



HISTORICAL REPORT

THE FOUNDING OF RANCHO SANTA FE

AND

ITS WATER SUPPLY

PART 1 - THE FOUNDING OF RANCHO SANTA FE

PART 2 - THE LAKE HODGES DAM STORY

PART 3 - EARLY HISTORY OF THE SANTA FE
IRRIGATION DISTRICT

(As narrated from the "Memoirs of Ed Fletcher",
a privately printed autobiography, and organized
in the form of selected passages that have been
rearranged by time and subject, and provided
with additional annotated background information)

PREPARED AND ANNOTATED BY:

SAMUEL Y. JOHNSON

SEPTEMBER 1986

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Col. Ed Fletcher and his wife, Mary, in 1952
when the "Memoirs of Ed Fletcher" was published

FOREWORD

Edward Fletcher (1872-1955), known throughout his life as Ed Fletcher or Col. Fletcher, was the foremost pioneer in the development of land, water and roads in the City and County of San Diego from 1900 to 1950. His land development activities extended from La Jolla to Oceanside in the coastal area. Inland, they covered the communities of Grossmont, La Mesa, Lemon Grove, Mount Helix, and Fletcher Hills to the east of San Diego, and the Cuyamaca Lake and Warner Hot Springs areas in the central mountainous area of San Diego.

His primary interest, however, was the development of water resources for San Diego County and City lands, and he directly promoted and was largely responsible for the Lake Hodges Dam, Murray Dam, Sutherland Dam, and the water distribution districts that resulted from them. He was also active in road and highway developments, numerous civic affairs, and for eight years represented San Diego in the Senate of the California State Legislature.

In 1952 he published a 747-page autobiography of his lifetime activities from childhood to that date, entitled "Memoirs of Ed Fletcher." This was a limited edition distributed as a gift to his family, relatives, friends and close business associates. This paper, in three parts, contains his personal account of (1) the founding of Rancho Santa Fe, (2) the Lake Hodges Dam story, and (3) the establishment and early history of the Santa Fe Irrigation District. It has been prepared with paragraphs extracted, sequenced, and pieced together from various parts of the "Memoirs" to focus on the three topics.

It is then annotated with notes of my own to provide historic background information on certain narrated subjects. These notes are those paragraphs marked by parenthesis at the beginning and end, to delineate them from the Fletcher narrative which includes all paragraphs not so marked. Also it is pointed out that in reading the Fletcher narrative pertaining to the 1911 - 1925 periods, the reader should mentally multiply by ten the numerous dollar amounts mentioned to obtain an approximate equivalent value in terms of the buying power of 1986 dollars.

S.Y. Johnson, August 1986

PART 1 - THE FOUNDING OF RANCHO SANTA FE

As I remember it, in 1911 the San Diego Chamber of Commerce gave a banquet honoring E.P. Ripley, president of the Santa Fe Railroad, and W.E. Hodges, vice-president. I was at that time the chairman of the National, State and County Highway Committee of the Chamber of Commerce and as luck would have it was placed next to the vice-president, Mr. Hodges, at the head table.

I found him most interesting and charming. He told me of his problems; his work as purchasing agent, and during the course of the evening, made this chance remark: "I am the President of the Santa Fe Land and Improvement Company, a subsidiary of the Santa Fe Railroad, and one of my greatest problems is the San Dieguito Rancho - a Spanish grant near Del Mar, which we own."

Here again destiny played a part with me. I asked him what his problem was; that I was in the wholesale farming, land and water development, being at that time an owner with James A. Murray of the Cuyamaca Water Company. Mr. Hodges' reply was that U.S. Forester, Gifford Pinchot, had frightened everyone by stating that the timber of the United States was rapidly disappearing. Even Theodore Roosevelt, the President, had been a strong backer and believer in Gifford Pinchot; in fact it was Theodore Roosevelt who made Pinchot U.S. Forester.

Mr. Hodges went on to say that with the approval of Mr. Ripley and the Board of Directors of the Santa Fe they had purchased San Dieguito Rancho, planted 4000 acres of eucalyptus trees, the intention being to raise their own railroad ties in anticipation of the expected shortage and high cost of railroad ties.

For a number of years the railroad company had spent thousands of dollars annually in the planting and care of the eucalyptus trees on the ranch. They had failed to realize that it only rains 9 or 10 inches annually on San Dieguito Rancho; the trees were starving for water; very few had grown to any appreciable size and also the scare of high priced railroad ties was over for they could later buy railroad ties, Oregon fir, at 12½ cents each by the million and by paying 9¢ or 10¢ more and dipping same in creosote, the ties were more durable than any eucalyptus ties, the cost of which would exceed \$1.00 per tie at least to grow.

The operating loss of the ranch the year before was nearly \$50,000, he told me. Each year the operation of the ranch was in red ink, for which he was being severely criticized.

Bluntly he asked me what could be done about it and first talked about the sale of the ranch, quoting me a price of \$280,000 - just the amount they had in the property without interest. The ranch appealed to me - there were romantic adobe rancheritas, or houses, with beautiful pepper trees. The soil of the ranch was badly eroded, but the large young eucalyptus trees made its bluffs, hills and small valleys a thing of beauty and I saw the advantages of a real subdivision at some future time.

I suggested that he turn the ranch over to me to manage and stated that from the day I took it over he would not be in red ink for a cent; in fact, all I asked him as compensation was 20% of the gross receipts to manage the property in my own way, the railroad to get 80%, and told him in time I would sell the ranch for them or develop it.

In reply he said "May I bring the Old Man (meaning E.P. Ripley, the president) to your office tomorrow morning at 10 o'clock?" My answer quickly was "Yes," and they were both there on time.

I enjoyed my visit with Mr. Ripley. He was a remarkable man - quiet, but quick in his ability to ask questions, get the facts and make a decision. Before he left the office I was in charge of the San Dieguito Rancho with full authority to act, under the terms of an agreement by letter that I was to incur no obligations and manage the ranch as I saw fit.

That day I took a letter of dismissal to the Superintendent and all the employees of the ranch from Mr. Hodges, giving them a month's notice. Immediately that possession of the ranch was given me I moved E.C. Batchelder, my brother-in-law, the only brother of your mother, in, a mighty fine boy, young and energetic, who married Maude Clark and who was associated with me in the real estate business.

They lived for several years there managing the property. Many is the time we all enjoyed the hospitality of the old Spanish Rancho, later to be purchased by Bing Crosby when we subdivided a portion of the San Dieguito Rancho under the name of Rancho Santa Fe.

The first year we leased the ranch mostly for cattle and grain, securing around \$6,000 in gross revenue. The second year, as I remember it, the tenants put nearly 1000 acres into sugar beets, arrangements for which I made through my friend James McFadden of the Anaheim Sugar Beet Company. Our gross revenue was roughly \$25,000. Both Mr. Ripley and Mr. Hodges were pleased with the way we handled it. Through their different visits we became better acquainted and a friendship developed between us. Every six months meant a trip into the back country - including Imperial Valley, Palomar, Eagles Nest or Ensenada.

One of the most remarkable experiences of my life was in 1916. We had a terrific flood - the San Dieguito River north of Del Mar was a half mile wide and there was four feet of water - a raging torrent - covering the present race track. I had the management of the Santa Fe Rancho at the time. The highway bridges as well as the railroad bridges were washed out both north and south of Del Mar. I received a telephone call from Del Mar from one of our tenants at the Santa Fe Rancho in the valley - they were surrounded by three feet of water and the water was rapidly rising and they could not get out. I secured a sea-going boat at Del Mar and with four men rowed to the Santa Fe Rancho and took the tenant with his wife and two children out two hours before the house went into the ocean.

We built Lake Hodges dam in 1918, but the flood menace still prevails. Believe it or not, if Sutherland Dam is not completed and the Super Lake Hodges Dam built, I make a prediction that one of these days we will again see the water running through the fair grounds and race track at Del Mar with untold damage done.

(Note: Sutherland Dam which covers about 17% of the San Dieguito River drainage area that the Lake Hodges Dam does, was completed in 1955. However, the Super Lake Hodges Dam proposal was turned down by the State Water Authority in 1952 after Colorado River Metropolitan Water District aqueduct lines were built to San Diego.)

On one trip, after the 1916 flood had wiped out the valley agricultural holdings, I made the chance remark that I felt the mesas of Rancho Santa Fe were well nigh flood-free and frostless and should be developed. Mr. Ripley said "What have you to suggest?" My answer was that I wanted two things - a 75 horsepower Holt Caterpillar to clear the brush and build the main roads through the property, having in mind future subdivision development and also the installation of a pumping plant to pump water from the valley to the mesa to demonstrate the growing of high-priced winter vegetables.

Mr. Ripley immediately turned to Mr. Hodges and said "W.E., let Mr. Fletcher buy a 75 horsepower Holt Caterpillar, also put down a well and install a water system to make the demonstrations desired, on one condition that you do not ask for any money from the railroad company and only such money used as Mr. Fletcher gets from rentals hereafter, but he may use all the money necessary to cover these expenses that may be coming to us.

At that time, I had about \$9,000 coming and it was with a great deal of pleasure that I bought the tractor, installed the pumping plant and put in the water system.

The results were that I built the main roads that are traveled today in the subdivision of the property - a new road up the valley from Del Mar, also the contour road winding around along the bluff from Solana Beach; the road to Olivenhain - the highway now traveled to Lake Hodges - in fact under my supervision was built our first road from Escondido to Lake Hodges and from Lake Hodges to Del Mar, while representing the Santa Fe and William G. Henshaw.

We rented the first 80 acres of land with water at \$30 per acre to Japanese and demonstrated the future of Rancho Santa Fe on the mesas. It goes without saying both Mr. Ripley and Mr. Hodges were more than pleased.

At President Ripley's request, I made a report to him as to the possibilities of the subdivision of Rancho Santa Fe after our water system was installed. It was accepted and I received a five year contract from the Santa Fe Land and Improvement Company for the sale of the ranch.

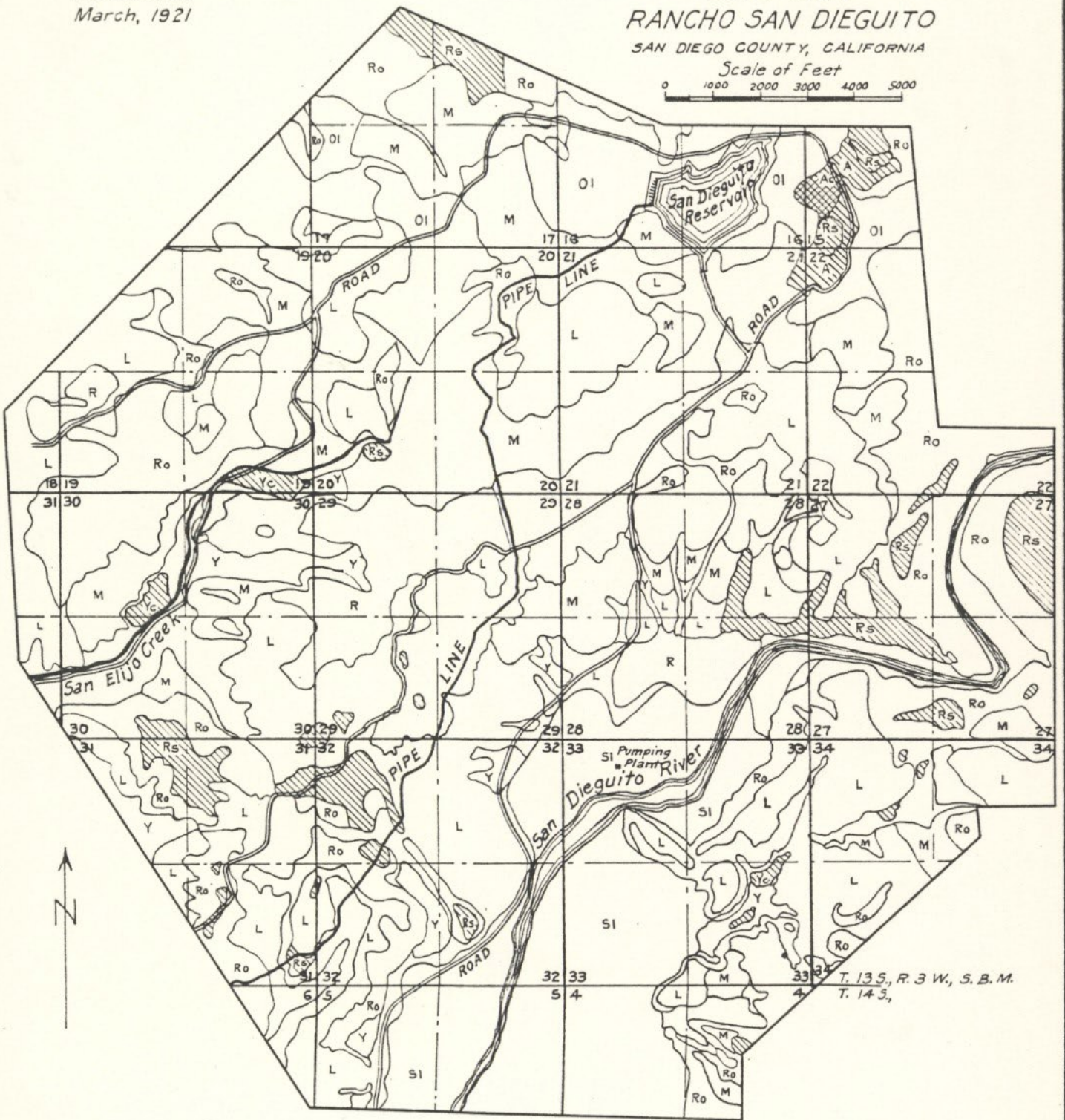
(Note: The enclosed Figure 1A is a 1921 map of the original Rancho San Dieguito area in March 1921 that shows the roads constructed by Col. Fletcher before the Rancho Santa Fe subdivision was started. It also shows the location of the well and pumping plant used to get water to the 80 mentioned experimental acres of agricultural planting on the elevated mesa territory. This location appears to be that of the well and pumping plant at the Chino vegetable stand, and if it is the same, it is the source of the first water supply for the present Rancho Santa Fe area, and under California riparian water law, its flow rate would be protected even though it was necessary to release water into the water table from the later-built Lake Hodges Dam.)

(The San Dieguito Reservoir shown on the map was built in 1919 after the 1918 completion of the Lake Hodges Dam, and was supplied by a gravity water flume from that dam. The water line shown from the reservoir was built to supply surplus Lake Hodges water to Del Mar and La Jolla areas, after the requirements of the two new local irrigation districts were fulfilled as described later. This long abandoned pipe line was rediscovered in 1986 in

Base Study for
DEVELOPMENT SURVEY
L. G. SINNARD
March, 1921

RECONNAISSANCE
SOIL MAP
RANCHO SAN DIEGUITO
SAN DIEGO COUNTY, CALIFORNIA

Scale of Feet
0 1000 2000 3000 4000 5000



LEGEND

- | | | | |
|---|---|---|---|
| <p>L
Las Flore and Kimball
Loams and Sandy
Loams
(undifferentiated)</p> <p>M
Montezuma Adobes</p> | <p>R
Ramona Sandy Loam
(terrace phase)</p> <p>Y
Yolo Sandy Loam</p> <p>Yc
Yuba Clay Loam</p> | <p>OI
Olympic Loam</p> <p>A
Aiken Loam</p> <p>Ac
Aiken Clay Loam</p> | <p>SI
San Dieguito
Sandy Loams</p> <p>Ro
Nonarable</p> <p>Rs
Nonarable (rocky)</p> |
|---|---|---|---|

T. 13 S., R. 3 W., S. B. M.
T. 14 S.,

If there ever was an empire building and rugged individualist, it was E.P. Ripley. As I dictate this today (September 1, 1950) I want to pay a lasting tribute to these most remarkable men who were an inspiration to me - E.P. Ripley, W.E. Hodges, E.J. Engel, E.O. Faulkner, and *U.T. Clotfelter, their attorney.

(*Note: Mr. U.T. Clotfelter was the uncle of our local resident, Reginald M. Clotfelter, who came to Rancho Santa Fe in 1931 to represent the Santa Fe Land Improvement Company, and whose wife Constance Clotfelter is the author of the booklet "Echoes of Rancho San Fe." Many chapters in that publication provide a wealth of information on the founding of Rancho Santa Fe at that point in time where Col. Fletcher's narrative leaves the subject.)

I am more than grateful that they had confidence in me and that I had the opportunity, with them, in developing one of the largest of our natural resources in San Diego County - Rancho Santa Fe and the Santa Fe and San Dieguito Irrigation Districts, while at the same time helping San Diego with its water supply. You will hear more later, first about the creation of the Cardiff Irrigation District, which failed, then the successful creation of the San Dieguito and Santa Fe Irrigation Districts.

PART 2 - THE LAKE HODGES DAM STORY

I have been accused of having water on the brain, for the reason that I have, for forty years, publicly and privately preached the building by, the city and the districts, of every dam they could finance in the county.

I sold out my interest in the South Coast Land Company with regret - it had been a most pleasant and happy experience at Del Mar, but in a contract that I entered into with William G. Henshaw, covering the promotion and sale of the water development of Warner Ranch and the development of Sutherland, Pamo and Lake Hodges dam sites, I found it more interesting and financially more profitable to give my time to my new work, associated with William G. Henshaw.

I entered into a written agreement with Mr. Henshaw whereby I would put my time against his money and I was to receive an expense account of \$200 per month, also 25% of the net profits on the water projects after Mr. Henshaw received his money and interest back.

(Note: The contractual relationship between Mr. Henshaw and Col. Fletcher in the 1910-1920 decade for County water projects was concurrent with the contractual relationship of Col. Fletcher with the Santa Fe Railroad for managing the Santa Fe Rancho. Mr. Henshaw, a president of the Riverside Cement Company, was the wealthy owner of the Warner Ranch and Hot Springs, and built the Lake Henshaw Dam and Reservoir which bear his name and supply water to the Oceanside, Vista and Fallbrook areas and supporting irrigation districts.)

One time when Mr. Henshaw went to Europe he authorized me to spend not to exceed \$4,000 in taking options on the available dam sites on the San Dieguito River which ran for three miles through the Santa Fe Rancho.

The water in the mountains running through the Pamo Ranch was known as the Pamo River, and as the water continued running down hill and entered the San Pasqual Valley, it was known as the San Pasqual River; then as it continued to the sea it was known as the San Bernardo River, running through the San Bernardo Ranch; then it entered the San Dieguito Spanish grant and again it was marked on the U.S. Topographical maps as the San Dieguito River until it entered the ocean just north of Del Mar - all one river and should have been named the "All Saints River."

Following Mr. Henshaw's instructions, one hot day in July, I walked up through the canyon (there was no road then), going easterly up the river from the Rancho, and discovered what is now known as Lake Hodges damsite and dam.

The damsite was owned by James Carroll, whose son is now our County Superintendent of Schools - Dr. John S. Carroll. I paid him \$200 for an option on his property and that of his brother, Tom Carroll - these options were later exercised and I bought the property for Henshaw.

Following up the river, I discovered a damsite below Pamo Valley that looked good to me, below the site selected by the Linda Vista Irrigation District in the Eighties, which I later acquired.

Another day, following up the river, I located two damsites; found a Mr. Booth and George Chambers owned them, and took an option on same - and now called Sutherland Dam - one of the ranches being the Sutherland Damsite.

When William G. Henshaw came back from Europe and found I had spent most of his \$4,000 in taking options on the Carroll properties, on the bonds of the Linda Vista Irrigation District that controlled the Pamo Damsite and the Booth and Sutherland properties on the Santa Ysabel River adjoining the Santa Ysabel Rancho, he employed an engineer by the name of H. Hawgood to inspect the damsites I had optioned, and make a report as to the advisability of their acquisition, without personally investigating the properties himself.

I showed Mr. Hawgood the properties in question. He was non-committal, made his report direct to Mr. Henshaw who later on wrote me to exercise the options and purchase the so-called Booth-Sutherland Dam and Reservoir sites, and purchase the Linda Vista Irrigation District bonds that controlled Pamo, but not to buy the Carroll properties now known as Lake Hodges damsite.

By following the recommendations of Mr. Hawgood, Mr. Henshaw kissed some of his money goodbye; and did not exercise the option to purchase the Carroll Damsite. In fact he rather severely criticized my action for optioning same.

When I received the letter I felt hurt and wired Mr. Henshaw, asking if he would accept the money paid out and assign the Carroll option to me and waive all interest in said options. To my surprise he wired in reply to meet him at Del Mar two days later with saddle horses to inspect the Carroll property. On arrival we made the investigation, taking our lunches with us, made by your good Mother, and under an oak tree Henshaw asked me, after going over the damsite and reservoir site, for my reasons why the Carroll property should be purchased.

My answer was as follows: "Under the laws of the State of California, no water could be taken out of one watershed and transferred to another without acquiring the ownership of the land or the riparian rights below the point of diversion.

Mr. Hawgood had recommended the acquisition and building of the so-called Sutherland Dam only. It was nearly 30 miles away, while the Carroll damsite was only 5 miles from Santa Fe Rancho; there was only one-third of the watershed area and supply of water available at Sutherland compared to the amount of water that would be caught at Carroll Damsite, all the riparian rights between Sutherland and Lake Hodges would have to be acquired first; it meant at least a couple of million dollars spent unnecessarily at that time if a dam were built at Sutherland site and anybody could come in at any time and give us all kinds of trouble by filing on the water rights and building a dam below; while if the first dam was built at the Carroll site we could protest the diversion of water into other watersheds from any point above.

If we built at the Carroll site, we would have three times the amount of water available at least and for a million to a million and a half dollars we could build a dam at the Carroll damsite, acquire the riparian rights of the river to the ocean, one-third of which was owned by the Santa Fe Railroad Company, and in reality it meant an investment of three and a half to five million dollars to build Sutherland and take it to the coast lands as compared to one and a half million dollars to build and take the water to the coast from the Carroll site. It would also be much easier to raise the one and a half million dollars as compared with five million."

"Being manager of the Santa Fe Rancho at the time and a close friend of the President of the Santa Fe Railroad, I felt that some day, some way it would be possible to work them into the deal and get them to finance the water development first."

Mr. Henshaw agreed with me, and on his instructions I exercised the option, purchased the Carroll properties, and later on the Rancho Bernardo of several thousand acres, including all the lands that would be flooded by the building of a dam 125 feet high, making a lake 8.6 miles long, later built with finances of the Santa Fe Railroad and now known as Lake Hodges.

In 1916, after the flood, when on the authority of Mr. Ripley, the Santa Fe Railroad President, to sell, I offered the Santa Fe Rancho to Mr. Henshaw. He had to admit he was hard up for money and was not in any position to buy the Santa Fe Rancho. Since Mr. Henshaw was so short of cash, I suggested that he send me to Chicago to see Mr. Ripley and get the Santa Fe Railroad to finance the building of a dam at the Carroll damsite and bring the water to the coast.

He laughed at me, said the railroad company could not finance a water development, as it was a violation of the Clayton Act, but I insisted a way could be found. The Santa Fe was particularly interested, as their lands would be benefited by a bountiful water supply and easily sold. Also, it would develop the coast lands from Del Mar to Carlsbad.

(Note- The Clayton Act was a 1914 Anti-Trust Law passed by Congress which, among other things, prohibited any corporation engaged in commerce from establishing an economic monopoly that limited competition in any way. The construction and control of a completely non-competitive dam and water distribution system by a railroad could be construed as a monopoly that determines who gets water and who doesn't get water for developing agricultural crops that generate railroad transportation business. Such charges of monopolistic practice would be especially liable in a low rainfall water shortage year when all previous water commitments could not be fully met. Consequently the Santa Fe Railroad after building and acquiring large water holdings as herein described was sensitive to the Clayton Act, and later sold the holdings off to the Henshaw interests for a very nominal amount, just when the water business was expanding rapidly and profitably in the developing Rancho Santa Fe and coastal community areas.)

At last I offered to go to Chicago if my expenses were paid and outline a plan which I took with me after having wired Mr. Ripley and made a date for a conference. Henshaw agreed to pay me \$25,000 if a deal was made. I arrived there on a Thursday morning to keep an 11 o'clock engagement with Mr. Ripley - I laid all our cards on the table to Mr. Hodges; he said it was impossible, the plan suggested by Mr. Henshaw was out of the question and was a waste of time and he did not even go with me to the conference with Mr. Ripley.

But an inspiration came to me as I waited outside for the appointment. I was greeted very cordially but when I commenced talking water and financing he gave me no encouragement whatever - I told him I had not come to him for money; would he call in his stenographer and have her take down what I had to say if he wanted a copy of it, I felt I did. He granted my request and in 10 minutes I told him somewhat along the following lines:

That the Santa Fe Railroad running from Oceanside to San Diego was at that time taking if anything less passengers and freight than in the early days of its construction; that the lands were practically frostless along the coast from Del Mar to Oceanside; good soil, ideal location, but all it lacked was water; that Henshaw and I controlled the Carroll damsite; it would cost so much money to build it and so much for the transportation lines through the 12,000 acres owned by the Santa Fe Railroad to the coast, the plan being to put the water to beneficial use from Del Mar to Carlsbad. I called his attention to the fact that several towns would be developed and that his own expert stated that 11,000 pounds of citrus fruit per acre was shipped each year from Southern California east.

That what I was asking was that he select his own engineer, send him out there, the railroad to pay for the cost of the engineer's report, and if anything that I was saying that day was untrue, I would pay even the cost of the engineer; that the whole expense should not be over \$1,500 or \$2,000; that the Santa Fe Railroad must be interested in the development of its own land and the country through which the railroad travels and would he pick an engineer, check up on my statements, and if they found it to be true that we could develop the cheapest water in quantity ever developed by storage in San Diego County.

Then all I asked was that he would write and give us a letter to their bond houses, stating in effect that the investigation had been made by the Santa Fe Railroad, giving the possibilities and necessity of this development - that it meant much to the Santa Fe Railroad and San Diego County and would they give consideration to financing the project.

All Mr. Ripley said was, "Come back, Colonel, at 2 o'clock" which I did. My statement had been typewritten by the secretary, Mr. Ripley wrote on the face of it "accepted," asked me to sign and handed me the original - much to my surprise and pleasure. He appointed as his engineer to investigate the project, none other than the Chief Engineer of the Santa Fe Railroad, G.W. Harris.

Mr. Henshaw was delighted. After four months investigation I received a telegraph from Mr. Ripley that he and Mr. Hodges would meet Mr. Henshaw and me in San Diego. Mr. Henshaw could not make it, being in a hospital sick, but I took Mr. and Mrs. Ripley and Mr. and Mrs. Hodges and your Mother and myself in a seven-passenger Cadillac for a day with a splendid luncheon made by your Mother - the day was spent investigating the whole project. Mr. Ripley made no comments.

I had no knowledge of what the final result would be, but as we were eating our lunch and finishing up with apple tarts, Mr. Ripley spoke up and said, "Mrs. Fletcher, this is a wonderful lunch and a most opportune time, I think, to tell you that we have investigated this whole project and to tell you and your good husband it is favorable - we find that the Santa Fe Land and Improvement Company - a subsidiary of the Santa Fe Railroad, Mr. Hodges, President - can legally, and has sufficient money to finance the project without the necessity of borrowing any money elsewhere and providing Mr. Hodges, Mr. Henshaw and your husband can arrange the details, we will finance the entire project under the control of the Santa Fe Land and Improvement Company."

It certainly made me happy and it was a pleasure to wire Mr. Henshaw of the offer. A few days later a conference was held between Mr. Hodges, Mr. Henshaw and myself in Los Angeles, but we could not reach an understanding.

At a second meeting a few days later, after three hours of conference, we got nowhere and Mr. Hodges picked up his hat to leave - the whole question was as to valuations of the Santa Fe Railroad water rights, rights-of-way and the holdings of Mr. Henshaw. Just as Mr. Hodges reached the door, he turned around and said, "Henshaw, I will make you one more proposition - I will leave the valuation of our properties needed to Ed Fletcher if you will yours."

I was in a bad position, but Henshaw immediately accepted.

After a week or ten days I made my report, involving over two million dollars in valuations of lands, water rights, rights-of-way, including three reservoir sites and lands flooded. It was accepted by both parties, the Santa Fe Land and Improvements Company controlling the majority of the stock - a new company was formed called the San Dieguito Mutual Water Company.

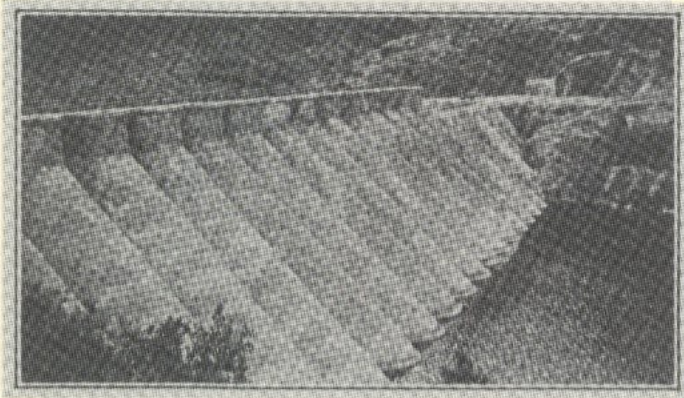


Figure 2A
Upstream Face of Lake Hodges Dam

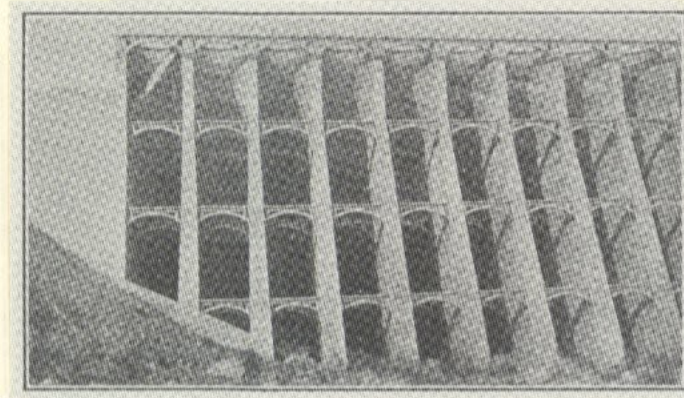


Figure 2B
Downstream Face of Lake Hodges Dam

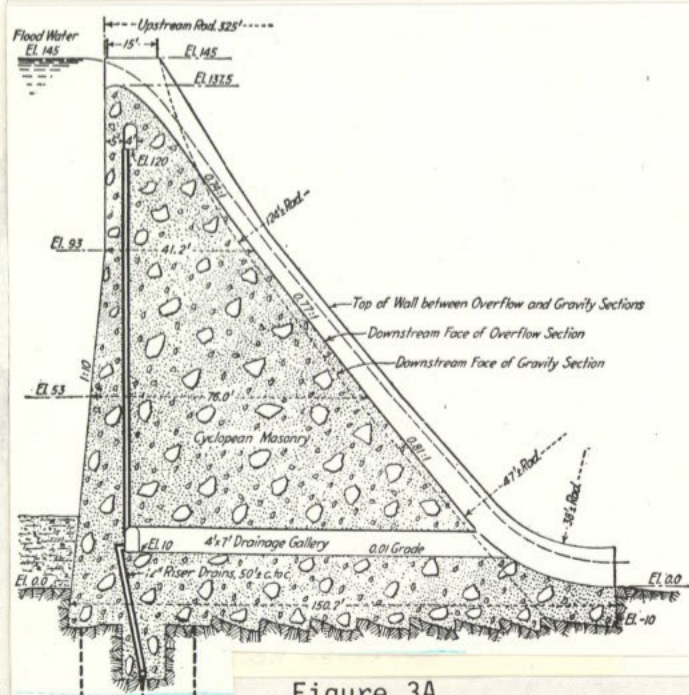


Figure 3A
Cross Section of Lower Otay Dam

Mr. Savage insisted that the only type of dam to build was a gravity type. I have no knowledge of his ever building anything else, excepting an earth dam - El Capitan - and he used Freeman's plans for that.

Mr. Savage went out of his way to ridicule the construction of Lake Hodges Dam, but to no avail. Lake Hodges Dam was built in 1918 and has withstood the worst floods with a regular Niagra running approximately 12 feet deep over the spillway.

In the meantime, Mr. Savage had built Barrett Dam, as well as Otay, both massive gravity types.

One day in 1923, I conceived the idea of finding out if insurance companies would write policies of insurance on dams and found Lloyd's of London carried such insurance. I asked that their expert engineer be sent here. I took him to Lake Hodges and Murray Dam, built by James A. Murray, William G. Henshaw and myself, both of which were inspected thoroughly and the plans and specifications and stresses of each were given Lloyd's engineer.

I then took him to Barrett and Otay Dams, built by Mr. Savage. There they secured identical data and we asked Lloyd's to establish a rate of insurance on the gravity type advocated by Mr. Savage and ours. The result was that Lloyd's of London gave Hodges Dam a higher factor of safety for the multiple arch type than the gravity type.

(Note: Lloyd's of London, the world-famous insurer of all types of maritime ships and their cargoes, was willing to analyze the stresses and insure thin-walled reinforced concrete dams in 1923 because they had previously analyzed and insured ocean-going cargo and tanker ships with thin-walled reinforced concrete hulls in the years after World War I. These were part of an emergency World War I program to produce needed shipping. San Diego had one of the two Pacific coast shipyards that constructed 3,500 ton, 410 foot long cargo and tanker ships with reinforced concrete hulls that were only 4 to 10 inches thick, which was much thinner than the Lake Hodges Dam reinforced concrete arches.)

(This national ship construction program, conducted at six locations, was headed by Mr. R.J. Wig, who lived in San Diego at that time and was a world-famous expert on the handling of cement to increase its steel bonding strength in thin slab reinforced concrete design. The first of these ships, which was appropriately named S.S. Faith, satisfactorily bucked an 80-mile gale off the coast of Mendocino on its maiden voyage to Seattle without difficulty. After this experience, Lloyds of London was willing to write cargo insurance on the twelve "stone bottom" ships that were finished on this war-time program and placed into commercial service for a few years after the end of World War I; and later on thin-walled multiple arch reinforced concrete dams.)

(It is of interest to note that when the two concrete hull ships built in San Diego finally left service because of being too heavy for economical operation, one was dismantled and the concrete hull towed to San Clemente Island off the local coast by the Navy. There it was beached, pulled up on the shore and installed in a prepared excavation. Serviced by water tanker ships, its interior was the only island water supply reservoir for this busy Navy installation during World War II and a number of years later.)

Our state engineer for many years, Mr. W.F. McClure, was brought into the row between Savage and myself for the dam had his official approval. The following is a letter that I wrote to the State Engineer on November 13, 1923:

"Mr. W.F. McClure, State Engineer
Foreman Building
Sacramento, California

Dear Mr. McClure:

You will be glad to know that Lloyd's of London have paid us a great compliment - they have agreed for 75¢ per \$100 to insure both Murray Dam and Lake Hodges against earthquake, flood, mischievous damage or collapse - the first insurance that has ever been offered in this state of this kind.

Very truly yours,
Ed Fletcher"

We insured both dams, paying 75¢ per \$100 while Lloyd's of London demanded \$1.00 per \$100 to insure either Barrett or Otay. Lloyd's considered the risk so much less at Hodges and Murray Dams by earthquake, flood or collapse that they were willing to give us one-quarter lower rate than what they demanded for the gravity type of dam - Barrett and Otay built by the City of San Diego and advocated by Savage.

All of this was made public!

To go back a little, I want to bring out the point that the value of the Lake Hodges water development to San Diego County has not been appreciated by many. Water on our coast lands is surely the blood of the soil. Any letter from the County Assessor, Crowell Eddy, showing the valuations of the Santa Fe and San Dieguito Districts then and today, is self-explanatory on the huge amount of the value increase.

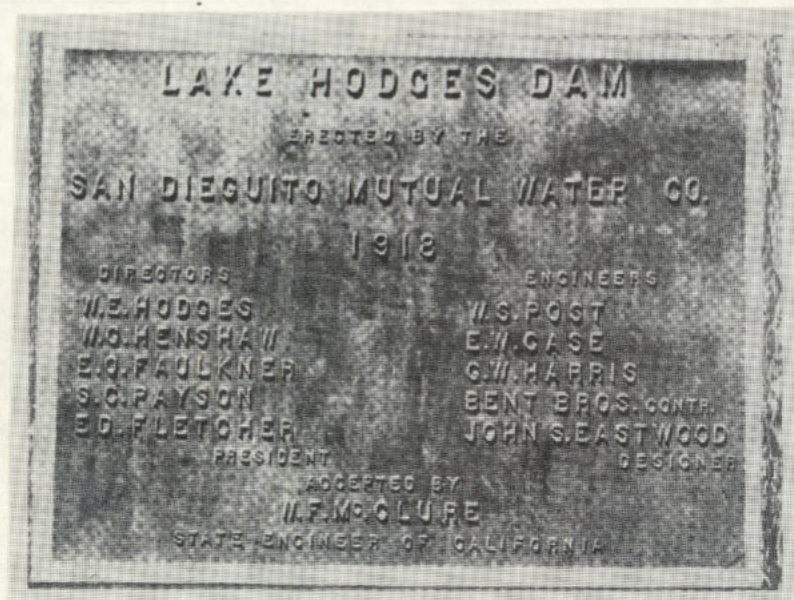


Figure 4A
Dedication Plaque at Lake Hodges Dam

Later we organized the San Dieguito Irrigation District, approximately 4,000 acres, embracing Cardiff, Encinitas, and Leucadia. We also signed a contract to furnish them with water, all with the approval of the State Authorities.

We had no trouble in selling the bonds of the Santa Fe Irrigation District for the construction of its distribution lines, but the San Dieguito District had trouble in the sale of its bonds for its distribution lines and main trunk line from San Dieguito Dam.

Twice the San Dieguito District advertised the sale of its bonds, with no bidders. It was a tight money market at that time (1922), their interest rates were high and the financial interests considered it a big risk to buy the bonds.

The Ed Fletcher Company owned several hundred acres that were included in the San Dieguito District and I had purchased practically all of Leucadia for the South Coast Land Company, controlled by William C. Kerekhoff; also Frank Salmons and I had purchased Eatonville subdivision at the north end of Leucadia adjoining La Costa Slough on the south.

The Directors of the District appealed to me to help sell the bonds of the San Dieguito District. I went to Los Angeles; saw William G. Kerekhoff, explained the situation and asked him what he could do to help. He said he was a director of the Security First National Bank; Mr. Satori was president, and he made arrangements for a luncheon engagements where the matter was discussed. The Security First National Bank loaned us \$400,000 on our joint note; again the bonds of the San Dieguito District were advertised and we were the only bidders.

The distribution lines were immediately installed with a bountiful water supply to Encinitas, and eventually Leucadia and Cardiff commenced to develop rapidly. Two years later, we sold the bonds, paid off our note at the bank and our total loss was \$384! But we had rendered a valuable service to the community and ourselves.

With the development of Southern California, particularly Los Angeles and the coast lands, the territory between Del Mar and Oceanside boomed in the early 20's.

While the boom was on, I purchased the town of Solana Beach from George H. Jones at \$200 per acre and purchased several hundred acres adjoining, all with the approval of the Santa Fe Railroad Company. The railroad company paid for half the cost of the Solana Beach depot and we the other half. I laid out the present Plaza at Solana Beach and got permission from the Santa Fe authorities to use the water from Lake Hodges dam that was going over the spillway to hydraulic through a bank 100 feet high and 400 feet wide, at Solana Beach so as to get a view of the ocean and develop the beach itself.

It was a most interesting sight to see one man for three months using hydraulic pressure, melt away the soil. The soil went on to the beach and the ocean took it away. The Ed Fletcher Company gave the County land for the present park and also donated a mile of ocean frontage on the beach.

been organized every drop of rain water from the Lake Hodges system would have been today serving that territory from the city limits of San Diego to Carlsbad and undoubtedly the Cardiff Irrigation District would have owned the system, for the Santa Fe Railroad only asked in return, its money back and interest, and that is the price that the Santa Fe Railroad sold the Lake Hodges system to the San Diego County Water Company, which company made over a two million dollar profit in its sale later to the City of San Diego.

The Santa Fe and San Dieguito Districts, through bad advice from the State Authorities, did not contract in the beginning for enough water. In the first place, the state authorities figured that the duty of water was one acre foot per acre per annum, within the boundaries of the district - the proven facts today are that they need from two to three acre feet per acre per annum.

With the City of San Diego having purchased the Lake Hodges system, naturally San Diego has no further water to sell to the irrigation districts - this has forced the irrigation districts, along with the City of San Diego, to purchase Colorado River water and to join the Metropolitan Water District in acquiring the most expensive water ever, and the quality is not so good either.

The Colorado River water that we receive is pumped 1,696 feet. Its quality is questionable, owing to the minerals which are in the water itself and causes corrosion to the city pipelines and private plumbing.

That you may know how poor quality of the Colorado River water is and why we should get better quality water either from the Klamath or the Feather River, I want to pass on some information that will be of interest to you. San Diego has four million dollars invested in the Murray Filter Plant and, roughly, a half million dollars invested in the plant to soften our drinking water. It will probably cost a million dollars additional money in my opinion that the City of San Diego must dig up before we can get the water properly softened for drinking purposes.

(Note: This was later accomplished.)

There is one further point I wish to bring out as to an additional water supply for the San Dieguito Irrigation District - I refer to the Escondido drainage which empties into the San Elijo Creek and the ocean right between the Santa Fe Irrigation District and the San Dieguito Irrigation District. The water should be conserved. There is a splendid drainage area of 48 square miles.

I discovered in 1916 and had surveyed, a damsite just north of Rancho Santa Fe, while president of the San Dieguito Mutual Water Company and with the approval of the Santa Fe railroad officials, we spend something like \$30,000 in making those surveys. Through J. Frank Cullen, we acquired certain riparian rights. It has a net safe yield of approximately 3,000 acre feet per annum and the water will flow by gravity to the San Dieguito Irrigation District.

I called attention a number of times to the Districts to the possibilities of this local development. It is only within the last two or

three years, 1948-1949, that the San Dieguito Irrigation District has taken an interest after I wrote them a letter on the subject and donated all the surveys and plans and specifications.

I am very happy to see that they have recently filed on the waters of the San Elijo Creek and I am sure that development will be completed in time. It is an added advantage to the San Dieguito District to develop this additional water particularly in that it is practical to put its Colorado River water right into the San Elijo Reservoir and save the loss of evaporation and cost of transmission of the Colorado River water into Lake Hodges and from there through the San Dieguito Dam to the San Dieguito District - the present method.

(Note: Construction of a San Elijo Dam has not been pursued, probably because there is potential pollution in the drainage watershed area. This area includes the City of Escondido and districts still under septic tank sewage systems. As a result, the storage situation would require an expensive water treatment plant that could increase the cost of delivered water above that of the present water distribution system. However, it is interesting to note that if this dam were built, motorists on the Encinitas Blvd. road crossing of San Elijo Creek between Rancho Santa Fe and Encinitas would not be subjected to the problems of road block, or unavoidable passage through muddy torrents of water as they are today after every heavy rainfall.)

During these recent years, it has been a pleasure to cooperate with the Directors of the Santa Fe and San Dieguito Irrigation Districts. In a way, it has been a dream child, through my interesting the Santa Fe Railroad people to finance the Lake Hodges development. I want particularly to thank my old friend, L.P. McChesney, of the San Dieguito District, for his friendship through all these years - sometimes we did not agree, but we always agreed to disagree. This goes for D.M. Bakewell, Superintendent of the Santa Fe District, and the Directors of both Districts.

(Note - This concludes the personal narrative part of the story of this remarkable man who dominated the creation of Rancho Santa Fe and its water storage and supply systems.)

(To bring the water supply history to date, in 1985 the Santa Fe Irrigation District obtained 59.9% of its water from San Dieguito River water collected at Lake Hodges dam. The 40.1% balance was obtained from the San Diego County Water Authority which controls the operation of four water pipelines from San Diego to the Skinner Reservoir near Lake Perris in Riverside County. Here 17% of our water supply was obtained as a limited allocation of Feather River water from Northern California, and was mixed with a limited allocation of 23% of our water supply obtained from the Colorado River by the Metropolitan Water District aqueduct. This mixture was then pumped to San Diego County in the four pipelines. That off-site water destined for the local irrigation districts was first filtered and treated for hardness at the Miramar Treatment Plant near the Naval Air Station, and then pumped into Lake Hodges to add to the collected local water. From there the final mixture was carried by flume to our local San Dieguito Reservoir bounded by Montevideo and Lago Lindo streets, where it was given a final chemical treatment to kill any residual bacteria, and pumped to the Santa Fe Irrigation District meters.)

(In the "Memoirs of Ed Fletcher," he also tells of his eight years as a State Senator in the California legislature, and how he sponsored the various state water bills that made water from those distant sources available to San Diego County.)

(Unfortunately, the Metropolitan Water District Colorado River water supply will be cut to 50% of its present level by 1990 to divert water to Arizona in accordance with a 1964 Supreme Court decision. Meanwhile the Santa Fe Irrigation District water usage continues to increase at a rate of 7.6% a year over its 1980 level. A low rainfall precipitation year in any of the three water source areas will result in future arbitrary water rationing by the Santa Fe Irrigation District directed by the San Diego County Water Authority. This could seriously curtail or eliminate Rancho Santa Fe agriculture, recreational, and landscaping water. This will result in significant Rancho Santa Fe water supply history to be recorded in future dry years.)

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RECONNAISSANCE
SOIL MAP
RANCHO SAN DIEGUITO

SAN DIEGO COUNTY, CALIFORNIA

Scale of Feet

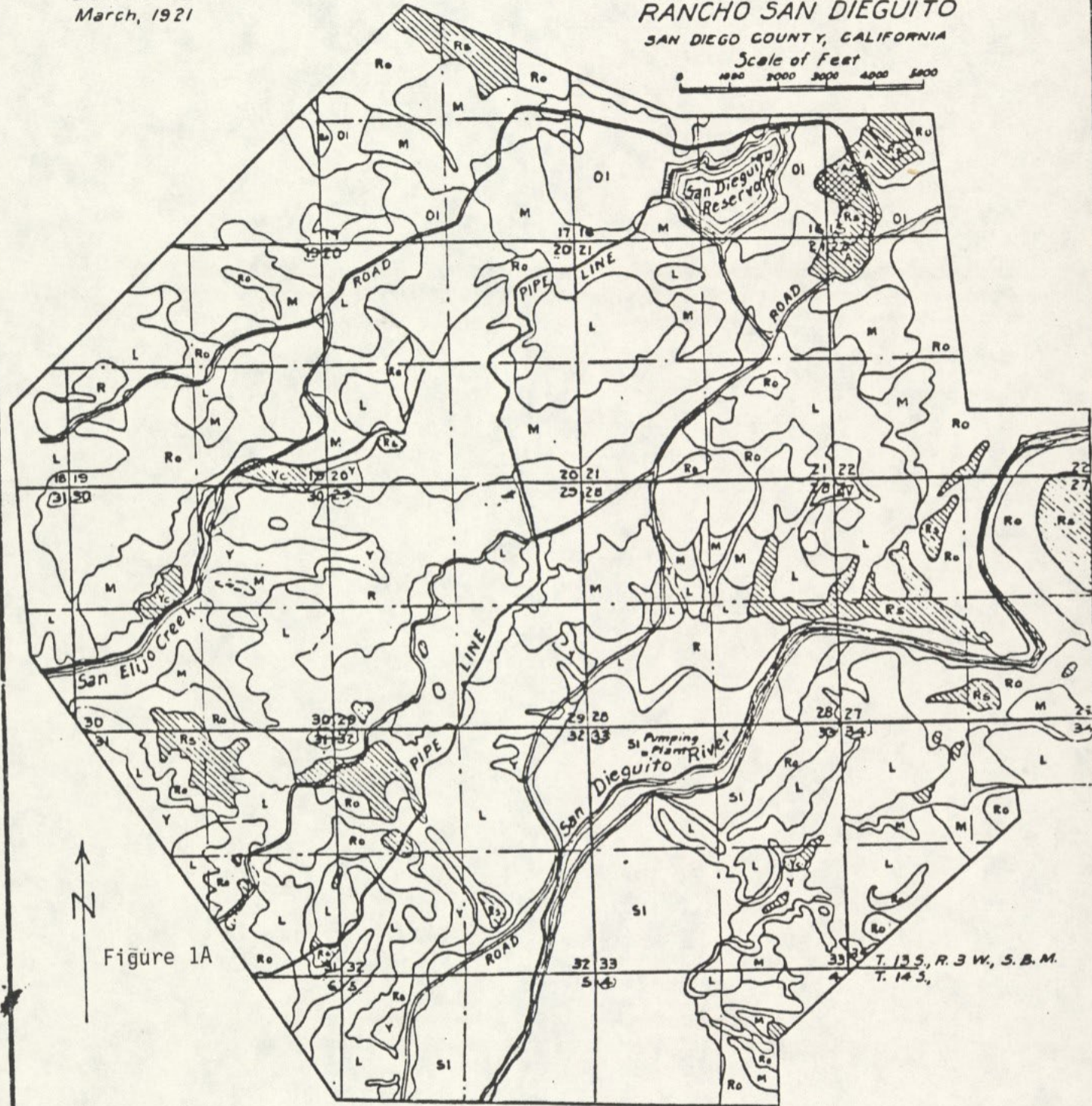
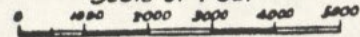


Figure 1A

T. 13 S., R. 3 W., S. B. M.
T. 14 S.,

LEGEND

L
Las Flore and Kimball
Loams and Sandy
Loams
(undifferentiated)

M
Montezuma Adobes

R
Ramona Sandy Loam
(terrace phase)

Y
Yolo Sandy Loam

Yc
Yuba Clay Loam

OI
Olympic Loam

A
Aiken Loam

AC
Aiken Clay Loam

SI
San Dieguito
Sandy Loams

Ro
Nonarable

Rs
Nonarable (rocky)