

# History Comes *Alive!*



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## ON THE RADIO

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~ Tales From the City Archives ~

*Photos courtesy the Los Angeles Archives and the Los Angeles Public Library Photo Collection*

The recent discovery of a length of a pipe made from bricks in Chinatown has been a source of curiosity. That got me thinking about how a typical Angeleno in, let's say 1872, would have thought about their water and how it was delivered.

Many of the early City charters had an entire section devoted to the management of the water supply. The 1872 charter has chapter seven titled, "Water Canals – Water Regulations." What do you think of when you hear the word "canal"? An open ditch of flowing water, or a shipping lane similar to the Panama Canal? How about the Spanish word *zanja* used by the earliest residents as well as the Spanish, Mexican and American periods during most of the 19th century? *Zanja* means "ditch." The section of pipe uncovered near Capitol Milling belonged to the *zanja madre*, or "mother ditch" – in other words, the main canal of water for the City.

So, who was in charge of the *zanja*? That was the *Zanjero*, sometimes known as the Water Overseer in the charter. The job was appointed by the mayor and council to someone who would "assist and direct the repairs and work upon the main canal and branches ... keep a book of all persons having purchased water ... setting forth the days, nights or hours ... to get permits for one day also a certain number for nights and hours..." If you think it sounds bureaucratic, read on.

The typical water user needed to apply for a permit in advance. The 24th and 25th of each month were days to file a petition to buy water for the following month. The 26th and 27th were days set aside to return to the office, buy your permit and take it with you. The permit allowed you to have access to water during certain times of specific days. Stop and think about that. Moreover, charter section 76 lays out the exact times: "A day's water shall be from sunrise to sunset and a half-day's water shall be from sunrise to 12 noon and from 12 noon to sunset." So an Angeleno had to plan for their irrigation needs and that of their families at home. If you missed the days to pay for and pick up your permit, you were out of luck for that month.

Now, if you're thinking that these were



The *zanja madre* in the basement of the Hammel Building downtown, during renovation of the buildings used to house the *Siquieros* mural two years ago. This renovated space in the Hammel Building has become the new Olvera Street Welcome Center.

restrictive measures, let me acquaint you with the earlier regulations from 1855. The overseer would need to know what was being irrigated, how many acres and the valuation of what was being produced on those acres. The landholder would have to demonstrate that the field was improved sufficiently to make the best use

of the water. Irrigation for crops started no later than May 15 and ended after September. You couldn't water your pasture in October. Imagine our use of water today. Could you go from October through half of May without watering your lawn?

Oh, I forgot to mention that you could irrigate once a week and no more. The rate of water use in 1872, by comparison, was "two and half hours per acre for each twenty-four hours – once in each month."

It was also necessary to be able to check the conditions of the canal and the branches at any time. The 1855 overseer was designated an ex-officio policeman, which gave him access to any property under his jurisdiction to do inspections, repairs and enforce the



A section of the *zanja madre*, west of Union Station, rediscovered circa 2000.

taking of the water. By 1872, what was important was being able to pay for the water you wanted, assuming it was being used for irrigation, livestock and standard household uses. A privately owned decorative fountain was considered socially unacceptable.

Property owners had to accommodate the priority of the canal system. As far back as 1848, prominent landowners who wanted a credit towards their use of the *zanja* provided some of their laborers – some of the local Native Americans – called "peons" in City documents – to help the overseer dig and maintain the ditches. A credit was worth 12.5 cents toward the overseer's salary. Jean Luis Vignes – one of the largest property owners with vineyards and other agriculture – contributed four laborers in exchange for four credits.

The property owners also made room for the *zanja* on their lands. The canals crossed through many properties, and the Council practiced a type of eminent domain. They would approve a new or expanded canal in exchange for increased access to the water in that canal by the landholder. If someone's road was affected by a new canal, a bridge would be built over it to make the landholder whole. Several days a month were set aside for maintenance of the canals to keep them clean and in good repair. Fences were built by the property owner to keep animals and livestock away from the canal. If the property owner failed to follow all of the rules, he would lose access to the water. Stealing water by diverting it from the *zanja* was a quick way to land in jail for up to ten days with a \$30 fine.

The same questions apply to the 1872 water user as to the 2014 customer: How

much was the water, and how was the infrastructure being funded? The water rate for 1872 was \$1.50 for one day. A half-day cost \$1 and an hour cost 25 cents. Using water from sunset to sunrise the next day was a bargain at \$1. Don't forget that this was pre-paid water.

As early as 1855, a water fund was established that would provide for the salary of the overseer (\$100 a month) plus paid labor as needed. Infrastructure including bridges, flumes and other expenses would be transferred to the cash (general) fund to pay vendors. Speaking of salaries, the Water Overseer – still called the *Zanjero* in the 1872 charter – collected \$1,200 a year, whereas the mayor and City Marshall were paid \$1,000 a year each. Cristobal Aguilar – the city's mayor in 1872 – became the *Zanjero* for several years, making more money after his term



The Los Angeles City Archives received several brick pieces of the *zanja madre* pipe May 14, and they are safely stored away for future display and research. The archives wishes to thank Sharon Lowe of Council District One and Nate Arnold of Forest City Builders for their help in securing the artifacts for the City.

the end of the 1870s, the main canal was slowly being encased in brick and cement, whereas most of the branch waterways were still open trenches. The improvements were part of the conditions of leases that allowed private ownership of the water supply after 1850.

The Canal and Reservoir Company started in 1868 and managed the system of reservoirs feeding the *zanja* and other infrastructure. Their management of the water system was decidedly mixed. For one thing, water quality was always a concern before the development of treatment facilities. One of the major chores of the deputy *Zanjero* was clearing weeds, dead animals and other debris out of the ditch. Water rates were a never-ending source of complaints to the mayor and Council. One example was when the company wanted to charge a higher water rate for homes with bathtubs at one point in 1879. They were also slow to install fire hydrants in a City where many of the buildings were still made of wood.

Through a series of lease agreements and favorable bond measures, the Company held onto the water rights until the City bought them back in 1902 through yet another bond measure, one that promised to benefit all the citizens of Los Angeles. Shortly after they were formed, the Los Angeles Board of Water Commissioners agreed to retain the services of the superintendent from the previous ownership group. He had started out as a deputy *Zanjero* in 1877 and had worked his way up to the top of his field by the turn of the 20th century. But William Mulholland was only getting started.

## The Mother Ditch

Managing LA's early water supply was a big job.

ended that year.

During years of sufficient water supply, the Overseer was allowed to sell excess water. The charter of 1872 allowed the overseer to sell excess water to people outside of the City limits. This was also what happened to the unsold water if you missed the petition deadline each month. The water was used during nighttime hours only and cost an extra 50 percent. It was against the law for a citizen to trade or sell his water permit to someone outside the City. The penalty: \$25 fine and no water access.

By the late 1860s, homes and businesses were starting to have iron pipes transport their water from the *zanja*. By



View of three women and two children washing clothes at the *zanja madre*. Circa 1900.