

Chapter 3

WATER AND THE SETTLEMENT OF BERKELEY

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"Nature has made but a few spots on earth where such an array of varied landscapes is found, and only one such on the Pacific Coast, and placed it opposite the only Golden Gate."

--Charles A. Bailey, 1889

Introduction

Berkeley has a fascinating and colorful history of settlement that dates back more than one hundred and fifty years. The early settlers were attracted to the area by the creeks and streams that coursed through the region, bringing an abundance of pure water down from the hills. The Indians, the Spaniards, the American settlers, and ultimately the Trustees of the College of California would not have established themselves in the area had they not been assured of a constant supply of fresh water. This paper examines the influence of the creeks on the settlement patterns of Berkeley and the uses and development of the local waters.

The Early Discoverers and Settlers

When early European explorers first visited the area east of San Francisco Bay, on March 28, 1772, they halted for the night by the banks of a stream that later came to be known as Strawberry Creek, somewhere near the Founder's Rock. The exploration was led by Father Juan Crespi and Pedro Fages. It was on that expedition that Crespi drew up the first map of the East Bay, including the future site of the town of Berkeley (NCWP, 1941).

Several years later Spaniards named the area as well as one of the many local creeks "Temescal". The location of an Indian village on this site inspired its name, which appears to be a mutilation of the Nahuatl word "tenazcalli", meaning 'sweathouse' (NCWP, 1941).

When Don Luis Maria Peralta saw the area which is now Alameda, he recognized it as the perfect inheritance for his children. In 1820 he petitioned the Spanish governor, Pablo Vicente de Sola, for the tract of land of four or five leagues stretching from San Leandro Creek to the hill adjoining the sea beach at the northwest extremity of Alameda County. On August 16, 1820, the land was placed

in Peralta's possession as directed by the Governor, on the condition that the Mission de San Jose be allowed to use San Leandro Creek (Houston, 1913). On August 30, the land north of Temescal Creek was withdrawn from the grant, which Peralta strongly protested, so that a new title was issued for the whole grant (Bowman, 1951).

The land Peralta purchased is traversed by many creeks that head in the Oakland-Berkeley Hills and flow in a southwesterly direction to San Francisco Bay. These streams include Cerritos, Codornices, Strawberry and Temescal Creeks (Thompson and West, 1978).

Peralta named the area Rancho San Antonio. The family first lived in a temporary adobe house that they built on San Leandro Creek. They later moved to a permanent house in the present-day Fruitvale District (Bowman, 1951). In a letter written to his Commandante on December 19, 1827, Peralta wrote that his land, which he was using to raise cattle, sheep and horses and to grow grain, was hilly and that water was scarce. It is characteristic of the region's streams to flow heavily during the winter and spring months, and for the level of flow to decrease dramatically in the summer and fall. Yet, even in the driest of seasons, Peralta would have had an abundant supply of water for agricultural purposes if it could have been distributed evenly by means of storage and irrigation (Langley, 1870).

In 1830, and again in 1836, various members of the Peralta family built adobes on Temescal Creek (Bowman, 1951). In 1842, Peralta divided the Rancho among his four sons. He used the creeks to delineate property lines, in order to make it easier to defend their claims. This was a practice that would prove common in the decades that followed.

It was to his son Jose Domingo that Peralta gave the area now called Berkeley. At this point Jose Domingo withdrew his family from Temescal and moved them to an adobe built one year earlier on the south side of a creek in North Berkeley. He and his brother, Antonio Maria, had named the creek "Codornices " (Quail Creek), in 1818 (Bowman, 1951). He lived near the creek so he could have a source of water for the small garden and orchard he maintained, while leaving the rest of his land uncultivated. His house was the first building on the present site of Berkeley (Bowman, 1951).

With the Gold Rush of 1849, the portion of the Rancho belonging to Jose Domingo Peralta bore the brunt of the impact of activities from San Francisco. He and his brother Jose Vincente, who owned the area of Oakland and Temescal Village, resisted the first American squatters, but soon realized they could not maintain control over such desirable lands (Halley, 1876).

The American Settlers

The American settlers and squatters began to move in and occupy the lands of Domingo and Vincente as early as 1852. They made use of the abundant resources, broke the soil, and established harbors. Life was hard, "but favorable conditions offered by so beautiful and bountiful a land enabled them to bear their conditions hopefully" (Halley, 1876).

The primary crops grown by the farmers included wheat, barley and hay. These grains required no artificial irrigation, so they were easy and inexpensive to grow, and brought a good profit. Other produce grown by many of the American settlers were potatoes and onions (Halley, 1876).

As an increasing number of settlers were attracted to the area by the rich soils, inexpensive lots, and especially the abundant supply of fresh water, the Peraltas began selling off portions of their land. In 1853, Vicente Peralta sold his land except for a tract of seven hundred acres that straddled Telegraph Avenue, about two miles from Oakland (Halley, 1876). That same year Domingo Peralta sold all of his ranch except for 300 acres, leaving himself with the homestead tract around his house. He disposed of his land in two sets of transactions. In the second set, boundary markers other than streams were used, causing future difficulties in establishing definite property lines. Broken fences, colored stones, and marked trees were sometimes used in place of the creeks (NCWP, 1941).

By now the area had changed markedly in appearance. Tents and shanties sprang up around the longstanding adobes, as increasing numbers of squatters began to till small patches of land. Companies and industries also began to locate in the area. In 1854 a sea captain, Orrin Simmons, turned to farming and acquired squatter's rights to 160 acres of land between Strawberry Creek and the present School for the Deaf and Blind. In 1857, he obtained full title and purchased two more tracts of land, giving him ownership of seven hundred acres, which included the present site of the University of California. During the years before 1860, he established a lumber business, and an agricultural equipment store (Simmons, 1860). He also owned a flour mill powered by water from "Clear Lake" (Houston, 1913).

The availability of water attracted other entrepreneurs to Berkeley as well. A number came from San Francisco, where well water was so costly, and of so low quality that it had to be shipped in from Sausalito. In the mid-1850's San Franciscans could expect to pay \$1.00 per 250 gallon cartload, or as much as \$.25 per five-gallon bucket - a prohibitive amount for industries that required large amounts of water. It was for this reason that starch manufacturer John Evercing moved across the bay, giving Berkeley its first factory--the Evercing and Ramelsbury Starch and Wheat Factory (Houston, 1913). The factory was located astride Second Street, near the Indian shell mounds, on the Berkeley beach, from the 1880's to the 1890's.

By now there were small, scattered, cultivated plots of land all the way from the hills to the bay. In what is now known as West Berkeley, there was a small village called Ocean View (Antisell, 1868). Businesses were attracted to this area by the accessible roads such as San Pablo Avenue, and by the ferry service. A Captain Bowen owned several businesses in present-day Ocean View, around which the small community developed. It was near these businesses, at the present site of Franklin School on the south bank of Schoolhouse Creek, that Domingo Peralta donated an acre of land for the first schoolhouse in Berkeley (Bowman, 1954).

The College of California

The College of California Trustees chose Berkeley for the new college site because of the mild climate, the accessibility, the choice scenery, and especially for the water. "All the other striking advantages of this location could not make it a place fit to be chosen as the College Home, without this water. With it every excellence is of double value" (Willey, 1887).

It was Captain Orrin Simmons who convinced Henry Durant to pick Berkeley as the new site for the College of California. He knew that it had every attribute that the Trustees were looking for-- especially the stream, described here by Professor Frank Soulé:

Strawberry Creek is for a large portion of the year a beautifully clear stream; during the winter it discharges an enormous quantity of water, and runs between steep banks ten to fifteen feet in depth, and with a span from thirty to one hundred feet It would be difficult to find a spot with so many varieties and capabilities in the way of soils, irrigation and exposure. (Thompson and West, 1878)

Simmons sold all but one hundred acres of his land to the College Trustees (NCWP, 1950). On August 14, 1850, he signed an agreement with his wife Hannah to convey water rights of the creek running through "Lot 80 in the Kellersberger subdivision" the President and the Board of Trustees of the College of California (Simmons, 1860).

Judging by official Weather Service records from San Francisco, Sacramento, and Stockton, 1864 was the second of two very dry years in central California. Unofficial records indicate that only 8.5 inches of rain fell in Berkeley that season, little more than a third of the long-term average of 22 inches (Langley, 1870). It was in this year that the Trustees commissioned civil engineer C.W. Boynton to determine the most efficient use of the water resources on the college site. Reverend Samuel Willey summarized the engineer's report:

Through these grounds runs the winding course of a stream of water. The stream flows freely the whole way during the wet season. Its sources are in the hills, where they flow the year through. Even in October, of this driest of dry years, 1864, they were yielding by actual measurement, over 100,000 gallons a day. (Willey, 1887)

According to Mr. Boynton, this minimum stream flow could satisfy the ordinary household needs of 400 persons, allowing almost 30 gallons per person per day. He recommended that "the first water supply for the College grounds should be taken from the springs on your lands, conducting the flow all into a central collecting reservoir" (Willey, 1887).

The College of California Trustees formed the Homestead Association in order to sell plots of the University's land to raise money. They knew the sale of the lots depended on the introduction of water, so the people could plant lawns and adorn their lots with ornamental vegetation. Therefore, the

Trustees formed the College Water Company, which gave them the rights and privileges of water companies, incorporated under state law, for furnishing towns and cities with pure and fresh water (Willey, 1887).

In 1867 a brick reservoir was constructed in Strawberry Canyon and main pipes were put in to take water from the reservoir and deliver it to where it was to be used. A flume was constructed to bring water from Strawberry Creek and its tributaries, and add it to the flow of Heywood Springs in the main ravine about two miles north of the college lands (Houston, 1913).

When the water-works was completed in August, 1867, few residents had built in the region. Up until that time the territory was divided among different types of farmers, some of whom built permanent houses, while others occupied temporary abodes during seed-time and harvest. Much of the undeveloped land was owned by speculators who proposed to improve their properties and have them ready for future building with the introduction of water (Antisell, 1881). Thus,

"when the water was first turned from the reservoir into the pipes, it went up in a spray under 150 feet pressure at various points on the homestead tract and College site It was a demonstration that water-works thus begun could be carried down where it was wanted, all over the plain" (Houston, 1913)

Local Waters and the Town Settlement

The Trustees named the College and the surrounding area Berkeley, after Bishop George Berkeley of England. They mapped out roadways surrounding the college site, and sold lots adjacent to streets to raise the needed funds. With water readily available, many sheep and cattle ranches were turned into lawns and parks, and the farm houses into villas (Antisell, 1881).

Increased availability of water, accessible roads, good climate and convenient ferry service greatly increased property values, and real estate investors and land speculators who owned large plots in the township quickly became aware of the potential value of the land. Real estate flyers were sent out to San Francisco proclaiming all the advantages of living in Berkeley. "A superior class of people," one pamphlet began, "have purchased property in the town, built substantial houses, and shown every intention of making it a permanent place of residence" (Antisell, 1881).

One landowner, a Mrs. Hopkins, sent out flyers and maps of her property. Among the many "advantages" touted in the pamphlet was "abundant water." The property was called Hopkins Terrace and it covered most of what is now Northwest Berkeley. A map of the property illustrates its greatest assets, including a water tank near Codornices Creek just north of Spruce Street, and a bridge over Codornices Creek on Spruce Street (Hopkins, 1896).

Photographs of the town show the natural beauty and other advantages of the private properties located there. In the 1870's and 1880's, the larger estates were located on or near the foothills and clustered around the campus. The houses became smaller as one moved from the hills to the bay. The sizes of the plots of land stayed quite uniform throughout the township. Windmills built to pump

groundwater were located on many of the plots of land. Some even had their own water tanks. Windmills were located near the creeks and the bay, as well as on the hills and plains (Figure 1) (Berkeley Pictorial, 1865-1930). Ed F. Niehaus & Bros. owned the Berkeley Planing Mill, located between Second and Third Streets, on Bristol and Delaware, that had a water tank on the side of the building which advertised, "Water Tanks Made to Order" (Figure 2) (Elliot, 1883). Even though water was being piped in to many residential areas - especially around the College site - many residents still depended on the creeks and ground water for their water sources. One well, built prior to 1868, was used as a source of water for the early settlers, and is still being used today by Safeway, located on Shattuck Avenue and Rose Street, to water the vegetation (Figure 3).

Macadam Construction and Local Waters

Otto Putzker, a resident of Berkeley in the 1870's, described Berkeley as resembling a big ranch.

"From our house on Telegraph Avenue we could see tall grain fields in all directions From Shattuck Avenue down to the water there were truck gardens and swamps. At Ashby, around Shattuck, Adeline, and Grove, I had a row boat and used to go duck hunting. There there were lots of cattle driving through this town." (NCWP, 1941)

Berkeley was incorporated in 1878, at which time there were about 1500 residents. The biggest problem of the period was the thoroughfares. They were considered by the Berkeley Advocate "to be civic sore spots". Downpours would swamp the business section and leave the roads under several feet of water. It was not unusual for town authorities to be busy repairing washouts on San Pablo Avenue (NCWP, 1941). Interest was expressed in fixing the roads so as not to make the town liable for injuries and damages caused by the hazardous conditions (Berkeley Herald, 1886).

By 1892, the Trustees had decided that the future sidewalks would be made with cement. Wood would no longer be used to build sidewalks in thickly settled districts. Soon plans were underway to grade and macadamize the two main thoroughfares through the city - San Pablo and Shattuck Avenues (NCWP, 1941).

Early Sewer and Water Systems

The last local water development project that the Trustees completed was the final construction of a city-wide sewer system. The main sewers were on Shattuck and Dwight Way. During the mid-1880's, contractors built sewers from Center Street to Shattuck and from Blake and Ellsworth to Shattuck, for which the Town Marshal paid the contractor \$500. The contractor was expected to go to any expense to protect the town from all claims of damage. Because problems were always arising from breakdowns in the plumbing systems, the town officials wanted to make sure the work was done satisfactorily (Berkeley Advocate, 1886).

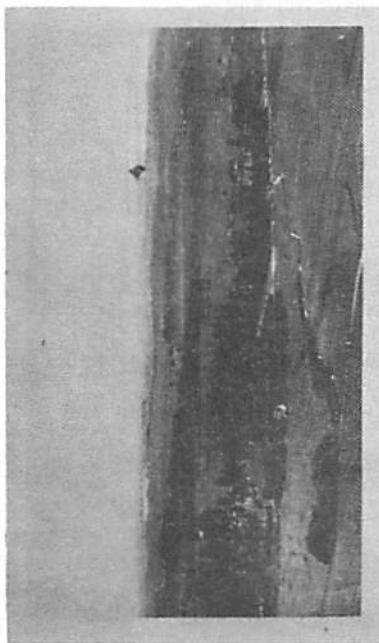


Figure 1. Creek and windmill in the main ravine behind the University of California campus.

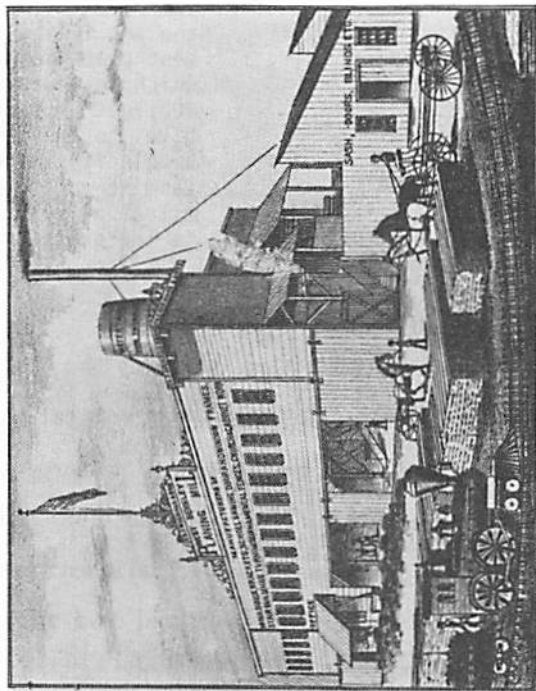


Figure 2. "Water tanks made to order".

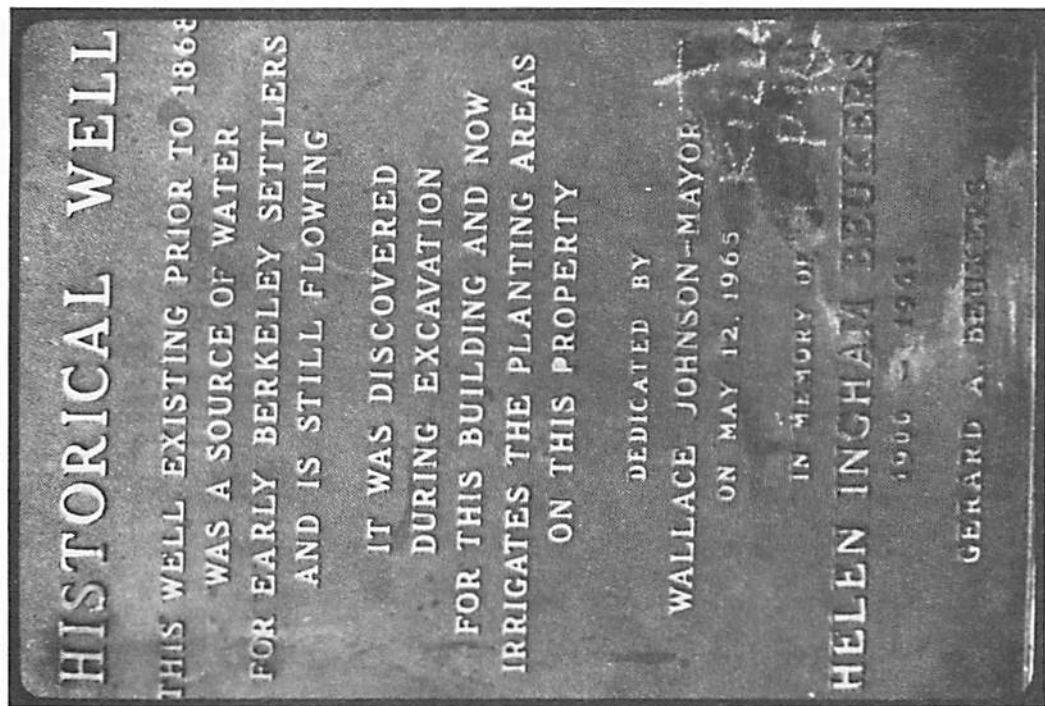


Figure 3. The old well commemorated by this plaque is used today by Safeway at Shattuck and Rose to irrigate the grounds.

Since the mains constructed of sheet iron were constantly bursting and wooden flumes decaying, plumbers did a brisk business. According to the Berkeley Advocate, "no branch of trade affects the breath of the community so closely as the Plumber's" (Berkeley Advocate, 1886). The reporters never failed to see the humor in the accidents caused by broken mains:

"Mr. George Dornin of Dwight Way had an opportunity of testing the pressure of water in the main pipe in front of his house last Thursday. A break occurred, through which the water rose to a height which may possibly enable him to be better prepared in case of need. As manager of three of the largest insurance companies in America, he is always ready to adopt anything new which may be of service in preventing fires." (Berkeley Herald, 1886)

The old mains in the city were replaced with cast iron pipes capable of withstanding the pressure of a steady flow of water, by a Doctor Wellendorf, who had taken over the Berkeley Water Company in the early 1880's (Berkeley Advocate, 1886).

Work continued to be done on the town sewer system. Scourge and diptheria had become a problem in the University Avenue area, causing an increased death rate. Drainage was carried off to places where no one could see it. When the sewer was laid, the people were willing and anxious to pay for their own hook-ups to the main pipes, in hopes that this would reduce the disease death rate (Berkeley Advocate, 1886).

By the early 1890's most of the work was complete. The sewer system was

"the small pipe system, which is the result of the best practice of modern sanitary engineering and which is now generally adopted The fall of 300 feet from the base of the hills to the bay gives to the flow of the water through the sewers a velocity which frees and cleans them and makes them serve the purpose of removing quickly and effectually the decomposing organic matter which is the origin of disease." (Berkeley Advocate, 1892).

Conclusion

By the 1880's, Berkeley had lost the rights to most of its natural water sources. In the preceding decades the local waters had supported the settlers, and they had come to depend on this valuable resource to satisfy all of their household, farming and recreational needs. The settlers had used and developed the creeks and ground water to a great extent, which allowed them to advance and build up the township, by attracting more settlers and developers. The early activities involving macadamization, water and sewer system construction, and reservoir building were directly influenced

by the local waters and contributed much toward the evolution of the Berkeley we know today.

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