

CHAPTER XVI

THE EVOLUTION OF THE WATER WORKS

I

Berkeley has been sharing for several years with other East Bay cities the ownership and operation of a municipal water system—one of the essentials to her progress. The experiences and steps which have brought this valuable acquisition cover so many years and are of such significance that they are set forth here in a chapter which is devoted wholly to them.

College Of California Water Works

Berkeley's first water works were constructed by the College of California in 1867. Their construction marked an epoch in Berkeley's early history. Twenty years later Dr. S. H. Willey, who was at the time of their construction the acting president and financial manager of the College of California, wrote concerning this pioneer enterprise: "Early in the month of August the water-works were so far completed that they were ready for use. But few residences besides my own had at that time been built in all that region, though the owners of many lots proposed to improve them by the use of water and have them in readiness for future building. But when the water was first turned from the reservoir into the pipes, and went up in spray under a hundred and fifty feet pressure at various points on the homestead tract and College site, playing jets fifty or seventy-five feet in the air, it was a sight novel and animating. It was a demonstration that water-works thus begun could be carried to any desired extent; that the water could be conducted down where it was wanted, all over the plain, and even to Oakland if it should appear that it could be done to advantage."

The friends of the College in Oakland and San Francisco and the surrounding country were invited to a celebration occasion on the College grounds.

The day, the 26th of August, 1867, was a windy, blustering one in San Francisco and on the Bay, but many had occasion to remark "how still it was, and how sunny and genial on the College

grounds and in the neighborhood around." The demonstration of what had been accomplished as the water was let on from the reservoir of thirty thousand gallons located at the beginning of Panoramic Way near the Stadium, made it evident that the only obstacle in the way of Berkeley as the ideal site for the College had been overcome. The capacity then was 300,000 gallons a day, but it was stated that by making a reservoir in the hills, which could be done at any time at small cost, the supply could be increased to any desirable extent. The water for the small reservoir then in existence had been conducted thereto from numerous springs and rivulets in the hills.

In its report the next day the *Alta California* observed that all that was done and said on that gala occasion gave evidence that "upon that spot would grow up the great educational establishment of California." Stating that eighty of the one-acre lots originally laid out had been bought by "the solid men of San Francisco," the further remark was: "When its attractions as a place for suburban residences are fully known people will make their future home there because nowhere within a reasonable distance of the city is there another place possessing so many desirable advantages: the city within sight, the bay and the Golden Gate in front, and the mountains for a background, sending down living water, with a foreground already the garden of the state, a college within speaking distance, and a climate of surpassing loveliness all the year around,—these were some of the considerations so well attested both by observation and by the remarks of the speakers as not to leave room for a dissenting opinion."

There is in the archives of the University of California today a little book which contains in the handwriting of Dr. S. H. Willey memoranda of the plans which the College Water Company was considering for the conducting of water to Oakland, both from Wild Cat Creek and San Pablo Creek for the profit of the College. The transfer of the property of the College to the state for university purposes ended those plans. Along with other transfers to the state went its cherished and valuable water-rights, and Berkeley had then for a short time the "University Water Works" system. In January, 1874, an engineer made a survey and study of the system and the needs to be met and reported to President Gilman that an expenditure of ten thousand dollars would leave the works "in a most desirable condition."

For reasons now unknown the regents did not continue the works. In 1888 in a comment on some of the disappointing things in the early life of the University Dr. Willey stated concerning these water rights

which the College had sought so devotedly to acquire for itself and for Berkeley: "They sold the hill land and with it went the water-sources of Strawberry Creek and the opportunity of empounding the water . . . No attention was paid to the preservation of the College Water Company or of the legal rights that had been acquired under it. All were forfeited by neglect; and years after when water sources had become very valuable and had been taken up by private parties and the University was almost without water the regents tried by long and expensive litigation to recover something of that which had been lost—and failed."

Berkeley Water Works

An organization called the "Berkeley Water Works" began to meet the water need early in Berkeley's history. Its owners were Messrs. H. B. Berryman and Felix Chappellet, the former purchasing the interest of the latter in August, 1877. Early in that year an office was opened in Antisell's real estate office near Berkeley Terminus and announcement was made that it was extending its lines along the principal streets and avenues in preparation for serving the town—many applications having already been received. In May connection was made with the water pipes of the University, on the campus, the force of which was light and which would thus be much augmented. In July the public was informed that a large addition had been made to the supply of water by adding to the sources a stream back of the University in the vicinity of the coal mine. In November the information was that "well knowing the prospective importance of Berkeley, which will in a few years be a city containing thousands of inhabitants, the company has determined to make the supply equal to the prospective demand" and was preparing to tunnel the hills in the vicinity of Wild Cat Creek. The newspaper's comment then was: "It appears to us that the stock of said company will partake much of the wild-cat character, as the land along the course of said creek is yet in chancery." In 1882 the water-works passed into the possession of Moses Hopkins which brought the comment that ownership by this capitalist "would result no doubt in adding much to the material interests of Berkeley."

Considerable dissatisfaction began to be expressed not long thereafter with the service rendered. In June, 1883, when a shortage was apparent, the company declared that the people were wasting the water, and it was ordered that consumers on the south side of Strawberry Creek should irrigate only on Mondays; those on the north side,

on Fridays; that no standing irrigants or hose would be permitted to run all night, and that any persons who desired to irrigate other than as ordered would have to ask for the installation of meters.

In January, 1884, one who signed himself "Citizen" stated in a communication to the local paper that the water situation was at that time such as to justify the complaints which were being made, and that there were "grave reasons for apprehension in the future." "Within the last year or so sixty or seventy families have been added to the population, and much more land would have passed into the hands of bona fide settlers could a proper supply of water have been guaranteed. But the supply at the present time is barely enough for domestic use, to say nothing of the requirements for irrigation. And unfortunately there appears no prospect of an increased supply." It was stated that when the water-works had been purchased from Mr. Berryman the transfer included a site for a capacious reservoir for the storage of sixty or seventy million gallons, but the capacity then was only eight million. It was suggested that Mr. Chabot be asked to bring in water from the reservoir at Temescal or that an Artesian Well company be formed—in the event that the existing local company should not proceed to meet the present need and to avert the future threatening danger. Some improvements were in progress at that time and enlargements were made at an early date. In 1885 the "Berkeley Water Works Company" became the "Alameda Water Company," and soon the two reservoirs on the hills, one south of the School for the Deaf and Blind, the other in the Berryman district north of the University campus, had capacities respectively of 2,500,000 and 23,000,000 gallons.

Alameda Water Company

This change came about through the absorption of the Berkeley company by the Alameda company, a corporation dating from 1864 and reincorporated at different times as it enlarged the scope of its service. According to articles of incorporation which were filed on the 28th of June, 1884, Moses Hopkins held considerably more than a majority of the shares of stock; and he or his heirs at a later date nearly all. At first the Alameda Water Company's principal place of business was in Alameda. Later it was in San Francisco.

A decade passed without much complaint about the service which was being rendered by the Alameda Water Company. A few years after complaints began to be voiced there came an outburst of wrath

which soon shook the foundations of a corporation which was then manifesting great indifference to the needs and interests of the people and by its attitude was endangering the growth and prosperity of the town. At one of the early meetings of citizens at which the situation was under consideration, Mr. Charles H. Spear, a man prominently active in the affairs of the town and county for many years, declared that the water company had been a source of trouble for fifteen years. "While Berkeley has been going ahead the corporation has been standing still, and now gives a third-rate service for first-rate pay."

Absentee Ownership

It was a case of absentee ownership. One of the editorial observations was: "It is calculated that the dividends of the Alameda Water Company amount to \$35,000 a year. It seems to us that this money instead of being spent in foreign countries, as it now is, might be devoted to the improvement of the company's system. We are inclined to think the system will be improved as soon as the Contra Costa Company extends its service to Berkeley." But that company wasn't ready to extend its service to Berkeley unless certain guarantees were given, and the water problem stood unsettled two years yet, making three years from the time the wrath of the people began to bubble and boil. The corporation made defense. The *World-Gazette* published its elaborately-framed defense and made an effective analysis and reply. The concluding thoroughly-justified paragraph of the reply was: "The fact, however, remains that Berkeley is suffering from a water famine and that the Alameda Water Company has it in its power to give ample relief within twenty-four hours." It could have bought water of the Contra Costa Company or of the Oakland Water Company.

Commenting at one time on the accumulating, wide-spread criticisms, The *Gazette* declared: "It is quite true that the people of Berkeley have allowed themselves to be hoodwinked and imposed on almost since the company began operations here. Unwilling to protest against their wrongs until the last limits of their good nature and patience have been reached, they permitted the corporation to do as it pleased. As a consequence the company has come to regard the community with the 'people-be-damned' view, characteristic of the average corporation."

The pioneer newspaper, The *Advocate*, had been absorbed by the *Evening World* in October, 1897, and the uniting in July 1898 of

The World with The Gazette which had been started in November, 1894, left Berkeley with only one newspaper, the World-Gazette, at the time when this water problem was at its height. It should be noted that in February, 1896, the pioneer paper had some commendatory words for the Alameda Water Company. They were: "The increased water supply now in prospect is another step in line with the growing requirements of Berkeley. For years the works of the Alameda Water Company were of ample capacity for all our needs and the town was supplied abundantly with the purest and best of water and the company extended its mains and service pipes wherever called for, in a manner satisfactory to the public generally. With our rapid increase of population, however, the limitation of the company's facilities was ultimately reached, and energetic and persistent efforts have failed to increase the supply. It was a commendable act therefore on the part of the Alameda Water Company at the last meeting of the town trustees to agree to withdraw its service from those parts of the town where it is unable to meet all the requirements. By that withdrawal the town is now able to obtain for West Berkeley efficient service through the Contra Costa Water Company whose mains already laid as far north as South Berkeley can be readily extended to cover the entire field from which the old company has withdrawn."

This commendation limps greatly in holding up as commendable the action of the Water Company in withdrawing from a territory which it had failed to serve, and which it was not willing to serve in such manner as its interests required. That weakens the whole commendation, which, so far as research goes, is the only friendly word for the Water Company, to be found in any of the local papers during the last six years of its existence. Whatever it had been under Moses Hopkins the control at his death had passed to his widow to whom he had been married in 1884, in his 70th year. At the height of this trouble the manager was reported, apparently authoritatively, that the instructions from the Company were to "charge all that the traffic will bear."

Whatever the causes for it, there was in 1898 a water-famine in Berkeley. On the 15th of July, 1898, an ordinance was enacted by the town trustees which made it a misdemeanor for the people to irrigate either their lawns or their flower gardens. It was repealed at the next meeting of the board, the members being unwilling on second thought, even though the supply might soon be practically

exhausted, to penalize the people for that which they held the Water Company to be blameable.

A Movement For Municipal Ownership

A strong sentiment for municipal ownership of a water system sprang up. A committee was constituted by the board of trustees to make thorough investigations to this end. In the meantime it was to interview the managers of the Water Company and arrange if possible for the meeting of the present need. This solicitation resulted in the purchase by the Alameda Company from the Contra Costa Company of Oakland of a limited supply of water, though it could have had it without limit. The record is: "The people have been kept on short supplies all during the dry seasons, with burned lawns and flower gardens, but have exhibited great patience through it all."

It was during this long-dragged-out trouble that Professor Carl C. Plehn, the Dean of the College of Commerce in the University, gave a notable address before the North Berkeley Improvement Club, in which he said: "There is no fully sufficient reason why a public water franchise should ever be conferred upon a private person or corporation any more than there is any reason for conferring the police power in a city, or the management of our public schools upon private corporations. A corporation might make a franchise profit by owning and managing the public schools, putting up the buildings, employing teachers and collecting rates from the pupils. The public has just exactly as much interest in having a good water system as it has in having good schools. We are so accustomed to public free schools that we can consider no other system reasonable. But in one sense water is even more necessary than education. Supplying water is naturally a public or a municipal enterprise, and not a private enterprise. A franchise has been defined by the courts to be the employment of powers that are public in their character.

"We may not be prepared as yet to say that water should be furnished to consumers free, but that is quite as reasonable as free schools, and the day will come when any other system will appear absurd. Supplying water cannot be a private business, because it requires the use of public property. Clothing is a common necessity, but the manufacture and sale of clothing does not require a franchise on the public streets."

In December, 1899, a Citizens' Syndicate stood ready to submit to the board of trustees a proposition to bond the town for funds to

construct a municipal water system. The cost of establishing such a plant was estimated at \$450,000; the cost of the land, \$10,000—already purchased by the ten citizens who formed the syndicate. It was stated that they had already expended approximately \$1,500 of the \$2,500 which the town trustees had voted for experimental purposes.

Soon thereafter, on the 27th of January, 1900, the committee which had been constituted by the board of trustees in 1898, which consisted of Messrs. Thomas Addison, L. J. Le Conte, and E. F. Nienhaus, made report. It was adverse to such a course of procedure at that time. This decision was based on the surveys and conclusions of a civil engineer whose findings were that the Pinole Creek project (the impounding of its waters) which had been considered, would not alone furnish a sufficient supply of water except for a few years; that it would be necessary to supplement this with water from wells to be bored in the San Pablo Creek delta; that not less than sixty would be needed in a few years, and that not until such wells had demonstrated the capacity of that locality to supply the water would the time come to project in detail such works as were required to deliver the water in Berkeley. "No matter how desirable it may be for Berkeley to own a source of supply," declared the engineer, "it therefore appears premature for the city to commit itself to any project relying solely upon the supply from these wells." Accordingly the committee on water supply concluded its report with the statement that it "found itself unable to recommend any definite action looking to the purchase of the San Pablo lands as a source of a permanent water supply."

There was much dissatisfaction with the report of the engineer; it was declared that he greatly overestimated the number of gallons of water that would be required to meet the existing need as well as that of many years in the future. Several courses of procedure were considered, among them a suit to condemn the properties of the Alameda Water Company. Nothing more, however, was done toward municipal ownership. The town trustees about two months later visited the Contra Costa Company's water sources and reservoirs and allowed a movement on the part of that company to purchase the Alameda Company's properties to go on to consummation. This deal was concluded in June, 1900. A short time before this consummation the Alameda Water Company had been reincorporated as the East Shore Water Company, it being thought that the first incorpor-

ation was defective. Bonds were issued to the amount of \$500,000, which were secured by mortgage and guaranteed by the Contra Costa Company, to which all the property was transferred by deed. This included besides its pipe lines, about 800 acres of land in Alameda and Contra Costa counties, the use of an extensive water-shed, three reservoirs: the Summit of 40,000,000 gallon capacity; the Berryman, with 30,000,000; the Garber, with 10,000,000. Improvements at a cost of \$75,000 were announced to be made at an early date.

There was a strong sentiment on the part of the board of trustees for a municipal water system. Influential citizens in large number favored it, but the uncertainty about the carrying of a bond proposition turned the tide toward ownership by the Contra Costa Company. Berkeley had then, as she has had through all the years since that time, a passion for voting down bond propositions—and this, despite the fact that if the thing isn't accomplished that way it cannot be accomplished at all when it should be.

It is suggestive of the future that at the time when Berkeley's water supply service passed into the hands of the Contra Costa Company there was in progress a hard struggle over rates between the City of Oakland and the Water Company; that an arrangement for the consolidation of the Contra Costa Water Company and the Oakland Water Company had been held in court to be illegal and that the value put on the two systems by the managements thereof, \$8,500,000, had been estimated by competent men to be more than double the real value. But whatever the value these companies had been built up into "going concerns" which were to claim an ever-increasing value during the next twenty-two years in their battles for rates.

The litigation over the conveyance of the properties of the Oakland Water Company to the Contra Costa Water Company, which was made in May, 1899, having been settled, the fortunes of Oakland and Berkeley and other East Bay cities with respect to their water supply were thereafter mainly in the hands of the Contra Costa Company, and its successors, for many years. This water company was organized by Messrs. Anthony Chabot, Renee Chabot and Henry Pierce on the 18th of July, 1866, and began delivery of water in Oakland in 1867. The Oakland Water Company, which was absorbed by it in 1899, was incorporated on the 15th of December, 1893.

Operation Under Contra Costa Company And Its Successors

The operation of the Contra Costa Water Company and its successors never was satisfactory to the East Bay Cities. Almost constantly there were aggravating disputes about the quality of the water, the supply and the rates; and at times costly litigation. Accordingly Mayor Anson of Oakland in 1901 urged a municipal system. In 1903 Mr. Warren Olney was elected mayor on a municipal ownership platform. The Contra Costa Company sold out to the People's Water Company in 1907, which company in 1917 transferred all its properties and rights to the East Bay Water Company. In 1918, under that company's operation, all the East Bay cities were in a deplorable situation because of the inadequate supply of water; all lawn and garden irrigation had to be discontinued. The water company tried at that time to meet a situation which might have been avoided if preparations for the needs of the growing cities had been undertaken at the proper time in the past.

In 1911 the City of Berkeley was cited to appear in the United States Circuit Court in San Francisco by reason of a suit instituted by the People's Water Company over the matter of rates which had been fixed by the council. The case was compromised and settled out of court, the council fearing that even if it gained a favorable decision the cost of the litigation would have laid a heavy burden of finances at that time.

Although certain enactments by the Legislature in 1911, 1913 and 1915 opened up the way for a solution of the water problem of the East Bay cities nothing was actually on the way towards accomplishment until 1923 when the first steps were taken for the East Bay Municipal Utility District and which became soon an assured enterprise.

The Course Which Led To The Movement For The East Bay Municipal Utility District

The course which led to the undertaking of this great enterprise will now be traced. In his first annual report (1910) Mayor Beverly L. Hodghead stated that an important question would confront the council and the people of Berkeley and adjacent cities in the near future—that of providing a supply of water not only to meet their needs during the next few years but the establishment of a system which could be developed gradually so as to meet the needs for the next half century. "We should know

whether the present supply is capable of such development," the mayor remarked, "or if such prospective needs can be furnished at all from local sources, or if these cities should look to the Sierras as their ultimate source of supply." Mention was made of the Hetch Hetchy project and of a desire by San Francisco for cooperation. In his second annual report Mayor Hodghead stated: "The council throughout the two years of its administration has been constantly active in regard to the important question of a municipal water supply." Expressing the conviction that in the not far-distant future there would be a continuous city from Hayward to Richmond, the declaration was: "An adequate water supply should be provided at this time for the needs of that generation. In the meantime the existing company should be allowed a reasonable return upon its properties which are used or useful for supplying the present needs."

The impression which Mayor Hodghead's reports leave upon the mind of the reader is that personally he was at least indifferent about the future water supply—whether it should be municipally or privately provided.

Mayor J. Stitt Wilson took a decided position when he came into office. Referring to some criticism of the legislative act which made it possible for cities to cooperate in securing a municipal system he observed: "It is possible that this act is not a perfect instrument. . . . My judgment is that notwithstanding the imperfections of the act, or the possible disadvantages that might arise, we should nevertheless proceed to act at once upon its provisions." It was declared then by Mayor Wilson: "Whatever we may do concerning the reservoirs and distributing system of the People's Water Company we must at last secure our supply from the Sierras." Berkeley could not, he stated, enter upon a program of municipal ownership alone, and accordingly he advised careful investigation of every project which might link our city with others for the securing of a supply from the mountains.

In 1913, sensing certain dangers, in a movement for county ownership, Mayor Wilson sounded a warning: "Municipal ownership is a good policy when carried out by men who are devoted to the principle and who are champions and guardians of the people's rights against the insidious encroachments of privileged corporations. Municipal ownership carried out by men of capitalistic tendencies may prove a positive burden and a calamity to the whole municipal ownership movement."

In 1914 the movement for the formation of a metropolitan water district for the East Bay cities was defeated at the polls. The vote for such formation was 10,606; against it, 13,282. The Berkeley vote was 2,443 for it; 2,143 against it. In Oakland the vote in favor was 6,478; against it, 9,142. At that time the Berkeley Courier made comment as follows: "The whole idea of disposing of a mortgage-logged and piecemeal constructed distributing system did not appeal to thousands of people who are warm advocates of the policy of municipal control of all public utilities. They considered that the plan of organizing the district was defective and offered opportunity for entanglements and complications that might become a heavy burden in the future. The fact that the People's Water Company was practically bankrupt and that an opportunity was open to purchase the property at bargain figures was not considered of sufficient importance to open up the way for passing the onus of high finance by a private corporation to public shoulders. They did not believe that the fact that the water company was in financial straits was any reason that they should come to its assistance. They remembered that in the past the water company had never been in the philanthropic business, and it was not incumbent upon the public to treat it otherwise than as a business enterprise which must work out its own shortcomings." Not long thereafter it was stated: "The Railroad Commission in permitting the People's Water Company to issue not to exceed \$3,329,884 in promissory notes for refunding purposes declared that the company had been improvidently and recklessly financed before the public utilities act was passed." The commission's words, then quoted, were: "Applicant's present plight is not the result of regulation, but the result of the absence of regulation at the time these transactions had their inception."

In a statement at a later date it was remarked: "One of the men familiar with the inside of the affairs of the corporation has recently declared that it is now more of a land syndicate than a water selling affair. There are in the water-shed area of the company about 44,000 acres, a portion of which is prospective valuable residence property. At present this land is covered by the general blanket bond mortgages, and the plan of reorganization makes provision for the sale of much of it by release clauses in any new mortgage."

Mayor Charles D. Heywood in his report in 1914 expressed regret that the effort for the formation of the Metropolitan Water District for the East Bay Cities had been defeated at the polls and urged

that steps be taken by the East Bay Cities to form a Public Utility District immediately under the Gates Bill of 1913. "Under this bill which is very broad all public utilities can be handled, including water works, electric light plants, street cars, etc., all of which I firmly believe will be operated by the people some day."

In March, 1916, Mr. Edgerton of the California Railroad Commission, reporting on the matter of the application of the People's Water Company for reorganization, stated: "I cannot leave this subject without directing the attention of the public officials of Oakland, Berkeley, Alameda and Piedmont, and the citizens of those communities to the unusual circumstance that now confronts them. They have long complained of inadequate water facilities. In fact the People's Water Company itself has admitted the inadequacy of its service. . . . There is practically unanimity in the belief that all larger communities would be benefited by owning and operating water systems. In fact there are very few large cities in the United States where this rule does not hold. I have no hesitation therefore in saying that Oakland and its neighboring cities will never solve their water problem until they own and operate their own water systems."

Mention was made by Commissioner Edgerton of the offer of the People's Water Company to sell for \$14,000,000 and it was remarked that "it should receive the very earnest consideration of the public officials whose duty it is to provide for the welfare of their communities."

In the early part of that year the Commissioner of Public Health, Mr. C. Hoff, renewed a former recommendation that the city acquire at least its own water distributing system, remarking in that connection: "I realize that we need other improvements, but we should take them in the order of their importance; and water is certainly of the very first importance."

Such was the situation by 1918, as hereinbefore stated, that public meetings were called to consider it. At a meeting of the City Club on the 15th of August, 1918, "Berkeley's Water Problems" were discussed. Mayor S. S. Irving presided at the meeting and called attention to the long-time inadequacy of the supply, and stated that many large establishments had for several years been unable to locate in Berkeley because of this inadequacy. His expressed judgment was that Berkeley was unable to solve her water problem alone and suggested and urged the formation of a public utility district which should include various cities and towns on the eastern shores of San

San Francisco Bay. Mr. Chris Runckel, deputy United States Marshall, analyzed the recent new rates allowed by the Railroad Commission and showed that there had been a flat raise of practically fifteen percent and that the burden of this raise rested upon the average householder. He stated further that these rates were the highest in the United States and three times as much as they were in Los Angeles where there was a municipally owned water system. M. M. O'Shaughnessey, the San Francisco engineer having to do with the Hetch Hetchy project, urged that the seven cities around San Francisco Bay get together not only for water but for transportation purposes and form a great public utility district.

The next three years brought no material change in the situation. Industries were being turned away from the several East Bay cities because no assurance could be given that they would be furnished an adequate supply of water. It was during this disturbing time of inability to forecast situations that Oakland lost the Goodyear Company's manufacturing plant because a guarantee of 8,000,000 gallons of water a day could not be given. Los Angeles secured it.

Early in the year 1921 considerable attention began to be given to the question of the formation of a city and county government, under the machinery of which it was maintained that the water problem could be settled and also such other important problems as power and light.

In May, 1921, the Legislature passed an act which provided for "the inauguration, incorporation, and government of municipal utility districts." It was a well-framed measure—one comprehensive enough in its scope to make it possible for municipalities to move forward in undertakings designed to meet the increasing needs in such a manner as to serve the interests of the people in an equitable manner. This enactment brought about renewed interest in the water supply and led on to the course of procedure set forth in the succeeding section of this chapter.

II

THE EAST BAY MUNICIPAL UTILITY DISTRICT

This Municipal Utility District, which has made possible an adequate supply of pure water for the East Bay cities for several years, and which assures such a supply for the future, was instituted by vote of the people on the 8th of May, 1923. During a thorough campaign it was made known through a committee of experts appointed

by the Oakland Chamber of Commerce that the limit of the present safe net yield of the East Bay Water Company's supplies would be reached in 1925, and the limit of its ultimate development upon properties then under its control before 1930. It was made known that in California 132 of 255 municipalities owned and operated their own water plants, and that there was no community in the United States as large as that on San Francisco Bay that did not have its own. Further, that in sixty of the large cities having their own supply the average rate paid by the people was fifteen cents per thousand gallons, while here it was thirty cents.

Mayor Louis Bartlett of Berkeley stated in an article in The Courier: "The indebtedness of the East Bay Water Company is never reduced, but grows at a rate which is only held in check by the Railroad Commission. The whole scheme of profits under private ownership in this utility calls for the issuance of all the paper the law will allow and all the public will buy. This constitutes a constantly increasing interest charge which the consumer must pay. In a great majority of the sixty cities with public ownership the municipal indebtedness is being paid off wholly out of the revenues of the service."

It was not without difficulty, however, that this action on the part of the people was brought about. The measure which made possible the formation of such a district was attacked because it was so framed that it opened up the way for the entrance on the part of municipalities upon other public utility enterprises.

In Berkeley, owing to this and other objections, the vote for the formation of the district was 3,664, and 3,507 against it—a majority of only 157. In Oakland the vote was 20,711 for it and 10,211 against it. Alameda's vote was 3,425 for it and 1,915 against. All the East Bay municipalities voted in favor except Piedmont and Richmond which entered later. The total vote was 28,733 for and 16,217 against. In an announcement to the people Mayor Bartlett spoke of it as "a great victory"—especially so in view of the struggles toward it through many years.

July 24, 1924, engineers began the examination of projects for the use of Eel River, two Sacramento River projects and the Mokelumne River source. Consideration was given to proposals for use of the American River and McCloud River, and a uniting with San Francisco in the Hetch-Hetchy project. In September a board of engineers, which consisted of the Chief Engineer, Arthur P. Davis and two consultant engineers, Wm. Mulholland and General George W.

Goethals, made a review of the investigations visited the various places and regions and finally recommended the Mokelumne River as the most promising economical source of supply.

On the 4th of November, 1924, a bond proposition providing for a construction fund of \$39,000,000 was carried by a vote of 81,919 for and 31,988 against. The vote in Berkeley was 14,093 in favor of it; 9,369 against it.

Immediately the courts were asked by opponents to pronounce on the validity of the action. The Supreme Court of California held it valid on the 24th of August, 1925; and on the 29th of September in that year the first awarding of contracts was made.

At an election which was held November 1, 1927, the issuance of bonds to the amount of \$26,000,000 was ordered for the acquisition of a distributing system either by purchase or by construction. The vote was 44,725 for such issuance and 5,213 against it. Every one of the 725 precincts gave a majority, and all but two registered majorities which exceeded two-thirds. Berkeley's vote was 8,427 to 1,061. Oakland's was 27,144 to 2,699; Alameda's was 4,333 to 1,056. "It was a great day for the East Bay cities," said Dr. George C. Pardee. "As a citizen and as president of the Utility District I am gratified by the result."

Unable to reach a satisfactory agreement with the East Bay Water Company for its system bids were asked for and were received for the construction of the first division of a distributing system. Requested then by the East Bay Water Company to resume negotiations for purchase, an agreement was reached on the 26th of September, 1928, for such purchase for the sum of \$33,752,900, of which \$13,962,200 was to be in cash and the balance by the assuming of the payment of bonds against the properties as they became due.

On the 19th of June, 1929, water from the Mokelumne River came into the East Bay district from the Pardee Reservoir; and on the 4th of May, 1930 that reservoir was filled for the first time. It was, however, in December, 1928, that the East Bay Municipal Utility District assumed the management of the distributing system and other properties which it had acquired from the East Bay Water Company. That which was thus acquired included 1,400 miles of pipe line, three large reservoirs and fourteen service reservoirs, many wells and pumps, and 42,000 acres of land, the major part of which would be available in the future for other than water supply purposes—not being needed for that purpose.

At the time of the dedication of the dam, on the 4th of May, 1930, Dr. Pardee made evident to some extent by brief remarks what the formation of the East Bay Municipal Utility District had meant and would in the future mean to the cities which had established it: "While other cities in California and on the Pacific Coast are concerned as to where their domestic water is coming from during the next few months we are sitting on top of the world with nearly five years' supply of the best water that can be secured. There has hardly been a time during the past ten years when there was not a possibility of a water shortage which would have crippled, if not ruined, these communities. We have seen the end of that. Our water problems are over."

It is worthy of note that not long after this East Bay municipal water system was in operation it was able to meet an emergency in San Francisco and for six months supplied that city with millions of gallons of water per day.