WASINGTON TOWNSHIP WATER

May 14, 2008: Water rationing went into effect Tuesday for East Bay residents after water managers unanimously passed a drought management program aimed at preserving the system's deteriorating water supply.

Residents of single-family homes throughout much of Alameda and Contra Costa counties were required to reduce water use by 19 percent; golf courses face 30 percent cuts; refineries and manufacturers must trim 5 percent…

It was not always this way. When Alameda County was in its infancy the water supply from the south county was thought to be inexhaustible. There was more than enough water in Southern Alameda County for residents and farmers.

Indeed, Alameda County was famous for its annual floods from the San Lorenzo and Alameda Creeks. These floods brought rich alluvial soil to the San Lorenzo, Hayward and the Washington Township areas. What water the land could not hold flowed out to the bay, and the alluvial soil it left behind made these areas rich for farmland.

THE LITTLE LAKE AT ALVARADO

Water plays an important part in any town’s progress and the first artesian water well was discovered on the Henry S. Smith property, the original well having an eight-inch flow. Shortly after other wells were sunk by John Quigley, of the Alvarado Salt Co., and Capt. Richard Benson, the last being extremely active.

Its overflow was distributed into a natural depression, which Capt. Benson first covered with rock and gravel, thus forming a pretty little lake about 300 feet in diameter and about 8 or 10 feet deep.

The lake later came into the possession of Capt. Richard Barron, who built a little island in the center of the little pool, upon which were planted all kinds of vines, while the bank of the lake was fringed with calla lilies. Small boats were kept on the lake, and it became one of the attractions of the countryside, many people coming miles to view the beautiful lilies with its wonderful growth of white flowers.

The lake was kept full by the flow of the artesian well and the excess flow was drained off into the marshes. The little lake drew some attention to Alvarado but did not create a tremendous storm of interest until the cities of Oakland and San Francisco felt the need for an added water supply for their growing cities. Suddenly the rich water resources of Southern Alameda County came under the envious eyes of the two large cities to the north.

Alvarado's Pure Bubbling Artesian Wells:

What happens next is the discovery of a seemingly inexhaustible supply of pure artesian water bubbling from the ground. A *San Francisco Call* newspaper reporter made a trip to the marshes of Alvarado to visit Farley B. Granger Sr. Mr. Granger hosted the reporter and showed him about the artesian wells of Alvarado. Here is the reporter's story along with the color of the day printed in the *San Francisco Morning Call* of July 10, 1892:

"Alvarado is a pretty little village of perhaps 700 population. Once upon a time, it bade fair to become a great city. When Oakland was a tiny hamlet, Alvarado was the county seat of Alameda County, and already was a thriving burg. The first steam flourmill built in this State was erected there by John M. Horner, who afterward laid out Horner's Addition in the city of San Francisco. He then became involved in financial difficulties thereby and finally went to the islands to redeem his shattered fortunes by manufacturing sugar for the United States trade.

A navigable creek ran from the Bay way up to the town, and large side-wheeled steamers used to ply up and down the stream, which is now wholly filled up by the wash from the hills. Nothing remains but a tulle swamp. The rotting timbers of the old wharves lie exposed to view like the bones of some great monster. They are, in fact, the decaying bones of a dead commerce.

The planking has long since disappeared, and only the piles and heavy braces remain. A skiff could not now force its way where once great steamers floated free. Cattle graze where once immense warehouses stood, haystacks have taken the places of business blocks, geese wander where once the busy merchant trod, and tradition only remains of the old embarcadero that was once one of the liveliest on the coast.

An SF *CALL* reporter visited Alvarado to see the wonderful artesian wells that are located there on the property of Colonel F.B. Granger. Col. Granger is one of the earlier pioneers of the place having lived there for the past 39 years. During 20 of these years, he has become familiar with the almost incredible capacities of this underground water supply.

A company was formed for the purpose of piping water from these wells to supply the city of Alameda, at the other end of the county. A supply of 6,000,000 gallons daily will be easily obtainable here.

Colonel Granger took the reporter over to the scene of operations from the hotel at Alvarado. Four wells are already down along the line of the flume. Some of these have been in operation for years. The colonel drew rein near a group of men who were driving a 10-inch well, the largest yet put down.

Nearby, was another well, consisting of a 4½-inch pipe sunk in the earth. Like the others, it was closed, the only use for them at the present being for the purposes of irrigation. At Colonel Granger's request, however, one of the men turned the water on, and immediately such a stream rushed forth as the reporter had never before dreamed could flow from a pipe. Out it poured, tumbling over itself in its hurry, and flowed along a deep ditch that carried it off across the fields. With such an irrigation system as those fields ought to be converted into veritable gardens of Irene.

This was originally a 7-inch well, but the stream proving unmanageable for the purposes for which it was desired, a smaller pipe was put in its place about three years ago. After watching it for some time, the colonel prepared to drive on. "Just let it run today," he called to the man. "You surely don't mean to let that water run all day, colonel?" gasped the reporter. "Why that pipe will send out 100,000 gallons before night."

"Nearer a million," was the careless response, and the colonel drove on to the next one, pointing out the remains of the old embarcadero, and chatting of olden times as he went.

"It don't seem possible, does it," he exclaimed, gazing across the green expanse where once the creek ran, "that large steamers and ships once came up here? Yet I have seen them lying here loading grain, and unloading all sorts of merchandise."

What little water remains is almost fresh, the great artesian supply having nearly conquered the saltiness of the seawater.

A peculiar feature of the landscape near here is any number of great white piles that at a little distance resemble huge white buildings. The reporter learned with surprise that they are piles of salt, which is procured by evaporating the seawater in great tanks, raking up the salt, which is then shipped to the city.

A very simple process, that, but nature seems to have rendered all processes simple in that section. Where once was a vast expanse of almost worthless marshland the wash from the surrounding hills of earth loosened by the agricultural operations of the past score of years has produced a rich alluvial soil.

It literally rains farms down there during the rainy season. The water to irrigate these farms lies all along under the soil, and the time must come when Alvarado, left behind in the march of mercantile progress, will become one of the richest and most productive agricultural sections around the Bay.

Near the head of the creek, not far from the old wharves, is a low, picturesque-looking house that was at one time one of the beautiful homes of the county. An early history of the section gives a picture of it, in beautiful order, the embarcadero scene of busy life and a big side-wheeler tied up near the front door. The big steamer could not get within many a mile of it now.

In the yard of this place is a seven-inch well that has been flowing for years. So great is the force of the water that it has been necessary to enclose the pipe in a strong iron casing, and even this has been so forced that a series of little streams flow from its joints into the cement basin below. The overflow from the well has formed a large lake in the rear of the house and transformed what was once a commonplace farm dooryard into a retreat of sylvan loveliness.

All around the lake grow willows and other trees. In the center, is a little island shaded by a drooping willow and covered with a growth of green. Pond lilies grow all along the edges, fish swim in the cool water and an unused boat floats on its surface. "The place once fitted up for a fish-hatchery and the abandoned ponds and nurseries

still remain; but the place is deserted and still, a pathetic reminder of bygone days. One might while away a summer vacation in that sylvan retreat nor sigh for anything lovelier.

The salt works and the artesian wells are not the only attraction or industry at Alvarado. The old flourmill has been transformed into a large foundry; the pioneer beet-sugar factory is located there, and the growing of sugar beets is an important feature of its agricultural enterprise.

The Alameda Creek is a deep, placid river in the summer, albeit it rages in the winter, so that heavy bulkheads are necessary along the banks to protect the town from its invasion.

The Riverside Hotel, of which Colonel Granger is the proprietor, stands in the midst of one of the finest natural groves in California, and the entire surrounding of the little town are so entirely beautiful that the reporter wondered that it was not thronged with city people.

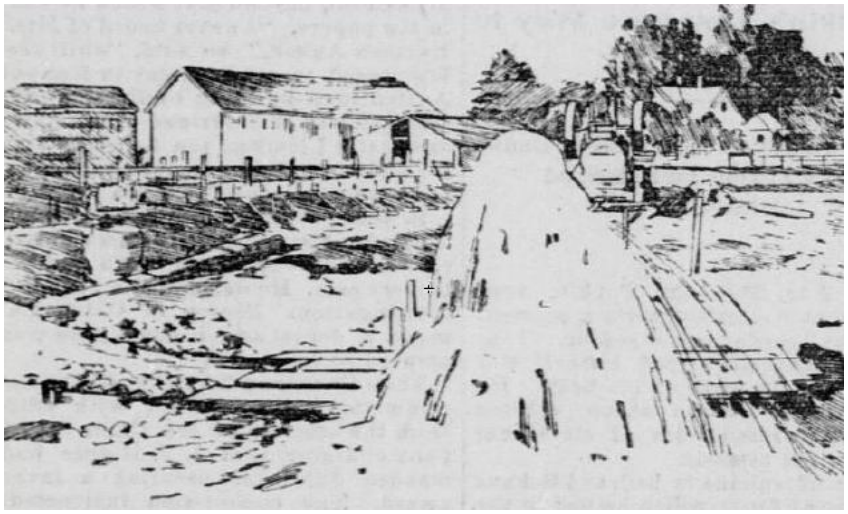
The railroad runs a slow, disagreeable little narrow-gauge train up there, but that is the only discomfort about the place. All else is a dream of sylvan loveliness, but 'tis a great pity some of that glorious water could not be brought to San Francisco and Oakland."

THE OAKLAND WATER COMPANY:

The city of Oakland would soon cast its eyes upon the wells at Alvarado, for the City of Oakland was running low on water and an entrepreneur named William Dingee would soon come calling to fill the Oakland need.

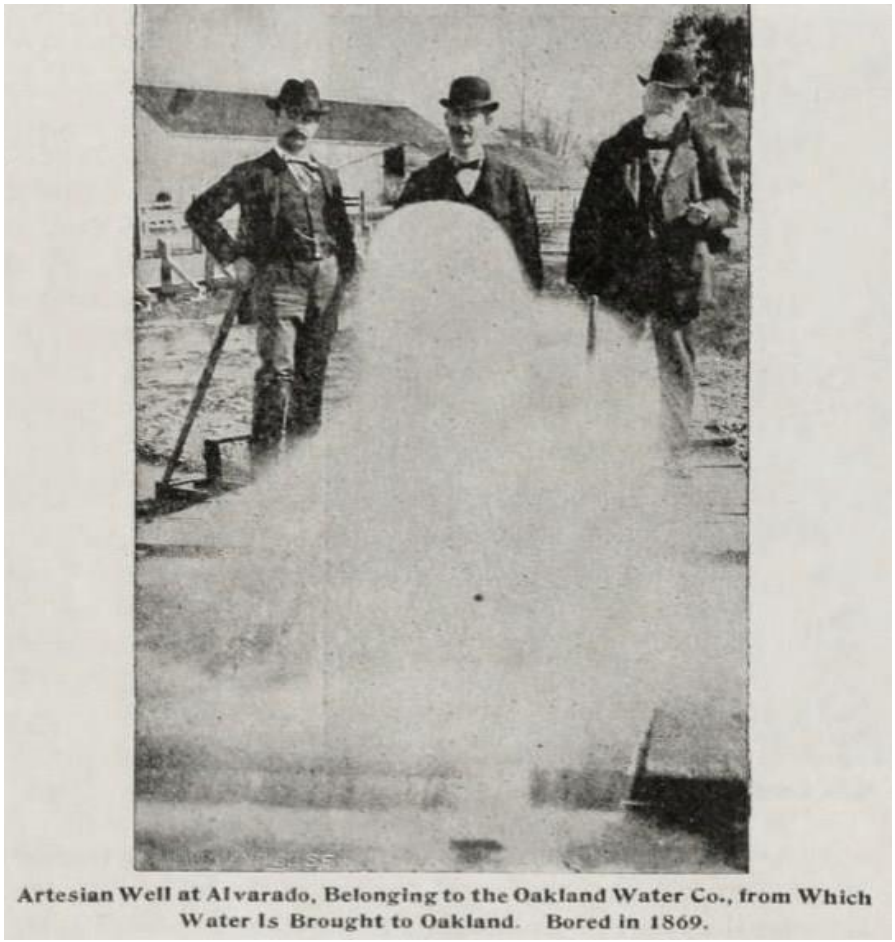
The marshes west of Alvarado would bring a new industry to the little town. The sale of water to a growing and thirsty City of Oakland would bring financial reward to some and ruination to others in Washington Township.

Alvarado had the water and Oakland had the thirst, and at first, it seemed like a perfect marriage. The story of the Oakland Water Company would hasten the demise of the water supply for Washington Township, but first would slake the thirst of a growing city.



THE ARTESIAN WELL ON THE GRANGER TRACT
AUGUST 1893

Artesian Well at Alvarado, Belonging to the Oakland Water Co., from Which Water Is Brought to Oakland. Bored in 1894.



Artesian Well at Alvarado, Belonging to the Oakland Water Co., from Which Water Is Brought to Oakland. Bored in 1869.

Alvarado water first became an issue in April of 1890 when Willard P. Farwell, of Oakland, commenced an action against several Alvarado farmers and corporations to secure water rights so the plaintiffs can supply the City of Oakland with water from the artesian wells of Alvarado. The suit was brought against Pacific Land Investments Co. (James G. Fair), A. Baker, A. Kerr, J. McKeown, S.P. Harvey, P. Hellwig, Mrs. Samuel Poorman, F.B. Granger Jr., John Quigley, J.W. Sinclair, Lawrence Whisby, J. Nicholson, the Union Pacific Salt Works and the Eureka Chemical Co., et. al.

Within one week of the suit, F.B. Granger Sr. made a most remarkable discovery as to the amount of water stored in the artesian belt around Alvarado by boring a well down to the depth of 170 feet. Here he struck a stream of water so strong in volume that when the auger was withdrawn, the water, instead of overflowing as is customary with wells of this kind, rose to a height of twenty feet above the orifice. A solid seven-inch stream thrown twenty feet in the air is so remarkable that it has well attracted widespread attention in the surrounding country. At this time, a report was received that F.B. Granger was contemplating putting into operation a scheme to supply the City of Oakland with water from the artesian wells on his property near Alvarado.

Within a month, Willard Farwell had purchased marshland near Alvarado from the Eureka Chemical Company and F.B. Granger and others, for $15,000. The glory of the artesian wells at Alvarado were being sung around the Bay.

An entrepreneur then stepped forward to lead the Oakland water enterprise. It was W.J. Dingee, of Oakland, who put together the Oakland Water Company to harness and deliver to the City of Oakland the artesian water from the marshlands of Alvarado. On May 15, 1893, Mr. Dingee accompanied the Mayor of Oakland, the members of the city council, and a number of prominent citizens to Alvarado to inspect the wonderful water supply. Mr. Dingee has promised the citizens of Oakland that an abundant supply of pure water from the Alvarado artesian wells would be in Oakland before the close of the year. The boast proved to be a little over optimistic.

Mr. Dingee employed the services of W.T. Boardman, a well known engineer, and the first work would be the construction of a circular reservoir 60 feet in diameter and 15 feet high, near the old steamer landing (in the old Union City district of Alvarado). Within a radius of 300 years of this point there were four flowing wells, which were tapped ten feet below the surface, would supply more than enough water the City of Oakland presently needed. The main from Alvarado to Oakland was 30 inches in diameter with the capacity of supplying 7,000,000 gallons every twenty-four hours, a quantity double the present consumption of the city. The length of the line was twenty miles and the pumping was to be done by a 500 horsepower engine.

Mr. Dingee moved forward with his water company. In January 1894, he let the contract for laying the great main to tap the wells and convey the water to Oakland. Gangs of men were put to work at the Alvarado end, the Oakland end and midway, and they had hoped that water would be brought to the city within six months, and within the year it was expected that the Alvarado water would be piped all over Oakland.

On October 2, 1894 the first shipment of two carloads of pumping machinery for the plant of the Oakland Water Co., arrived at the Southern Pacific train depot in Alvarado from the Edw. Allis Co., Milwaukee WI. The balance would arrive over the next few days and the work was would be pushed to completion. The water works plant was built under the supervision of A.J. West and A.E. Werner of Milwaukee, Wisconsin, who had arrived in Oakland en route to Alvarado where they would superintend the erection of the pumping station.

On December 1, 1894, Alvarado water was pumped into the Oakland city mains for the first time. The connection with the big main from San Leandro was made on November 30. The machinery at Alvarado stood ready to do the pumping in earnest and on December 13, 1894, the water from the artesian wells at Alvarado fully filled the pipes of the Oakland Water Company for the first time and in 24 hours 3,000,000 gallons of water was pumped through the system. The water company was now functional and ready to serve the Oakland area between Lake Merritt and the Bay, and from 1st Street to 36th Street.

At this time, the City of Oakland was already served by a powerful water monopoly, the Contra Costa Water Company. The young Oakland Water Company was now ready to sign up subscribers to their service, and in doing so take customers away from the Contra Costa.

It did not take long for the two antagonist water companies to collide. As the Oakland Water Company set about signing up subscribers for its Alvarado water, the Contra Costa Water Company set about trying to subvert the fledgling company. It did not take long for the public to become aware of the animosity between the two rival companies in Oakland.

Mayor Davie of Oakland, commenting on his city being served by two aggressive water companies, stated:

"As mayor of this city I do not care to be quoted, but there ought not to be much trouble for you to make a correct surmise. One company must maintain a large catchment basin and withstand the criticisms of the expert with the microscope and the analysis of the chemist. Read your own newspaper for the week past and see what is found in the (Contra Costa Co.) water. The other company is modern in every respect. Its source of water supply are those ***inexhaustible*** wells at Alvarado and anyone who knows anything about the difference between artesian and catchment water knows that the former is pure and the latter is…well, read the scientific analysis in the *Tribune* of last Friday."

In the middle of 1895, the water wars in Oakland heated up. The Contra Costa Water Co. spread rumors about the purity and softness of the water delivered from Alvarado to the customers of the Oakland Water Co. Professor E.W. Hilgard of the Experimental Agricultural Department of the State University at Berkeley in an open letter attested to purity and softness of the water from the Alvarado artesian wells.

In July 1895, the Oakland Water Company laid pipes along the principal streets of Alvarado in preparation for the delivery of Alvarado water to the citizens of Alvarado. The fresh and bountiful supply came at a very fitting time. Not only was it a great comfort to have the water, but in case of fire it could be the means of saving the entire town.

At about this same time someone sabotaged the Oakland Water Co.'s Alvarado supply by cutting a hole in a pipe crossing a salt-water slough. The pumping station sucked up salt water from the marsh and piped it into Oakland. For two hours, people in Oakland would get only salt water from their tap. The sabotage was quickly found, repaired and the fresh water from Alvarado flowed again to Oakland.

One month later on August 3, 1895 headlines of various newspapers of the day in the Bay area screamed, "**THE CONTRA COSTA (WATER CO.) PILLORIED,**" actions of the Contra Costa Water Co. "**CALLED A DASTARDLY DISGRACE,**" and "**ALVARADO WATER ROBBERY DENOUNCED WITH FERVOR**."

The Contra Costa had again tried to subvert the Oakland Water Company wells at Alvarado. This time the Contra Costa Water Company had bought the grounds at the

old glue factory in Alvarado sunk artesian wells and allowed pure fresh water to flow freely into the Bay.

Twenty-six pre-eminent citizens of Oakland visited the Oakland Water Company Pumping Plant in Alvarado. Here they witnessed the Contra Costa's effort to bankrupt the Oakland Water Co. by pumping clean fresh water into the marshes of the Bay.

From George W. Baker, prominent Oakland attorney, "It is a dastardly outrage that the opposition to the Oakland Water Co. (by the much larger Contra Costa Water Co.) has proceeded to this extremity."

Mr. Baker explains: "I went to Alvarado yesterday not only free of all bias favorable to the Oakland Co. and devoid of prejudice against the Contra Costa Co., but utterly disbelieving the newspaper reports concerning the action of the latter company. The allegation that their agents were endeavoring to deplete their rival's water supply by pumping from wells tapping the same source and running the water obtained wastefully and wantonly into the marshes. I say that I did not believe, for I considered such methods too contemptible for honest men and beneath the dignity of businessmen under any stress of business rivalry."

All the businessmen agreed they saw evidence that millions of gallons of water had been pumped from wells within several hundred yards of the Oakland Water Company wells and the output of these wells were diverted into the marshes and eventually into the Bay by a series of channels and flumes.

The censure continued into the beginning of September when Christian Schreiber of Oakland gave this stinging rebuke of the Contra Costa: "Like others who went with me to Alvarado, I could not believe anybody could be guilty of the acts we saw committed there," he said. "I cannot find words strong enough to express my opinion of the men who would assist in such a dastardly waste of pure water as those people are pouring over the marshes of Alvarado. I am a patron of the Oakland Water Co. I prefer the fresh pure water of these artesian wells to the filthy compound that the Contra Costa Water Company serves to its patrons. My neighbors prefer the Oakland Water Company and are using it. And because we refuse to patronize the Contra Costa Company an effort is being made to deprive us of this supply is outrageous."

Finally, on October 10, 1895, the Contra Costa Water Company ceased pumping and wasting 3,000,000 gallons a day of artesian water from the marshes of Alvarado, much to the satisfaction of the local people.

On a beautiful spring day in April 1896, William Dingee invited the Oakland Merchants Exchange (some 70 people) to visit the Alvarado Water Works. The Oakland merchants disembarked at the Southern Pacific Train Depot in Alvarado where they found conveyances ready to take them to the water works on the Union City side of town about one mile from the train depot. The drive was made in a short space of time although some of the merchants decided to walk instead.

The day was beautiful, there was a breeze blowing from the Bay, the keenness of which was modified and given a bracing and inspiriting effect by the genial warmth of the sun. As the visitors passed through Alvarado they were greeted by the merchants of the place, a compliment of which was also intended for the projector of the works which had done so much to bring the name of the little town into prominence.

At the entrance to the grounds, W.J. Dingee stood and shook hands with his friends and welcomed them to the water works. The guests then divided themselves into several parties and under the conduct of Mr. Dingee, Frank Moffitt and W.F. Boardman, respectively; the last mentioned the engineer who is in charge of the

works, inspected all the features of the facility. The guides had little to tell, because everything is visible to the naked eye and its own story in more satisfactory terms than could have been detailed in words.

Then, just after the fourth of July 1896, William Dingee, President of the Oakland Water Co. received a phone call. "The Contra Costa Water Company has started its pumps again in the old glue factory in Alvarado," was the message.

As we know, the Oakland Water Company obtains its water from a system of artesian wells near town of Alvarado. These wells have been flowing for a third of a century and the quality of the water they furnish for softness and purity is unsurpassed in America.

The Contra Costa Water Company, the desperate and vicious water monopoly from Oakland, in an effort to undermine and bankrupt its new rival set up pumps at the old glue factory in Alvarado last year and pumped pure water into the marshes and the Bay night and day for months. Billions of gallons of clear soft water were wasted by their effort. Such a public outcry was heard that the Contra Costa Company stopped their wastefulness.

But now, they are back it again, pumping pure Alvarado artesian water into the marshes. Fortunately after some time, the Contra Costa was again forced to back down due to the sway of public opinion.

For several years, the water war between the Contra Costa and The Oakland Water Company has died down. Then in the beginning of July, 1899 considerable excitement was caused in Oakland by the announcement that the stock of the Contra Costa Water Company had taken a sudden jump from $50 per share to $65 per share, and $63 per share offers were refused. The previous Friday the stock could not be sold for $50 a share. It was openly stated that the Contra Costa had absorbed the Oakland Water Company, and that henceforth there was to be no competition.

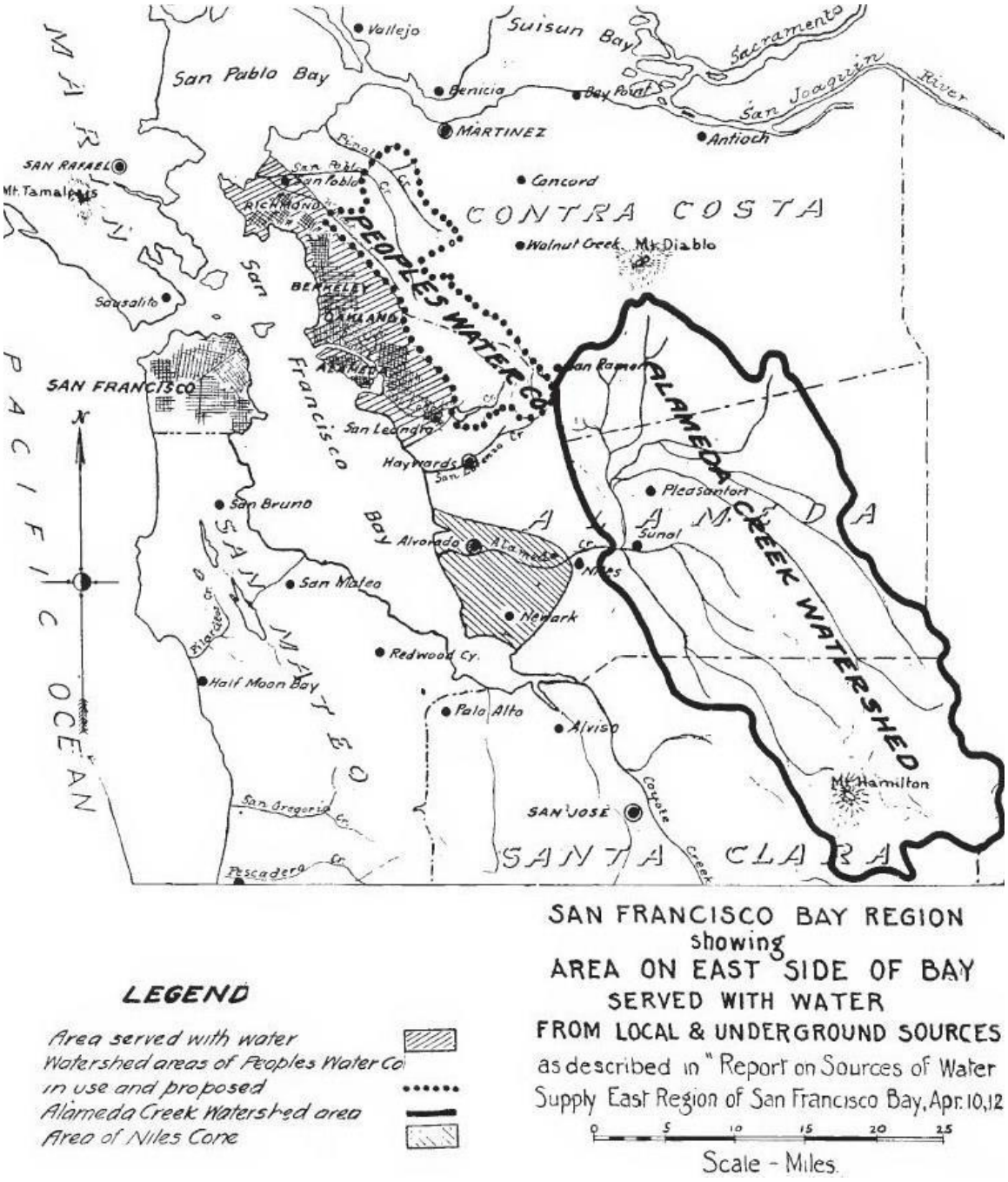
The Contra Costa had been forced to open an immense pumping plant at Alvarado, and this has cost it nearly one fourth of its entire bonded indebtedness. Both companies fully realized that their combined plants are necessary to tide Oakland over in a dry year, and they realized that for the protection of their stockholders they must come under one general management.

By the end July 1899, the companies were pumping together for the benefit of the residents of Oakland. A newspaper article invited people to come and visit the wonder of the Alvarado artesian wells:

"The Oakland Water Company plant Alvarado, which was recently consolidated with the Contra Costa Water Co., is one of the marvels of the Township. Located out on the low marshland adjoining the salt plants, it furnished millions of gallons of water each day to Oakland and the suburbs. The water is the purest, right from the depths of the earth.

There are now 31 wells, with depths of 197 to 1,000 feet and diameters of 4" to 10". These wells all flow steadily and are worthy of a visit. They are scattered over a 500 acre tract and are all connected with reservoirs at the pumping plant. The daily capacity of the wells is 10,000,000 gallons, although less than 5,000,000 gallons a day are being pumped."

EAST BAY WATER SOURCES IN THE YEAR 1912



The map above shows the Alameda Creek Watershed. The watershed stretches from the southern slopes of Mt. Diablo in the north, to the entire Mt. Hamilton basin in San Jose to the south, to the ridgeline of the San Joaquin Valley range of the Altamont Pass on the east, and through the Niles Canyon on the west continuing past Alvarado and into the Bay.

THE SPRING VALLEY WATER COMPANY:

In 1858, George H. Ensign obtained a charter from the legislature and organized the Spring Valley Water Works in the City of San Francisco. He took up a small spring near the intersection of Mason and Washington Streets and laid a few pipes in 1858. He kept this franchise alive by extensions of time until 1860, when a stronger company bought it. This company retained the name Spring Valley Water Works until 1904 when it changed its name to the Spring Valley Water Company.

In February 1865, the Spring Valley Water Works consolidated with the old San Francisco Water Works and brought water in from the peninsula at Pilarcitos via Lake Honda. In 1867, litigation began between Spring Valley Water and the city of San Francisco over the rates that Spring Valley charged San Franciscans. This lawsuit went on for over 40 years, interspersed with brief periods of armistice.

The year 1872 to 1873 resulted in less than plentiful rainfall and the people of San Francisco clamored for a municipal water company to free themselves of Spring Valley. A report was produced by the city that favored the acquisition by the city of Calaveras Creek, draining the northwest slopes of Mt. Hamilton and adjacent outliers to the north and forming the principal tributary of the Alameda Creek. This plan came to be known as "the Calaveras cow-pasture scheme."

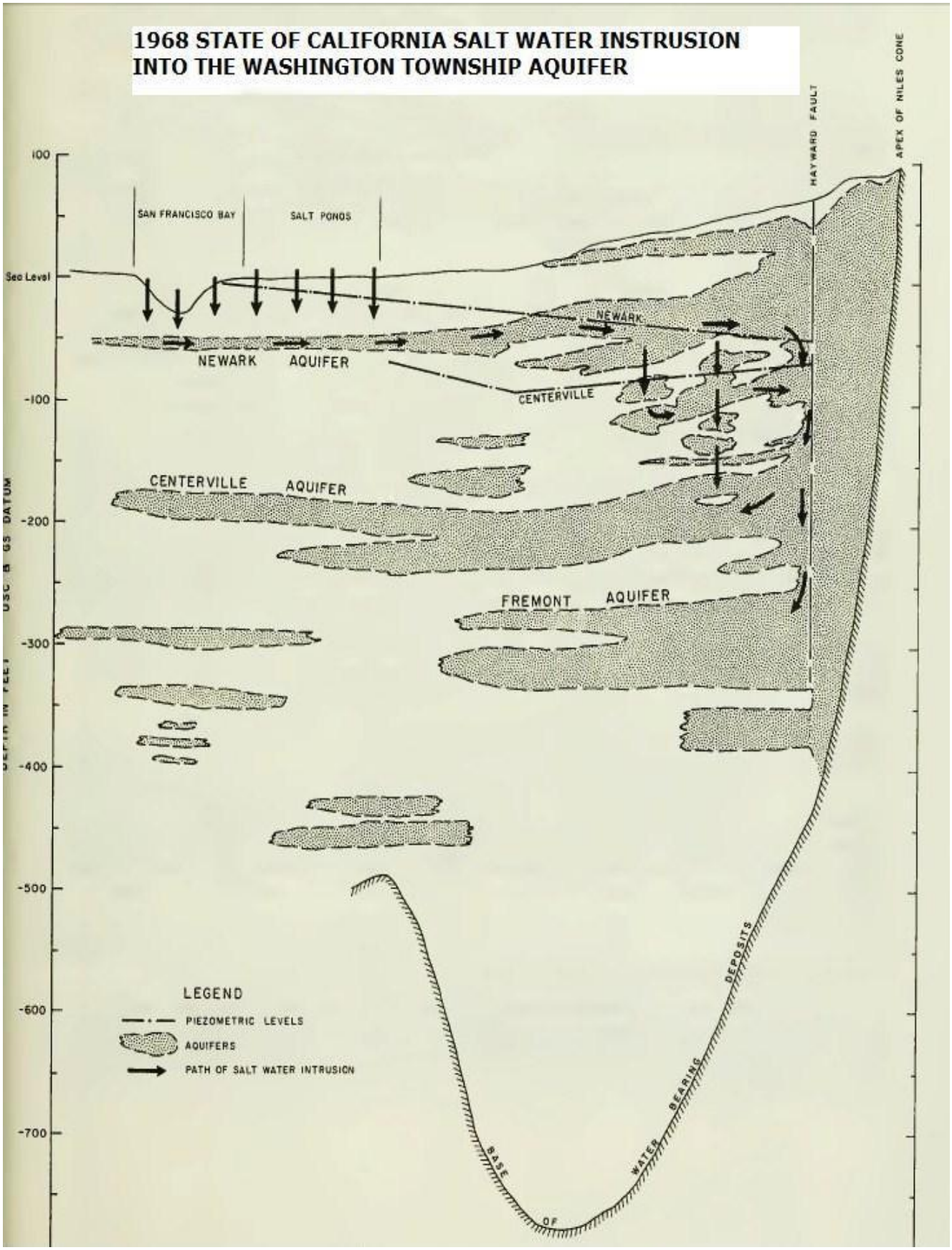
However, before the City of San Francisco could put their plan in place, the Spring Valley Water Works, fearing competition, forestalled the city's action by the purchase of the water rights and properties in May 1875. Eventually Spring Valley water would control the majority of the water east of the Washington Township foothills (the Alameda Creek watershed), the waters of Niles Canyon, and the flow of the Alameda Creek up to and past Alvarado. Besides the free flowing waters in the Alameda County watershed, Spring Valley also owned numerous artesian wells in and around the city of Pleasanton, and the gravel beds of Sunol.

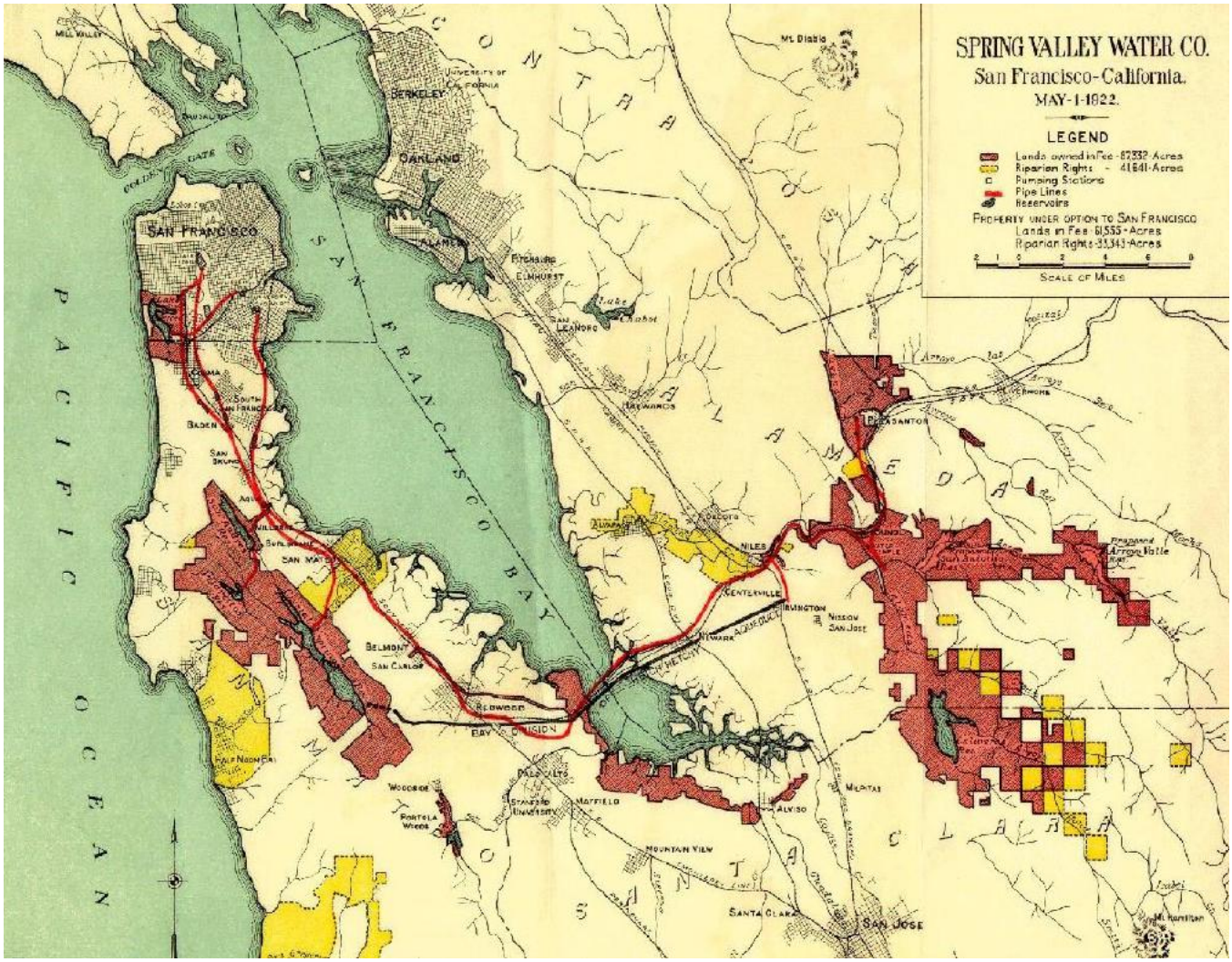
When the development of water sources on the San Francisco Peninsula proved insufficient for future needs, the Spring Valley Water Company turned its attention to water sources across the Bay in Alameda County.

The land that the company bought in the Calaveras Valley was fed by streams from Mount Hamilton. Spring Valley also acquired the Vallejo Mills properties near Niles, consisting of a dam, brick flume and a mill constructed by in the 1840's by Don Jose de Jesus Vallejo, a brother of General Mariano Guadalupe Vallejo. These properties afforded excellent locations for new reservoirs to serve the increasing demands of Spring Valley Water Work's customers.

Eventually the Spring Valley Water Company gained control of the water flow from the Calaveras Creek, the Alameda Creek, and the Arroyo de la Laguna Creek, which gave the company control of the water that flowed into Niles Canyon. As time went on the Spring Valley Water Company came to control and divert the waters of the Alameda Creek that flowed into the Niles Canyon for the use of the citizens of San Francisco. This diversion would have grave consequences for Washington Township as the underground level of water in the aquifer slowly dwindled.

The following diagram shows the Niles Cone aquifer as a cross section of Washington Township from the west bay (on the left) and the Niles Cone on the right. The Alvarado artesian water belt would be to the right of the arrows labeled "Salt Ponds." As you move further to right the elevation climbs until you reach the Niles Cone on the far right side of the page.


1968 STATE OF CALIFORNIA SALT WATER INSTRUSION
INTO THE WASHINGTON TOWNSHIP AQUIFER
HAYWARD FAULT
APEX OF NILES CONE
SAN FRANCISCO BAY
SALT PONDS
Sea Level
NEWARK
NEWARK AQUIFER
CENTERVILLE
CENTERVILLE AQUIFER
FREMONT AQUIFER
100
-100
-200
-300
-400
-500
-600
-700
USC & GS DATUM
LEGEND
PIEZOMETRIC LEVELS
AQUIFERS
PATH OF SALT WATER INTRUSION
BASE OF WATER BEARING DEPOSITS

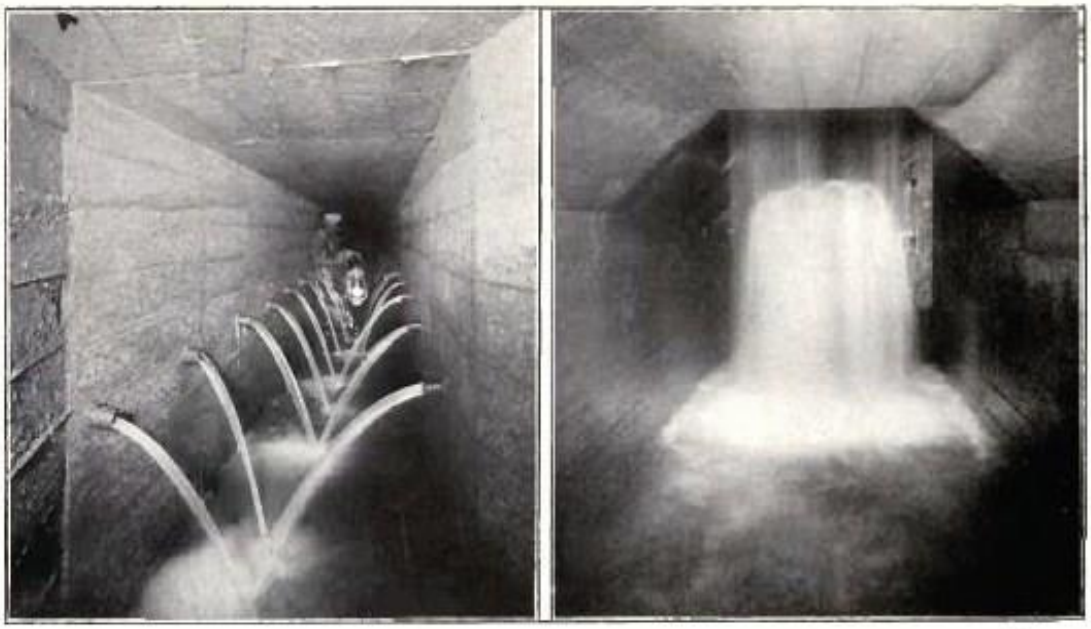


In the above example, red indicates land owned in fee simple by the Spring Valley Water Company and the color yellow indicates where the company has riparian rights. Spring Valley jealously guarded these rights. Note the ownership of Niles Canyon and the riparian rights the company owns from Niles past Alvarado. These rights also extend to the Niles Cone area.

The Sunol Valley is a gravel-filled depression of about 1,300 acres at the upper entrance to Niles Canyon in Alameda County. The entire Alameda Creek watershed drainage of some 630 square miles flows through this area and is restrained at the canyon entrance.

Filter beds were completed along the Sunol Aqueduct in 1900. Sunol Dam, a concrete structure 31 feet high, backs up the creek drainage to saturate the gravel beds. The groundwater percolating through the gravel beds are collected through a concrete tunnel, or filter gallery, 8,985 feet long, pierced with screened brass pipes and tapped by 38-inch perforated concrete pipes. The dependable yield is five million gallons daily, but under flood conditions, the galleries will produce up to 20 million gallons of water per day.

SUNOL GRAVEL BEDS.
The Location of the Gravels with Respect to the Watershed is Favorable for Large Catchment.

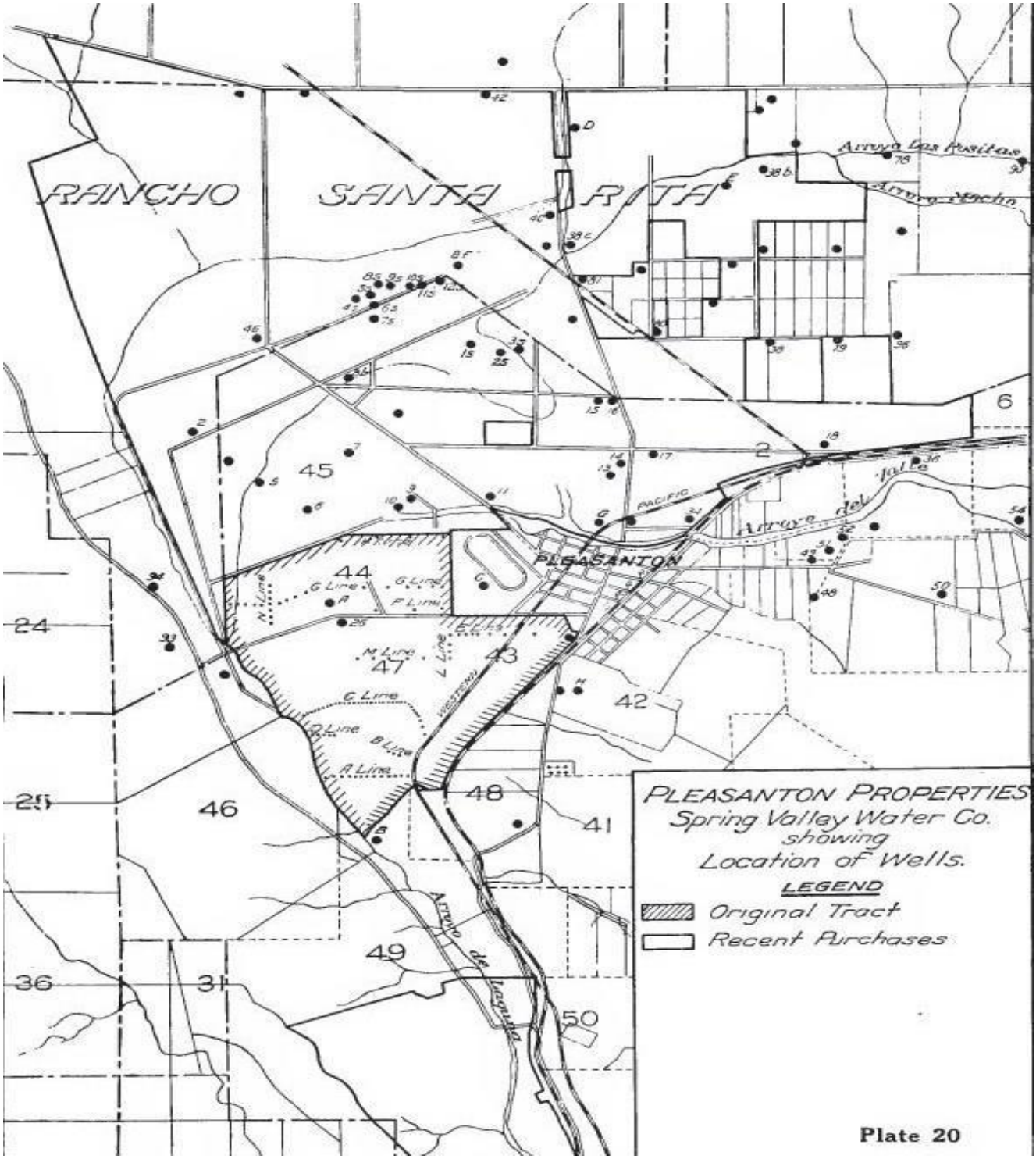


FILTER GALLERY AT SUNOL. JUNCTION OF THE GALLERIES, SUNOL.

Subterranean Water Being Drawn from the Gravel Fill of Sunol Valley. Nearly Half San Francisco's Water Supply is Thus Drawn Daily.

THE BASIN OF THE WATER TEMPLE AT SUNOL.

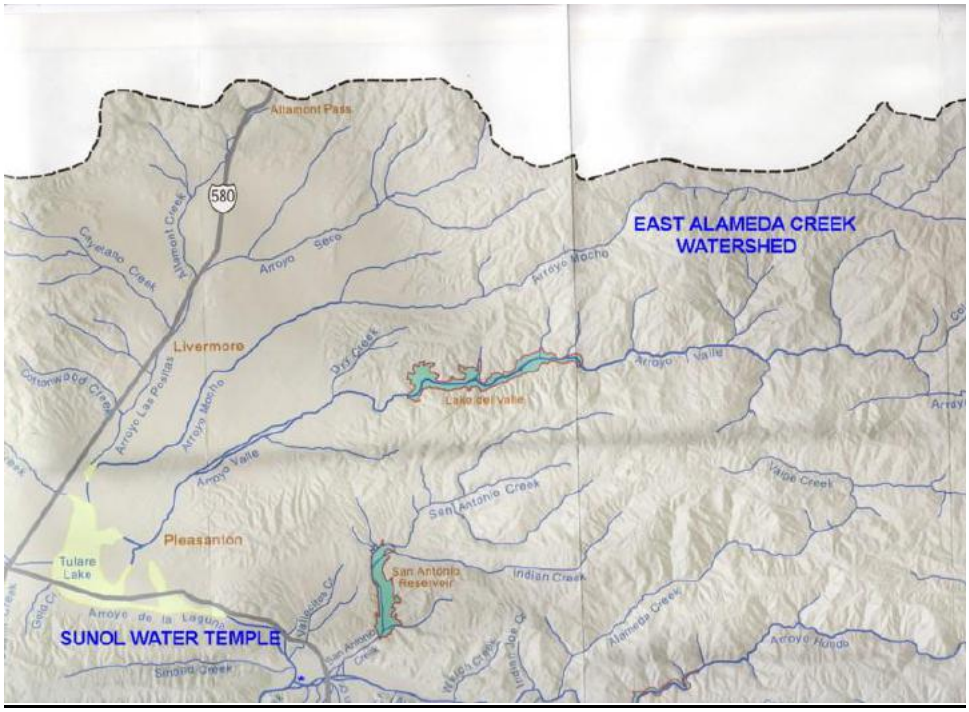
Here the Filtered Water from the Galleries at Sunol Meet the Artesian Waters from Livermore Valley.



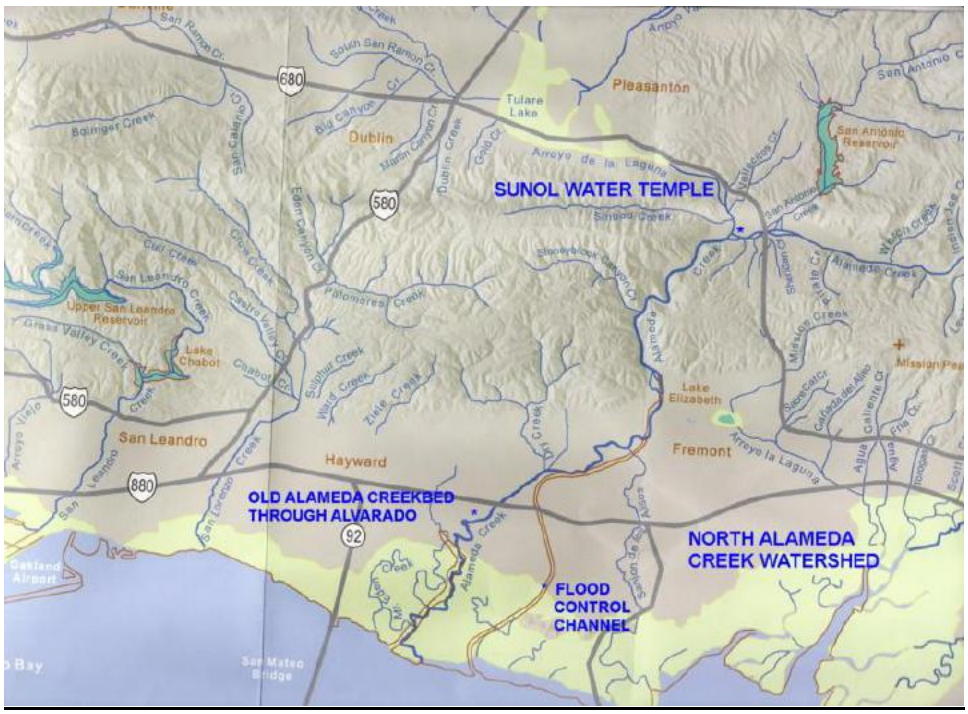
The location of the Spring Valley artesian wells around Pleasanton. The black dots indicate Spring Valley Water Company wells. The entire flow of the water pumped from these wells went directly to the Sunol Water Temple to be merged with the flow from the Alameda and Arroyo de la Laguna Creeks from the Sunol gravel beds filter galleries.

The Spring Valley Water Company built the Sunol Water Temple in 1910 to merge the flow of its two East Bay water sources; the Alameda Creek and the Arroyo de la Laguna Creek. These two creeks merge at the Sunol gravel bed filter galleries and the Pleasanton artesian well field. Designed by renowned San Francisco architect, Willis Polk, the temple is an elegant circular pavilion of twelve fluted columns surmounted by a peaked clay tile roof and a copper finial of three dolphins tail to tail.

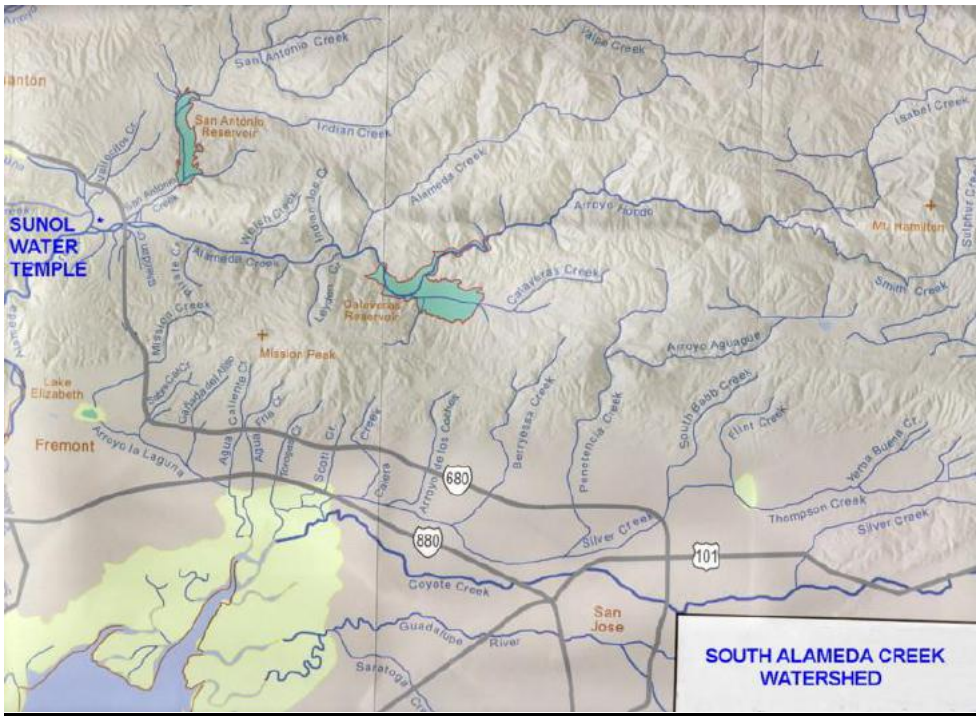
The Sunol Water Temple is modeled after the Temple of Vestal in Tivoli Gardens, built in the 2nd century B.C., atop a cascade of waters from the Apennine Mountains captured from afar and sent via aqueducts to supply the home and bathhouses of ancient Rome. The temple frieze quote Isaiah 41:18: "I will make the wilderness a pool of water and the dry lands springs of water. The streams whereof shall make glad the city."



East Alameda Creek Watershed showing the Altamont pass the top of the map. The Sunol Water Temple is shown with a blue asterisk. Increase Word's zoom rate to 150 or 200% for easier viewing.



The North Alameda Creek Watershed showing the Sunol Water Temple with an asterisk, and the old Alameda Creek bed through Alvarado and the Flood Control Channel along Lowry Road. Increase the zoom rate to 150 or 200% for easier reading.



The South Alameda Creek Watershed showing the Sunol Water Temple with an asterisk. Mt. Hamilton is on the far right of the map about one third of the way down. Increase zoom rate to 150 or 200% for easier viewing.

As stated previously the Alameda Creek Watershed is a network of major streams fed by many auxiliary small creeks. In the north part of the watershed about Dublin is the South San Ramon Creek, and its tributaries, which eventually meet up with the Arroyo Las Positas Creek, Arroyo Mocho, and the Arroyo Valle from Livermore/Pleasanton. All of these connect to the Arroyo de la Laguna west of Pleasanton and then flow into the Sunol gravel beds. (See the maps of the East & North Alameda Creek Watershed above)

In the south, the Isabel Creek and the Smith Creek drain the basin below Mt. Hamilton and feed it into the Arroyo Hondo, which eventually was connected to the Calaveras Reservoir and Calaveras Creek by a tunnel dug by the Spring Valley Water Company. The Southeast part of the watershed is drained by the Alameda Creek. Here it meets with the Calaveras Creek just north of the Calaveras Reservoir. Alameda Creek then flows north towards Sunol where it meets the San Antonio Creek below the San Antonio Reservoir. (See the map of the South Alameda Creek Watershed above)

The Alameda Creek and the Arroyo de la Laguna Creeks meet at Sunol and, when they were unrestricted, flows through Niles Canyon on its way to Alvarado and eventually into the Bay. (See the map of the South Alameda Creek Watershed above)

The Sunol Water Temple:

In 1910, the Spring Valley Water Company built the Sunol Water Temple to merge the flows of the Arroyo de la Laguna Creek, from the north, with the Alameda Creek, from the south, at the subterranean filter galleries at the Sunol gravel beds. The water drawn from the 22 artesian wells around Pleasanton was then merged with the water from the filter galleries at the Sunol gravel beds in a thunderous flow of water at the Sunol Water Temple where it disappeared into a huge conduit to be carried west along Niles Canyon and then under the Bay to San Francisco. At one time, half of San Francisco's water supply flowed through the water temple every day and it was a favored tourist destination. Thus, the Spring Valley Water Company controlled the flow of Alameda Creek above the Niles Cone recharging beds.

Washington Township Turns Militant Over Water:

Residents and farmers in Washington Township were already concerned by the amount of water Spring Valley Water of San Francisco and the Peoples Water Company of Oakland were diverting and pumping from our underground aquifers for their cities. The combined loss of local water due to the diversion of Southern Alameda creeks and streams, and the pumping of subterranean waters from artesian wells in Alvarado and Pleasanton totaled some 22 million gallons a day.

Early on there was a voice in Washington & Murray Townships that recognized the dangers to these two townships that would be caused by the increasing power of the Spring Valley Water Company and their usage of Alameda Creek water. That person is eulogized in his obituary of July 3, 1939:

Christian Runckle Obituary:
"Funeral services were conducted in Berkeley for the Christian H. Runckle, for 25 years secretary of the Alameda County Water District, who died Monday (July 3rd) at the age of 70. Born in Dutch Flat in 1869, Mr. Runckle became a schoolteacher at the age of 18. Runckle taught school (and was the school Principal) in Decoto and then Pleasanton after the turn of the century and at the same time published the *Washington Township* & *Niles Register*; for a long time he owned and published both papers.

Mr. Runckle began agitation, through his Niles newspaper, for the creation of the Alameda County Water District in Washington Township as early as 1901. He became secretary of the district when it was formed in 1914. He was known as the "the father of the water district idea."

He battled the old Spring Valley Water Company, opposing its destruction of the flow of water in Alameda Creek through construction of Calaveras dam, and against its withdrawing water from wells in the Amador Valley.

Runckle succeeded in forming a group of landholders who voluntarily taxed themselves to raise funds for the litigation. He prepared an enabling act, which was passed by the legislature and which formed the first water district.

Through his newspaper, he agitated for San Francisco's Hetch-Hetchy system and through the district; he secured an agreement, whereby litigation was dropped in return for a supply of Hetch-Hetchy water.

To take care of this the district laid a new pipeline connecting the cities of the township, including Newark, Alvarado, Decoto, Niles, Centerville, Mission San Jose, Irvington and Warm Springs. This pipeline has just been completed and Runckel's last official act was performed last Thursday (June 29th) when he turned the valve sending the supply of water into the line."

Runckle Takes up the Fight:
Chris Runckle knew of the law suit the Spring Valley Water Company had brought against the Alameda Sugar Company of Alvarado in January 1889 to permit them to divert the waters of the Alameda Creek for the benefit of the citizens of San Francisco. To this end in 1890, the Spring Valley Water Company built a dam on the Niles Canyon to back up the water over the Sunol gravel beds and eventually divert flow to its pipeline under the Bay and into its reservoirs on the west Bay.

Lawsuits over the diversion of the Alameda Creek water continued until 1895 when the Alameda Sugar Company accepted $1,423, deeded over to the Spring Valley Water Company all riparian rights on its Alvarado property, and withdrew its counter

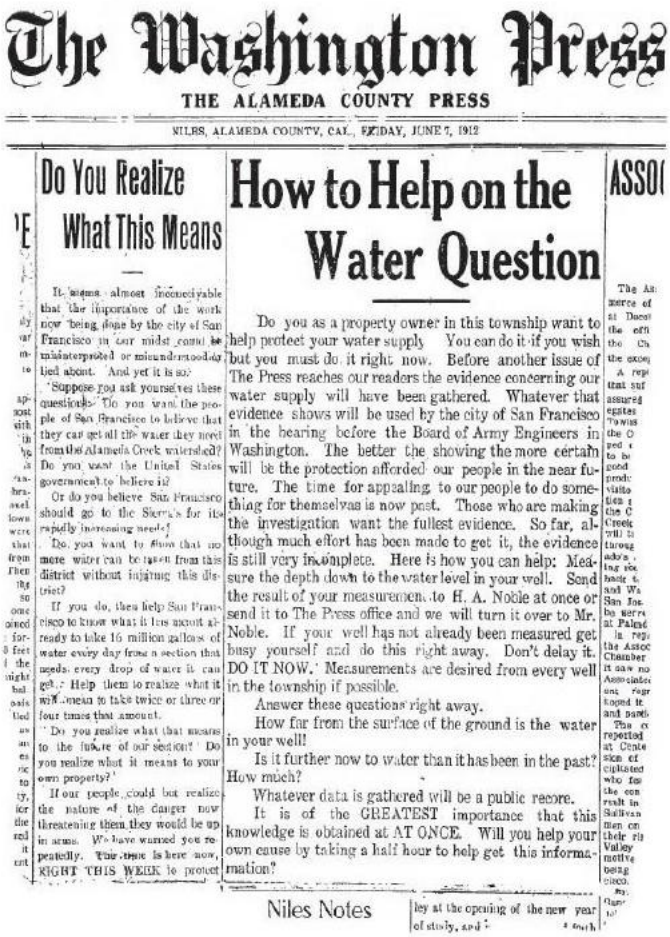
suit. The Spring Valley Company also brought lawsuits against George Althauser of Alvarado and the Beard's on Beard Road for control of waters in the Alameda Creek.

When Spring Valley's planned Calaveras Dam became known local residents feared for loss of control of the water supply that fed the Niles Cone gravel beds via Niles Canyon and recharged the aquifers under Washington Township. Local residents had already been concerned about the Spring Valley's dams at Sunol and in the Niles Canyon.

In 1912, the fear of water shortages in Washington Township spurred grave concerns. Water levels in local wells had dropped to their lowest level in history, with water levels dropping an inch a day. In 1912 local residents formed the Washington Township Water Committee composed of Wm D. Patterson, George Lowrie, G.S. Caldeira, J.C. Shinn and W.H. Ford.

The driving force behind the movement to curb Spring Valley was Chris Runckel, Editor of the Pleasanton and Niles newspapers. Chris had been principal of the Decoto Grammar School and then the Pleasanton Grammar School. He was also the editor of the Pleasanton and Niles newspapers.

He foresaw the coming water shortage and used his newspaper to get the news out to Murray and Washington Township residents. The news that Spring Valley would build the Calaveras Dam and interrupt the flow of the Alameda Creek spurred Chris into action in 1911 and 1912 his newspaper rallied the people into action



The Washington Press

THE ALAMEDA COUNTY PRESS

NILES, ALAMEDA COUNTY, CAL., FRIDAY, JUNE 7, 1912

Do You Realize What This Means

It seems almost inconceivable that the importance of the work now being done by the city of San Francisco in our midst could be misinterpreted or misunderstood or lied about. And yet it is so.

'Suppose you ask yourselves these questions: 'Do you want the people of San Francisco to believe that they can get all the water they need from the Alameda Creek watershed? Do you want the United States government to believe it?

Or do you believe San Francisco should go to the Sierras for its rapidly increasing needs?

Do you want to show that no more water can be taken from this district without injuring this district?

If you do, then help San Francisco to know what it has spent already to take 16 million gallons of water every day from a section that needs every drop of water it can get. Help them to realize what it will mean to take twice or three or four times that amount.

'Do you realize what that means to the future of our section? Do you realize what it means to your own property?'

If our people could but realize the nature of the danger now threatening them they would be up in arms. We have warned you repeatedly. The time is here now, RIGHT THIS WEEK to protect

How to Help on the Water Question

Do you as a property owner in this township want to help protect your water supply. You can do it if you wish but you must do it right now. Before another issue of The Press reaches our readers the evidence concerning our water supply will have been gathered. Whatever that evidence shows will be used by the city of San Francisco in the hearing before the Board of Army Engineers in Washington. The better the showing the more certain will be the protection afforded our people in the near future. The time for appealing to our people to do something for themselves is now past. Those who are making the investigation want the fullest evidence. So far, although much effort has been made to get it, the evidence is still very incomplete. Here is how you can help: Measure the depth down to the water level in your well. Send the result of your measurement to H. A. Noble at once or send it to The Press office and we will turn it over to Mr. Noble. If your well has not already been measured get busy yourself and do this right away. Don't delay it. DO IT NOW.' Measurements are desired from every well in the township if possible.

Answer these questions right away.

How far from the surface of the ground is the water in your well?

Is it further now to water than it has been in the past? How much?

Whatever data is gathered will be a public record.

It is of the GREATEST importance that this knowledge is obtained at AT ONCE. Will you help your own cause by taking a half hour to help get this information?

Niles Notes

...ley at the opening of the new year of study, and ...

MASS MEETING

TO CONSIDER THE

Water Supply Question

At Town Hall
CENTERVILLE

Tuesday Eve. May 28

Addresses by J. H. Dockweiler of San Francisco and Other Speakers. Everybody Come.

Important Notice!

Property owners in Washington Township are urgently requested to furnish information to H. A Noble, Assistant to Consulting Engineer of San Francisco, now at work here. It is of the highest importance to our people that all information be given freely and promptly.

SIGNED:---

CHRIS RUNCKEL
F. V. JONES
J. B. FAIR

Committee Associated Chambers of Commerce.

Press Print, Niles

Photographic reproduction of notice posted in conspicuous places throughout Niles region. Copy is about one-quarter size.

NOTE: Runckel is editor of The Washington Press, of Niles.

The Washington Press
THE ALAMEDA COUNTY PRESS
NILES, ALAMEDA COUNTY, CAL., FRIDAY, AUGUST 2, 1912

REPORT ON NILES CONE

Engineer Dockweiler Files His Report to Army Board.

Late on Wednesday night of this week the report of Consulting Engineer J. H. Dockweiler of San Francisco on the water supply question was ith the Board of Army Engin- people who are not ac- the scope of the work

The Washington Press
THE ALAMEDA COUNTY PRESS
NILES, ALAMEDA COUNTY, CAL., FRIDAY, AUGUST 2, 1912

MEASURE THE WATER IN YOUR WELLS.

We urge upon our people the immediate necessity of keeping at least a monthly measurement of the depth to water in the wells. If your well isn't fixed so you can make these measurements a very trifling expense of boring an opening so that it can be done should be met at once by every owner of a well. This data should be secured and gathered during the next two months. It is VERY, VERY important that it gets into he hands of he proper people before the final decision is made by the government. We appeal to our people to see that it is done.

In the near future the Press will give its readers a more complete of the report that was filed this week.

WATER MEETING WELL ATTENDED

Water Supply Question Ably Discussed.

The meeting held at Centerville last Tuesday evening to discuss the water supply question drew out a good audience. Although no effort was made to drum up a crowd, the town hall at Centerville was well filled by an interested body of property owners of the township. One of the features of the meeting was that it was almost exclusively made up of men. J. C. Shinn acted as chairman. The purpose of the meeting was stated by C. Runckel, of the committee of the Associated Chamber of Commerce. The meeting was called at the request of a number of citizens of Centerville and was to have been held the latter part of last month, but was postpond to the present time owing to the pressure of other questions.

J. H. Dockweiler, consulting engineer of the city of San Francisco, was the speaker of the evening, and in a very able manner convinced the audience of the liberal attitude of that city on the water question. Mr. Dockweiler stated that the city was preparing a report at the suggestion of the federal army board of engineers, which is to pass upon the Hetch Hetchy case in the near future. The city authorities are gathering data on all available water supplies that may be utilized by the city. The investigation of the Niles cone portant relation to the supply.

During 1911 and 1912, Chris Runckle ran a series of articles in his papers alerting the people of Washington and Murray Townships of the danger inherent in the construction of the Calaveras Dam and its consequences for the two townships. Chris had many friends in the Niles area including J.C. Shinn, with whom Chris had shared political views.

On June 15, 1912, with the support of the United Improvement Clubs of Washington Township, a citizens committee, was given support at a mass meeting held in Centerville. Committee members were prepared to fight to the end any attempt on the part of the water companies to derive additional water supplies from artesian or surface sources, which would result detrimentally to the private water supplies of the township. A communication to this effect was sent to the following corporations: Union Water Company, Peoples Water Company, United Properties Company, and the Spring Valley Water Company.

On the committee, which had signed copies of the notice to the companies, were William H. Ford, W.D. Patterson, J.C. Shinn, G.S. Caldeira, G.P. Lowrie and Henry May.

Thus, was set in motion, the first step in curbing the water appetite of Oakland and San Francisco and save Washington Township from the same fate that would befall the Owens Valley (started in 1905 in Inyo County) by the Los Angeles Water Board. Numerous lawsuits and nearly 18 years later, Washington Township was able to free itself from the yoke of outside water influences.

In August 13, 1913, William H. Ford, of Niles, presented to the Board of Supervisors a petition asking permission to form a county water district to be known as the "Alameda County Water District."

Said Ford, "This will not take in Alvarado so as not to conflict with the present Oakland municipal water district plan." Ford was informed that the Caminetti County Water District Law (under which the district may be formed) called for the publication of the petition, following which the supervisors will consider it. The date set for consideration of the petition, after publication, was set as September 8.

On November 12, 1913, the Alameda County Board of Supervisors passes the following resolution:

"Resolved, that upon the hearing before this Board the Board does now determine that the petition for the incorporation for the Alameda County Water District complies with all requirements of the provision of the act of June 10, 1913, entitled 'An Act to provide for the incorporation and organization and management of county water districts and to provide for the acquisition of water rights or construction thereby of waterworks and for the acquisition of all property necessary therefore, and also to provide for distribution and sale of water by said districts,' and be it further Resolved, that this Board does hereby find in favor of the genuineness and sufficiency of the petition and notice on file in said matter."

On December 1, 1913, the Alameda County Board of Supervisors set the date of December 31, 1913 for the election for the proposed Alameda County Water District. A proclamation for said election was ordered the Board of Supervisors for publication of said proclamation in the Washington Press.

After the Washington Township voters approved the water district, the district filed for a certificate of incorporation on January 12, 1914. On March 3, the Board of Supervisor of Alameda County set March 31 as the date for holding the election for the trustees of the newly formed Alameda County Water District. The candidates for the board, which would consist of five members, were Emanuel George, W.D. Patterson, J.C. Shinn, E.H. Stevenson, and W.M. Trenough.

At a supervisor's meeting held on March 9th, the Board of Supervisors announced that a certificate was received from the County Clerk stating that William Trenouth, E.H. Stevenson, W.D. Patterson, Emanuel George, and J.C. Shinn had qualified according to law as candidates for Directors of the Alameda County Water District at an election to be held March 31, 1914.

On April 17, 1914, the winners of the election for the Board of Directors for the Alameda County Water District were published as in the Oakland Tribune:

Emanuel George	397
W.M. Trenough	385
W.D. Patterson	376
J.C. Shinn	372
E.H. Stevenson	351

Alfred Meyers	24
C.B. Overacker	24
Samuel Stivers	22
B.A. Brown	7
H. Mason	1
Chas. Evans	1
Mr. Orpin	1
John V. Dias	1
George Lowrie	1
Louis Rose	1
Mabel Fowler	1
Mitch Day	1
William Smith	1
Louis Ruschin	1

The Alameda County Water District consisted of five of the township's eight towns. They were Centerville, Decoto, Irvington, Niles, and Newark.

Although the district had been formed and voted in by local people, there were outside forces that sought to overturn the legality of the new district. Therefore, for the first part of its life the water district had to battle to save its corporate life rather than fighting for local water rights.

During September of 1914, Superior Court Judge H.D. Burroughs of Lassen County affirmed the proceeding under which the water district was formed. However, as the matter stood at the time of the ruling the district was practically upheld, although it left open an appeal to a higher court.

In March 1915 the Alameda County Water District was ready to go on the offensive by bringing a lawsuit against the Spring Valley Water Company to prevent the building of the Calaveras Dam and the consequent diversion of the water in the Alameda Creek. This suit will be commenced by the Alameda County Water District at Niles before the bond election comes up before the voters in San Francisco on the proposition of that city's purchase of the water company.

This has been definitely stated by Attorney John. T. Nourse, counsel for the water district and by Chris Runckel, Secretary. The district was formed more than a year ago to protect the people in the lower of the county who receive their water supply from the Niles Cone.

That the building of the Calaveras Dam would inflict irreparable injury upon the Alameda County Water District, and on the Pleasanton Water District, also recently formed, is the contention of those who will oppose the dam project. Upon an investigation, it has developed that the points at law are such as to make it extremely improbable that the courts would uphold the project in a suit for injunction. This the attorneys are practically agreed upon. The San Francisco water bond election would be held next month**.**

Said Attorney Nourse, "It is our intention to bring this action before the election (by the people of San Francisco to buy the Spring Valley Water Company) is held so that they voters of San Francisco may understand that in the purchase of the Spring Valley Water plant, they would acquire property that is of questionable value."

In April 1915, injunction proceedings were commenced in the Superior Court by the Alameda County Water District to prevent the Spring Valley Water Company of San Francisco from diverting the waters of the Alameda Creek from the 40,000 acres of the district, through the construction of the Sunol Dam. Work on the structure is now in progress and the court is asked to enjoin the water company and the contractors from completing it.

Attorney John Nourse, representing the Alameda Country Water District, which was formed about two years ago, filed the suit, which will be made the basis for action on the part of the property owners within the district to protect their sole water supply for commercial and irrigating purposes.

The Sunol Dam is located in a narrow canyon about 4 1/2 miles east of Niles, through which flows Alameda Creek. The creek waters come chiefly from a watershed of some 630 square miles of the Calaveras Valley in Alameda and Santa Clara counties.

Yearly the overflow of this stream deposits rich sediment over the lowlands, which makes the surrounding country particularly susceptible to cultivation while the percolating waters are distributed into the gravel strata underlying the valley from which it is pumped readily for irrigation during the dry months.

The Sunol dam site is the lowest point of diversion along the Alameda Creek and its tributaries. The dam is owned by the Spring Valley Water Company and is without the district, which was formed for the protection of hundred of ranch owners and a number of towns and hamlets located in the most fertile part of Alameda County.

The water from Alameda Creek percolate into what is know as the "Niles Cone" on the underlying strata of gravel. To divert the water from the creek by damming up the canyon above Niles would practically confiscate all of the water that now goes into the Niles Cone. It would also prevent the annual overflow and would deprive the thousands of fertile acres of their necessary water supply as well as bring about a destitution of underground water supply for the hundreds of families in that region.

That the intent of the defendant corporation in building the Sunol dam is to make an intake for a pipeline auxiliary supply for the City of San Francisco to the depreciation of the supply in the Niles Cone, it is the contention of the plaintiff in bringing the action.

Involved in the litigation is the pending project of the purchase of the Spring Valley properties, watersheds and distributing system by San Francisco at a cost of nearly $40,000,000.

The suit has been threatened for some time and was finally decided upon when it developed that the dam is to be constructed. No other relief is manifest for the people in the district and the matter will be heard found in the courts, it is promised.

A request that the District Attorney of Alameda County intervene in the suit brought by the Alameda County Water District against the Spring Valley Water Company of San Francisco to prevent the taking of water from the Alameda Creek and causing drought in Washington Township, will be formally be made Monday, January 10, 1916, at the meeting of the Board of Supervisors. Chris Runckel, Secretary, and E. H. Stevenson, Director, of the Alameda County Water District, who informally discussed the matter with District Attorney W.H. Hynes.

San Francisco has intervened in behalf of the Spring Valley Water Company, and it is on this ground that the water district asks the county of Alameda to intervene on its behalf, permitting the District Attorney to be associated in the trying of the case with the district attorney.

"We can prove that the county is vitally interested," said Runckle. "In the first place, the taking of more water from Alameda Creek and the drying of the Niles Cone will mean a loss of millions in valuation. The water supply of cities on the Eastbay shore is seriously threatened, and the cost of getting a new supply would be enormous. In addition, if the city of San Francisco buys the Spring Valley Water Company and we lose the case, hundreds of acres in this county would pass into the control of San Francisco**.**

The long-standing dispute between the Spring Valley Water Company and the citizens of Alameda County Water District is going to be settled by the State Water Commissioner after both sides agreed to arbitration. Arguments in the arbitration controversy over water rights in Alameda County between the two adversaries will begin Monday, September 16, 1916, at the State Water Commission. An agreement signed by S.P. Eastman, Vice-President, and John E. Behan, Secretary of the Spring Valley Water Company; and by J.C. Shinn, President, and Chris Runckel, Secretary, of the water district, has been filed with the commission.

While the matter is pending before the commission, the several suits and injunction proceedings arising from the three-year battle over the construction by the water company of the Calaveras Dam and reservoirs will be held in abeyance. John T. Bourse, and Warren Olney Jr., attorneys for the district and the company, respectively, have agreed to this truce.

Land owners and farmers in the agricultural district between Niles, Newark, and Alvarado, known to geologists and riparian experts as the Niles Cone; organized the Alameda County Water District for the purpose of preventing, if possible, the impounding of the waters of Calaveras Creek on the grounds that the soil of the district would be rendered a desert by the withdrawing of the water. The wells in the district are supplied from a water-bearing stratum of gravel, which gets its supply from the seepage waters of the Alameda Creek and its tributary, the Calaveras Creek.

Under the agreement filed with the State Water Commission the Spring Valley Water Company agrees to pay $10,000 a year for a three-year investigation, legal and engineering, of the merits of the controversy.

The water district failed in its attempt to halt the construction of the Calaveras Dam and the construction on its completion continued unabated.

Meanwhile, Back at Alvarado:

As the year 1899 ended, the Oakland Water Company, the company that had originally sunk the artesian wells at Alvarado, was forced into merging with the Contra Costa Water Company, as both companies had nearly bankrupted each other in their fight for water delivery dominance in the Oakland Bay area. The name of the company was changed to the Peoples Water Company, which sounded like a gentler, kinder company than the Contra Costa Water Company had been.

In December 1907, the Peoples Water Company pointed to the importance of these wells at Alvarado by saying in the Oakland Tribune, "These wells at Alvarado, twenty miles distant from Oakland, are the second source of supply in importance (to the Peoples Water Company). The wells are situated on the famous Niles Cone, which is a tremendous underground gravel deposit, filled with water, furnishing storage capacity for untold millions of gallons. The water finds its way into this cone from Alameda Creek, which breaks through the coast range at the Niles gap (canyon). Five and a half million gallons daily are now being pumped from these wells."

In 1910, there was talk in Oakland of the city buying the Peoples Water Company. For $1,500,000, the new proposed water district could assume instant and absolute ownership of the entire plant and holdings of the Peoples Water Company.

A partial list of the property the Peoples Water Company was given as:

1. Seven hundred and thirty-five miles of pipe.
2. Lake Chabot
3. Lake San Leandro
4. The Alvarado wells, supplying 6,500,000 million gallons of water daily.
5. The Wildcat Reservoir.
6. The Fitchburg well at Alameda, supplying 1,800,000 million gallons daily.
7. 46,294 square acres of land, or 72 square miles.
8. Lake Temescal
9. Summit Reservoir
10. Berryman Reservoir
11. San Pablo Lake
12. Lake Pinole
13. Pumping plants Alvarado and 24th Avenue.

This is an enormous amount of assets held by this company. However, the company itself was not in the best of financial health. In addition, as such it limped along for a number of years.

The Peoples Water Company still feared water shortages and in October 1910 pointed to the Spring Valley Water Company's Calaveras Dam, slated to be completed in 1913, as a possible source of future water for Oakland. The People's Water Company noted that their Alvarado water works lay in close proximity to the San Francisco supply, which went under the Bay near Newark. The Peoples Water Co. thought that the Spring Valley Water system could furnish any amount that might be required on short notice and at a fair price. Peoples thought that such a plan would further postpone a large capital investment on their part.

The following month the *Oakland Tribune* assessed the new plans of the Spring Valley Water Company to tap the Tuolumne River, Lake Eleanor and dam the Hetch-Hetchy Valley. Just a year before, Interior Secretary Garfield had given San Francisco a permit to begin work on the Hetch-Hetchy Valley over the rights of the Turlock and

Modesto Irrigation Districts. However, President Taft squelched the idea, saying he would revoke Garfield's permit on the Hetch-Hetchy water idea. The Spring Valley Water Company also sought to involve other Bay Area cities in their scheme for Sierra snow pack water. The City of San Francisco proposed a consolidation of San Francisco and other communities on the shores of the Bay into a Greater San Francisco. This would be based on a borough form of government. Those cities, which lay out of the metropolis, could exercise autonomic powers in regard to the control of the liquor traffic and schools, leaving all other public interests to be controlled exclusively by the central government, located of course, in San Francisco.

The *Oakland Tribune* found no merit in the City of San Francisco's scheme to dam the Tuolumne and flood the Hetch-Hetchy Valley. They were opposed to this water grab and so stated in their editorial.

On November 29, 1916, the Peoples Water Company was sold to E.S. Heller. Heller the assigned his Certificate of Purchase to the East Bay Water Company, a company that organized at that time to take over the properties.

Water Shortages Again hit Washington Township:

On November 5, 1927 it was announced from Washington Township that wells around the Alvarado/Newark area are threatened with possible ruin due to the East Bay Water Company's pumping of 10,000,000 gallons of water daily from the artesian wells around Alvarado. It was claimed that the water table was below the level of the Bay and many wells in the Alvarado-Newark area had already been rendered useless.

George Clark, an attorney for the Washington Township ranchers, urged the utility to seek relief for the Alvarado wells by using its emergency procedures of importing water from the San Joaquin River to its San Pablo Reservoir. The utility district already had a permit from the state water commission to pump from the San Joaquin during the summer freshet period in case of an emergency. The East Bay Water Company would have to purchase the water from the local utility district and the attitude of the delta region farmers have opposed taking such an action.

In December 1928 the East Bay Water Company was sold to the East Bay Municipal Utilities District (EDMUD)

On May 26, 1930, J.C. Shinn and Chris Runkel, on behalf of the Alameda County Water District, paid to the East Bay Municipal Utilities District $265,00 for the former's Alameda Creek water rights and the Alvarado pumping station. The payment was part of a $290,000 transaction.

The transfer give to the Alameda County Water District control of all waters released over Calaveras Dam by the Spring Valley Water Company, and ended 17 years of effort by the landowners to assure themselves of an adequate water supply.

The Alvarado pumping station would then be operated by the Alameda County Water District only to serve Alvarado and Newark and portions of the Mt. Eden district with domestic water supplies. The pumping was curtailed to permit replenishment of the underground supplies which furnish the water for irrigating the 54,000 acres comprised in the district, which include the richest truck garden, orchard and general farming lands in the vicinity of Alvarado, Centerville, Decoto, Irvington, Newark and Niles.

San Francisco & the Hetch-Hetchy Valley:

After the 1906 earthquake, the City of San Francisco applied to the U.S. Dept. of Interior to gain water rights to Hetch-Hetchy. Lobbying for rights to dam the Tuolumne River and flood the Hetch-Hetchy Valley, the City of San Francisco a

permit on May 11, 1908 to dam the Tuolumne from former U.S. President and now Secretary of the Interior James R. Garfield. Naturalist and environmentalist John Muir waged a ceaseless war against the power of the City of San Francisco and the Spring Valley Water Company.

John Muir, backed by the Sierra Club (which he founded) convinced President Taft to revoke the permit to the City of San Francisco that had been granted by Interior Secretary Garfield.

San Francisco continued their lobbying for water rights to the valley and John Muir fought equally as hard to keep the Hetch-Hetchy Valley away from the developer's blade.

The battle for Yosemite water was brought to Washington D.C. by the City of San Francisco and was joined by the cities of Burlingame, Hayward, Menlo Park, Palo Alto, Redwood City, The Alameda County Water District and the Spring Valley Water Company. The battle ended on December 19, 1913 when President Woodrow Wilson signed the "Raker Act" into law authorizing the dam on the Tuolumne and flooding Muir's cherished Hetch-Hetchy Valley.

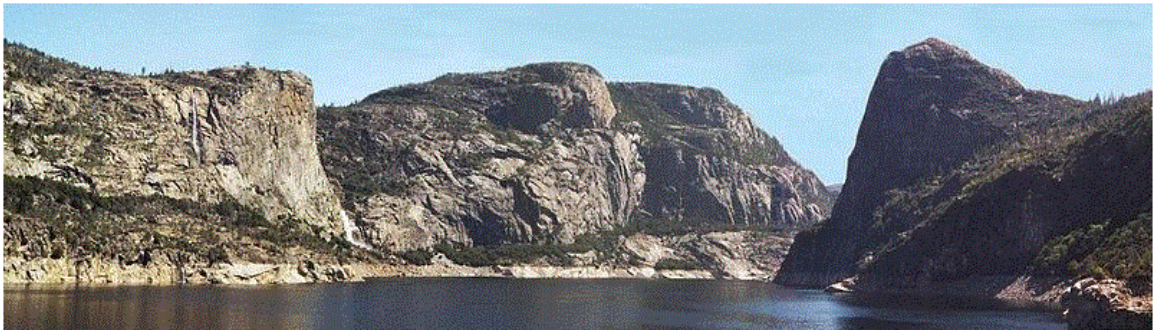
The Alameda County Water District had joined the Spring Valley Water Company in lobbying for the damming of the Tuolumne River, the flooding of the Hetch-Hetchy Valley and the water rights to Lake Eleanor. For this, the Spring Valley Water Company would cede the rights to the water that overflowed the Calaveras Dam that would eventually flow down the Alameda Creek to the Niles Cones, thereby recharging the underground aquifer.

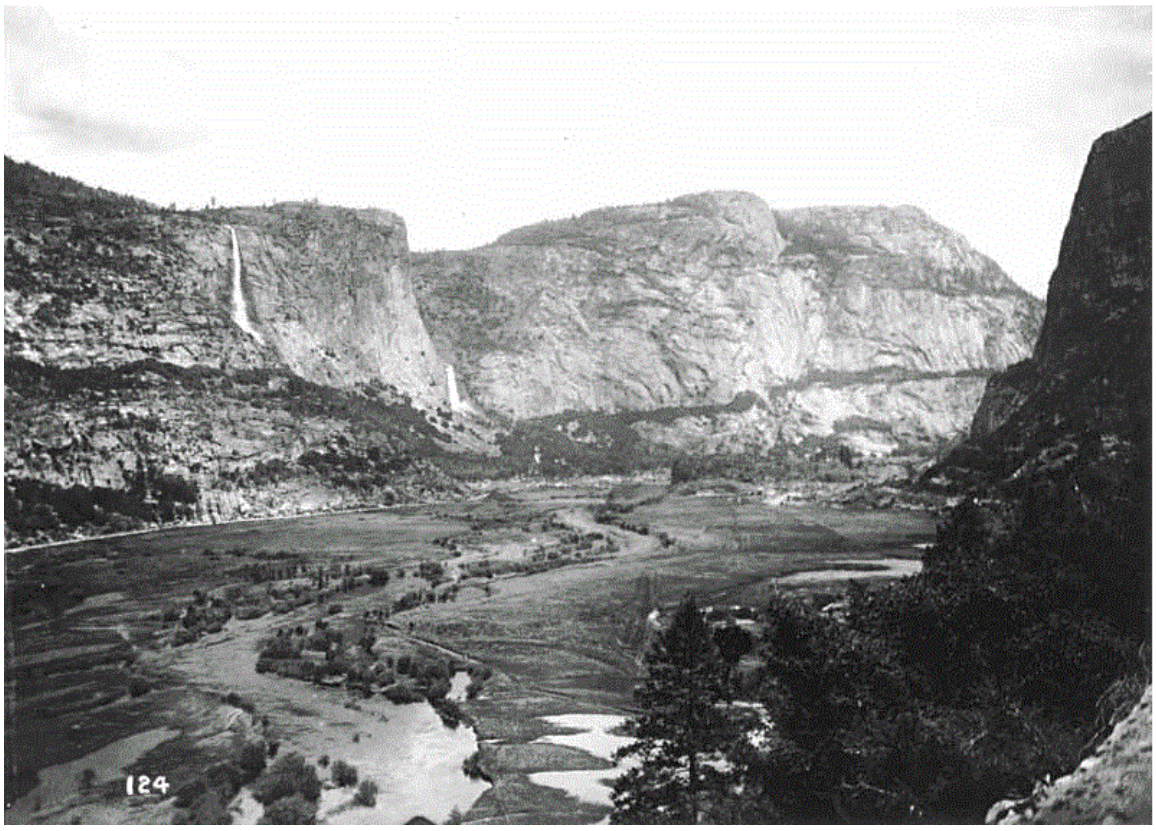
Said Muir, of the loss of the Hetch-Hetchy Valley, "As to the loss of the Sierra Park (Hetch-Hetchy) it's hard to bear. The destruction of the charming groves and gardens, the finest in all California, goes to my heart."

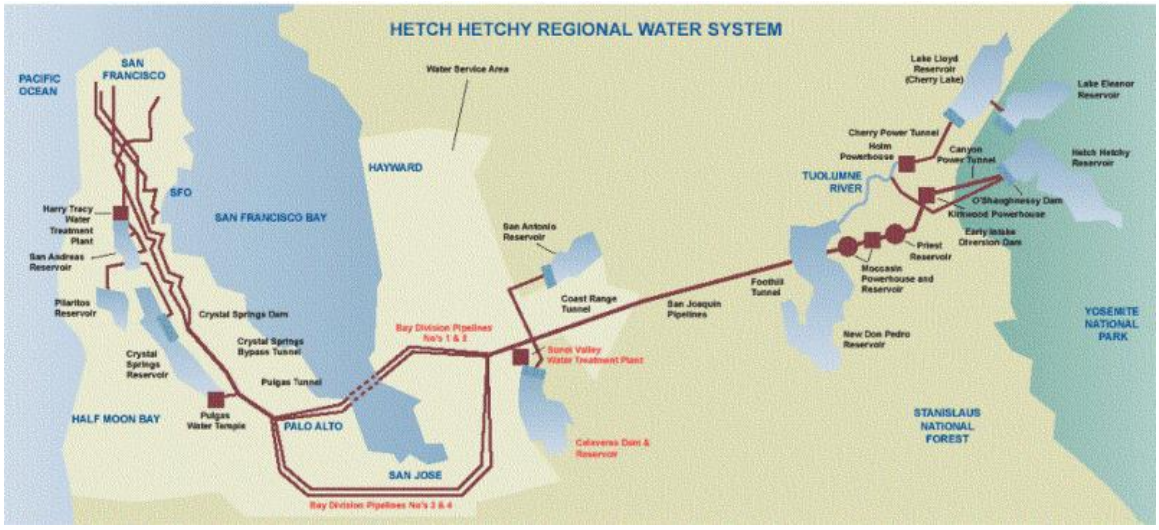
One year and five days later, (December 24, 1914) John Muir died of pneumonia in Los Angeles California.

Water will always be contentious in California as today the anger over the Hetch-Hetchy Valley damming is still in existence over a bill that was signed nearly 100 years ago. Today there is still strong sentiment being fueled by Muir's Sierra Club to remove the Hetch-Hetchy Dam and restore the valley floor to its previous beauty. This movement is still very active and very vocal about the Hetch-Hetchy Dam and the cry for its removal is growing in strength.

On the following pages, you will find before and after picture of the Hetch-Hetchy Valley and a diagram of the San Francisco Water Company's (successor to the Spring Valley Water Company) pipelines. Please note that the diagram of the San Francisco pipeline does not include the water or the pipelines that flow through the Sunol Water Temple, this is completely separate from the Hetch-Hetchy pipe system.







A synopsis of the water situation in Alvarado can be best be described by an editorial that appeared in *The Alvarado Pioneer* January 30, 1948:

"The problem of water for Washington Township and adjacent areas is becoming more acute as each day passes without rain, and a northerly wind adds to the dryness of the soil. When the white man first discovered this region, there was an abundance of water. Regions that are now becoming sterile because of the infiltration of salt water once produced two crops a year by means of sub-irrigation.

The loss of water began in 1870 when the Spring Valley Water Co. of San Francisco managed to get sufficient riparian rights to give them the benefit of the Alameda Creek watershed. Local citizens, alarmed at the prospect formed the Washington and Murray Township Water Company, but while they obtained some concessions and spent $11,000 in building dams and ditches, they lost out. San Francisco got the water.

Nor was this all, the Contra Costa Water Company came in (actually it was the Oakland Water Company who later sold out to Contra Costa Water) and bought up the artesian well district around Alvarado and began pumping millions of gallons of water to Oakland.

Now the ditches for irrigation are filled up, Alameda Creek is almost dry, and the salt water is seeping into the former artesian wells, as well as others along the area fronting the bay, even reaching now into Centerville and Irvington.

In 1930, the Spring Valley Water Company was taken over by the City of San Francisco and the Hetch-Hetchy program begun. When this was completed the district was entitled to the overflow, but that is not sufficient. Oakland sold the Alvarado pumping plant back to this district, then organized as the Alameda County Water District for the sum of $250,000. Bonds were issued to pay for them and this issue is almost paid off. Considering the amount of water taken from the district that price was rather high.

Oakland now has the Mokelume project completed and an abundant supply of water, while we are faced with a dangerously low water supply, partly because of the water drained from the artesian well district by that city.

It would seem from the facts in the case that both San Francisco and Oakland owe this region help now. One good turn deserves another they say. We helped both cities in their need, why not they help us now in our need? There is another reason for this help, that is, this region is a very valuable hinterland for both cities. Would they want to see it become arid waste?

The people in this region are largely in favor of the Reber Plan, which promises to restore the underground water levels and keep this region from becoming a desert wasteland. Whether or not this is the needed solution remains to be seen, but it is our contention that both San Francisco and Oakland have a duty to perform in helping to solve this very vital question, which is of concern to the whole area. No more expansion can be made unless there is an abundant water supply not only for the industrial plants that are looking in this direction for future construction, but also for the increasing population, as well as the needed food, which is supplied from the farming district of the southern part of Alameda County."