A History Time Line of the Hemlock Water Reservoir

1840's	Responding to the Need - drinking water for the citizens of Rochester (incorporated in 1834) was obtained either from wells or from cisterns, which collected rain water. During this period, elected officials' primary concern was maintaining an ample supply of water for firefighting purposes. The purity of the water had comparatively low priority.
1852	A cholera epidemic swept through the city, dramatically demonstrating the need for a pure, safe water supply. The first of several Rochester Water Companies was chartered, but none of the schemes aimed at providing drinking water to city residents over the next two decades succeeded due either to a lack of capital or poor design.
1872	A Board of Water Commissioners was created by an act of the New York State Legislature. The Board appointed J. Nelson Tubbs as chief engineer and J. L. Nichols as assistant engineer to design the City's water system.
1873	Land for reservoirs in Rush and at Highland Park was purchased.
1873 – 1874	Building an Infrastructure - The Holly system was constructed so steam-driven pumps could bring Genesee River water up to high pressure for fire protection in the City's downtown commercial and industrial areas. The pumping station was located on Brown's Race. A test of the Holly system on February 18, 1874, at Main and State Streets shot a 4-inch stream of water 294 feet high.
1873 – 1876	The domestic water system was constructed to supply the city with drinking water from Hemlock Lake. The project included running a transmission conduit (conduit I) from the north end of the lake to reservoirs located at Rush and in what is now Highland Park, and developing a distribution system of water pipes within the city. Hemlock Lake water entered the distribution system for the first time on January 23, 1876, and Hemlock Lake water was being delivered to customers throughout the city by September. That original distribution system, consisted of 58 miles of pipe, 521 hydrants and 27 water troughs, supplied 2700 customers. By 1880, the Rochester Water Works was supplying an average of 4.5 million gallons of water per day to the people of Rochester.
1877	Keeping Pace with Progress - A telegraph line was strung between Hemlock Lake and the city in support of water system operations. It was later converted to a telephone line which, at the time, was the longest in the world.
1893 – 1894	Because of the City's fast growing population and increasing demand for water, a second transmission conduit (conduit II) was added between Hemlock Lake and Rochester, which included a 6 foot-high, 2-mile-long horseshoe shaped tunnel, a 60-inch diameter, 1550-foot-long intake pipe in Hemlock Lake and two structures called "overflows" designed as safety valves to prevent water pressure from rupturing the tunnel and to discharge water from the conduits in emergencies.
1901	A gatehouse was constructed at Hemlock to regulate the flow of water from the intake into the tunnel.
1904	The Upper Gatehouse at Highland Reservoir was constructed, replacing a temporary wooden building over the stop-gates which had been erected in 1894.
1904	Satisfying a Growing Thirst - Land on Cobbs Hill was purchased for construction of a third city reservoir.
1905 – 1908	Cobbs Hill Reservoir was constructed with a capacity of 144 million gallons. Also built were two new gatehouses and a new transmission conduit from Cobbs Hill down Highland Avenue to Clinton Avenue, which connected to an existing conduit on Clinton Avenue just south of Highland at a location that became known as the Pinnacle Tee.
1914 – 1918	Due to increasing population and demand, another conduit (conduit III) was laid between Overflow 1 (at the north end of the Hemlock Tunnel) and the Pinnacle Tee. Eight truss bridges were built along this route over Honeoye Creek to carry an access road for conduit maintenance.
1917 – 1919	The "Curved Dam" was constructed on Canadice Lake Outlet which diverted Canadice Lake water through a 5-foot diameter concrete pipeline into Hemlock Lake, providing a new water source and enhancing the total supply by 25%.
1925	A chlorinator was installed on the outlet from Rush Reservoir.
1934	Backing Up the System - A pump station and chlorinator were built on Dewey Avenue just south of Ridge Road, which could draw up to 4 million gallons of water per day from Eastman Kodak Co.'s water mains to provide an

	alternate source of water during emergencies and potentially satisfy increasing demand.
1934	A 24-inch diameter crossover pipe was constructed near the Lima-West Bloomfield town line linking all three conduits.
1936	The dike at the north end of Hemlock Lake was raised and a new spillway was built to increase storage capacity.
1943	Maintaining and Expanding (Again!) - A program of restoring water mains to "like-new" condition by cleaning out deposits and lining them with cement began when Conduit I (the original line from Hemlock Lake) was cleaned and lined.
1944 – 1945	Land in the Town of Wayland was purchased in order to divert a creek into the Hemlock watershed to increase its yield (the amount of water it can deliver to the Rochester system).
1947	The dike at the north end of Canadice Lake was raised to provide greater storage capacity.
1948	A pump house was built at Canadice Lake so that water could be drawn from below the level where it could be taken by gravity.
1948	The Wayland Dam and Spillway were constructed.
1953 – 1955	Adding Another Source - A new water treatment plant which drew water from Lake Ontario was built on Dewey Avenue in the Town of Greece, northwest of the City. The new plant, along with a 48-inch diameter pre-stressed concrete water main and a booster pump station on Mt. Read Boulevard at Ridge Road, gave the City an alternate source of water, ending complete dependence on Hemlock and Canadice Lakes. Water was initially drawn from Lake Ontario through two pumps sets in Kodak's intake well.
1963	The City contributed to the cost of an intake pipe into Lake Ontario constructed by the Monroe County Water Authority, securing the right to withdraw 40 million gallons per day.
1964 – 1965	Updates, Repairs and Improvements - A pump station and 36-inch diameter pipeline was built at Hemlock Lake, enabling the City to draw water from below Hemlock Lake's gravity feed level. The pipeline also served as a bypass when needed for maintenance of the Brick Tunnel between the Hemlock Gatehouse and Overflow I.
1972	Hurricane Agnes, the most destructive natural disaster to the system, washed out the "Curved Dam," preventing Canadice Lake water from reaching Hemlock Lake until the dam was rebuilt in 1973. The storm also undermined Conduits II and III at Frost Hollow and damaged a right-of-way bridge at Factory Hollow. These were repaired or replaced by Water Bureau employees.
1978	The new, automated Holly Pump Station was constructed on Brown's Race to replace deteriorating mechanical systems and eliminate need for an on-site staff "operator".
1978	An agreement was signed with the Monroe County Water Authority giving the City ownership of all distribution mains within city limits (some of which had been leased) and turning over the Dewey Avenue Treatment Plant to the MCWA. It also provided for exchange of water between the City's Water System and the County's, allowing each agency's facilities to function at maximum efficiency.
1981	The Wilson Boulevard Pump Station was constructed, assuring an ample water supply for Strong Hospital and the University of Rochester in the event of a disruption in the conduit system south of the city.
1983	Continuous Improvement - Cobbs Hill Reservoir was cleaned and the concrete lining was restored to "good-as-new" condition.
1985	New chlorine stations were built at all three City reservoirs
1985	The Highland Reservoir was drained so the fountain could be rebuilt and the stonework rehabilitated.
1986	An Elmwood Avenue river crossing was installed (the first to use welded plastic pipe), which allowed delivery of water to the City's Southwest sector directly from the Upland lakes without being diverted into reservoirs.
1991	Rush Reservoir was drained so a new clay lining and control valves could be installed.
1991	Hemlock brick tunnel was slip-lined with 60-inch diameter plastic pipe.

1993	A New Plant and Better Processes - Though the quality of Hemlock and Canadice Lake water was very good, new federal regulations required that all water drawn from surface sources (including Hemlock and Canadice Lakes) be filtered to remove the tiny suspended particles which can cause cloudiness in the water and prevent proper disinfection. Construction of a new filter plant at Hemlock Lake with a capacity of 48 million gallons per day was begun in 1991 and completed in 1993.
1998	The first of three new Sodium Hypochlorite chlorination stations opened at Cobbs Hill Reservoir. The use of Sodium Hypochlorite is much safer than the Chlorine gas previously used, as there is a much lower health risk from exposure to the Hypochlorite solution.
2010	The ownership of the Reservoir land transferred to the State of New York becoming the Hemlock - Canadice State Forest.