

Long Before the Salton Sea

Uncover the story of a bygone body of water known as Ancient Lake Cahuilla.

BY JUNE ALLAN CORRIGAN

FOR SOME UNFAMILIAR with the region's geography, the initial discovery of the Salton Sea can come as a surprise. Yet there it sits, in the middle of the Colorado Desert of Imperial and Riverside counties, boasting a surface area of 350 square miles.

Despite its high salinity (greater than the Pacific Ocean), the Salton Sea is not really a sea at all; it is a lake, and what comes as an even greater surprise to many is that it is not the only one to occupy the area. In fact, the Salton Sea is a small footprint in the basin of a much larger lake that preceded it.

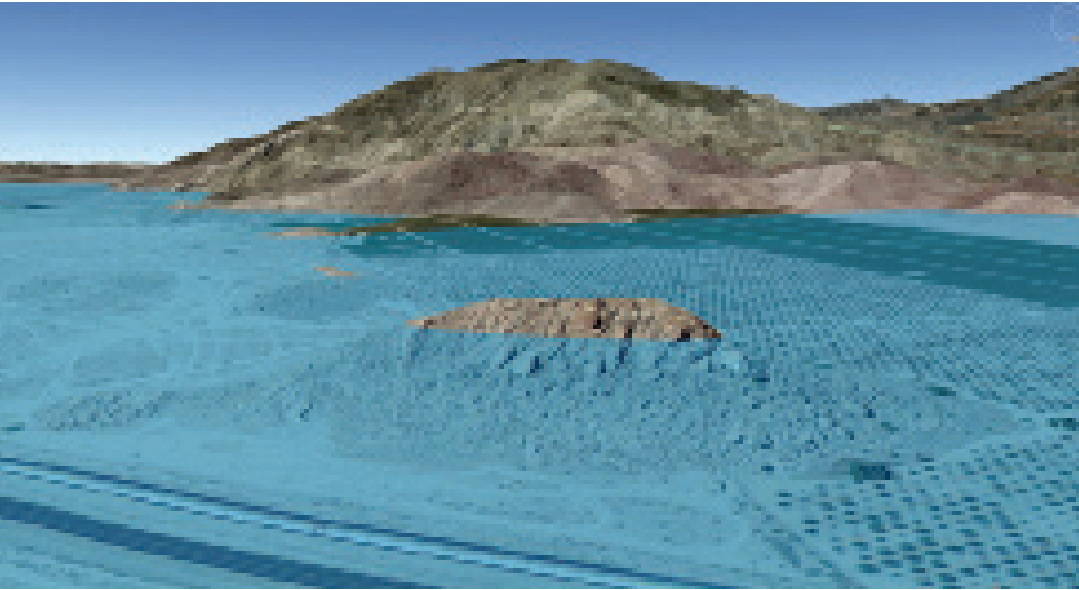
What previously covered that stark desert expanse is known as Ancient Lake Cahuilla, a huge freshwater body spanning, at times, more than 2,000 square miles and plummeting to depths

of more than 300 feet. The ancient lake would ebb and flow, shrinking, growing, and shrinking once again, century after century, until it dried up forever before the beginning of the 18th century.

Archaeological evidence has revealed that fish, shellfish, waterfowl, and marsh plants were likely harvested and consumed by early Native Americans at lakeshore sites. Fish traps — pointed rock arrangements where Cahuilla Indians may have herded fish — indicate that the earliest residents of the Colorado Desert hauled in catches that would have included razorback suckers and bonytail chub. The Cahuilla weren't the only ones to benefit from such bounty; the lake's vast size meant various Native American tribes could have entered the basin independently from several



THIS PAGE AND OPPOSITE: Travertine Point, near the Salton Sea, shows waterline marks left behind by Ancient Lake Cahuilla, which researchers estimate dried up approximately 400 years ago.



ABOVE: A rendering of Ancient Lake Cahuilla, a large body of freshwater that once filled the area now occupied by the Salton Sea; waterlines indicate the lake sometimes measured more than 300 feet deep.

directions. Peculiarities in ceramics, arrow points, and shell beads discovered on the northern and northwestern shoreline suggest the Cahuilla were present in this area, while the Kumeyaay and Cocopah most likely occupied the southern and southwestern shoreline. Since Ancient Lake Cahuilla's rise and fall was sporadic and the intervals between so lengthy, there's no indication that permanent

settlements ever sprung up around it. Native American response to any one recession likely repeated itself through the ages. In the abiding tradition of oral history, one generation made the next aware of the pattern of previous lake cycles. In truth, Ancient Lake Cahuilla came and went many times over hundreds of years, experiencing periods of activity and inactivity from 700 A.D. to the late

1600s. One of the reasons this unusual body of water came to exist at all is that in a remote geologic era, a great shallow depression formed, which modern researchers have named the "Salton Sink." This phenomenon occurred because the San Andreas Fault runs directly underneath the area, and the push-pull of two major tectonic plates created a trough. The water that came along to fill the trough arrived

courtesy of the Colorado River, which originates in the Rockies, heads south, and ends its journey in the Gulf of California (also known as the Sea of Cortez). However, prior to the Colorado River flowing in, the Salton Sink was part of the Gulf of California, reaching as far north as present-day Indio. In the late 1800s, geologist William P. Blake of New York, a graduate of the Yale Scientific School, was the first

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years. ... there
were times
when it was
here for a couple
of decades.

Douglas A. Barnum,
certified wildlife
biologist, USGS

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to explain the origin of the Salton Sink, to trace its ancient history, and to give a name to the great freshwater lake it had once held. Blake had been part of an exploratory group authorized by the U.S. Congress to discover a practical railroad route to the Pacific Coast. Traveling down through the San Gorgonio Pass to the Coachella Valley, Blake noticed the mark of the ancient sea that once filled



the basin along the base of the Santa Rosa Mountains. The ancient waterline mark, measured at 42 feet above sea level, is still visible in many places today. Blake was aided in his findings by the Cahuilla Indians, who told him their ancestors had once lived in the canyons above the lake and journeyed down to the water to catch fish, ducks, and other small animals. The Cahuilla told him the water had receded "poco a poco" (little by little). Once, they said, it came back in a rush, bolstering his theories

about the ancient lake's ebb and flow patterns. "There were times when Ancient Lake Cahuilla existed for thousands of years," says Douglas A. Barnum, Ph.D., a certified wildlife biologist with the United States Geological Survey. "We just don't have a way of tracking it back that far. There were times when it was here for hundreds of years; there were times when it was here for a couple of decades. There was clearly a presence of water here at some level that allowed for Native American use for decades at a time and basically for them

to migrate back and forth from the mountains to seek shelter from the temperatures, and back down again for food and forage." The Grand Canyon also played a role in the creation of Ancient Lake Cahuilla. Sediment from the torrential flows that cut the Grand Canyon over several million years filled the lower reaches of the Colorado River. A great deal of that sediment ended up in the Imperial Valley and created a delta, which in turn established a massive natural dam or barrier that isolated the Salton Sink, eventually cutting it off from the Gulf. That was the beginning of Ancient Lake Cahuilla. The isolated lake soon evaporated in the arid desert climate, but over time, the meandering Colorado River would occasionally break through the soft sediments and fill it up again. Sometimes Ancient Lake Cahuilla would cut its own channel to the Gulf and discharge its contents. These patterns persisted for hundreds of years and contributed to the fluctuating nature of the lake. The last incarnation of Ancient Lake Cahuilla was about 400 years ago. It is one of the many natural occurrences that have made their mark on the Coachella Valley, a region with a rich geological, tectonic, and indigenous past. Though the waterline marks are all that is left of this bygone lake, their presence serves as a steadfast reminder that nature is never static, though it might appear so in our own lifetime. What is now open desert was once an oasis teeming with life, and just like the generations of Cahuilla people who have thrived here for thousands of years, there is still much to be learned. ●

DIGGING DEEPER
Learn more about Ancient Lake Cahuilla by tapping in to these sources behind the story.

Ancient Fish Traps Near Salton Sea, a video produced by the California Indian Arts Association. Speaker: Jay von Werlhofer, 1999.

Ancient Lake Cahuilla – the Salton Sea, video recording of an Agua Caliente Cultural Museum's Spirit Keepers Lecture. Speaker: Jerry Schaefer, 2004

Ancient Lake Cahuilla's Fish Trappers by Ann Renker and John W. Balch, 1974

The Lost Ship in the Desert by Bob Difley, DesertUSA.com (online magazine, Borrego Springs, California), April 2001

The Periscope – a publication of the Coachella Valley Historical Society, 1995 edition

The Regional Consequences of Lake Cahuilla by Don Laylander (The San Diego State University Occasional Archaeological Papers, Volume One), 2005

The Salton Sea: An Account of Harriman's fight with the Colorado River by George Kennan (New York: The Macmillan Company), 1917

The Salton Sea: Yesterday and Today by Mildred De Stanley (Los Angeles: Triumph Press), 1966

Salton Sea Atlas (Redlands Institute), 2003