



# THE RISE AND FALL OF A WATER SYSTEM

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My home town water system, The Village of Webster Water Department located on the shore of Lake Ontario just East of Rochester, NY had its beginnings in the early 1900's. It was decided at this time to research a water source to provide drinking water and fire protection to this small community. Funding was obtained and a good quality spring fed source was located a short distance from the Village. Pipe lines were laid, a steel tank was erected and booster pumps were installed to maintain the level in the tank. A six inch "Stave" type wooden water main was laid from the source to the booster pumps. At this time no treatment was required. The fire hydrants were fed with a four inch cast iron water main, houses were fed by a combination of lead piping and galvanized pipe.



As the community grew a need for more water arose. In the 1930's a search was started for an alternative source. A Geologist proposed researching what is known as the "Ironde-Genesee" aquifer which was said to be the pre-Ice Age Genesee River which is now found a few miles to the west. This self contained aquifer was found between 3-400 ft below the sand bluffs along Irondequoit Bay. The first two wells were drilled in the 1930's and at that time a 12 inch cast iron water main was laid from the well site to the Village. These wells produced between 800-1000 GPM each. A small clear-well and booster pumps were added along with an elevated riveted steel water tank some 5 miles from the source. In the early 1950's a 1 MG welded steel tank was added. The Village and Town grew and the water system expanded into the Town and outlying areas.

In the early 60's as population and business grew, along with it grew a need for more water. The well field at this time had 12 operating wells. The system experienced another big growth. Five new wells were added, each with a capacity of 1500 GPM. A new transmission main was added, along with a 3MG and a 1MG tank bringing the total storage capacity to 5.5 MG. A new .5 MG clear-well and a series of 5 high lift booster pumps brought the capacity of the plant to 13MGD, all groundwater. A Cat 12 cylinder diesel

generator was added to operate the system during a power failure. At its peak, the system was maintained by 8 certified operators, 2 distribution operators and 2 office staff.



The population and demand for water grew to the point where we had enough water but not the transmission capacity. The town of Webster at this time entered into negotiations with the local Water Authority to provide water to the Town leaving the Village on their own system. This presented some real challenges. The Village had too many operators and too big pumps. Through retirement and people taking positions with the Authority, the system was down to 4 operators and 1 office staff. Two smaller boosters were installed with VFD's to be much easier on the downsized system.

Because of politics and infrastructure costs, in 2013 the remaining part of the system was handed to the Authority, bringing to an end over 100 years of the Village of Webster Water Department. The Superintendent and I shut off the switch for the final time and all was quiet. The politicians put on their show and it was over, well not quite.

The property is located on 45 Acres of land that held its' highest value as a water plant. It is now worth much less. There are over 30 wells that have to be abandoned per EPA specifications. Pumps have to be pulled, buildings demolished, wells filled and capped. This cost will all be a passed along to the Village taxpayers with no water income to cover the cost, they call this progress. Even when it is over, it is not really over.

I hope to see you in my travels. Let's all work together to keep drinking water safe. 💧💧💧