

The Berkley Water Works - Circa 1949

# Berkley’s Wonderful/Terrible Water

by Don Callihan

One of my fondest memories as a kid growing up in Berkley was coming in the house on a hot summer day and chugalugging a glass of straight-from-the-tap cold Berkley well water. Jack Chapman also liked Berkley water. A July 31, 1952, article in the *Berkley Advance* was titled, *Jugful of Berkley Water and Pension Is Sufficient for Retiring Jack Chapman*. 70-year-old Jack was retiring from the DPW and told city council members during his retirement ceremony, “Just look at my physique if you don’t believe Berkley water is the best beverage of any.”

While Jack Chapman and I liked the water, my mother did not. She would have agreed with housewives who were interviewed for an August 24, 1940, article in the *Daily Tribune*: “Mrs. Kriss who was hanging out wash said; ‘(My) wash comes out yellow due to the terrible water. . .something certainly ought to be done’ said Mrs. Benson J. Wachter, 1592 Catalpa.”

## Berkley’s Hard Water

Berkley had “hard water,” so named because of all of the iron and minerals that it contained. Berkley water had about 17 grains of hardness whereas 4 to 5 grains is considered ideal. The iron not only yellowed clothing, it also caused rust stains on plumbing fixtures and anything else that it came in contact with. Galvanized steel pipe, used for water supply lines, eventually experienced enough iron buildup to restrict or completely block water flow.

Minerals in the water were primarily calcium and magnesium bicarbonate. They prevented soap and detergent from dissolving in the water which reduced cleaning effectiveness and also caused a residual soap scum. Some residents were able to combat these problems by installing water softeners, but the vast majority just put up with them.

But, not all of the minerals were bad. Berkley water contained a small amount of fluoride that may have helped save the teeth of Berkley’s kids.

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*During the months of April & May, the Museum will feature an exhibit on the Holland Hardware fire, one of the largest fires in Berkley history. Exploding ammunition and aerosol cans contributed to the danger. Arson was suspected.*

*Children in attendance will receive a Berkley junior fire chief’s helmet.*

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## How did Berkley get this "terrible water?"

At a special election on Friday, September 28, 1923, voters approved a charter for what would be known as the "Village of Berkley." They also elected a village president, a clerk, a treasurer and six commissioners. At its second meeting on Monday, October 15, 1923, the commission began work on the services and infrastructure needed to support a village. Establishing fire and police departments was the top priority and water and sewer systems were a close second.

In early 1924, the commission proposed a water distribution system and water works for Berkley. Naturally occurring artesian springs beneath the village were chosen for the water source.

Some Berkleyites already had their own wells and some were using water from wells and distribution systems installed by subdivisions. While subdivisions provided water to those residents who paid to be connected to the system and paid for the water they used, subdivision systems had several disadvantages: wells tended to be shallow and more subject to contamination and distribution systems were unable to provide a constant flow of water at stable pressures. They were also inadequate for fighting a fire.

In order to get water to residents as quickly as possible, the commission approved an agreement with Royal Oak to supply water through a water main that crossed Woodward at Eleven Mile and connected to Berkley's newly installed mains. Once residents had a main in front of their house, they paid \$5 and submitted an application for connection. The \$5 paid for drilling and tapping the main, installing a shut-off valve at the street and a meter inside the building. Mrs. Rosa Schiaffino, 1021 Cambridge Road, lived in the first home to be connected.

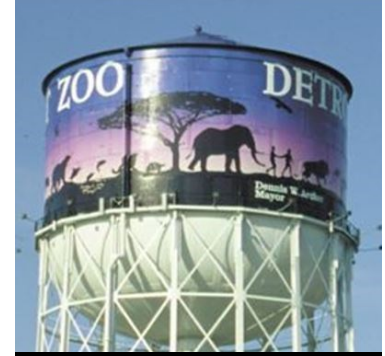
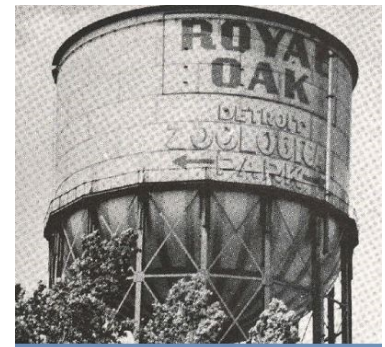
As more and more homes were connected, there were some unexpected consequences. Mrs. Arthur J. Billet, 1510 Dorthea Road, received her first six-week water bill. It was \$13 when a \$3 water bill was considered high. When her water system was first installed, her 5-year-old son took numerous drinks from the hose connected to the outside faucet and became ill. Mrs. Billet decided to flush the pipes and turned on the outside faucet and let it run for two days. Her huge bill was the result. She complained to the village and was told, "The water department is always willing to cooperate with users in getting pure water and requests to flush pipes will always be given prompt attention." There was no indication that any portion of her bill was forgiven.

Another consequence of water main installation was unfilled water main trenches, which made walking dangerous, especially at night. In order to reduce the hazard, the Berkley Commission authorized arrests of persons who kept street openings open longer than necessary without providing proper barriers.

## Berkley's First Well Began Supplying Water to the Village

It wasn't until August 20, 1926, that Berkley's first well was put into operation. 75 to 80 gallons per minute were pumped from the well, enough to supply the entire village without using the water from Royal Oak. The well was 219 feet down and the water was cool and clear and, of excellent quality.

Less than a year later, water was again in short supply. In April of 1927, village president Oliver C. Swords said, "One of the most pressing problems before us, is that of an adequate water supply. . . . Our present supply is furnished by only one six-inch well of our own, and with Royal Oak. Fifty percent of our people are using private subdivision water which holds the demand down somewhat, but soon these wells will be abandoned and the entire village will be served from a common source. . . . There is nothing left for us to do except to proceed immediately to sink a well and erect our own tank using such money as we have at hand and raise the balance by general tax or submit the question of bonds again at a special election."



The Detroit Zoo Water Tower

## The Zoo Water Tower

Why is the Zoo Water Tower in a newsletter about Berkley? Because, in November of 1924, Berkley was part of a five-city group (Royal Oak, Ferndale, Pleasant Ridge, Clawson & Berkley) that was to receive Detroit water. Detroit was bringing a 48-inch main to Eight Mile Road and the cities would take it from there.

However, Berkley voters turned down the proposition and 32 years would pass before Berkley had Detroit water.

In the meantime, Ferndale, Royal Oak and Pleasant Ridge went forward and the water tower was built in 1928. Still-standing, it holds 1.5 million gallons of water and contains the most steel of any similar tank of its time. The tip of the roof soars 163 feet into the air and the tank portion is 70 feet in diameter. Originally, the words "Royal Oak" were painted on the roof in ten-foot high letters along with a 50-foot arrow pointing due north for the aid of aviators.

The tank was emptied for good in 1984 because of a faulty valve. But the tank lives on as the artful landmark for the Detroit Zoo.

## Berkley's Water

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Work began immediately to sink a larger, 12-inch diameter, well, Erection of a water storage tank also began. The second well was being utilized and concrete piers had been poured for the new water tank before Berkley residents voted the necessary funds, at a July election, for completion of the tank and the construction of a water works building. Village engineer, Edward H. Pate, reported that "The new well which is now being pumped temporarily by a 500 gallon a minute pump, was even better than had been previously reported and that with a 1,000 gallon pump, water tank, etc. Berkley's water needs would be taken care of for some time."



**Southeastern Oakland County Water Authority Headquarters  
Royal Oak Side of Webster Road – North of Pattengill School**

In late 1927, the water tank was completed. It was 125 feet from the ground to the top of the roof, 28 feet in diameter and supported by four steel posts. Its capacity was 150,000 gallons. The exterior of the water works building was also completed. It had been erected around the existing 40,000 gallon water storage tank. This tank, of concrete, was constructed on the ground and was used along with the new elevated tank to provide reserve capacity for high-usage periods. The one-story brick, stone and concrete water works structure was Berkley's first municipally-owned building.

Although Berkley now had an adequate water supply, work began in the fall of 1928, on a second 12-inch well to provide redundancy and allow well and pump shutdowns for maintenance. As a money-saving measure, rather than drilling a third well, the original 6-inch well was enlarged to 12 inches. Testing of the enlarged well began in January of 1929, and it was put in service shortly thereafter. Both wells could be pumped together in case of an emergency such as a large fire. Berkley finally had an adequate supply of water.

As the years ticked by, the water works continued to meet the demand for water, even after Berkley became a city in 1932. Growth was sluggish during the Depression years but began to pickup during World War II. By the end of the war growth was rapidly accelerating and it was projected that in the near future, water would again be in short supply.

In May of 1947, Berkley began looking for more underground water. A test well was drilled at Catalpa & Gardner, but water was never sourced from the site. Then in February of 1948, a test well was drilled on the Angell School property and put in operation. Its capability was one million gallons per day (700 gallons per minute).

With the capacity problem solved, a new water quality problem appeared in the early 1950s. Housewives were beginning to see a dark sediment in the water that found its way onto their freshly washed clothing. The cause was the iron-rich water reacting with a new substance in the water, hydrogen sulfide, to form iron sulfide. To remedy the situation, the city installed a chlorinator to add chlorine to the water. The chlorine broke down the hydrogen sulfide before it could react with the iron. While the dark-sediment problem was solved, the problems caused by iron and minerals continued.

Berkley considered the installation of water softening equipment, but quality was not the only consideration. Demand was, continuing to increase and the water table had dropped significantly. Finally, in 1953, the solution to all of Berkley's water problems began to become a reality. The municipalities of Berkley, Birmingham, Clawson, Huntington Woods, Pleasant Ridge, Royal Oak and Southfield Township formed the Southeastern Oakland County Water Authority (SOCWA) for the purpose of supplying Detroit Water to its member communities. Work began shortly thereafter on the authority's headquarters, pumping station, a ten-million gallon ground-based storage tank and a one-million gallon elevated tank. A second ten-million gallon ground based tank was added several years later.

On the morning of Thursday, June 14, 1956, valves were opened, and Berkley's era of "terrible water" came to an end. While my mother was pleased, I was not. Detroit water always tasted "flat" to me and does to this day. I often wish that I could sample that original Berkley water to see if it tasted as good now as my brain remembered it from then.

Berkley's water tower and wells were around for a few more years, but in February of 1964, Berkley sold the Berkley Water Tower to Universal Tank and Iron Works of Indianapolis, Indiana for the sum of \$500. The steel in the tank apparently had enough scrap value to cover the cost of demolition and transportation to a scrap-metal facility. Then in the fall of 1987, the pumps were removed and the wells were filled with concrete, thus totally ending all traces of Berkley's era of "wonderful/terrible" water.

# The Museum Gift Shop

The museum gift shop has the perfect gift for that person with a Berkley connection. Selections include books about Berkley history, posters, banners, post cards and more.

## Our Best Sellers

Our best selling gifts/souvenirs are our Berkley Coffee Mugs with the Berkley Theater mug being our most popular. The Santa, on view during the Christmas season at Coolidge and Twelve Mile, is a popular choice during the Christmas Season, and the "WE CARE" mug is popular year around.



Coffee Mugs available at the Museum Gift Shop

## Visit Us

**Berkley Historical Museum**  
3338 Coolidge Highway  
Berkley, MI 48072  
248-658-3335  
museum@berkleymich.net

Hours:

Wed: 10 AM till 1 PM

Sun: 2 PM till 4 PM

Group tours by appointment.

Visit us on the web at  
[www.berkleyhistory.org](http://www.berkleyhistory.org)

Facebook: Berkley Historical Museum

The Museum Corner Editor:  
Don Callihan

## Get the Newsletter

If you wish to receive *The Museum Corner* each time that it is published, please put your name and email address in the body of an email and enter the phrase "The Museum Corner" in the subject line. Send the email to: [museum@berkleymich.net](mailto:museum@berkleymich.net)

## Make a Donation

If you have artifacts or historical photos that relate to Berkley and you wish to donate them, stop by the museum or email: [museum@berkleymich.net](mailto:museum@berkleymich.net). Items should be clean and in restorable condition.

## Become a Member

Do you enjoy history and/or the preservation of historical artifacts? If so, we have a place for you on the Berkley Historical Committee. We are an official committee of the City of Berkley dedicated to preserving and promoting its history. We educate and engage the public in our efforts through the administration and management of the Berkley Historical Museum. If you wish to become an active member of this committee, send an email to [museum@berkleymich.net](mailto:museum@berkleymich.net) indicating your interest, or call 248-658-3335 and leave a message.

The mission of the Berkley Historical Committee is to preserve and promote the history of the City of Berkley, Michigan, and to engage the public through the administration and management of the Berkley Historical Museum.