

Once Upon a Time in North Park

The Sewer: The Unsung Hero of Infrastructure

By Katherine Hon*

Imagine stray dogs and wild pigs consuming sewage and garbage dumped into streets and empty lots. A town in Crete in 2500 BC? Yes. But also San Diego in 1880. The modern sewer design of underground pipes below the center of streets with access manholes for cleaning and repairs was not developed until 1887. And it took until 1917 for almost all houses built in the City of San Diego to have wastewater removal either by the city system or septic tanks. It is not a topic we want to think much about. In contrast, in Paris in the 1700's, the newly built, 8-foot diameter sewer tunnels were considered an engineering feat and a public attraction. People toured the sewers in barges to admire the efficient system. Live tours of the sewer system in North Park are not feasible, since the typical pipeline diameter is only 8 inches. However, the construction of the system had a significant effect on development of modern San Diego.

The approach to wastewater disposal in early San Diego was simple and individualized. From the 1830's to late 1880's, outhouses in back yards shielded shallow holes which were covered up or allowed to overflow into small drainages when they filled. These foul rivulets fed the San Diego River and eventually emptied into the San Diego Bay. As anyone who has dug holes in the area can attest, the underlying conglomerate formation is shallow and nearly impenetrable. Overflowing wastewater ran down dirt streets, contaminated water supplies, flooded basements, and spread disease. Not to mention the fact that the smell was terrible. In 1881, a five-member Joint Committee on Sewerage was formed. A pipeline system to flow by gravity was proposed. The committee also decided that since San Diego experiences far less rain than the East Coast, smaller diameter pipes that would carry only sewage could be used, instead of large pipelines and tunnels that carry both sewage and storm runoff. Thus began the concept of Colonel Waring's separate sewage and storm flow systems in San Diego. A gravity sewage system was proposed because even up to 1917, pumping with electrical power was a new technology. At that time, steam engines were still being used on the East Coast to drive sewage pumps.

The city-wide pipeline system was slow to develop. In the Report of the Health Officer, January 1889, D. Gochenauer, M.D., noted, "One of the most dangerous forms of soil pollution with which we have to contend is that of the unscientific and unsanitary construction and maintenance of cesspools and privy vaults that have existed throughout our city, and it is surprising to find that many of our intelligent people even to this day cling to these deceptive life-destroying pits and pools with a tenacity and zeal that I have labored hard to imitate in my endeavors for their removal."

However, indoor plumbing was becoming more popular. George F. Kendall, Inspector of Plumbing, noted in his 1889 report, "The change from the pan and plunger closets to tank closets, for inside use, is meeting with general satisfaction."

Although the first city sewers were built downtown, it wasn't long before the North Park area received attention. A San Diego Union article on January 6, 1909 quoted a letter from the Mayor to the council recommending sewer extensions because "Some of the most sightly and desirable sections of the city, which are building up in fine improvements and actual homes, must, in the nature of things, soon acquire sewers." University Heights east of Georgia Street was noted as one of these areas, and a 10-inch diameter pipeline was built west under University Avenue from University Heights, connecting into the head of the Fifth Street sewer. In 1911, bonds for \$26,000 funded the construction of the Switzer Canyon Trunk Sewer, an 8-inch diameter pipeline that ran south from the east side of Balboa Park in Golden Hill to Pershing and B Streets, where it entered the downtown system. This was only the second trunk sewer for the city, and placed North Park at the leading edge of the modern sewage system in San Diego.

*Based on "Raw Sewage to Reclaimed Water – A History of Sewerage Systems in the Metropolitan San Diego-Tijuana Region" by Jon Jamieson
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This article appeared in the January/February 2004 North Park Community Association Newsletter. Katherine Hon is a registered civil engineer and environmental specialist, and Secretary of the NPCA History Committee.