

Original on shelf in RM 206.

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Photographs by Joan Myers

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Salt Dreams

LAND & WATER IN LOW-DOWN CALIFORNIA

advantage of these great dry channels. They are available for all time and deep enough on each side of the valley to keep the land perpetually sweet.²

The channels were the New and Alamo rivers, which today carry a steady flow of irrigation drainage and municipal sewage to the Salton Sea. In 1907 and the years immediately following, however, no one considered that the bottom of the sink might become the site of a permanent sump. Valley leaders and government scientists generally agreed that the Salton Sea was "destined to disappear from the cutting off of its source of supply." And good riddance to it, they muttered. The lake was a reminder of the nightmare they had narrowly survived. The sooner it evaporated into the sky, the better they and all their neighbors might sleep. And so they promised themselves that the lake would soon be gone and that the river would not threaten them again: "There is no ground for fear of injury to any farm lands from this quarter. . . . It is certain as anything human can be that the farmers of Imperial Valley will not be disturbed again by the rise of the river. . . . There is in the Valley to-day, an absolute sense of security, and it is affecting prices and stimulating investments in all realty."³

Fortunes, along with crops, began to grow anew. The quarter million acres under cultivation by 1913 swelled to 360,000 acres five years later.⁴ The transformation of the region proceeded as fast or faster than anywhere else on the continent. From Hispaniola to Plymouth Rock and onward to the California coast, Europeans and their New World descendants had reworked the environmental character of large portions of North America in only a generation or two. But in Imperial Valley, they quickened their pace. A vast agricultural plain materialized from the desert in little more than a decade. But as the former wastelands bloomed, the swamps and marshes of the Colorado River delta commensurately dried up, and John Van Dyke's beloved "bottom of the bowl" remained submerged.

FEW PEOPLE thought much about either the delta or the Salton Sea in the first years after the flood. So certain was the U.S. government that the new lake would soon vanish that it made a gift of some of the land beneath it. In 1909 the Department of Interior reserved, in trust, ten thousand acres lying under the sea for the benefit of the Torres-Martinez Band of Desert Cahuilla Indians. The new "lands" added greatly to the size of the tribe's holdings, but of course they did so only on paper, for they could hardly be considered terra firma. Then again, neither could most of the land the tribe already controlled: between eight thousand and nine thousand acres of the existing reservation had been inundated by the Great Diversion.

The Torres-Martinez Cahuilla of 1909, like their five hundred descendants today, would probably not feel insulted to be called a "patient" people. But even Job might take exception to the predicament they have endured. Nine decades after the

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greater part of their land was flooded, and after the government bestowed its curious "gift" of ten thousand additional acres of flooded land, nothing has changed. Their land is still under water and they have been able to acquire no land to replace it. Members of the tribe like to joke, not without bitterness, about borrowing a boat and cruising out on the Salton Sea "to look at my land."

At first blush, the granting of a reservation beneath a sea might seem a cynical act. In this case, however, the evil of government resulted not so much from malice as from a nearly perfect absence of foresight and vigilance.

In the nineteenth century the Cahuilla people inhabited several dozen villages scattered through San Gorgonio Pass and the foothills and valleys of the Santa Rosa Mountains. Today they hold claim to ten small reservations, some of which nestle among the golf resorts of greater Palm Springs and the farmlands of the Coachella Valley. The word *coachella* derives from a variant of *cahuilla*.

The lands of the Torres-Martinez band lie farthest south of the Cahuilla reservations. Ancestors of the band probably inhabited the north end of Salton Sink since time immemorial. Presumably it was they who built the rock traps in the bluffs west of Mecca in order to capture fish from the receding waters of Lake Cahuilla. And it was they who entertained William Phipps Blake in 1853 with legends of earlier inundations.

In 1876 the U.S. government conferred on the band a reservation consisting of one section (640 acres) of land. In 1891 the government withdrew from the public domain almost 20,000 additional acres for the benefit of the tribe, but nearly half of this area was inundated by the floods of 1905–1907. Under the Indian policies of the day, these lands were to have become the farms that would support the tribe's transition to a more Euro-American style of life. For the farms to function, however, the tribe needed two things. First, they needed the newly formed Salton Sea to evaporate. Second, they needed a good supply of freshwater with which to leach salts from their prospective farmland and then to irrigate their crops. The superintendent of the Martinez Indian School notified authorities in the Department of Interior's Bureau of Indian Affairs that "a fine belt of artesian water" lay under certain lands that the sea had inundated.⁵ He recommended that the lands be reserved for the tribe in order that, when the sea finally evaporated, its members should have the water they needed.

The superintendent's recommendation became the basis for the additional reservation of twenty-two sections in 1909, which brought the tribe's total holdings to more than thirty thousand acres. The Cahuilla now presided over the nation's largest submerged Indian reservation.

And so the tribe, then and now one of the poorest in the region, waited for the sea to evaporate. At its greatest height, in 1906, the surface of the sea lay 195 feet below sea level—over 30 feet higher than today. The arithmetic of prediction was simple: given that the lake stood 80 feet deep and would evaporate at a rate of slightly less

than 6 feet per year, it should vanish in about fourteen years. (Percolation into the ground was rightly deemed negligible, owing to an impervious stratum of clay underlying the basin.) Allowing for the occasional winter storm and the in-flow of irrigation tailwaters at pre-flood rates, those who studied the matter predicted that the Salton Sea would disappear by 1923.⁶

But of course it did not. What the seers of the sink failed to take into account was the continued expansion of agriculture in Imperial Valley, as well as the reclamation of northward-draining lands in the Mexicali Valley, where 118,500 acres were being farmed by 1918.⁷ Although the level of the sea declined steadily from 1906 to about 1924, it was clear by 1920, if not sooner, that the sea had become a permanent feature of the landscape.

The agricultural empire that had formed in the Colorado Desert contributed water to the Salton Sea in three ways: as tailwater, or surface runoff from irrigation, as drainwater, which percolates through the irrigated soils and seeps into the drains, and as spillwater, which runs through the canal system and into the drains without being diverted onto a field. These flows, plus municipal discharges and runoff from storms, are the inputs to the sea, while evaporation is the only appreciable output. As the level of the sea rises, its surface area expands, increasing the volume of water that evaporates from it. At some point, if inflow remains steady, evaporation will offset inflow entirely and the level of the sea will stabilize. If inflow decreases, the reverse occurs. The sea surface falls, the sea's area shrinks, and total evaporation diminishes until it comes in balance with inflow again. The level of the sea has ranged between 220 and 235 feet below sea level for most of the period from 1924 to the present.⁸

THE EVIDENT permanence of the sea became an issue of considerable interest to the Imperial Irrigation District not long after it was formed in 1911. Following the collapse of the California Development Company, the affairs of the valley became more chaotic than ever. Water deliveries failed as mutual water companies warred with each other and with Southern Pacific, which controlled the remnants of the CDC. The federal Reclamation Service, never popular with valley settlers, watched for a chance to step in and take over, a prospect that few in the valley welcomed.

Hence the referendum in June 1911 by which voters in Imperial County approved the organization of an irrigation district. Once chartered, the IID set about acquiring the CDC's water delivery and distribution system. The task was long delayed, however, by the maze of litigation arising from the Great Diversion. Finally, in 1914, the IID voted a bond issue of \$3.5 million, of which \$3 million went toward purchase of the CDC's former assets, including its Mexican property, and \$500,000 remained available for improving the canal and levee system.⁹

Over the next decade, the IID bought up the valley's remaining mutual water companies and consolidated its position as the most powerful political and corpo-

rate entity in the region. In about 1920 it turned its attention toward the northern limit of its territory, to the lake that refused to go away. The IID began buying railroad and other private lands that lay below the sea, and it soon also approached the Department of Interior, which was responsible for the nation's public domain, to ask that it be granted an easement over the public lands that the lake had inundated. Federal attorneys, however, were reluctant to convey permanent rights in the submerged lands to the IID and proposed an alternative: the federal government, by executive order of the president, would set aside the submerged lands as a permanent drainage reservoir, a sump. IID agreed. The first withdrawal was made in 1924 by President Coolidge; it was supplemented by a second withdrawal in 1928 by President Harding. The explicit purpose of both actions was to provide an "evaporative pan for surplus and waste water from Imperial Valley irrigation development." Effectively the two executive orders included all the federal land in the basin up to an elevation of -220 feet.¹⁰

Unfortunately, no one at the Department of Interior troubled to reconcile these two withdrawals with the earlier withdrawal of a reservation for the Torres-Martinez Cahuilla. Certainly someone should have noticed. In the management of the nation's public domain, the government bears a certain periodic obligation to produce maps, and cartographers within the Department of Interior had duly recorded the 1909 reservation, as well as the formerly dry 1891 reservation lands that now lay beneath the sea. One might wonder who was minding the business of the department and its constituent agency, the BIA.

ONE DAY IN 1990, Albuquerque attorney Tom Luebben received a phone call from a stranger in southern California. The caller introduced herself as Mary Belardo and said she was chairman of the Torres-Martinez Desert Cahuilla Indians. She had just received a letter from the federal government, which she did not understand. The letter notified her that the government had awarded the tribe a grant of \$140,000 for undertaking hydrological studies. Neither Belardo nor anyone else in the Torres-Martinez community was accustomed to receiving official correspondence from Washington, D.C., let alone notification of six-figure grants. She had heard from officials at another tribe that Luebben was pretty good at representing Indians. Would he be interested in helping the Torres-Martinez Cahuilla find out what the letter was about?

Luebben made some calls and learned the basic elements of an improbable story. Eight years earlier, in 1982, an attorney representing the U.S. Department of Justice had filed suit in the Southern District of California on behalf of the Torres-Martinez Cahuilla against the Imperial Irrigation District and the Coachella Valley Water District (CVWD).¹¹ The suit alleged that the two irrigation districts had trespassed on Cahuilla property for many years by storing their drainage water on the reservation. The suit further held that the irrigation districts owed payment to the tribe for