

The Bureau of Land Management El Centro Field Office: managing archaeological and cultural resources

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The Bureau of Land Management (BLM) was established in 1949 and is one of several branches of the United States Department of the Interior. The BLM currently manages 264,000,000 acres of public land primarily located within the western portion of the United States. The BLM's primary mission is to manage public lands for multiple public uses, including mining, recreation and commercial activities as well as to manage and protect the nation's priceless natural and cultural legacy. The BLM administers some of the most ecologically and culturally diverse and scientifically important lands in federal ownership.

The BLM El Centro Field Office is one of five offices within the California Desert District. The El Centro Office manages approximately 1,300,000 acres that spans both the Imperial and eastern San Diego Counties of California and includes nine federally designated Wilderness Areas, two Off Highway Recreation Areas, eight Areas of Critical Environmental Concern (ACECs) and three National Register-eligible archaeological districts. Figure 1 shows land ownership in southeastern California.

The archaeology of the desert

The archaeology of southeastern California is unique in that it blends the cultural traditions of California with the traditions common to northern Baja California and the southwestern U.S. in Arizona and New Mexico. For example, unlike other traditional cultures of California, the people of the western Colorado Desert region planted crops in flood plains and made pottery. However, like other California groups, they also moved around seasonally and relied heavily on traditional California resources such as acorns and pinyon nuts. Figure 2 shows the desert regions of southeastern California and a few of the important archaeological sites that have been studied in past years.

Within the western Colorado Desert, prehistoric cultural resources tend to be located along shorelines of Lake Cahuilla, on the banks of the Colorado River and within the Yuha Desert. A sample pedestrian survey of the east and west shoreline areas (Gallegos 1980) found that the majority of the prehistoric archaeological sites, particularly those that are eligible for inclusion to the National Register of Historic Places, are located within 0.4 to 0.5 mi. of one of the last shorelines of Lake Cahuilla. The exception is the Yuha Basin ACEC, where significant cultural resources are located throughout the basin. Archaeological investigations conducted since 1980 continue to support this hypothesized pattern of prehistoric occupation.

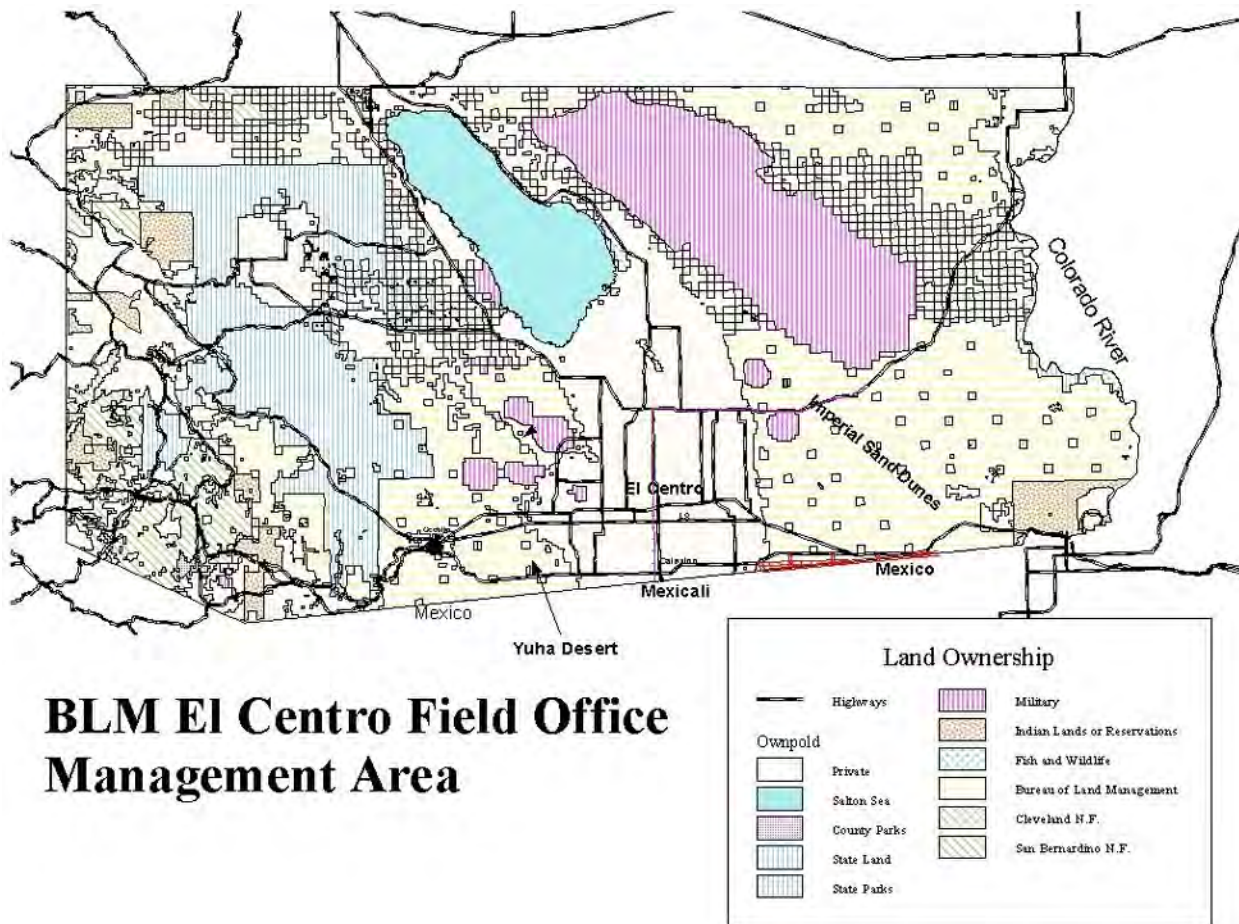


Figure 1. Land ownership in southeast California.

Lake Cahuilla

Also known as Lake LeConte or Blake's Sea, Lake Cahuilla was named by geographer William Blake (1907) after the lake's northern inhabitants, the Cahuilla Indians. The lake was also located within the traditional areas of the Quechan, Cocopah and Kumeyaay tribes. Figure 3 shows a late stand of Lake Cahuilla.

Beginning in the late Pleistocene era (over 10,000 years ago), the freshwater Lake Cahuilla formed intermittently within the Salton Trough whenever the Colorado River diverted to the northwest (Waters 1980:vii). Lake levels were dependent on the amount and duration of the river's flow into the trough, the rate of evaporation, and the overflow altitude of the delta threshold (Waters 1980:vii).

The archaeological and cultural sites associated with the lake shoreline are predominately a series of seasonal camps consisting of hearths or fire pits, evidence of small brush structures and pit houses, scatters of pottery shards, stone tool production material, milling tools, freshwater and saltwater shell fragments and fish and bird bones. Some of the sites can also contain rock alignments, geoglyphs (also known as intaglios), pecked rock figures or petroglyphs, pedestrian trail segments and cremations. The individual camp sizes range from about 5 m (15 ft.) square to as large as 295 m (967 ft.) square, and, in some cases, the camps represent the reoccupation of a portion of the shoreline over a series of seasons or years. The

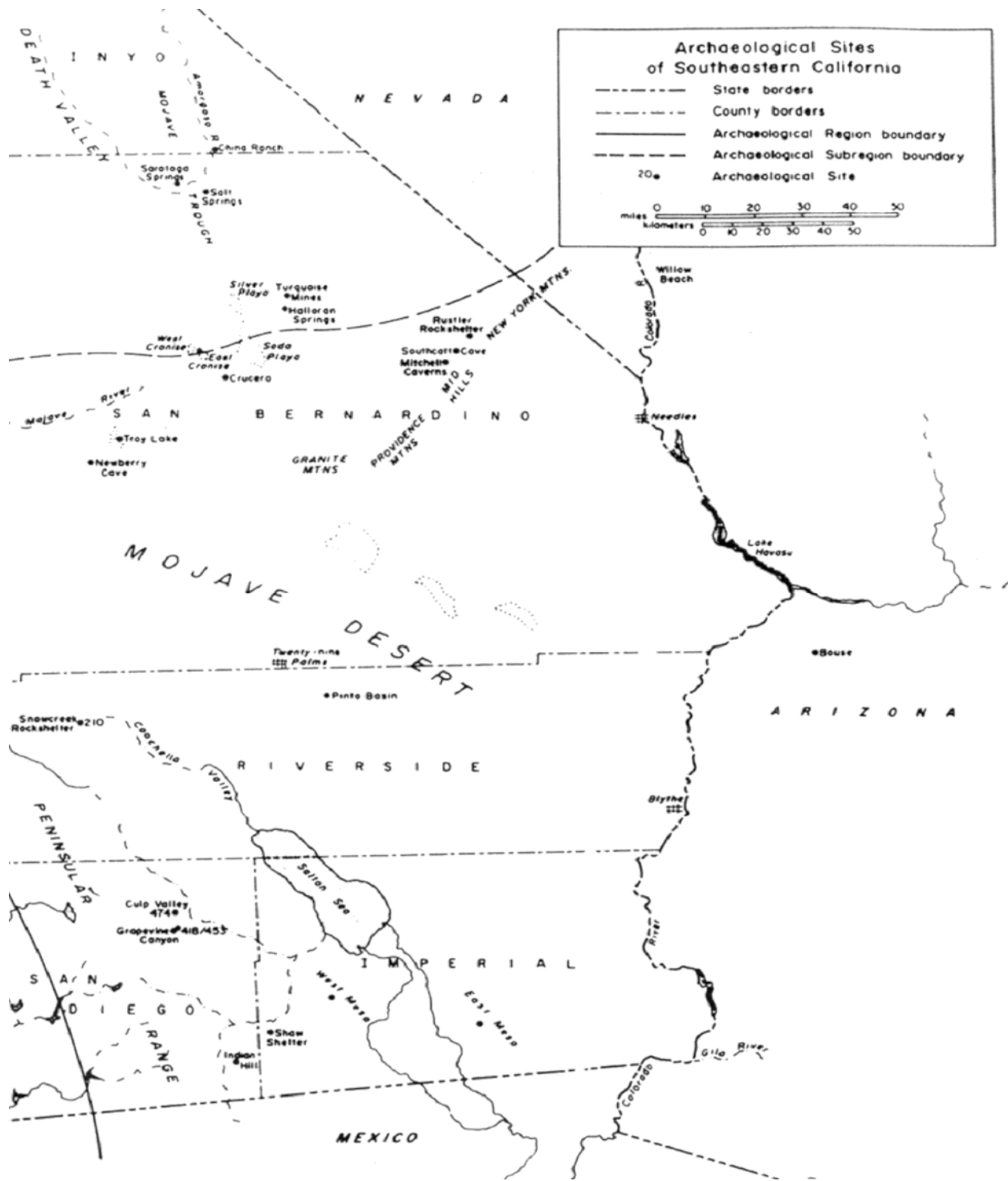


Figure 2. The desert region of California.

Southwest Lake Cahuilla Recessional Shoreline Archaeological District occupies approximately 2,700 acres and represents a series of sites dating to around A.D. 1540 that followed the shoreline as the lake recedes and eventually became brackish before drying up completely.

Another set of archaeological features prevalent along the shoreline are fish traps. Lake Cahuilla had tides just like the ocean. These fish traps are rock alignments that are generally “U”

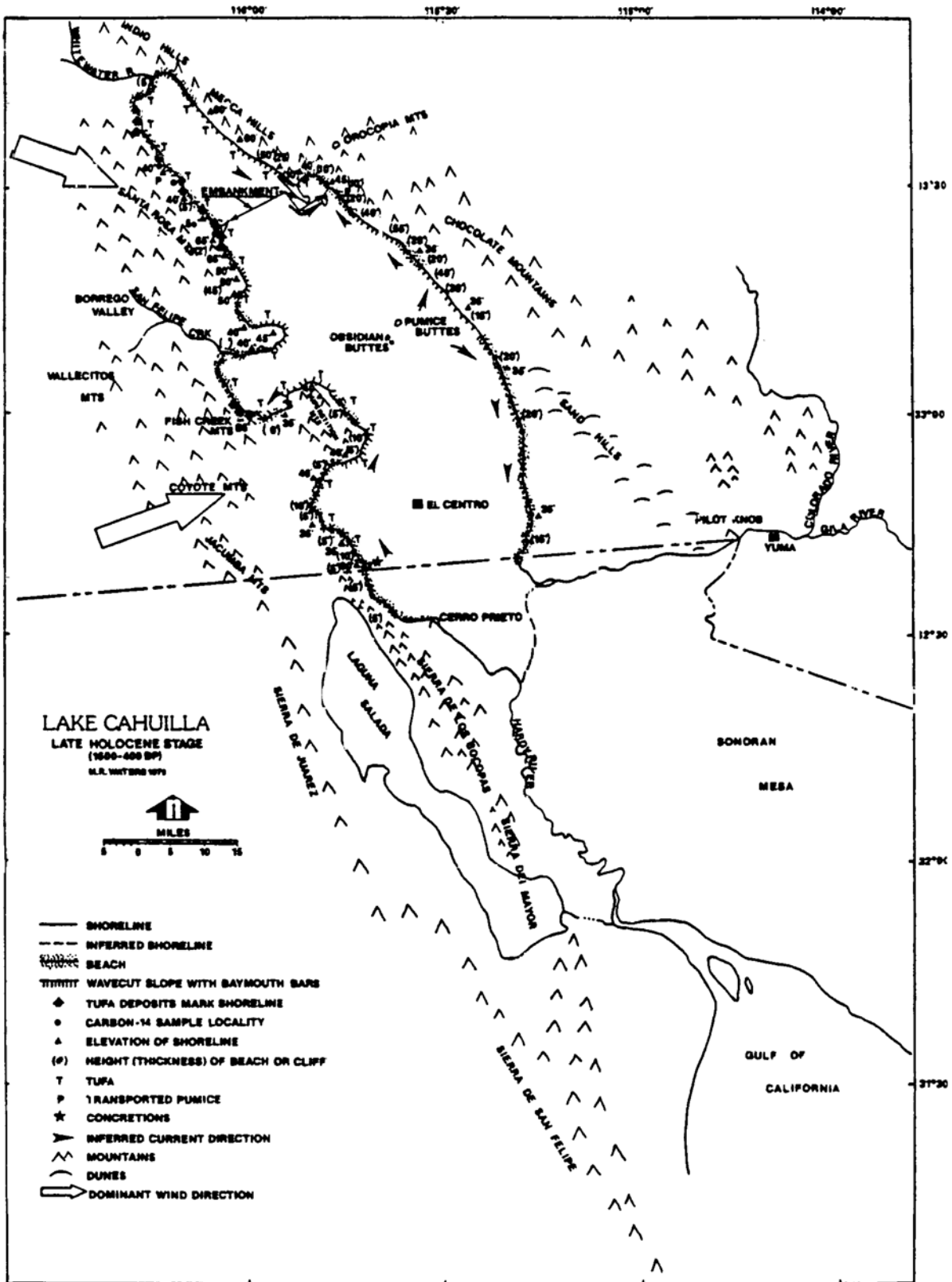


Figure 3. Lake Cahuilla.

or “V” shaped and tended to be built perpendicular to the shoreline. The Native Americans relied on the infilling of the water during the high tide period to bring in fish that would then be trapped by the rock alignment as the water ebbed during the low tide period.

There are only a small number of villages. Similar in content to the temporary camps, these sites are very large, and are believed to have been occupied year-round rather than seasonally. They are generally located close to freshwater springs that are often near the lake shoreline.

The Yuha Desert

The predominate material for making stone tools is a metavolcanic known as andesite porphyry or Alverson andesite, and it is found within sites located all around the Imperial Valley (Morton 1977:17). One of the largest sources for this material is within the Yuha Desert, where it occurs in the form of large rocks or small boulders on the surface of the ground. As a result, the majority of the archaeological sites within the Yuha Desert are “lithic scatters”, or areas where tool stone was tested, reduced and made into tools.

Prehistoric campsites are located along shorelines of Lake Cahuilla at the eastern edge of the Yuha Desert and along the edge of Pinto Wash (Gallegos 1980). Similar to shoreline sites north of the Yuha Desert, these sites contain hearths, scatters of pottery sherds, stone and milling tools, rock alignments, cremations and small geoglyphs (or intaglios). Also found within these temporary camps, or sometimes alone, are small areas known as cleared or sleeping circles. These are round areas created when the surface rock and gravel was brushed away to make an activity area that might have been shaded by a brush shelter of some type.

Large geoglyphs and features called dance circles are also found within the Yuha Desert, generally along the edge of the Yuha Basin. These archaeological features were created by the removal of the darker soil on the surface to expose the lighter soil below and were probably tamped down to compact the soil. They tend to be made in geometric shapes or patterns and are recognized by the Kumeyaay and Quechan tribes as having important religious significance.

The sand dunes

The Imperial sand dunes have played a significant role in shaping the prehistoric and historic landscape of the Imperial Valley. Located west of the lower Colorado River, the unique landscape offered a variety of resources, such as plants for food and medicine, which would have been desired by the early peoples, particularly the Hokan-language-speaking people, like the Quechan and Cocopah Indians, who have traditionally occupied the lower Colorado River region. In early historic times, the dunes became thought of not as a resource but as a barrier to be avoided by the Spanish explorers, like Juan Bautista de Anza and Father Francisco Garcés, and the American pioneers moving west along the Southern Emigrant Trail. They were also a barrier to the expanding railroad network, diverting the 1877 Southern Pacific line north through Mammoth Wash to link Yuma, Arizona to the city of Los Angeles.

Managing archaeological resources in the desert regions

Because of the high demand for public use of public land in this region, particularly for

recreation and, most recently, energy and communications-related projects, protecting and preserving the archaeological resources of the western Colorado Desert region is a challenge. But we use a combination of federal laws and education to protect cultural and archaeological resources on public land.

The federal laws include the National Environmental Policy Act (NEPA), the National Historic Protection Act (NHPA) and the Archaeological Resource Protection Act (ARPA). Basically, NEPA and NHPA, particularly section 106 of NHPA, dictate that each time there is a proposed action on public lands that has a potential to affect cultural and archaeological resources, the effect must be taken in consideration, analyzed and mitigated if necessary. ARPA gives federal law enforcement the legal teeth to prosecute people who purposely disturb, remove or destroy archaeological and cultural resources for criminal or civil reasons.

Along with the laws that protect resources, the El Centro BLM office is trying to protect resources through grants and a series of public outreach programs. For example, off-highway vehicles (OHVs) must be registered in the state of California, and a portion of the registration money is set aside as “green sticker” grants to protect cultural and natural resources and to enhance OHV recreation. In 1999, an OHV green sticker grant was approved to protect archaeological resources within the Yuha Basin ACEC. OHV grants also fund the California Archaeological Site Stewardship Program or CASSP, which has been adopted by several BLM offices, including El Centro. The volunteer site stewards adopt archaeological sites that are threatened to monitor and aid in protecting them. There has also been an extensive outreach effort to the OHV communities, the local communities and the U.S. Border Patrol to educate them about the environmental and archaeological sensitivity of the southeastern California desert region.

The archaeological and cultural resources of the desert regions are interesting and very unique. Managing these resources for the public is a challenge that requires a varied approach. With the continued increase in demand for the use of public lands, the ability to manage and protect these resources on public land will continue to require a multilayered approach that includes enforcing federal laws and increasing programs of educational outreach to the public.

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