

100 YEARS

OF

“SWEET WATER”

1888 - 1988

On The Cover
*Fanciful rendering
of water works of
San Diego Land &
Town Company
Circa 1887*

100 YEARS OF “SWEET WATER”

*“The turning on of the water
from the Sweetwater Dam at
National City marks the virtual
completion of an enterprise, the
importance of which can hardly be
overestimated.”*

*The San Diego Union
January 26, 1888*

Written by Leslie Trook
Published by The Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA

BUT THE GREATEST OF THESE IS WATER

SWEETWATER.

Completion of National City's Great
Water System.

ENTHUSIASTIC CELEBRATION.

Six Thousand Strangers Participate
in the Great Event.

Honor to Whom Honor is Due—
Frank A. Kimball, Col. W. G. Dickinson
and Warren C. Kimball Given the Credit They Deserve—
Water Turned On and the System
Pronounced a Success Both as to
Quantity and Quality—A Magnificent
Display of Fruit From the
National Ranch The Speeches.

National City Record, April 26 1888

It was Thursday, April 19, 1888, a big day for National City. Two slim columns of water, rising 70 feet into the air, served as a beacon for the people arriving in a steady stream. Men dressed in their finest double-breasted suits, and women, in their long, bustled gowns, carrying parasols, walked across dirt roads and newly completed train tracks to the improvised seating in front of the speakers' platform.

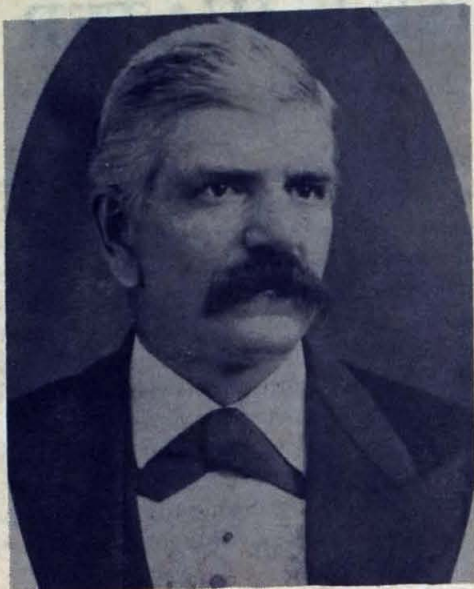
Although many of the celebrants came to town by horse and buggy, many more came by rail. "Train after train came sweeping in with expectant faces at the car windows," reported the *San Diego Union*. A.L. Storey and H.L. Babcock had opened their Belt Line Motor Road from Coronado for the first time that day, bringing people from across the bay. And down from San Diego came the trains of the National City and Otay Railroad, "rushed through as rapidly as possible, every car loaded to the utmost."

The crowd, estimated at from three to five thousand people, depending on which daily you subscribed to, arrived from as far away as the East Coast to transform a dusty business roadway into the scene of the largest celebration in local history: The Sweetwater Dam, after one false start and two design changes in mid-construction, had at last been finished.

Waterworks, rather than fireworks, marked this celebration. The twin streams of water shooting into the air in front of the International Hotel paid homage to the phrase, "water, water everywhere, and lots of it to drink." Under the supervision of A.L. McCoartney, the foreman of the pipeline, a group of men used two-and-a-half-inch hoses with one-inch nozzles to maintain the spectacular sight. The water sprayed continuously throughout the afternoon, "just to prove there was plenty of it."



April 19, 1888. The crowd gathers at the speakers' stand.



COL. WILLIAM DICKINSON

The dam was commenced November 17, 1886, and completed April 7, 1888—seventeen months. In the meantime 65 miles of wrought iron pipe has been laid, and water been supplied to this growing city to its farthest extent, and being introduced to all the olive and orange orchards and vineyards within its reach. In the large building west of the platform you will see as fine a display of citrus fruits as can be raised in America, all of which have been raised on National Ranch, without the aid of this water system.

Another year from now these same parties propose an exhibition from their same ground with this Sweetwater applied to their growth. If this result to-day is shown, what may we expect in 1889? Whoever looks upon it, will he ever doubt that San Diego county can fail to capture the further premiums of the world? Let Los Angeles, Riverside, San Bernardino and Florida, take up the glove.

*From his speech at the Celebration
April 19, 1888*

Although the water display attracted the crowds, it was the inaugural performance of the National City Band, 14 members strong, that directed those crowds to the shaded, makeshift speakers' platform for the official opening of the day's affair. The music of the band, along with that of the Coronado orchestra, served as an overture for the numerous speakers scheduled to ascend to the podium.

Frank Kimball, whose vision had led to the completion of the dam, was the first speaker. He was followed by Colonel William Dickinson, General Manager of the San Diego Land and Town Company, who had taken Kimball's vision and made it a reality. Commenting on the abundant fruits on display across the street, all of which had been grown without benefit of a fully developed irrigation system, Dickinson asked, "If this result to-day is shown, what may we expect in 1889?"

The question was answered as each speaker took his turn. From Father Horton to A.H. Isham, the message was clear—water supply was the gateway to National City's and the bay region's prosperity. Judge Puterbaugh spoke for everyone when he said, "While five years ago the town was dead, it is now ringing with the hammer. Water is king."

After the speeches ended, the people were invited to the new warehouse of Isham, Gordon, and Co., where that morning a "hundred willing hands" had turned the rough, unfinished building into an exhibition hall laden with fruit and flower displays from the acreage planted on the National Ranch. "The hall . . . was transformed into a veritable Eden," reported the *National City Record*. The air within was redolent with the scent of 35 varieties of roses and other flora which blended with the smell from orange and lemon displays to produce a sensory delight.

The "pièce de résistance" of the whole show was a replica of the Sweetwater Dam. Banks of roses, fuchsias, orange blossoms, marguerites, and Spanish bayonets formed, according to the *Union*, a "perfect facsimile of the great dam."

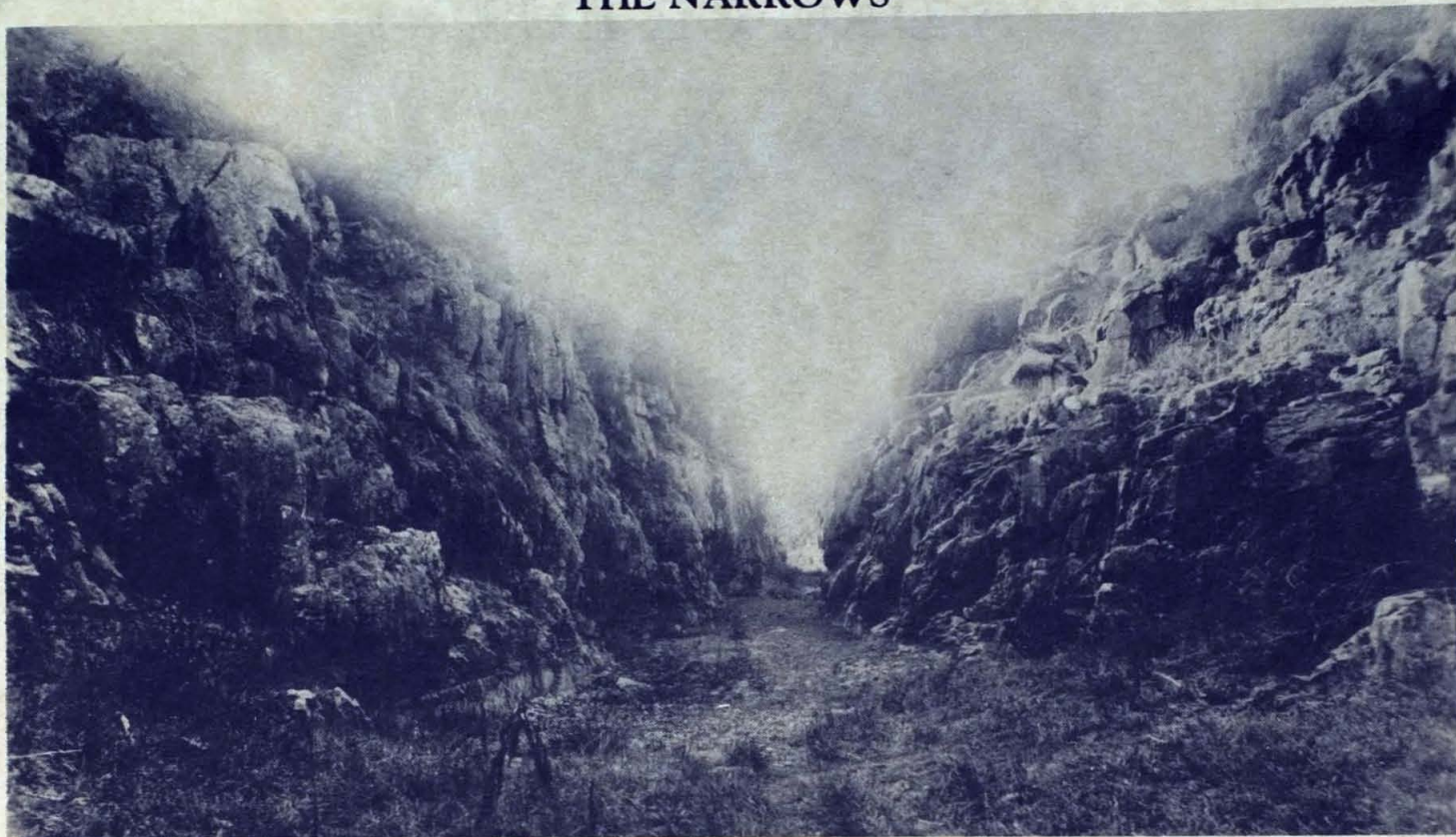
As night fell and the exhibit hall emptied, people continued the celebration in Horticulture Hall. There a grand ball capped the day-long tribute to the "progressive spirit and liberal expenditure of money that resurrected a dead town and made it a live and prosperous city."



"Train after train came sweeping in with expectant faces at the car windows."

San Diego Union: Yesterday was a great day at National City. "Climate. Soil and Water, but the Greatest of These is Water," was the legend flaunted from the wall of the room where the splendid exhibit of fruits was displayed. The good people of National have long been enjoying their climate and soil, but yesterday they rejoiced at the water that sprayed from the nozzle of the testing hose even as the thirsty Israelites at the crystal tide that gushed from the smitten rock. There was good music, a big crowd, good speeches and a good time. The Kimball Brothers, the pioneers of the great National ranch were in a very happy frame of mind. They have lived to see the grand fruition of their toil and hope and faith.

THE NARROWS



The finest water power site: This was where Schuyler would build the Sweetwater Dam.

KIMBALL'S VISION

What National City was celebrating on that April day was the realization of a dream Frank Kimball had nurtured since the day he rode to the northwest corner of Rancho de la Nacion and beheld the "finest water power [site] that I ever saw in my life." That site was a rocky gorge of the Sweetwater River where 20 years later the dam would be built.

Kimball had come south from San Francisco, where he and his brothers, Levi and Warren, had established a contracting business. Looking for a homestead in a milder climate, Kimball traveled to San Diego and found it. On June 18, 1868, the Kimball Brothers bought 26,632 acres of land for \$30,000 from San Francisco banker Francois L.A. Pioche. Rancho de la Nacion, long used by Spanish and then Mexican ranchers for cattle pasture, had now been sold to a visionary who saw not only the value of the land but the need for a reliable water supply in order to develop it.

On May 26, 1869, Frank, Warren, and Levi Kimball formed one of the pioneer water companies in San Diego County. The Kimball Brothers Water Company supplied the 35 residents of the Rancho with water drawn from wells or taken directly from the flow of the Sweetwater River. The brothers then began to buy the water rights within the river's watershed as the first step toward the construction of a great reservoir.

To lure buyers to the area, Kimball knew that along with a good water supply he needed a railway connection with the East. Shortly after acquiring the ranch, he began negotiations to bring a railroad to San Diego, but it was not until 1880 that he was able to entice the Santa Fe Railway, by giving them 10,000 acres of the National Ranch, to build a San Diego connection to their transcontinental route.

Organized by Kimball in July 1880 as a subsidiary of the Santa Fe, the California Southern Railroad opened service in 1885 between San Diego and the East via its connection to the Atlantic and Pacific Railroad at Barstow. The new rail connection added impetus to the land boom that was just getting underway in San Diego. That land boom in turn led to the realization of Kimball's dream—the Sweetwater Dam.



FRANK KIMBALL

THE SWEETWATER DAM.

Ceremonies at the Completion of the Great Waterworks.

The completion ceremonies at the Sweetwater dam took place yesterday afternoon. The last stone was laid by the oldest employé on the works, Mike Logan, who went to work the first day with Hamilton & Burkhart, contractors for the excavation, in November, 1886. He has worked faithfully ever since, and has not lost a day from that time to the present. More remarkable still, he keeps every check he has received, and has not drawn a cent of his money during the whole time.

As the last stone was put in place the American flag was run up on the flagstaff surmounting the water tower, and all gave three hearty cheers for the dam. The employés then proceeded to "can" their chief in an appropriate way by presenting an ele-

gant gold-headed ebony cane, handsomely inscribed as follows:

"Presented to J. D. Schuyler, Chief Engineer Sweetwater Dam, by the Employés. April 7, 1888."

The ceremonies were improptu, and with so little previous preparation that none of the other officers of the company were aware of what was going on. The dam is now completely finished, and camp was broken up last night.

At a meeting held in Temperance Hall, National City, last night Colonel Dickinson announced the completion of the dam and that that it seemed advisable to hold an appropriate celebration in National City. He suggested also that steps be taken in the matter. Messrs. J. D. Griffith, S. N. Stevens, Dr. Risdon, F. A. Kimball and William Burgess were appointed a committee to consult with Colonel Dickinson in regard to celebrating the event.

San Diego Union, April 8, 1888

A DAM OR BUST



Because California law forbade railroad companies from dealing in real estate, the lands and the water rights given to the California Southern by Kimball were deeded to a newly formed corporation called the San Diego Land and Town Company.

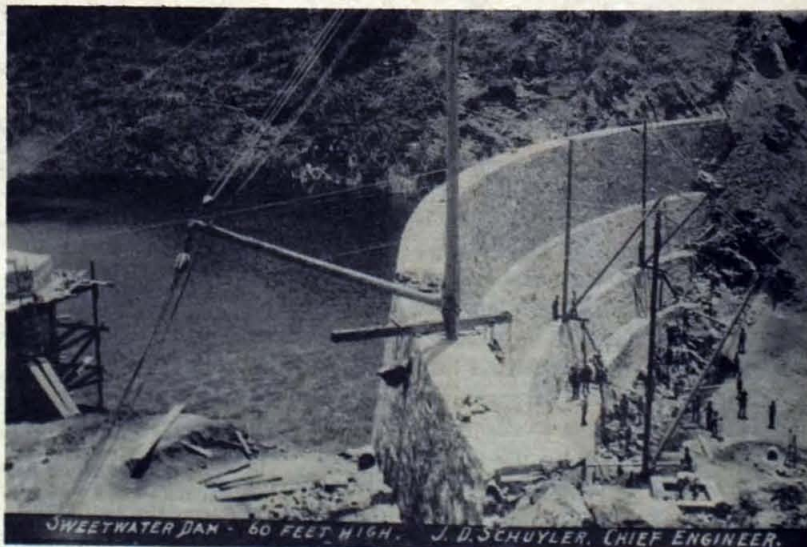
It was the San Diego Land and Town Company's desire to take advantage of the land boom, by obtaining a quick water supply to hasten land sales, that caused the dam to be planned without the usual preliminary studies. The results were predictable. In a January 2, 1887 journal entry, Kimball wrote, "Am thoroughly disgusted with the entire management and the method of construction and I believe the dam cannot stand. Half the time is being spent breaking large rocks into small pieces. One-half more cement is being used than necessary and the earth used is totally unfit for the purpose."

The Land and Town Company's managers apparently saw it the same way. Two months and \$35,000 after work began, they fired the supervising engineer, F.E. Brown, and turned the project over to James Dix Schuyler, Assistant State Engineer. Schuyler was directed (as he later wrote) to "design a suitable structure and execute its construction." Brown's design had been patterned after the Bear Valley Dam in the San Bernadino Mountains. It was to have been a thin, 50-foot-high masonry wall (a mere 10 feet thick at its base), reinforced on its upstream side by a large earthen bank. Schuyler's radically different design called for a massive, 35-foot-thick concrete and stone monolith, much stronger than Brown's would have been. To keep the costs down, Schuyler used the masonry already

SWEETWATER DAM, NATIONAL RANCH, CALIFORNIA

*Constructed 1886-88 and owned by
the San Diego Land and Town Company*

Height of Dam to floor of roadway	90 feet
Length of Dam at top	340 feet
Length of Dam at base	100 feet
Thickness of masonry at base	46 feet
Thickness of masonry at top	12 feet
Area of watershed	186 square miles
Area of reservoir	721.86 acres
Capacity of reservoir	5,871,310,000 gallons
Elevation of top of Dam above sea level	215 feet



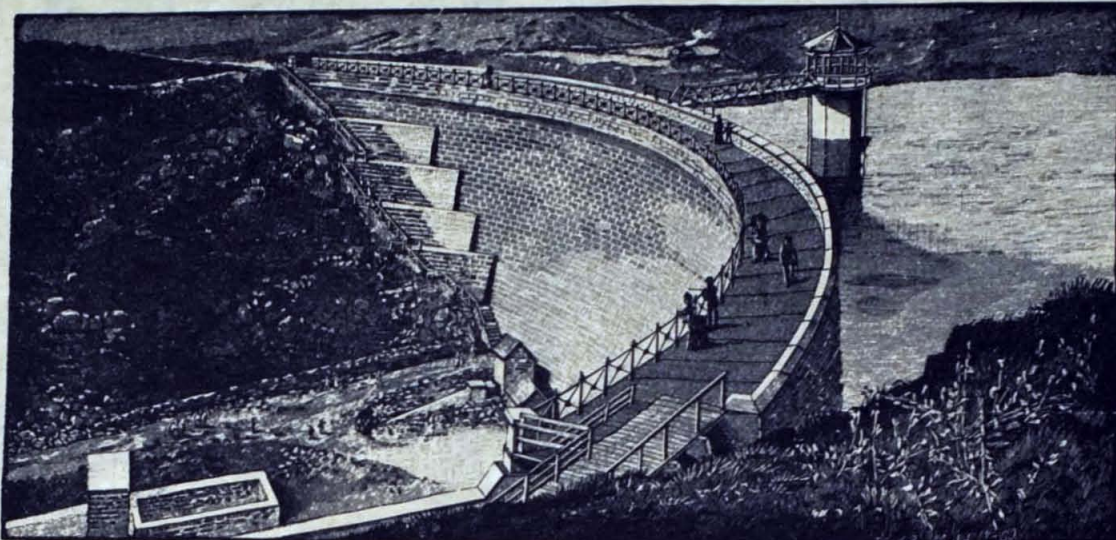
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40,000 ACRES
OF
CHOICE FRUIT AND FARM
IRRIGATED LANDS

IN
20 AND 40 ACRE TRACTS.

"CHULA VISTA," near National City, on Motor Street Railway line, five-acre tracts for HOMES, with ample supply of pure, cheap soft water. Fine ocean and mountain view.

Business and Residence property in San Diego and National City. Circulars cheerfully furnished on application.



"Sweet Water Dam," built by San Diego Land and Town Co.

Continued from page 6

1888 - Frontispiece from San Diego Land and Town Company investor's prospectus

in place, entombing it within the new structure.

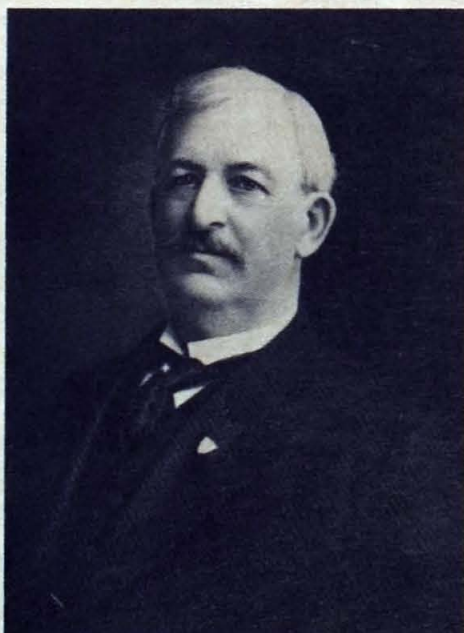
Under Schuyler's dynamic leadership the work went fast, and by the beginning of June 1887 the dam was finished; Schuyler had built it to a height of 60 feet, 10 feet higher than originally planned. In the meantime, however, Schuyler's surveyors had been busy, and calculations based on their work showed that a 90-foot-high dam would impound five times as much water as a 60-footer. Armed with that information, Dickinson traveled to the Land and Town Company's Boston headquarters and persuaded the company's directors to authorize the additional funding needed to take the dam up to 90 feet.

Schuyler was ready. He had anticipated the extension and had terraced the back of the dam "in three steps, to give an opportunity of bonding the new work to the old." Construction continued apace. The stone was quarried from a 100-foot-high cliff located 800 feet from the construction site and was hauled up to the site in wagons and stoneboats. At the site, the stones, some weighing as much as four tons, were lifted into position using horsepowered wooden derricks.

Most of the manual labor was done by Chinese workers. Other workers were in short supply because of the land boom. It was a time, Schuyler wrote, when labor was "independent and restless on account of the general feverish excitement." Boom wages and prices made the overall cost of the dam higher than originally expected, although Schuyler cut costs wherever he could. He insisted on using horses instead of steam engines to power the derricks and devised a gravity-powered tramway for delivering mortar to any place along the width of the dam. He cut costs, but not at the expense of safety. During the 16 months it took to build the dam, not one worker was killed or seriously injured.

Upon its completion on April 7, 1888, the Sweetwater Dam stood 20 feet higher than any other arch masonry dam in the United States. What had started out as a modest 50-foot dam had ended up a 90-foot marvel of engineering.

WATER'S KING ENGINEER



James D. Schuyler

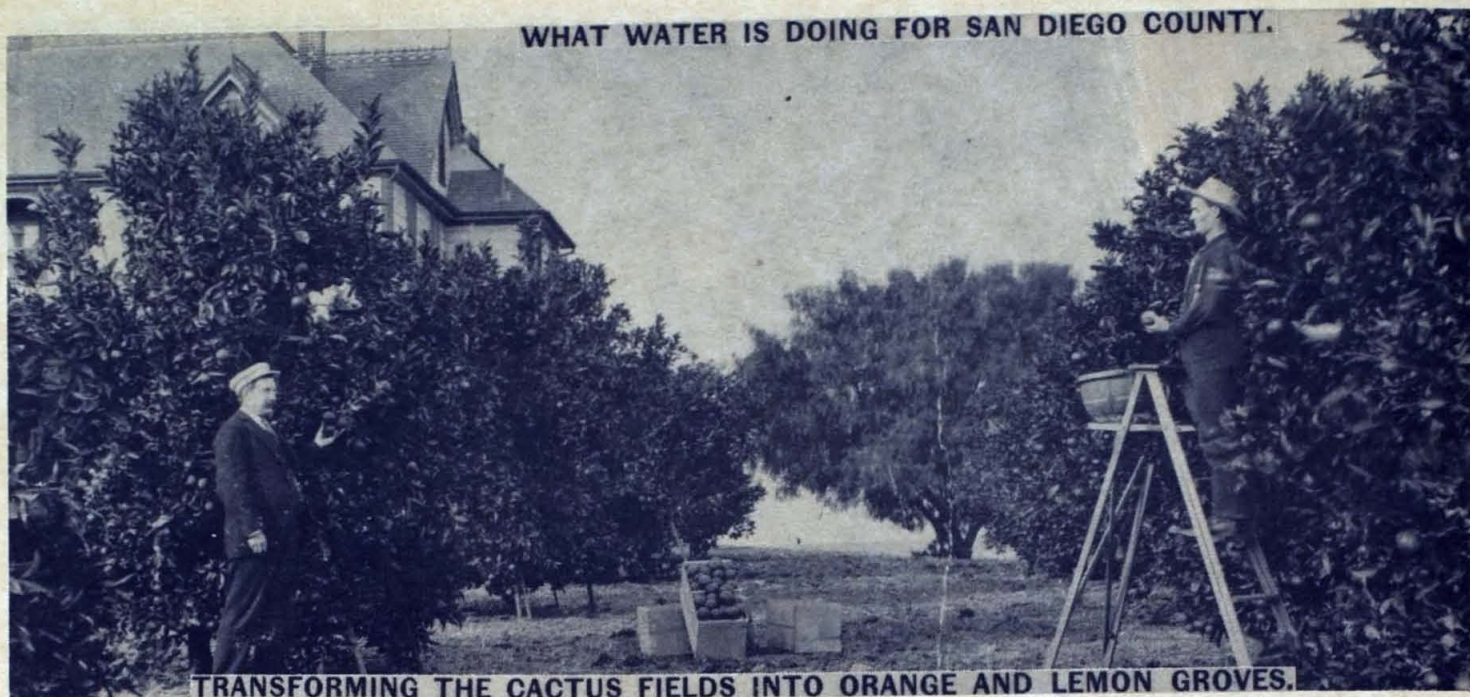
James Dix Schuyler was an impressive man, in both physique and mental acuity. Considered one of the foremost engineers of his time, Schuyler began his career, according to a 1909 issue of *Out West Magazine*, "locating the western end of the Kansas Pacific Railway, in the days when it was necessary to fight the Indians as well as combat the elements of nature in a wild country."

Schuyler began to specialize in water when, in 1878, he became California's Assistant State Engineer in charge of irrigation investigation. It was in that capacity that he was sent to inspect the work at the Sweetwater construction site, which brought his expertise to the attention of the Land and Town Company.

One of the greatest successes of his career saved the City of Los Angeles millions of dollars. As one of three consulting engineers to report on plans for the Los Angeles aqueduct, Schuyler recommended a change in location that eliminated some 25 miles of costly construction.

Whether overseeing the construction of the highest dam in the state (Hemet Dam in 1890-91) or the largest irrigation system in the United States (on the Snake River near Twin Falls, Idaho), Schuyler tackled assignments of huge magnitude and skillfully succeeded.

WHAT WATER IS DOING FOR SAN DIEGO COUNTY.



TRANSFORMING THE CACTUS FIELDS INTO ORANGE AND LEMON GROVES.

LOTS OF WATER BUT NO MONEY

The completion of Sweetwater Dam brought with it the promise of prosperity. An assured water supply was the key to the development of the low mesa at the southern end of the National Ranch. Colonel Dickinson had been hired by Land and Town in 1886 to develop those lands. Once the water supply and transportation were secured, professional town planner Dickinson embarked on a project to bring more permanent settlers to the area. He wanted to create a suburban community of small farms and hoped to attract solid citizens who were looking for a "little land with water."

Dickinson subdivided 5,000 acres into 40-acre blocks of five-acre homesites, and advertised them in the local newspaper: "In order to secure the very best people and a nice class of houses [The San Diego Land and Town Company] will not sell a lot to any one unless the party will agree to build a neat, tasty, modern house that will cost not less than two thousand dollars."

In the midst of all this promise and attractive advertisement, the land boom collapsed. Much of the land buying had been speculative—"to make quick money and return"—according to the Land and Town's General Manager's Report of 1888. To attract a more stable class of buyers, the company introduced a new policy of land lease/sales. San Diego Land and Town would supply 20-acre tracts with water and furnish enough lemon and orange trees to cover half the acreage. After five years of tending the orchard, the tenant would receive title to 10 acres. The other 10 acres would then be offered for sale by the company.

The water distribution system serving the area spread out in a network of more than 65 miles of pipeline. According to Schuyler "wrought iron pipe, covered with masonry laid in lime mortar, plastered in cement" originated at the dam and followed the valley for five miles before rising to the top of Chula Vista Mesa. At the corner of Fourth Avenue and E Street, Chula Vista, the pipe divided into two twenty-four-inch mains, one running south to Chula Vista and the other running north to National City.

The reservoir and distribution system, claimed Schuyler in a paper presented in 1888 to the American Society of Civil Engineers, added "a value of \$1,500,000 to the principal tract of five thousand acres [Chula Vista] . . . and another million to the value of the town property in National City, and lands in its immediate vicinity."

But all this attractiveness could not make up for the scarcity of money that slowed down sales and, in September 1895, seven years after the collapse of the real estate boom, the San Diego Land and Town Company was forced into receivership.

N. C. AND O. RAILROAD



The first transportation system south of National City, the National City and Otay Railroad served to carry prospective land buyers to the outer limits of the National Ranch. The railroad took people as far east as San Diego and as far south as Tia Juana. Financed by the San Diego Land and Town Company, it was completed in 1888 in time for the celebration of the dam. Within the first 11 months of its operation 422,000 people had ridden the National City and Otay line.

WE HAVE SUB-DIVIDED

5,000 Acres ~~Joining~~ National City

on the south, sloping from the Bay of San Diego back to the foot hills, into five acre lots to be used solely for suburban homes.

In order to secure the very best people and a nice class of houses, we will not sell a lot to any one unless the party will agree to build a neat, tasty modern house that will cost not Less than Two Thousand Dollars.

—O THIS TRACT IS CALLED O—

CHULA VISTA!

(MAGNIFICENT VIEW.)

The streets have all been graded and ornamental evergreen trees have been planted on each side of them.

PURE WATER From the SWEETWATER RESERVOIR



The Sweetwater Dam was one of San Diego County's earliest tourist attractions.

TOO MUCH — TOO LITTLE — TOO MUCH

The company may have failed in 1895 but the dam it had built did not, though it had a fine opportunity to do so. On January 17 and 18 of that year, a rainfall of more than six inches in 24 hours caused a runoff of nearly three times the capacity of the reservoir. Water poured over the dam for 40 hours. The volume was so great that the water's crest at times topped the dam's parapet by as much as two feet. The dam was subjected to a test, according to Schuyler, "beyond any previous calculation or expectation." But it held. Pipes needed to be replaced, but no damage was done to the dam's masonry.

Since it had proven that it had the strength to hold an extra two feet of water, the dam's height was raised two feet. The spillway was also enlarged to enable it to handle a volume of runoff equal to that generated by the 1895 storm. The repairs, completed under the direction of Chief Engineer H.N. Savage, with Schuyler acting as consulting engineer, cost \$30,000.

Just two years after the flood, the opposite in weather extremes began—the drought of 1897-1904. By 1899, the Sweetwater Reservoir was empty. In desperation, the new San Diego Land and Town Company (the original had been reorganized in 1897 as a Maine Corporation) installed 17 pumping plants, drawing water from over 200 wells; additional well water from Jamacha Valley was transported by miners' troughs. Unfortunately, the water from the wells was not very good. A resident at the time, Fannie Thelan, remarked that "what water there was contained so much sulphur and alkali that the orchards and all other vegetation were injured or completely ruined."

In 1904 the drought ended. By now the San Diego Land and Town Company had undergone another change. It had separated in 1902 into three companies—Sweetwater Water Company, San Diego Land Company, and San Diego Fruit Company. The dam, water supply, and water rights came under the control of the Sweetwater Water Company. Attempting to offset the extremes of weather conditions, the Sweetwater Water Company raised the dam to a height of 110 feet during the years 1910 and 1911. At the increased height, the reservoir would take longer to fill in very wet years and longer to empty in very dry ones. The increase in height, however, was not all solid masonry: At the north end of the dam there was a section 90 feet long and 20 feet high composed of earth and rock reinforced by a 30-inch-thick concrete core wall. It was a potential weak spot.



Sweetwater Dam. Reservoir Pumping Plant. 1910. 1911. 1912. 1913. 1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 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SWEETWATER DAM IS SAFE OTAYS OUT

Bulletin:—Both Upper and Lower Otay Dams were carried away by the floods, according to authoritative report received Friday evening. Great loss of life and property in the Otay Valley resulted. No details are obtainable.

Bulletin:—Water will be pumped into the Sweetwater mains from the Sweetwater river, but it must not be used without boiling. The water stood at the 78-foot level in the Sweetwater dam Friday afternoon. More than a mile of main is washed out and some weeks will be required to make repairs. Repairs will be started soon at the reservoir.

DROWN IN FLOOD WATERS

GREAT DAM IS SAFE

ELECTRIC SERVICE

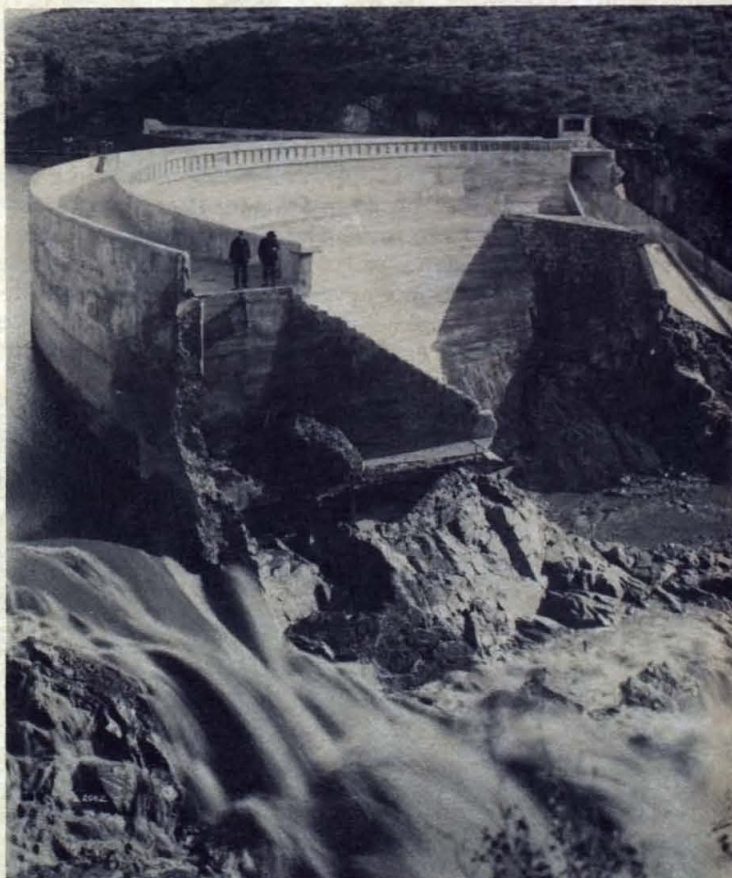
Just as the original structure had had to face its trial by flood, so the new structure would have to also.

On January 14, 1916, the rains came again. Over a period of 14 days, six inches of rain fell at the reservoir. Rainfall was even heavier in the upper watershed. The reservoir filled rapidly. Water reached the dam's top at 3:00 p.m. on January 27 and began pouring over the parapet. At the flood's crest, a wall of water three-and-a-half feet high was cascading 18 million gallons a minute onto the valley floor.

The rampaging water made short work of the 90-foot earth and rock extension, washing it completely away. And it didn't stop there. It eroded the rock abutments at both ends of the dam to 40 to 45 feet below the top of the parapet, leaving the upper portion of the dam standing alone like a huge monument, with the floodwaters rushing by on both sides. The total runoff for the entire flood was estimated at 46 billion gallons of water.

While one dam was standing, more or less, another was failing—the Lower Otay. The same engineer who built the Sweetwater Dam had reservations about the rockfill construction of the Lower Otay Dam, which he had not built. In his text on dam constructions, Schuyler said, "whether there may be grounds for regret... cannot be known until the stability of the structure is fully tested by the lapse of time." In January 1916 the time lapsed. Full of water, the Otay Dam burst like a bubble. Shortly after 6:15 on the evening of January 27, 13 billion gallons of water swept over the fields, livestock, and homesteads of Otay Valley. The agriculture of the valley was destroyed, and 21 people were reported to have lost their lives. There may have been more because the valley residents were primarily Japanese vegetable gardeners, some of whom may never have been included in the census. John Boal, General Manager of San Diego Land and Town Company, wrote in his diary that the National City and Otay Railroad tracks were washed out and for two days all means of communication were gone except by bay boats.

Ironically, in the midst of an abundance of water, there was a shortage of water to drink. For almost three weeks the area lived without a proper water supply. It would eventually cost close to \$146,000 to strengthen the Sweetwater Dam against future floods and to reconstruct its pipelines. But the dam had held, and the arrival of the 1920s would find its reservoir filled to capacity and serving a population nearly double that of 1910.



January 30, 1916



Compliments of CHAS. M. HATFIELD

HATFIELD, STOP THE RAIN!

With credentials of successful past experiments at making rain in hand, Charles Hatfield came to town in January 1916. The city of San Diego had hired him for \$10,000 on a "no rain-no pay" basis to fill Morena Reservoir.

To earn his \$10,000 Hatfield built four rain towers of rough wood on top of Laguna Mountain and began to work his magic. Carrying buckets of water from the reservoir to evaporation pans on top of the tower, he and his brother, Joel, mixed their secret chemicals (thought to be zinc and hydrogen) to produce clouds of vapor, "like fumes from a volcano."

The vapor clouds soon turned into rain clouds. The rain began to fall and continued to fall, and those fumes from a volcano became a monstrous storm. The reporters who at first had lauded Hatfield's feat began to yell to him in his tower. "They want you to make the rains stop."

The rains did eventually stop, after causing the biggest flood in San Diego history. The Morena Reservoir was full and Hatfield was elated. He went into town to collect his fee, but San Diego refused to pay him. If he claimed responsibility for the rain, the mayor said, he would also be liable for the millions of dollars in damage suits that could be filed against the city because of that rain.

The flood that some called "Hatfield's rains," the judge who tried his case called an act of God. Hatfield was forced to leave without collecting his \$10,000.



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EXPANSION

The population increase in Chula Vista and National City, from 2,333 in 1910 to 4,297 in 1920, brought with it an increased demand for water. Chula Vista had incorporated in 1911 and because of San Diego Land and Town Company's agriculturally oriented sales policy, that city's livelihood came primarily from its thirsty lemon orchards. Celery was a highly profitable second crop. National City's olive groves and Sweetwater Valley's dairy farms and citrus orchards added to the ever-increasing demand upon the existing water supply. As the need for water approached the system's 5,000-acre service area capacity, the necessity for expanding the water supply became apparent.

The National City News

Continuing the NATIONAL CITY RECORD, established September 23, 1893

VOLUME XV*

NATIONAL CITY, SAN DIEGO COUNTY, CALIFORNIA, FRIDAY, FEBRUARY 4, 1921

NUMBER 56

SWEETWATER SYSTEM OFFERED FOR SALE

The owners of the Sweetwater Water Corporation were not willing to invest the necessary capital. In 1920 the company offered itself for sale to the public. On December 20 John Boal made his offer. He gave as reasons, reported *The National City News*, "that the owners were investors only and not in any sense operators; that the corporation lands were now very largely distributed by sale to individual owners and were not in any way connected by ownership with the water system."

The issue of public ownership had been raised earlier, in 1902, when William Smythe addressed Chula Vista residents on the principles of the California Construction League. Smythe asserted that "the only ultimate solution of the water question is the public ownership of irrigation systems." Now, 18 years later, the public had its opportunity.

In response to Boal's offer, a committee of five prominent citizens was formed to investigate the feasibility of public ownership. A ten-month campaign to buy the system began in February 1921. Major opposition arose, not because of the \$850,000 sale price, but because of the inability of the existing system to adequately service its land. The opposition point of view was voiced in the *National City Record* when, on April 22, E. Thelan asked:

What is the object of forming an irrigation or water district of 13,000 acres when we have only water enough to supply a small part thereof, and when we have no resources in sight anywhere to develop more? To my mind it is a wildcat proposition which should be rejected.

And rejected it was by a three-to-one vote in December 1921, with only Bonita voting in favor. Six years later the company was sold to the same group whose engineers had been hired to appraise the water system for the proposed 1920 sale. In 1927 Loveland Engineers, under the presidency of Chester Loveland, acquired the Sweetwater Water Corporation—the first of several public utilities the Loveland group would own.

PROPOSITION SUBMITTED TO CITIZENS' COMMITTEE

Statement Read by Chairman of Investigators Says:
"Time Has Come When It May Be Well to Form
a District and to Acquire the System if this Can
Be Done on Favorable Terms."

On December 20, 1920, John E. Boal called in a room full of representative water users residing within the district served by the Sweetwater Water company and announced that the present owners of the property were determined to sell the system. He gave as reasons, among others, that the owners were investors only and not in any sense operators; that the corporation lands were now very largely distributed, by sale, to individual owners and were not in any way connected by ownership with the water system. The advisability of public ownership was discussed prior and then by this meeting and at its conclusion a committee consisting of R. C. Allen of Bonita, J. H. McElloch and Thomas J. H. McKnight of Chula Vista, Oliver Bower and E. L. Bullen of National City were appointed on investigation.

This committee elected R. C. Allen chairman and E. L. Bullen secretary and held several meetings between December 29 and January 31. On the latter date it called a meeting of the original body, with others, at the K. P. hall in National City, reported that the best price obtainable was \$850,000 and recommended that the question be submitted to the citizens residing in the district. The original price asked was one million dollars.

People Defeat District

	For	Agst.
National City, Pre. 1	67	495
National City, Pre. 2	23	192
Chula Vista, Pre. 1	46	100
Chula Vista, Pre. 2	136	196
Bonita	82	25
Otay	4	75
Ex-Mission	7	108
Totals	365	1191



MOUNTAIN SWEET WATER

At the Eastern ridge of South Cuyamaca Peak the river has its source "in some cold springs near an old Indian village called Japatai." An Indian legend tells of Moto Pitl Pit, an Indian strong enough to pull down any one of the largest trees in the mountains with one arm. He had numerous young and pretty wives whom he treated badly. Because he didn't like the water that was readily available in the lower valley, he forced his wives to bring him the "sweet water" from up near the mountain peak. His family, finally tiring of this chore, conspired to get rid of Moto Pitl Pit. One day, when he was asleep in a deep gorge where he lived, a mile below Green Valley, "they bound him fast and set fire to his house. In his struggles, the neighboring hills resounded with his throes. In vain! . . . He perished." Moto Pitl Pit perished but that "sweet water" went on to supply the generations to come and service the owners of land along the river's edge. (taken from an 1875 issue of the *San Diego Union*)

"Loveland Dam Hailed as Boon to Community"

Lake Loveland's \$2,000,000 dam and reservoir on Sweetwater river spell development and growth in the National City and Chula Vista areas, Chester H. Loveland, of San Francisco, for whom the dam was named, said yesterday at dedicatory rites at the damsite near Alpine.

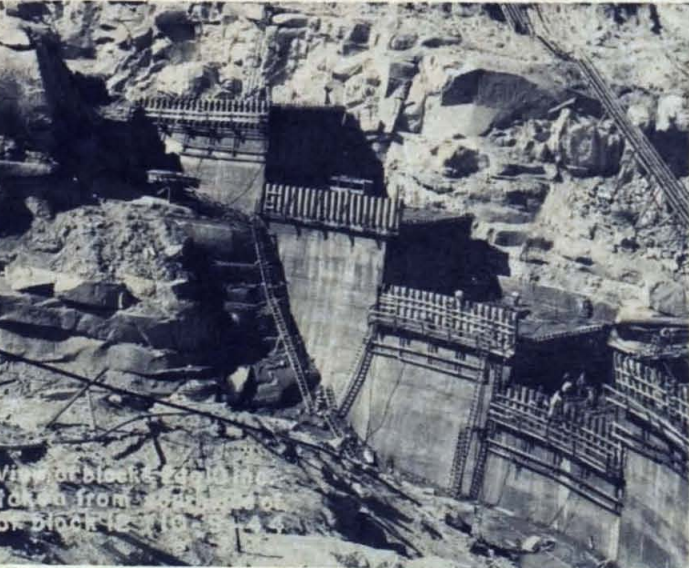
Saying that nature cannot provide this one vital element of life without great effort and sacrifice on the part of residents in this area, Loveland praised vision, skill and energy of those who created the structure. "The new dam assures adequate water not only for the present but for the future, and means communities it serves now can expand with the full knowledge of an adequate supply of water for domestic, industrial and irrigation requirements," he said.

San Diego Union, September 12, 1945

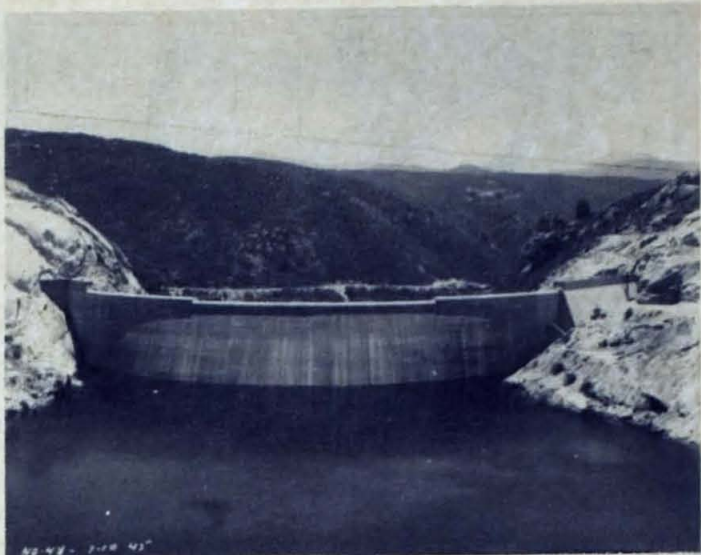
One of the new owner's first moves was to search out new sources of water reserves. Taking up an idea that had been expressed as far back as 1888, when the *Guide to the San Diego Land and Bay Region* stated, "in time still other dams will be put in higher up the river until we have the best irrigation system in Southern California," President Loveland looked toward the source of the Sweetwater system for a suitable reservoir site.

During 1927 and 1928, Loveland Engineers conducted preliminary investigations in the vicinity of Sweetwater Falls, the most likely spot for a new dam. The site looked promising, and the company began quietly buying the necessary Upper Sweetwater land, setting up working farms to conceal the reason for the land acquisitions. According to P.D. Rice, Manager of The Sweetwater Corporation in 1935, the secrecy was an economic necessity. He wrote, "Had the owners of the Company announced their intention of acquiring the reservoir site lands and of their development, prices greatly in excess of the agricultural value . . . would have been asked."

In 1930, after the company's plans had become public knowledge, an application was filed with the State Division of Water Resources "to divert 18.6 cubic feet per second and store 40,000 acre-feet per annum at Sweetwater Falls." Depression-era financial woes and problems in meeting State Engineer requirements caused extensive delays, and by 1941 construction of the dam had yet to begin.



Under Construction 1944



Loveland's Sweet Water - 1945

Then came World War II. The war economy, combined with the coming of Rohr Corporation, led to the third land boom in less than a century. The demand for water intensified, but wartime restrictions prevented the company (now reorganized as the California Water and Telephone Company) from acquiring the necessary materials for construction.

The dilemma was resolved when the water company was able to acquire a certificate of necessity from the government to buy materials, and Loveland was able to come up with the necessary financing. Excavation began in October 1943, and in less than two years, on July 17, 1945, the dam at Sweetwater Falls was completed.

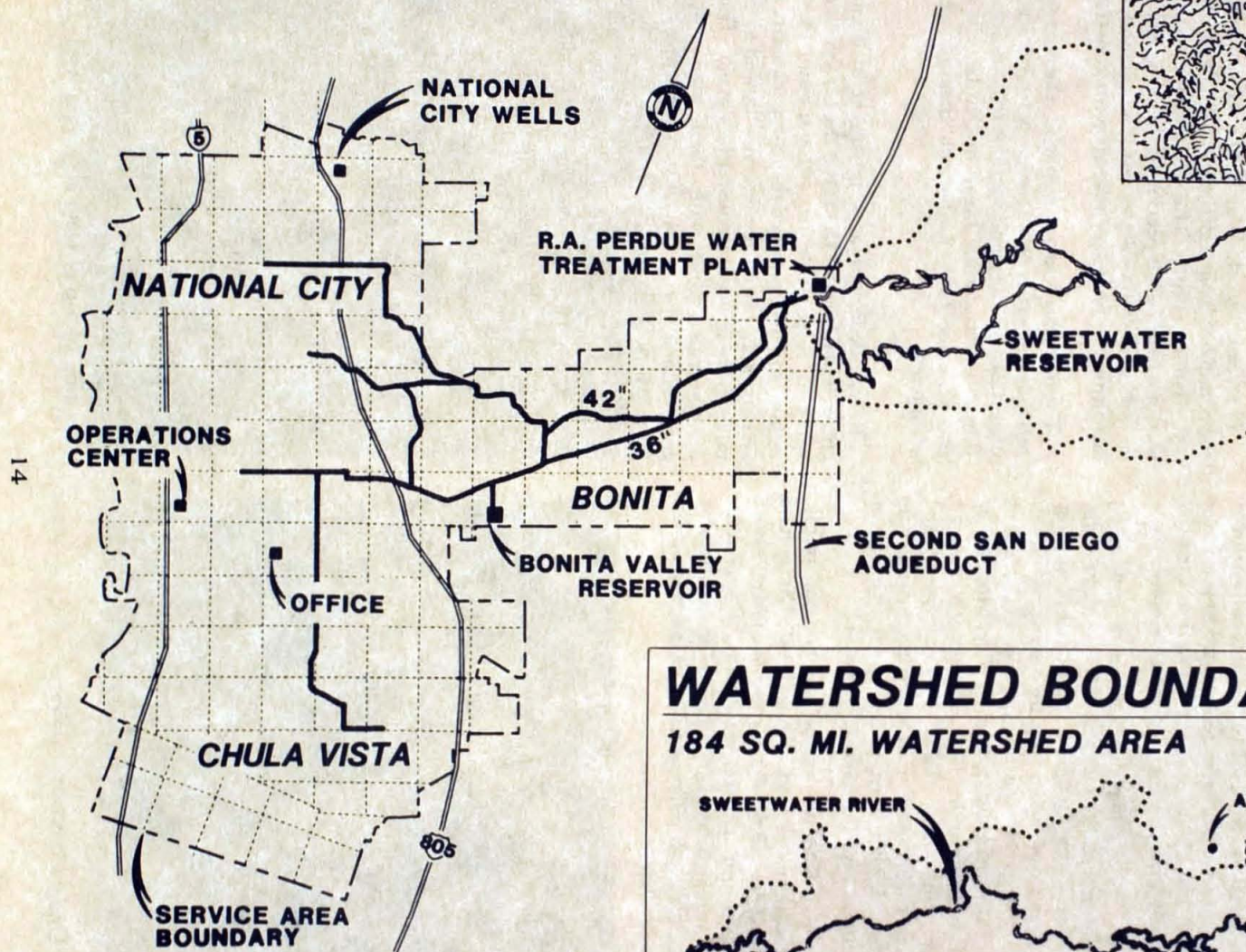
It was dedicated at a luncheon in September 1945 and christened Loveland Dam after the personality of the 1930s who was most responsible for getting it built. The dam, costing \$2.5 million to build, doubled the storage capacity of the Sweetwater system. Water from the reservoir flowed along the riverbed 18 miles to the lower Sweetwater Reservoir. (The wartime scarcity of materials, along with their high cost, prohibited the construction of a pipeline connecting Loveland to the Sweetwater Reservoir.) The building of the dam promised to eventually provide sorely needed additional water to an area that was close to exhausting its available reserves, but reservoirs take time to fill, and time was short for San Diego County.

LOVELAND DAM (1945) Constructed 1943-45 and owned by California Water and Telephone

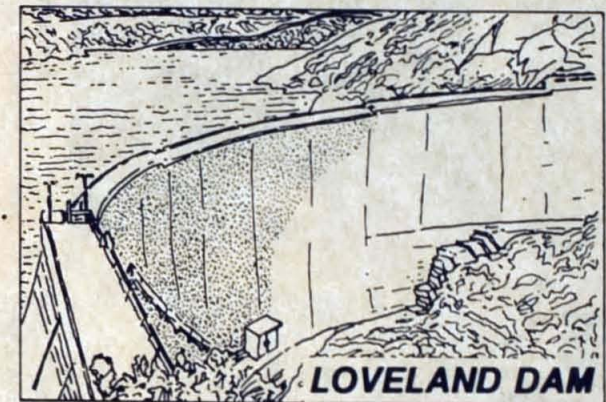
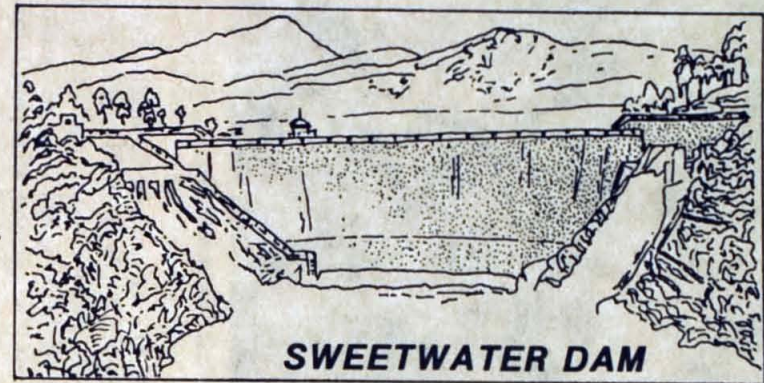
Height of Dam	203 feet
Length of Dam at top	765 feet
Length of Dam at base	50 feet
Thickness of masonry at base	50 feet
Thickness of masonry at top	8 feet
Area of watershed	98 square miles
Area of reservoir	454 acres
Capacity of reservoir	8,927,687,000 gallons
Elevation of top of Dam above sea level	1355 feet

SWEETWATER AUTHORITY SERVICE AREA

SCALE: 1 IN. = 1.5 MI.

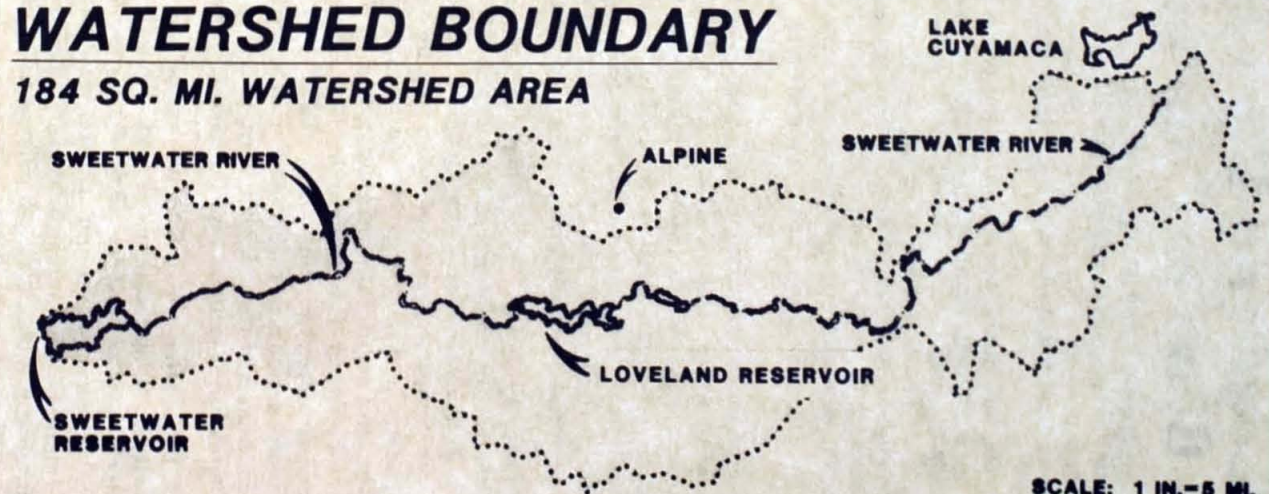


14



WATERSHED BOUNDARY

184 SQ. MI. WATERSHED AREA



SCALE: 1 IN. = 5 MI.

"Aqueduct Fulfills Promise"

San Diego Daily Journal

May 6, 1948

The demand for water had increased greatly after war-effort industries came to San Diego, making it paramount that San Diego County find a ready source of additional water, and quickly.

The city of San Diego, showing great foresight, had prepared itself back in the 1920s for the inevitability of having to look beyond local water supplies to meet the growing population needs. To that end, the city applied for an appropriation of 112,000 acre feet of water per year from the Colorado River. Eventually, the Secretary of the Interior decided, in response to persuasion from county civic leaders, that the application had been made on behalf of the entire county. This led to a county-wide effort to get Colorado River water. According to William H. Jennings, a lawyer active in local water projects for many years, the San Diego Chamber of Commerce in 1934 or 1935 "formed a group to discuss ways and means of importing waters. . . ." Their discussion led to the passage by the State Legislature, in 1943, of the County Water Authority Act, which authorized the formation of the San Diego County Water Authority—an agency formed to supervise the distribution of Colorado River water.

The California Water and Telephone Company had been "cautious," according to its District Manager at that time, Al Poulter, about the cities of National City and Chula Vista joining the County Water Authority. Loveland Dam was under construction, and there was some question whether imported water was necessary. But, according to Jennings, while some people had hoped that San Diego could handle its own water supply, by the time of the election the "reality of the situation had hit most people. It was better to join than ration." Chula Vista and National City voters approved the proposition to join the San Diego County Water Authority, and on June 9, 1944, the water agency was formed. Coronado joined its South Bay neighbor cities as one of the nine original members of the County Water Authority but withdrew a short time later.

The Metropolitan Water District of Southern California, formed in 1928, had already tapped the Colorado for servicing the Los Angeles area. The proximity of its aqueduct, roughly 70 miles north of San Diego, made it feasible and cost-effective to build a southern extension. The Federal Government, to supply the military installations in San Diego County, began the project. It designed, surveyed, and contracted for the construction of the aqueduct, but then, as the war's end neared, decided that it was no longer necessary. However, with the Navy's assistance, the San Diego County Water Authority persuaded the Government to revive the project. Construction began on September 12, 1945. On December 11, 1947, less than two years and three months from groundbreaking, water began flowing from the portal of the San Jacinto tunnel in Riverside County down to San Diego's San Vicente Reservoir.

Five months later, on May 5, 1948, the 16.3 mile La Mesa-Sweetwater extension, from San Vicente to the Sweetwater Reservoir, was also completed. It cost \$1,362,00 and doubled the available water supply of the Sweetwater system. (Later, a second aqueduct was constructed. Completed on May 6, 1960, it crossed the river gorge and passed west of Sweetwater Dam and within several hundred yards of the planned water treatment plant at Sweetwater Reservoir. The second aqueduct provided direct service from the Los Angeles Aqueduct to the reservoir, eliminating the need for the La Mesa-Sweetwater Extension.)



Water flowing in ditch blasted from La Mesa - Sweetwater Extension pipeline to Sweetwater River

The arrival of Colorado River water via the La Mesa-Sweetwater Extension in 1948 was celebrated at a ceremony held at the Sweetwater Reservoir on that May 5th day. (Truly celebrated because the Sweetwater system, during the construction of the extension, had been receiving emergency water supplies from the (City of San Diego.) One hundred and fifty men gathered to hear about the promised bounty more water would bring. National City Baptist minister Watson Brown's dedication speech set the tone by starting off with the Biblical passage, "The desert shall be filled with springs of water, and the valleys shall blossom as a rose." The highlight of the day occurred when the mayors of National City and Chula Vista joined hands to open the valve to start water flowing through the pipeline.

Sixty years after the first water celebration, the arrival of Colorado River water had finally brought assurance that the lands of National City and Chula Vista would continue to be cultivated and their consumers' thirsts quenched.

But the residents of the Sweetwater Valley had been left out. They were not entitled to the Colorado River water because they did not live in either Chula Vista or National City. Therefore, to accommodate the water needs of the growing population in this rural, agricultural area, the city of Chula Vista agreed to assign its water rights to a new organization: the South Bay Irrigation District (SBID).

Organized in March 1951 (and still in operation in 1988), the South Bay Irrigation District included Chula Vista and the unincorporated area of Sweetwater Valley. The district's voters elected five directors to four-year terms. Under the directors' guidance, SBID's function was to obtain rights to Colorado River water from the San Diego County Water Authority and franchise California Water and Telephone Company to sell the water to the district's water consumers.

About this time, because of the rapid growth in the number of urban water users, public concern shifted from water availability (the major concern of farmers) to water quality. That shift led to a disagreement between the public and the water company regarding the direction in which the water company should move in order to best service its customers. The result would be a campaign for public ownership of the water company that would not be settled until 1977.

THE BATTLE

Water Company Official "Doubts" City Alone Could Acquire System

National City News, June 19, 1953

Two years after the formation of SBID, talk of public ownership resurfaced. The increase in domestic water users (from 45% of all users in 1940 to 60% in 1954) focused attention on the safety of the water. Consumers had begun complaining about dirty water. This, together with talk of a fourth water rate increase since 1948 and a California Water and Telephone Company dispute with National City over transmission mains in its industrial area, prompted the city to hire a consulting firm—Utility Service Company of Palo Alto, headed by J.H. Jamison. According to a January 22, 1953, article in the *Chula Vista Star News*, the company was hired so National City could "obtain our own answers [to questions about water] in place of sitting idly by and accepting statements relayed to us by the water company."

The "answers" turned out to be a resolution passed by the city council of National City on June 2, 1953, to hold an \$11 million water revenue bond election to buy out the water company.

A campaign flyer of the opposition to the bond election portrayed the consulting firm's owner, Jamison, as a "fast talker who sold the city a bill of goods." Receiving a \$750 advance and an \$8,500 retaining fee, with a promise of \$41,250 when the bond issue sold, Jamison appeared to be the person who would profit the most from the election.

A committee calling itself the Citizens' Better Water Association, chaired by Mayor "Ace" Carrigan, looked for supporters who believed the success of the bond election could bring a filter plant for better water at no increased expense to the water consumer. The idea, according to the Better Water Association, was to finance the estimated \$11 million purchase price and the cost of building a filter plant for National City out of the \$1,069,359 annual revenue from water sales. The promise sounded good, but the election was lost by a vote of 2,535 to 1,233.

Working as an entity separate from the South Bay Irrigation District, National City had trouble explaining to the voters' satisfaction how the legal and technical problems of splitting the water distribution system between the two areas could be solved. The water company remained in the hands of California Water and Telephone, which took the hint and began plans for building a filter plant—a move that would save the water company from a second attempt at public ownership seven years later.

That attempt, in 1960, resulted in a second bond issue that had its beginnings in a 1956 feasibility study, conducted by the firm of Leeds, Hill and Jewett, which concluded that "the sale of [the] Sweetwater System to a public agency . . . would be in the best interests of all concerned." A 1960 update of that study recommended the acquisition of the system exclusive of Loveland Dam and surrounding lands because Loveland's purchase price would place a "heavy burden on the consumers of water"—a cost many times greater than the purchase of water from the San Diego County Water Authority.

Continued on page 17

BETTER WATER AT NO INCREASED COST!

Sounds too good to be true, doesn't it? But it is true!

The residents of National City for the first time in the history of the city have the opportunity to get better water — water that is free of impurities and disagreeable odors — at no additional cost to either the taxpayers or water users.

Present water rates paid by users in the Sweetwater District (National City, Chula Vista, South Bay Irrigation District) produce \$1,069,357 annually. This sum is sufficient to finance an \$11,000,000 Revenue Bond issue for the purchase of the water system, now owned by California Water and Telephone Company of San Francisco, and build a filter plant.

National City can pay all operating costs out of water revenue and still have a cash surplus each year in excess of \$100,000.00 after bond payments are made.

NO INCREASE IN WATER RATES WILL BE NECESSARY.

The taxpayer will not be saddled with additional taxes because Revenue Bonds CANNOT LEGALLY BE PAID OUT OF TAXES they must be paid out of water revenue.

This is a self-liquidating project under State law.

With the filter plant in operation a drain on the family purse. It will never be a necessity and

Let us join the other 197 progressive California cities with their water systems.

If you will be out of town on July 14, be sure to vote by ballot from the City Clerk.

For Better Water . . . Vote "Yes"

**READ . . .
the TRUTH about
WATER BONDS
.. before you vote July 14!**

DID YOU KNOW that the bond scheme upon which we are asked to vote July 14 was sold to the City Council by an out-of-town promoter and a local politician?
DID YOU KNOW that this promoter has been guaranteed a fee of \$41,250 if the bond deal goes through?
DID YOU KNOW that \$9,250 has already been paid to this out-of-town promoter for his interest in National City is taken out?

VOTERS WATCH OUT!

DID YOU EVER GET SOMETHING FOR NOTHING?

WHO IS UTILITIES SERVICE COMPANY?

HOW MUCH ARE THEY BEING PAID?

IS THE TAXPAYERS' MONEY BEING USED TO PROMOTE THE
\$11,000,000 BOND ISSUE?

COMMITTEE FOR TRUTH ABOUT WATER AND COOPERATION WITH OUR NEIGHBORS

Raymond Smith	Charles Anderson	Vernon E. Hawkins	D. P. Guy
Ed. E. Ingalls	Wayne Smith	Mill Morver	George James
Tom Leonard	Glen Isbell	Mrs. Joanne Smith	Ed. James
Vic Ivis	Mrs. Marjorie R. Ingalls	Lloyd Bates	Mrs. Ruth Kaufman
Don Chase	James E. Ingalls	Norman Stone	Charles Kern

HEADQUARTERS — 1814 HIGHLAND AVENUE — TELEPHONE G-7-1112

Chula Vista Star News, November 10, 1960

Vote YES

"A no vote is a vote for higher water rates."

READ THE

FACTS

INSIDE...

LEARN WHY YOU SHOULD

VOTE NO

ON NATIONAL CITY

PROP. "N"

Proposition "N"
Would Chop Off
National City's
Water Storage



with

National City

1960

low
benefit of
water Lake
ach improv
er, are a per
he operates
available to a
pal system.

cessary for the city can-
system to get its water sup-
from the Colorado River sup-
without mean that National City
the Colorado River pipe was shut
for cleaning, repairs, or any other
ison.

In addition, National City would receive
benefits from local rainfall, since there
catch and store it.

This is one of the important reasons
why wise National City voters will decide
to vote "NO" November 6 on Proposition
"N", the National City water bond issue.

10 GOOD REASONS

WHY YOU
SHOULD VOTE
"NO"
ON THE
CITY COUNCIL'S
WATER BOND
MEASURE

Continued from page 16

The Leeds, Hill and Jewett study envisioned National City and the South Bay Irrigation District as co-purchasers of a complete system, including the Sweetwater Reservoir. But somewhere along the way National City's leaders determined that National City would go it alone and forget about buying the Sweetwater Reservoir. They went to their voters with a campaign for a municipal water department that they said would be able to lower water rates by relying exclusively on Colorado River water piped directly to National City (bypassing the Sweetwater Reservoir). The proposal was backed by National City Mayor Thelma Hollingsworth and was supported by an October 1960 report from the consulting firm of Koebig and Koebig contending "that municipal operation would result in lower over-all costs."

Hollingsworth and the city council got the proposal on the ballot but couldn't win the election.

National City's solitary stance was a factor during the election campaign in the water company's favor. The water company's trump card, according to Al Poulter, was the filtration plant already under construction by spring 1960. "Protect Your Family's Health" was the company's slogan, implying that, because the filtration plant would not be accessible to National City, that city's water quality would be in jeopardy.

A statement made seven years earlier, in 1953, by a member of the opposition's "Truth About Water" committee still held true. After the bond failure that year, he had said in a *Star News* interview on July 16, "One question was answered. We cannot go forward in any kind of program in which all the people are not in accord."

QUALITY CONTROL

Dedication Program

11 A.M., THURSDAY, SEPTEMBER 7, 1961

Invocation	Dr. Everett Sorensen Pastor, Chula Vista Community Church
Introductions	Master of Ceremonies A. F. Poulter Manager, San Diego Bay Division California Water & Telephone Company
Remarks	Dr. J. B. Askew Director of Public Health, San Diego City and County
Dedication Address	Mr. Peter A. Nenzel, Vice President and General Manager California Water & Telephone Company
Ribbon Cutting	Chester H. Loveland, President California Water & Telephone Company
Open House	12 Noon till 3 P.M.
Luncheon	12:30 P.M. till 2 P.M.

LUNCHEON COURTESY FRED J. EARLY, JR. CO. INC.

Sweetwater Filtration Plant Dedication

In 1960, the nearly completed filtration plant promised to fill the pressing need for clean water. It had been a long time coming. According to Henry Meyers, the Sanitary Engineer for California Water and Telephone Company, "in the early days the local economy was based on cheap citrus irrigation. The idea for a filter plant was fought by the major users because they would have to bear the largest portion of the cost." But by 1960 the major users were no longer farmers but homeowners, who were concerned that the water pumped into their homes be clean and safe.

In April 1961, the consumers' concerns were eased. The \$1.5 million Sweetwater Filtration Plant was completed. Built next to the Sweetwater Dam, the plant was dedicated on September 7, 1961. Its water came from two sources—the aqueduct and local runoff impounded from the Sweetwater River. The 25 million gallons of water that could be filtered each day met the current needs of the growing population of the South Bay.

The completion of the filtration plant stopped, for a time, the drive for public ownership. The water company's backers were relieved and happy. Evan R. Peters, vice-president of public relations firm Russell Pierce and Company, wrote to DeWitt Higgs, water company lawyer, "Congratulations on the re-slaying of the multi-lived dragon. Let us hope that this one will stick for at least another seven years."

It stuck for exactly seven years. In the eighth year the dragon reappeared and touched off a battle that climaxed in a third, and finally successful, bid for public ownership.

THE DRAGON THAT WOULD NOT DIE



While the public ownership drive was slowing down, private ownership of the water company was changing. In 1964 California Water and Telephone was acquired by General Telephone and Electronics Company. Two years later a Delaware company, American Water Works Service Company Inc., "the largest investor-owned system of its kind in the country," bought the water company, along with several other systems, for \$41 million (the cost for the Sweetwater system was \$14.9 million). Operating as a subsidiary of American Water Works, the local water company was now called California American Water Company.

It was not long before rumor of water rate increases, in spite of General Manager Al Poulter's assurances otherwise, caused the dragon of public ownership to again raise its fiery head.

But this time a new player joined the game. The threat of another water rate increase, along with the lack of maintenance of the company's system, convinced the South Bay Irrigation District that now was the time to act. On May 10, 1968, SBID filed suit of eminent domain to acquire the Sweetwater system of the California American Water Company. National City was finally ready to abandon it's, go-it-alone stance and, on January 28, 1969, joined the suit. A lengthy trial commenced in November of 1971. It was not settled until May of 1977.

The main dispute was over determining just compensation to California American Water Company for the system. Superior Court Judge James Focht's determination, in 1973, of \$14,484,000 as the August 15, 1969, value of the water company did not satisfy the company's owners. They estimated the worth of the company's holdings at close to \$50 million. The \$35 million disagreement led the water company first to the Court of Appeal and then to the California Supreme Court, which denied the company a hearing.

California American was all but beaten. Believed to have been the "biggest water utilities case ever tried in California courts . . . and the biggest single property condemnation suit in county history," according to a June 1972 edition of the *Chula Vista Star News*, the case ended the 50 year, on again, off again,

battle for public ownership.

To avoid the expense of a second trial, the company negotiated a settlement. It would now be up to the voters to decide if they wanted to own the system. On May 31, 1977, an election was held to authorize the \$22.5 million worth of bonds needed to buy the water company. (Judge Focht's original \$14 million award had been increased to \$19,036,000 because of the inflationary time lapse between the 1969 valuation and the 1977 negotiation. Operating funds and reserves accounted for the extra \$3.5 million.)

The combined efforts of National City's civic leaders and the South Bay Irrigation District convinced just enough voters, and the bond issue was narrowly passed by a vote of 9,653 to 8,078. The local headline read . . .

That Water You're Drinking . . . You Really Own It

Chula Vista Star News, September 1, 1977

Once ownership was acquired, the people had to run their water company. To prepare for the eventual creation of a public water company, National City and SBID had formed, under a joint powers agreement in 1972, the Sweetwater Authority. Initially established to finance the acquisition of the water system, the Sweetwater Authority became the vehicle for operation and maintenance of the system once the bond issue was approved. The South Bay Irrigation District became the agency of ownership and the lessor of the system to the Sweetwater Authority. The five directors of the South Bay Irrigation District joined two directors from National City (appointed by the mayor and approved by the city council) to become the Board of Directors of the Sweetwater Authority.

The Authority took over the operation of the water system on August 30, 1977, under the direction of General Manager Garry Butterfield. The new management felt, Butterfield said recently, "that their most important task was to be sure that customers would see no interruption in services as a result of the acquisition of the system." Consequently, Al Sorensen, who had been hired as Operations Manager in July, decided to hire former employees of California American to make for an easier transition. His successful recruitment of 55 of those employees helped make it a banner day for both the company and its customers when the doors of the Sweetwater Authority building on Third Avenue opened to the public.

The banner drooped a bit, however, when Sweetwater management realized the condition the water company was in. Butterfield had gotten a foretaste of things to come when he'd been greeted on his first day in the office by a desk piled with keys—and no clue as to what they unlocked. During the years of litigation California American had let the system deteriorate. Knowing that it was just a matter of time before going public, the company had kept maintenance and improvements to a minimum. Among other things, most of the water company trucks were in disrepair, and two of the three pressure reducing valves at the treatment plant had failed and had been left that way. It therefore quickly became obvious to the new managers that maintenance would have to take precedence over improvements to the system. However, the community at last had control over its water system and the following year would see the first of a series of turnabouts.



IT'S YOUR WATER

• PUBLIC OWNERSHIP CANNOT RAISE YOUR TAXES.

The "Revenue Bonds" to be used to purchase the Cal-Am Water Company must be paid from water revenues and CANNOT be paid from taxes.

• PUBLIC OWNERSHIP IS TO YOUR BENEFIT.

Publicly owned water systems usually result in (1) lower water rates and (2) increased recreational opportunities on storage lakes and reservoirs.

• CONTROL YOUR WATER . . . CONTROL YOUR FUTURE.

It is important that you control your water . . . and only through a public water system will you be able to have local control.

Vote YES on WATER on MAY 31



• ASSEMBLYMAN WADIE DEDDEH • SUPERVISOR TOM HAMILTON
• MAYOR WILL T. HYDE
• COUNCILMAN GREG COX • COUNCILMAN LAUREN EGDAHL
• COUNCILMAN JAMES HOBEL • COUNCILMAN FRANK SCOTT

• David Burns	• Standlee McMains	• William H. Eckhart
• Art Johns	• Susan Watry	• John McGuane
• Lloyd Lee	• Wm. C. Cameron, Jr.	• Dr. Carl Bandelin
• Edwin Steele	• Ed and Connie Cramer	• Patricia Needham
• Dick Zogob	• Burton C. Tiffany	• Glenn E. Fuller
• Esther Lessman	• Harlow F. Codling	• Joy Shresh
• Mitch Koteff	• Robert H. Jenkins	• Joan Elliott
• Norm Ross	• Maria Luisa Woodill	• Frederick Drew
• Clay Ford	• Dr. Benjamin Layton	• E. E. Spencer
• John Roark	• Melvin K. Anderson	• Keith Atherton
• Michael J. Roark	• Leonard Mazer	• Linda Lay
• Scott Stewart	• Charles Shippey	• Donald Painter
• Herb Lathan	• Carole Smith	• Ralph P. Paxton
• Anna Melton	• M. L. Robertson	• Jesse C. Madden
• Peggy Hyde	• William L. Eckhart	• Walter L. Steele
• Dwight Gove	• Dorothy Burns	• Beth and Bill Evans
• Dale Horton	• Ted and Betty Martin	• D. K. McCredie
• Michael Rays	• Thomas A. Clarkson	• S. C. "Bill" Matthews
• Sue Johns	• Gordon Hobel	• John F. Ingle
• John J. Bryan	• Dr. Bruce Hartley	• Walter R. Carey
• Sandra Burns	• Newton Chaney	• Dr. Marianne Goettsch
• Jean Steele	• Shirley Chaney	• Peter J. Watry, Jr.

CITIZENS COMMITTEE FOR PROP. "W", 315 FOURTH AVE., SUITE T, CHULA VISTA, CA 92010
Co-Chairmen, Standlee McMains and Frank Scott - Treasurer, William H. Eckhart - Campaign Manager, Susan Watry
INSTANT PRINTING COMPANY • 1044 BROADWAY • CHULA VISTA, CA 92010

Sweetwater Authority



Robert A. Perdue
Water Treatment Plant
100 Lakeview Avenue
Spring Valley, CA 92077
(619) 420-1413
8:30 AM — 5:00 PM

SERVING
NATIONAL CITY • CHULA VISTA • BONITA

Dedication Day Events

Saturday
May 30, 1987
11:00 AM

Welcome and Introductions by . . .
Chairman of the Governing Board

Project Comments by
Sweetwater Authority General Manager

Health Standards by
California Department of Health Services

Unveiling Dedication Plaque

Invited Guests
Buffet Luncheon and Plant Tours

Public Tours
2:00—4:00 PM



Water treatment plant opens with public tour this week

Chula Vista Star News, May 28, 1987

In 1978 Loveland Reservoir spilled over for the first time in its history, showing skeptics who questioned the value of its construction that it could not only pay for itself but help pay for the entire system. The low cost water the dam produced created operating cost savings, making funds available to help correct deficiencies elsewhere in the system.

One major deficiency was old, worn out pipes. Eighteen thousand feet of original turn-of-the century steel pipeline on Sweetwater Road had to be dug up and new pipeline installed.

Although maintenance took first priority, management could not ignore needed improvements. The blending, in 1976, of Feather River water from the State Water Project with Colorado River water had amplified the importance of improving the filtration plant. (One of the conditions of approval by the voters for the State Water Project was that the reservoirs along the route would be open for public recreational use. Consequently, the Feather River water exposed the Sweetwater Reservoir to the threat of bacteriological contamination.) Because the cost of the improvements was beyond the company's financing ability in 1979, they were designed several years ahead of implementation.

In the interim, a second project began—a project that Sweetwater Authority directors think has "greatly improved" the system—the construction of the nearly 19 million gallon capacity Bonita Valley Reservoir. Partially financed from savings achieved from use of local water and completed in 1985, the reservoir nearly doubled the amount of stored, treated water available in the water system. An underground concrete structure with two feet of earth on top, the Bonita Valley Reservoir, says Butterfield, "improved the reliability of the system and provided an emergency supply of water to the western part of the system."

The filtration plant itself was, by May 1987, refurbished and expanded to meet the water quality standards that had been established by the public health department in 1978. Eight million dollars worth of improvements included a new main control room and water laboratory, and sedimentation basins to remove suspended matter from the water before filtration. (All these improvements were made without interruption of the services of the water treatment plant.)

Along with a physical facelift and expansion, the plant was dedicated under a new name—the Robert A. Perdue Water Treatment Plant. Perdue had been the Superintendent of Water Quality from the inception of public ownership in 1977 to his death on November 3, 1985. "His death," said Butterfield, "left a big hole in the organization." Perdue had been involved in the design and construction of the plant from the beginning and had worked hard to insure that the facility included all the necessary features to deal with variations in raw water quality.

After Purdue's sudden death at age 39, before the plant's completion, the board, recognizing the role he played in the filtration plant's construction, dedicated the plant "not only in his memory but in his name."

DREAMS FULFILLED



100-year-old masonry juts from the smooth surface of the Sweetwater Dam.

One hundred years of memories went into that dedication in May of 1987. A hundred years of history are celebrated in April of 1988. The Sweetwater Authority continues the tradition begun when Frank Kimball formed his water company and looked for a way to store water.

In just over a decade, the Sweetwater Authority has made great strides. The years of deferred improvements are over. In fact, Sorensen, who used to be an employee of California American, can now boast that in just over ten years of public ownership \$25 million has been used to improve the system."

Those millions of dollars invested on behalf of the people reflect a strong desire to serve the community and continue the vision of the founding fathers. The hundreds of miles of pipeline, the filtration system, the additions to the dam itself, all rest on the solid foundation of the 90-foot marvel of its age—the dam that Kimball, Dickinson, and Schuyler built. The celebration of that dam's 100th birthday is also a celebration of a water company that is determined to continue its struggle for water, while striving to make the second 100 years as colorful and farsighted as the first.

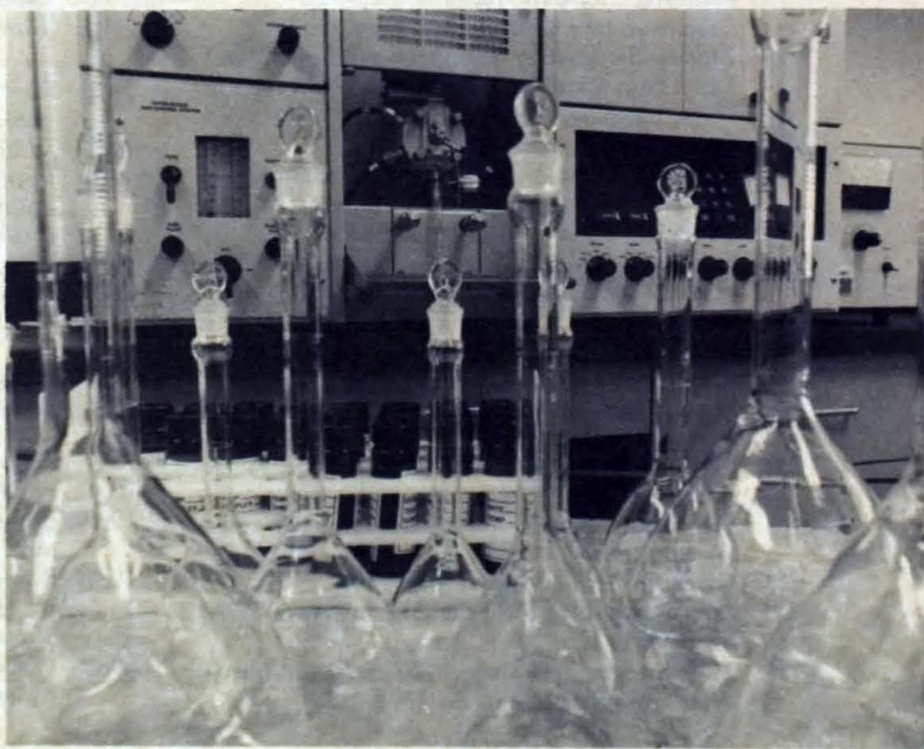


HONORED MEMBERS

The plaque in the patio of the Sweetwater Authority reads: "This atrium [is] dedicated in honor of Lloyd L. Lee—30 years of his life were devoted to the development of a reliable water supply." As a tribute to the man often called the "patriarch of the board," that plaque reminds the public of the instrumental role Lee played in the formation of both the South Bay Irrigation District and the Sweetwater Authority. Lee, a building contractor, began his service as a board director in 1956 and continued serving through the crucial transition to public ownership.

A second long-serving member of SBID was David Burns. An assistant right of way agent for Cal Trans, he joined the board of SBID in 1969, during the years of the condemnation trial. He played a major role in the formation of the Sweetwater Authority in 1972 and was chairman of SBID in 1977 when the bond election for public ownership was held. Both Burns and Lee were instrumental in shaping the developments of the Sweetwater Authority.

VISIONS CONTINUED



Today's water quality standards require exotic instruments.

ONE HUNDRED YEARS OF WATER

- June 3, 1868 Frank Kimball's diary entry: "I rode to the northwest corner of Rancho de la Nacion and beheld the finest water power [site] that I ever saw in my life."
- 1868 Pioche signs term sale agreement with Kimball Bros. for Rancho de la Nacion for \$30,000 (June 18)
- 1869 Kimball Brothers Water Company formed (May 26)
- 1871 Kimballs make last payment on Rancho de la Nacion (July 8)
- 1879 10,000 acres of National Ranch to Boston railroad for promise of line to National City
- 1880 Kimball Bros. Water Company sold to Lucius Pratt
California Southern Railroad chartered (Oct. 12)
- 1881 San Diego Land and Town Company of Kansas organized (Jan. 19)
Pratt sells Kimball Water Co. to San Diego Land and Town (Aug. 26)
- 1882 Railroad track to Colton completed (Nov.)
- 1885 Santa Fe Railroad line completed from the East (Nov. 21)
- 1886 Dickinson becomes general manager of San Diego Land and Town Company (Aug. 15)
Sweetwater Dam construction begins (Nov. 17)
- 1887 National City incorporated
Schuyler takes over supervision of dam construction (Feb. 1)
Dickinson gets permission to increase dam height from 60 to 90 feet (May 26)
First passenger train of National City and Otay Railroad (July 23)
- 1888 Sweetwater Dam completed (April 7)
National City Celebration (April 19)
Dickinson lays Chula Vista town plan
- 1895 Flood—Sweetwater Reservoir overflows (Jan.)
San Diego Land and Town Co., conveyed to Chas. Lanning, receiver (Sept. 18)
- 1896 Sweetwater Dam raised to 96 feet
- 1897 San Diego Land and Town Co. of Maine buys San Diego Land and Town Co. (Aug. 2)
Drought begins
- 1902 Sweetwater Water Company buys water rights of San Diego Land and Town Co. (July)
- 1904 Drought ends
- 1910 Sweetwater Dam raised to height of 110 feet
- 1911 Chula Vista incorporated (Oct. 11)
- 1916 Flood—Lower Otay Dam bursts—Sweetwater Dam holds (Jan. 27)
- 1920 Sweetwater Co. sells to Sweetwater Corporation (Jan. 1)
- 1921 Sweetwater Corp. offers to sell to public—voters say no
- 1922 Loveland land purchases begin
- 1927 Sweetwater sold to Loveland Engineers as "The" Sweetwater Corp.
- 1935 The Sweetwater Corp. becomes California Water and Telephone Co. (Nov. 18)
- 1943 Loveland Dam construction begins
- 1944 San Diego County Water Authority formed (June 9)
- 1945 Loveland Dam completed (October)
- 1947 San Diego Aqueduct completed (Dec. 11)
- 1948 La Mesa-Sweetwater Extension completed (May 5)
- 1950 First National City well drilled
- 1951 South Bay Irrigation District formed (March)
- 1953 National City attempts public takeover of California Water and Telephone Co.
- 1954 Second pipeline of aqueduct completed
- 1957 Second National City well drilled
- 1960 National City tries to split from Sweetwater system—voters say no
Filtration Plant construction begins
Second Aqueduct finished (May 6)
- 1961 Filtration Plant completed (April)
- 1964 California Water and Telephone acquired through an exchange of shares by General Telephone and Electronics Co. (June 26)
- 1966 American Water Works Company of Delaware buys California Water and Telephone Co.—Sweetwater subsidiary called California American (March 31)
- 1968 South Bay Irrigation District files suit to acquire California American (May 10)
- 1969 National City joins condemnation suit (Jan. 28)
- 1972 Sweetwater Authority formed (Feb. 3)
- 1973 Superior Court judge awards California American \$14,485,000 as just compensation
California American appeals judgment (May 14)
- 1976 State Water Project water from Feather River becomes available
- 1977 Water system value settled at \$19,036,000
Bond issue to buy water system passes (May 31)
South Bay Irrigation District acquires water system. (Aug. 30)
- 1978 Loveland Dam overflows for first time
- 1979 Water System Master Plan completed by James M. Montgomery Engineers, Inc. (June)
- 1984 Sweetwater Authority moves offices to Garrett Avenue
Completion of construction through Bonita of 42-inch steel pipeline replacing the 24-inch riveted steel pipe installed in 1888.
- 1985 Bonita Valley Reservoir completed (18.7 million gals.)
- 1987 Sweetwater Filtration Plant expanded and rededicated as Robert A. Perdue Water Treatment Plant (May)
- 1988 Observance of 100th Anniversary of completion of Sweetwater Dam (April 24)

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SWEETWATER DAM, 2 P.M., MARCH 3, 1938.

March 9, 1988

The Board of Directors and Management of Sweetwater Authority wish to commend Leslie Trook for her careful research and thoughtful preparation of this account of the history of the Sweetwater Dam and water system.

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