

"When the well is dry, we know the worth of water."

Benjamin Franklin, (1706-1790), Poor Richard's Almanac, 1746

It was 1866, the Civil War had ended and concerns were growing over water borne disease in the City of Burlington. The decision was made to purchase the Burlington Aqueduct Company which had provided water to some of the residents of the City via wells, springs and Lake Champlain. A plan was adopted in 1867 by the City Council to create a Burlington City Water Works which would charge a flat fee for residential customers and a metered fee for larger commercial users. The City sought to improve upon the Burlington Aqueduct

Company's delivery system and in 1868 they started the process of laying cement and cast iron mains.

| YEARLY WATER RATES | |
|---|--------|
| Burlington City Water Works. | |
| For one family, 1 faucet, | \$8.00 |
| " each additional faucet, | 2.00 |
| " two families using one faucet, each, | 4.00 |
| " three or more families using 1 faucet, each, | 5.00 |
| " each water closet, | 4.00 |
| " each additional water closet, | 2.00 |
| " private wells, | 1.00 |
| " each public well, | 1.00 |
| " each additional public well, | 2.00 |
| " gravity and Geyser grade water, each, | 4.00 |
| " offices in detached buildings, 1 faucet, each, | 4.00 |
| " offices in a block, 1 faucet, each, | 4.00 |
| " two or more offices using 1 water closet, each, | 4.00 |
| " cisterns and reservoirs, 1 faucet, each, | 4.00 |
| " fountains, | 4.00 |
| " each additional fountain, | 2.00 |
| " fire hydrants, | 5.00 |
| " steam boiler, factor rate, | |
| " steam of hot water, factor rate, | |
| " private houses, wells, | 1.00 |
| " trunk houses, wells, | 2.00 |
| " fire and hazard houses, each, | 3.00 |
| " house for garden, etc., not to exceed 1/2 acre surface, 2 hours each day, | 4.00 |
| " house or residence, | 5.00 |
| " each tank, per cubic foot, 1000 gallons, | 1.00 |
| " water, per cubic foot, | 0.11 |
| Planting - 100 yards, | 50 |
| MONTHLY METER RATES. | |
| Rate for first 1,000 cubic feet - \$1.00 per month. | |
| From 1,000 to 2,000 cubic feet add 50¢ per month. | |
| Add 50¢ to 3,000 cubic feet. | |
| Add 50¢ to 4,000 cubic feet. | |
| Add 50¢ to 5,000 cubic feet. | |
| Add 50¢ to 6,000 cubic feet. | |
| Add 50¢ to 7,000 cubic feet. | |



That year also saw work begin on the construction of a reservoir in the hill section located by the UVM Campus.



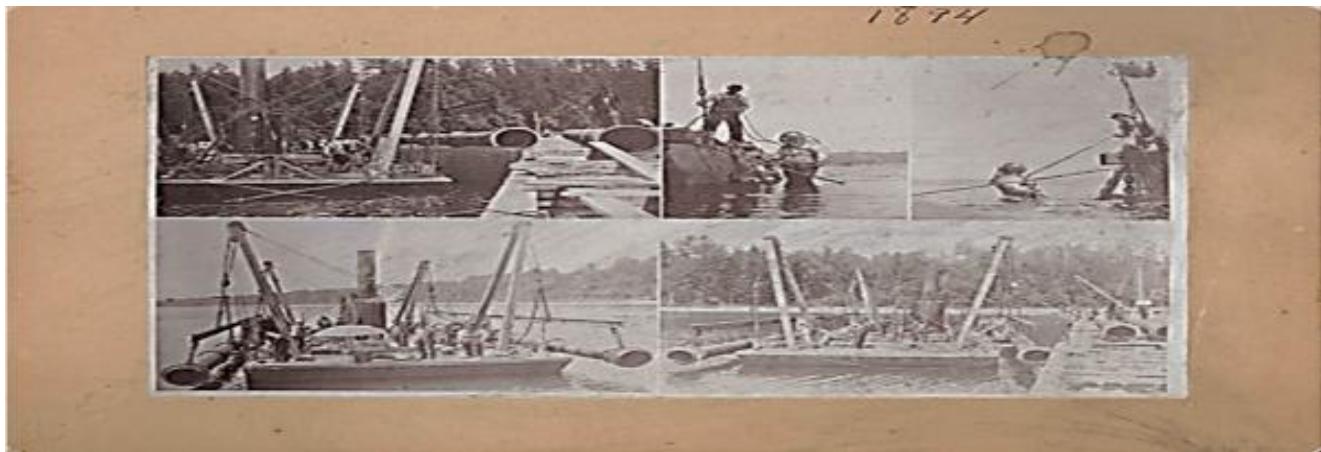
The year 1880 would bring the start of construction on the City's first high service tank located at what is now UVM's Redstone Campus. This tank had a capacity of 106,000 gallons and was fed by the gatehouse at the reservoir. Once the tank was completed the system was now divided into high and low service areas.



In 1888, a second reservoir directly next to and connected to the original was finished and the final capacity was seven million gallons.



In 1894, the City was gearing up for another large project—a new 24" cast iron intake line to be installed 30 feet deep into Lake Champlain. Each section was laid in 75 foot intervals connected by ball valves.



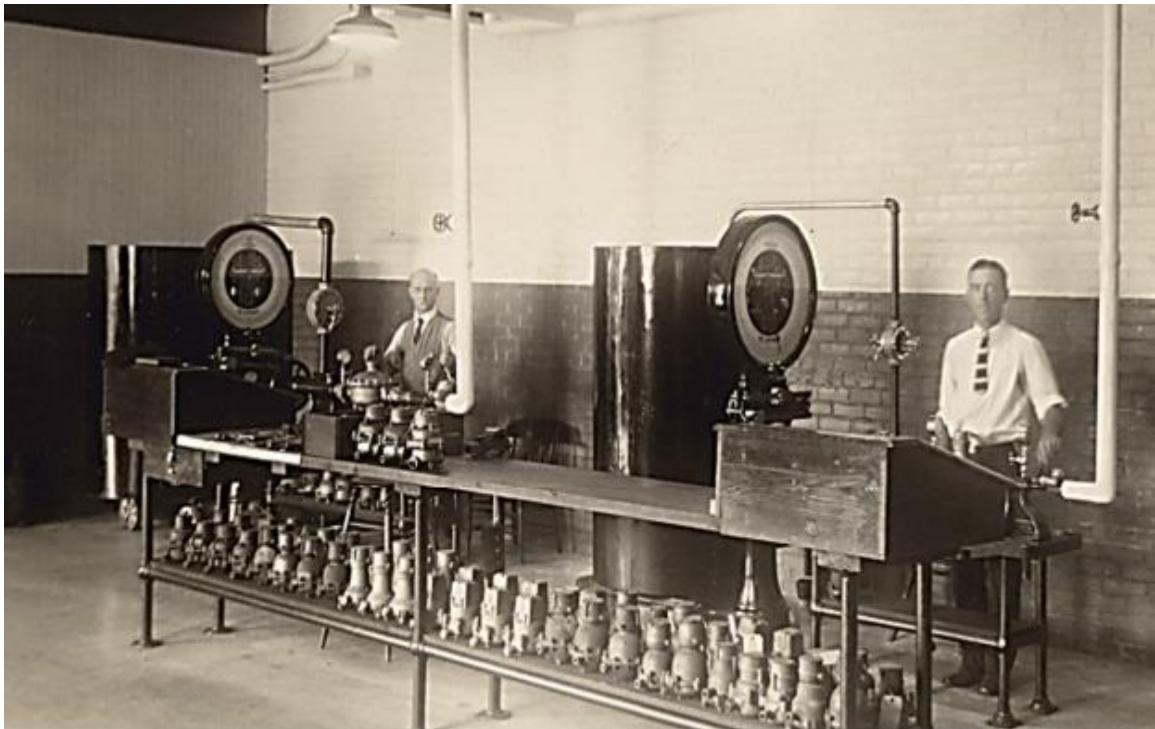
In the early 1900's with the City and surrounding communities growing rapidly the need for a water treatment plant was becoming evident. A special committee was selected and after much debate it was determined that the City would move forward with a rapid sand filtration plant. Construction on the plant would be finished in 1908 and provide water to 20,700 residents who consumed at a rate of 1.5 MGD via 45 miles of mains, 236 hydrants and 3,280 meters.





In 1914, the City would take another step forward in public safety by adding hypochlorite of lime to the water filters. Typhoid fever cases were still being reported within the City and chlorine disinfection had recently been proven effective in other parts of the United States.

The year 1934 would see the construction start on an elevated water tank on the Redstone campus. The tank, which held 150,000 gallons, was created to increase flow and pressure to the high service area of the City. In 1954, the high service area would once again require the building of another elevated tank. After a piece of land was donated, the 500,000 gallon tank was constructed to provide increased usage to UVM, Fletcher Allen and the northern section of the City.



The City's filtration plant would not need any major changes until the 1940's and, in 1948, due to increased consumption; four new filters were added to the plant. The plant was now providing water to 31,000 people who were consuming at a rate of 2.5 MGD. In 1952, at the recommendation of the State Health Department, the City began fluoridating the water.

Burlington would once again take a major step forward in public health when work was completed on the City's first wastewater treatment plant in 1953. The treatment process would be made up of clarification and chlorination with anaerobic sludge digestion and would be designed to handle 3.7 MGD. The plant would process the sewer for a majority of the City, excluding North Avenue, Riverside Avenue and Colchester Avenue. 1959 and 1963 saw the completion of the North and East treatment plants that would process sewer from the previously excluded areas of the City. Three secondary treatment plants were added in 1973 and they increased pollutant removal to 95%.

The Safe Water Drinking Act would be passed by Congress in 1974 and this would spark a review of Burlington's water treatment system. In 1981, voters overwhelmingly passed a plan for the construction of a new water treatment plant and concrete reservoir covers. The covers were completed in 1982 and the construction and dedication of the Francis J. O'Brien Water Treatment Facility was complete in 1984.



Information & Photos courtesy of the Burlington Water Division Archive
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