Company until 2005) drilled Yeager Well #2 circa 1970. The Golden State Water Company (GSWC), a wholly owned subsidiary of the American States Water Company, serves approximately 261,000 customers, six municipal water district agencies, 80 cities, and unincorporated communities throughout California. As of 2007, it provided 41% of its water supply from 64 active company owned wells. The company works with the Water Replenishment District to improve well-head treatment and stands as one of the larger investor-owned utilities in the region (AWR 2024).

GSWC's parent company, American State Water Company (AWR), has provided water to the western United States since 1929. Besides GSWC, AWR also owns Bear Valley Electric Service, Inc. and American States Utility Services, Inc., and serves over one million people in nine states. AWR supplies energy to roughly 24,000 customer connections in the City of Big Bear Lake and nearby areas in San Bernardino County, California, via its electric utility subsidiary, Bear Valley Electric Service, Inc. The company is traded on the New York Stock Exchanges and regulated by the California Public Utilities Commission (Green 2007).

3.8 Modern Wells

Modern wells built after World War II, like Yeager Well #2, are usually modest structures with little visible equipment on the surface. A basic concrete pad with a contained small-bore steel casing may serve as a small domestic well. A larger municipal well will include more surface materials, such as a pump head, motor, discharge pipes, electrical equipment, backup generators, water-metering equipment, and testing taps. A standard well below ground has a solid tubular casing with sections of perforated metal or wire screen arranged at aquafer depth to collect water. The turbine pump is often positioned at the shaft's bottom or suspended within the casing. It is propelled by an engine that is either on the ground or submerged. The well could be in the open or in a small shelter. Well buildings are generally inconspicuous, resembling a plain outbuilding distinguishable only by its sturdy electrical connections and warning signs. Alternatively, the well's status as a public utility may be emphasized through architectural adornment, the style of which will reflect the date of creation as well as the designer's expressive goal (JRP Historical Consulting, LLC & AECOM 2023).

3.9 Property History

Yeager Well #2 (Resource YW-1) is one of two wells visible on the 1972 USGS Morongo Valley, California topographic quadrangle map (1:24,000 scale). Additional information provided by Golden State Water Company employee Chris Mohler informed ECORP that Yeager Well #2 was drilled in 1970. During the field survey effort, an on-site Golden State Water Company employee believed that Yeager Well #2 replaced Yeager Well #1, which is believed to have been drilled at the same location in the 1950s.

4.0 METHODS

4.1 Personnel Qualifications

Registered Professional Archaeologist (RPA) Sonia Sifuentes, who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology, was responsible for this cultural resource investigation. Senior Architectural Historian Andrew Bursan conducted the evaluation of built environment resources. Staff Archaeologist Robert Cunningham performed the CHRIS Records Search at the South Central Coastal Information Center. Associate Archaeologist Steve Wintergerst conducted the fieldwork. Mr. Wintergerst and Staff Archaeologist Casey LeJeune, RPA prepared the technical report. Lisa Westwood, RPA provided technical report review and quality assurance.

Sonia Sifuentes, RPA is a Senior Archaeologist and the Southern California Cultural Resources Manager at ECORP and has more than 16 years of experience in cultural resources management, primarily in southern California. Ms. Sifuentes holds a M.S. in Archaeology of the North. She has participated in and supervised numerous surveys, test programs, and data recovery excavations for both prehistoric and historical sites; and has cataloged, identified, and curated thousands of artifacts. She has conducted evaluations of cultural resources for eligibility for the NRHP and CRHR. Ms. Sifuentes is experienced in the organization and execution of field projects in compliance with Section 106 of the NHPA and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resources management plans.

Andrew Bursan has 16 years of combined experience in historic preservation and land planning with experience in project management as well as historic research and report writing. Mr. Bursan has worked with the California Department of Transportation (Caltrans), Los Angeles County Metropolitan Transportation Authority (Metro), cities of Pasadena, Santa Monica, Los Angeles, Santa Barbara, Arroyo Grande, and other state and local municipalities. Experience includes architectural surveys, reconnaissance-level surveys, historical assessments, and extensive historical research. Mr. Bursan has prepared historic context statements, technical reports, and impact analysis for cultural resources in Environmental Impact Reports (EIR). His breadth of work includes major transportation projects, intensive archival research, city-wide surveys, and analysis of individual properties under CEQA, Section106, Section 4(f), and NEPA.

Robert Cunningham has 17 years of experience in cultural resources management, with an emphasis on the recordation, analysis, and evaluation of historic-period resources. He has participated in all aspects of archaeological fieldwork, including survey, test excavation, and construction monitoring. He has served as Field Director for archaeological inventories and site evaluation projects and has worked on San Diego County projects under ECORP's blanket purchase order since 2010. He has recorded and mapped numerous prehistoric and historic-period archaeological sites and has identified and documented hundreds of prehistoric and historic artifacts. Mr. Cunningham has prepared numerous archaeological site records and has authored and contributed to a variety of cultural resources technical reports.

Steve Wintergerst is an Associate Archaeologist with 15 years of experience in cultural resources management. He holds a B.A. in Anthropology. Mr. Wintergerst has participated in all aspects of archaeological fieldwork and laboratory process, with extensive experience throughout California and western Arizona. His experience has involved working as an archaeological crew chief, archaeological technician, archaeological monitor, paleontological monitor, and paleontological preparator. He is experienced in the organization and execution of field projects in compliance with CEQA and Section 106 of the NHPA. He has contributed to multiple cultural resource reports.

Casey LeJeune, RPA is a Staff Archaeologist who has worked in cultural resource management since 2020, with experience in the southeast and Southern California. She holds an M.A. in anthropology with a focus in forensic anthropology and bioarchaeology. She meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. She has participated in fieldwork on forensic and historic burials, survey, large-scale data recovery, monitoring, and in-field lithic analysis. Ms. LeJeune also has extensive laboratory experience in human osteology and analysis of historic and prehistoric artifacts. Additionally, she has contributed to numerous cultural resource technical reports.

Lisa Westwood, RPA has 30 years of experience and meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology. She holds a B.A. in Anthropology and an M.A. in Anthropology (Archaeology). She is the Director of Cultural Resources for ECORP.

4.2 Records Search Methods

ECORP conducted a records search for the property at the South Central Coastal Information Center (SCCIC) of the CHRIS at California State University, Fullerton on December 5, 2023 (Appendix A). The

purpose of the records search was to determine the extent of previous surveys within a 1-mile (1,600-meter) radius of the Proposed Project Area, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.

In addition to the official records and maps for archaeological sites and surveys in San Bernardino County, the following historic references were also reviewed: Built Environment Resource Directory (OHP 2022); the National Register Information System (National Park Service [NPS] 2020; 2023); Office of Historic Preservation, California Historical Landmarks (OHP 2023); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (OHP 1999); Caltrans Local Bridge Survey (California Department of Transportation [Caltrans] 2020); Caltrans State Bridge Survey (Caltrans 2022); and *Historic Spots in California* (Kyle 2002).

Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2022). Historic maps reviewed include the following:

- 1878 BLM GLO Plat map for Township 1 South, Range 4 East, San Bernardino Base Meridian
- 1901 USGS Southern California Sheet No. 1 topographic quadrangle map (1:250,000 scale)
- 1902 USGS San Gorgonio, California topographic quadrangle map (1:125,000 scale)
- 1953 USGS San Bernardino, California topographic quadrangle map (1:250,000 scale)
- 1955 USGS Morongo Valley, California topographic quadrangle map (1:62,500 scale)
- 1966 USGS San Bernardino, California topographic quadrangle map (1:250,000 scale)
- 1972 (minor revision 1984) USGS Morongo Valley, California topographic quadrangle map (1:24,000 scale)
- 2018 USGS Morongo Valley, California topographic quadrangle map (1:24,000 scale)

ECORP reviewed historic aerial photographs taken in 1970, 1972, 1983, 1984, 1996, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020 for any indications of property usage and built environment.

ECORP conducted a search for a local historical registry. The search did not yield accessible local historical registries in the Morongo Valley area.

4.3 Sacred Lands File Coordination Methods

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on December 1, 2023 to request a search of the Sacred Lands File for the Project Area (Appendix B). This search determines whether the California Native American tribes within the Project Area have recorded Sacred Lands, because the Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, ECORP solicited information from the Native American community regarding TCRs, but

the responsibility to consult with California Native American tribes pursuant to CEQA lies exclusively with the CEQA lead agency.

4.4 Historical Society Outreach

ECORP emailed letters to the Morongo Basin Historical Society on November 17, 2023 and December 1, 2023 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area. A record of all correspondence is provided in Appendix A.

4.5 Field Methods

ECORP subjected the Project Area to an intensive pedestrian survey on December 8, 2023 under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983) using 15-meter-spaced transects. ECORP expended one person-hour in the field. At the time, ECORP examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, ECORP examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP archaeologists did not undertake subsurface investigations or artifact collections during the pedestrian survey.

Standard professional practice requires that all cultural resources encountered during the survey be recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California OHP. The resources are usually photographed, mapped using a handheld Global Positioning System receiver, and sketched as necessary to document their presence using appropriate DPR forms.

5.0 RESULTS

5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the SCCIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

5.1.1 Previous Research

Thirteen previous cultural resource investigations have been conducted within one mile of the Project Area, covering approximately 30 percent of the total area surrounding the Project Area within the records search radius (Table 2). None of the 13 studies included the Project Area. These studies revealed the presence of pre-contact sites, including villages, burials, bedrock milling features, and ceramic fragments, and historical sites, including historic ranches and historic roads. The previous studies were conducted between 1971 and 2009 and vary in size from smaller than 10 acres to larger than 600 acres.

Table 2. Previous Cultural Studies within 1 mile of the Project Area

Report Number	Author(s)	Report Title	Year
106-0108	King, Thomas F.	M-YUC: An Archaeological Survey of the Proposed Right-of-way of the Morongo-Yucca-Upper Coachella Valley Pipeline	1971
106-0155	Smith, Gerald A.	Big Morongo Regional Park Archaeological Survey	1973
106-1108	San Bernardino County Museum Association	Cultural Resources Assessment: A.P. No. 583-331-01, Covington Park Area, Morongo Valley	1981
106-2448	Lerch, Michael K.	Cultural Resources Assessment of Serene Homes Tentative Tract 13845, Morongo Valley, San Bernardino County, California	1991
106-4768	Kind, Aaron S.	Yucca Ridge Trail Repair	2005
106-4769	Kind, Aaron S.	A Class III Cultural Resources Inventory for the Yucca Ridge Trail Repair–2004	2005
106-4770	Kind, Aaron S.	A Class III Cultural Resources Inventory for the Lanning Lanes–2005.	2005
106-4771	Horne, Stephen	Burned Area Rehabilitation: Paradise Fire	2005
106-4772	Kind, Aaron S.	A Class III Cultural Resources Inventory for the Big Morongo Canyon Preserve Trail Repair – F.Y.2006	2005
106-4773	Kind, Aaron S.	A Class III Cultural Resources Inventory for the Paradise Fire Fence Lines-F.Y. 2006	2005
106-4776	Thompson, Joyce	An Archaeological Study Pit, Big Morongo Wildlife Reserve	1978
106-6878	Wlodarski, Robert J.	Cultural Resources Record Search and Archaeological Survey Results for the Proposed Royal Street Communications, California, LLC, Site 4041A (Palo Verde Drive) located at Twenty-Nine Palms Highway & East Drive, Morongo Valley, San Bernardino County, California 92556	2010
106-7278	Jones, Gary A.	Archaeological Survey Report for Southern California Edison's Deteriorated Pole Project on the Campanula 25 kV, Chollita 12 kV, Meloday 20 kV, Mockingburd 12 kV, and Pioneertown 12 kV Transmission Lines in San Bernardino County, California	2009

The results of the records search indicate that no portions of the Project Area have been previously surveyed for cultural resources; therefore, a pedestrian survey of the Project Area was warranted.

The records search also determined that 14 previously recorded pre-contact and historic-era cultural resources are located within one mile of the Project Area (Table 3). Of these, three are believed to be associated with Native American occupation of the vicinity, 10 are historic-era sites, associated with early European-American ranching and mining activities, and one is of unknown age. One of the previously recorded cultural resources may overlap a portion of the Project Area: a multicomponent site (P-36-561), as described in Section 5.4.1.1 of this report.

Table 3. Previously Recorded Cultural Resources within One Mile of the Project Area

Site Number CA-SBD-	Primary Number P-36-	Recorder and Year	Age/Period	Site Description	Within Project Area?
561H	561	Britt W. Wilson et al. 2018	Multicomponent	Big Morongo Spring Site	No*
-	12205	Aaron Kind 2005	Pre-contact	Hill Sherd Isolate	No
12483H	13096	W. Raschkow 2006	Unknown	Rock alignment	No
-	13097	W. Raschkow 2006	Pre-contact	Buffware Isolate	No
15751H	24710	Patrick Stanton 2011	Historic	Historic Encelia Trail road segment	No
15758H	24717	Patrick Stanton 2011	Historic	Historic East Drive and Pioneer Drive road segments	No
15759H	24718	Patrick Stanton 2011	Historic	Historic N. Start Trail road Segment	No
15769H	24728	Justin Lev-Tov 2011	Historic	Historic Vale Drive road segment	No
15778H	24737	Justin Lev-Tov 2011	Historic	Historic Coronado Avenue road segment	No
15779H	24738	Justin Lev-Tov 2011	Historic	Historic West Drive road segment	No
15780H	24739	Justin Lev-Tov 2011	Historic	Historic Park Avenue road segment	No
15782H	24741	Justin Lev-Tov 2011	Historic	Historic Paradise Avenue road segment	No
15783H	24742	Justin Lev-Tov 2011	Historic	Historic Roselia Drive road segment	No
15784H	24743	Justin Lev-Tov 2011	Historic	Historic Adeline Way road segment	No

***Note, subsurface test would confirm lack of surface finds.**

5.1.2 Records

The OHP's Built Environment Resource Directory for San Bernardino County (dated September 2, 2022) showed two resources within 1 mile of the Project Area (OHP 2022). One resource is located at 10619 Hess Road, 0.85 mile from the Project Area. The second is located at 49270 Matzene Drive. Both resources were built in the 1950s, and both have been determined ineligible for listing on the National Register of Historic Places.

ECORP reviewed resources listed as *California Historical Landmarks* by the OHP (2023) on November 17, 2023. The nearest listed landmark is located 26 miles west of the Project Area.

Historic Spots in California (Kyle 2002) does not mention the Project Area or its vicinity.

Historic GLO land patent records from the BLM's patent information database (BLM 2022) revealed that the western half of the southeastern quarter of Section 28 was patented to Mark B. Warren on November 28, 1900 by the authority of the Homestead Act of 1962. The federal government granted public land to homesteaders under certain conditions in order to encourage settlement, farming, and other productive industries in recently acquired lands. The Project Area land was part of 160 acres in San Bernardino County that was granted to Warren, which later became Warren's Ranch.

A RealQuest online property search for APN 0583-261-07-0000 revealed that the property consists of 0.30 acre on Tract 3112, Lot 79. The property was sold in 2005 as a grant deed. In 2020, the property was sold again by Susan Miller through Chicago Title Company as a grant deed. A RealQuest online property search for APN 0583-261-08-0000 revealed that the property consists of 0.47 acre on Tract 3112, Morongo Village Lot 78. Both properties are owned by Golden State Water Company, with no listed information regarding types of buildings, building permits, or year built. Both properties are listed as being used for *Utilities*, and their county use is listed as *Public Utility Water Company*.

The Caltrans Bridge Local and State Inventories (Caltrans 2020, 2022) did not list any historic bridges within one mile of the Project Area.

5.1.3 Map Review and Aerial Photographs

The review of historical aerial photographs and maps of the Project Area provides information on the past land uses of the Project Area and potential for buried archaeological sites. This information shows that the Project Area was initially used for homesteading and travel. Following is a summary of the review of historical maps and photographs.

- The 1878 BLM GLO Plat map for Township 1 South, Range 4 East, San Bernardino Base Meridian, depicts the Project Area within an area labeled "Cienega", which is Spanish for *swamp* or *marshland*. The map depicts mountains to the southeast and sage and scrub brush outside of the Project Area.
- The 1901 USGS Southern California Sheet No. 1 topographic quadrangle map (1:250,000 scale) depicts a possible roadway outside of the Project Area, that is roughly aligned with present-day State Route (SR) 62. Several unnamed washes appear near the Project Area.
- The 1902 USGS San Gorgonio, California topographic quadrangle map (1:125,000 scale) does not depict anything within the Project Area. The roadway aligned with present-day SR-62 curves south of the Project Area.
- The 1953 USGS San Bernardino, California topographic quadrangle map (1:250,000 scale) depicts an unimproved roadway to the north of the Project Area running along the northern shore of an

ephemeral drainage labeled "*Morongo Creek*". This road connects directly to present-day SR-62 north of the Project Area.

- The 1955 USGS Morongo Valley, California topographic quadrangle map (1:62,500 scale) depicts a structure within the Project Area at the northeastern corner of Vale Drive and Morongo Drive. Just outside the Project Area, the map depicts Vale Drive, Morongo Drive, and other roads in their current alignments. Present-day SR-62 is labeled "Twentynine Palms Highway". The map labels "Covington Park" to the east of the Project Area.
- The 1966 USGS San Bernardino, California topographic quadrangle map (1:250,000 scale) depicts SR-62 and labels the ephemeral drainage that passes east of the Project Area as "Big Morongo Creek".
- Aerial photographs from 1970 are low resolution making it difficult to discern objects within the Project area in detail. However, it is possible to distinguish an irregularly cleared area located in the northern end of the Project Area, with a dirt trail connecting the cleared area to Mojave Drive in the south.
- The 1972 USGS Morongo Valley, California topographic quadrangle map (1:24,000 scale) depicts one well in the northern parcel of the Project Area, and one well and a structure in the adjacent parcel to the east.
- Aerial photographs from 1983 and 1984 are low resolution making it difficult to discern objects within the Project area in detail. It is possible to discern a rectangular cleared area along the northwest side of the Project Area and shorter green vegetation covering the southern portion. Some trees appear on the eastern edge of the Project Area.
- Aerial photographs from 2002 and 2005 are low resolution making it difficult to discern objects within the Project area in detail. However, it is possible to discern a rectangular structure near the northeastern corner of the Project Area. A trail within the Project Area trends towards the northernmost corner of the Project Area.
- Aerial photographs from 2009 and 2012 show a barrier fence around the northern parcel of the Project Area.
- Aerial photographs from 2014 show that the structure that was first discernable in 2002 photographs is gone. A larger rectangular structure is now present in the northwestern portion of the Project Area.
- Aerial photographs from 2018 show a tan ring-shaped structure in the southeastern corner of the northern parcel in the Project Area. This and all subsequent aerial photographs show the Project Area in its current state.
- The 2018 USGS Morongo Valley, California topographic quadrangle map (1:25,000 scale) depicts the Project Area as located southeast of Covington Drive, continuing which runs southwest into Big Morongo Canyon west of Big Morongo Creek.

In sum, the Project Area has been ranched since at least 1900. By 1970, a well had been drilled on the property. From 1970 until present, portions of the property were subject to vegetation clearance and improvements as a water utility facility. It is located near the eastern edge of Morongo Valley, Big Morongo Canyon Preserve, and SR-62.

5.2 Sacred Lands File Results

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources within the Project Area. A record of all correspondence is provided in Appendix B.

5.3 Other Interested Party Consultation Results

The Morongo Basin Historical Society responded to ECORP's letters on December 3, 2023, stating that their non-profit organization was unable to provide ECORP with the requested information. A record of all correspondence is provided in Appendix A.

5.4 Field Survey Results

ECORP surveyed the Project Area for cultural resources on December 8, 2023 (Figure 2). The ECORP archaeologist conducted an intensive pedestrian survey using 15-meter-spaced transects and examined visible ground surface for indications of cultural resources. During the survey, the undeveloped portions of the northern parcel had excellent ground visibility (90 to 100 percent); however, structures, a gravel-covered driveway, and paved portions precluded visibility in those particular areas. The southern parcel contained two areas that were not surveyed because of dense vegetation with no visibility (0 percent) (Figure 3). A dirt access road also crosses this parcel; visibility along the road was excellent (90 to 100 percent). The remaining portions of the southern parcel contained low lying vegetation that reduced ground visibility to 60 percent.

Figure 2. Project Area Overview (view southeast; December 8, 2023).

Location: N:\2021\2021-055.017 Yeager Well Replacement\MAPS\Cultural_Resources\Yeager Cultural.aprx - Yaeger Survey Coverage 20240124 (trotellini - 1/24/2024)

Map Date: 1/24/2024

Sources: ESRI (Maxar 2023)

Figure 3. Survey Coverage

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2021-055.017 Yeager Well Replacement

5.4.1 Cultural Resources

As a result of previous investigations by others, one multicomponent site (P-36-561, a pre-contact village site and historic ranch site) was recorded within the Big Morongo Canyon Preserve and in the Project Area. The 2023 survey by ECORP also identified one new cultural resource within the Project Area: YW-1, the site of Yeager Well #2, which was drilled sometime between 1970 and 1972. Site descriptions follow, and confidential DPR site records are provided in Appendix D.

5.4.1.1 Resource P-36-561

Resource P-36-561 is the Big Morongo Spring Site, a multicomponent site that consists of traces of the Historic Warren's Ranch and a pre-contact Native American village with one known human skull that washed into the area where it was found after a storm. The skull's original location is unknown, but it presumably eroded out of a burial located within the Big Morongo Canyon Preserve. Researchers have mentioned that surface collection of ceramic fragments from the pre-contact village may have greatly reduced surface presence of the Native American component of P-36-561.

The site records include at least four separate maps of the site and portions of the site, none of which include the Project Area; however, an unknown person redrew the site boundary after 1995 to include a much larger area including the Project Area. While they were probably trying to reconcile all the maps, they appear to have made an error and drawn the boundary too large. None of the previous field studies confirmed the presence of the site within the Project Area and mapping by the State Water Resources Control Board using data from the site records also indicates the site does not extend into the Project Area.

Despite thorough examinations of the Project Area, ECORP did not identify pre-contact artifacts during the 2023 survey or any traces of a site. However, the northern parcel has been heavily graded, and any surface evidence of this resource may have been buried or destroyed. ECORP did not conduct subsurface testing of the Project Area to confirm the presence or absence of a subsurface archaeological deposit.

5.4.1.2 Resource YW-1

Resource YW-1 consists of the Yeager Well #2 (Figure 4), one of two wells visible on the 1972 Morongo Valley topographical map. ECORP requested further information regarding the wells from Golden State Water Company employee Chris Mohler, who was told that Yeager Well #2 was drilled in 1970. An on-site Golden State Water Company employee believed that Yeager Well #2 replaced Yeager Well #1, which is believed to have been drilled at the same location in the 1950s. During the survey, ECORP observed this resource within the Project Area and recorded it in its current condition.

Figure 4. Resource YW-1 (view west; December 8, 2023).

5.5 EVALUATION

This section provides an evaluation of the significance of the built environment resource located within the Project Area relative to eligibility criteria set forth in the CRHR.

5.5.1 YW-1 (Yeager Well #2)

CRHR Criterion 1

A water well may qualify for listing in the state register under Criterion 1 if it has a demonstrably significant association with an important historic event, trend, or theme. Yeager Well #2 (Resource YW-1) in Morongo Valley provides water to residents of the communities in southern San Bernardino County. Many similar wells exist both in Morongo Valley and San Bernardino County and research did not find that the construction of the subject well represented a significant innovation in the development of water conveyance. It was not the first or last of its type and there is nothing in the archival record to suggest that Yeager Well #2 is associated with events that have made a significant contribution to the broad patterns of San Bernardino County history. Therefore, it is not eligible for the CRHR under Criterion 1.

CRHR Criterion B2

A water well may have significance under Criterion 2 if it is directly associated with a scientific, public policy, or social change that best represents the productive life of a historically important individual. Golden State Water Company (known as Southern California Water Company until 2005) crews built and maintained Yeager Well #2. However, there is nothing in the archival record to suggest that Yeager Well #2 is associated with the lives of persons significant in our past. Therefore, it is not eligible for the CRHR under Criterion 2.

CRHR Criterion 3

A water well that exhibits important engineering or design characteristics may qualify for listing in the national and/or state register under Criterion 3. As a modest water well designed like several other wells in San Bernardino County, Yeager Well #2 lacks the important engineering characteristics and architectural adornment found in better examples of the type. It does not embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. Therefore, it is not eligible for the CRHR under Criterion 3.

CRHR Criterion 4

The information potential of Yeager Well #2 is expressed in its built form and in the historical record. It has not yielded, nor is it likely to yield, information important in history or prehistory. It is not eligible for the CRHR under Criterion 4.

Findings

No CRHR-eligible built environment resources were identified within the Project Area as a result of the field survey. Extensive archival research, and property significance evaluation have found Yeager Well #2 (resource YW-1) not eligible for listing in the CRHR. Therefore, resource YW-1 is not considered a historical resource for the purposes of CEQA. Further, no potential indirect impacts to historical resources were identified.

6.0 MANAGEMENT CONSIDERATIONS

6.1 Conclusions

No historical resources or unique archaeological resources were identified in the Project Area as a result of this study. ECORP identified and evaluated Yeager Well #2 (resource YW-1) and found it not eligible under any of the criteria for listing in the CRHR.

6.2 Likelihood for Subsurface Archaeological Resources

No evidence of site P-36-561 was found in the Project Area and the Project site has been graded for the construction of the well facility, likely obscuring or destroying surface evidence of archaeology if any was once present. As the site is close to water and contains mesquite, an important food resource for Native Americans, there could be subsurface deposits that were not seen during the survey and subsurface testing for presence or absence of archaeological material is recommended.

6.3 Recommendations

ECORP recommends a subsurface test of the Project Area to determine if site P-36-561 or any other archaeological deposits are present in the Project Area. If present, evaluation would be required to determine eligibility for listing on the CRHR. ECORP recommends that no Project activity should occur until the Project Area has undergone archaeological testing.

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LIST OF APPENDICES

APPENDIX A

Records Search Confirmation and Historical Society Coordination

APPENDIX B

Sacred Lands File Coordination

APPENDIX C

Project Area Photographs

Confidential Cultural Resource Site Locations and Site Records

This appendix contains information on the specific location of archaeological resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Information on the specific location of pre-contact and historic sites is exempt from the California Public Records Act.