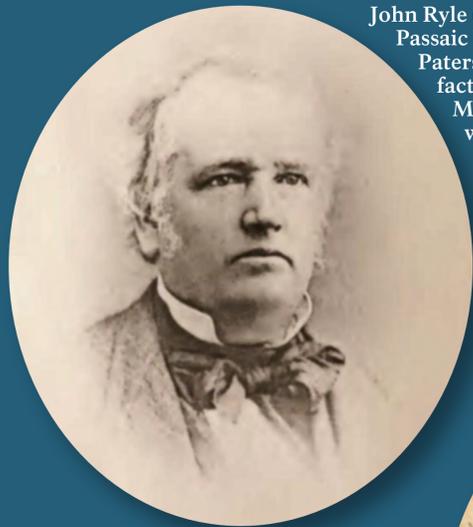




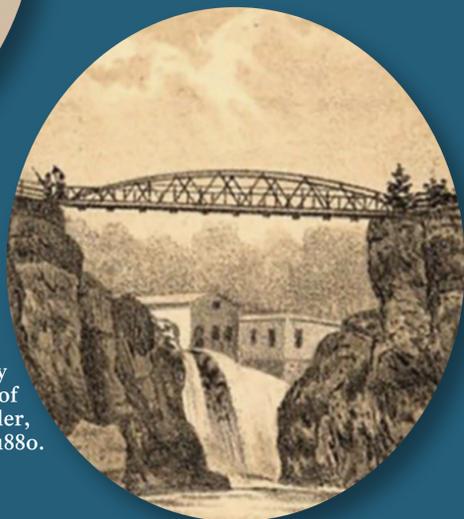
Paterson's First Public Water Supply

In the autumn of 1856, the City of Paterson reached a milestone when water began flowing to the main part of town through the city's first public water supply. The achievement was due to John Ryle's Passaic Water Company, which had acquired rights to pump water from the Passaic River at the Great Falls. Over the next three decades, the company built pumping stations, blasted reservoirs out of bedrock and extended pipe networks. These improvements were absolutely crucial to the growth of Paterson into a world-class industrial city.

John Ryle (1817-1887) was President of the Passaic Water Company and founder of Paterson's silk industry. His silk factory was located at the Colt Gun Mill where the first pump house was constructed. Image Credit: Nelson and Shriner, *History of Paterson and Its Environs*, 1920.



The Passaic Water Company's second pump house appears above the chasm beyond the footbridge over the Great Falls. The S.U.M. and the water company were in direct competition for the water of the falls. Image Credit: Packard and Butler, *Paterson, New Jersey*, 1880.



The Passaic Water Company did not keep up with the city's growth despite making large investments in infrastructure. Paterson's water supply ran dangerously low during a series of droughts in the 1880s. Eventually, the company consolidated operations with other water companies in neighboring communities, reducing competition and making water supply more predictable. In 1902, water began flowing from a new intake and the world's first large-scale sand filtration plant at Little Falls, about five miles upstream of the Great Falls. Today, the Passaic Valley Water Commission, a direct successor to the Passaic Water Company, continues to provide water to the cities of Paterson, Clifton, and Passaic.



The Passaic Water Company's first pump house of the 1850s was in a complex of mills below the Great Falls, later redeveloped as the Allied Textile Printers (ATP) Site. Water was pumped across the "broomstick" bridge, shown here in a photograph of about 1870. The bridge's pipe sent water to a reservoir in the area of Hinchliffe Stadium, directly behind you. Image Credit: Paterson Historic Preservation Commission.

"To the Health and Comfort of the Citizens"

– Corporate Charter of the Passaic Water Company (1849)

Disease

Paterson's population grew quickly during the mid-1800s amidst rising concern about the safety of water drawn from public wells. Cholera outbreaks in 1832 and 1849 killed hundreds of citizens. Typhoid and dysentery were also spread by foul water.

The Dublin Spring Water Boy, a sculpture created by Paterson's Gaetano Federici in 1931, marks the location of a former well at Mill and Oliver Streets. The statue commemorates the Irish, Italian, and other immigrant children who carried water in buckets and casks to houses and mills. The well was closed in the 1890s due to contamination. Image Credit: Hunter Research, Inc., 2022.



Fire

Water buckets and manually operated pumps relying on wells were a feeble way to fight fires. Paterson and other cities constructed water systems with reservoirs and underground pipes to provide a steady flow of pressurized water to hundreds of fire hydrants.



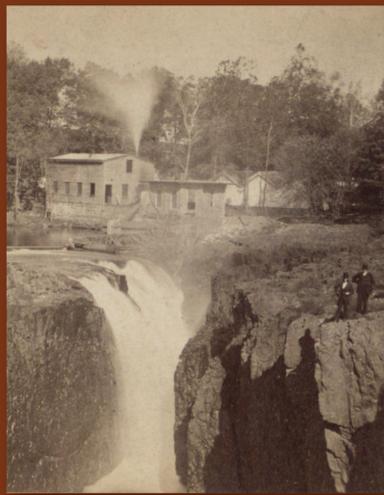
Large mill fires such as the one that damaged the Machinists' Association mill in 1896 were an all-too-common event in Paterson. The mill was located at the corner of Broadway and Prospect. Image Credit: Glenn Corbett Collection.



The Passaic Water Company

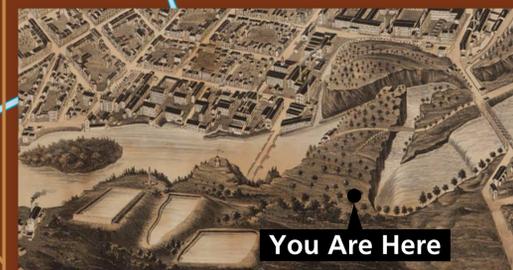
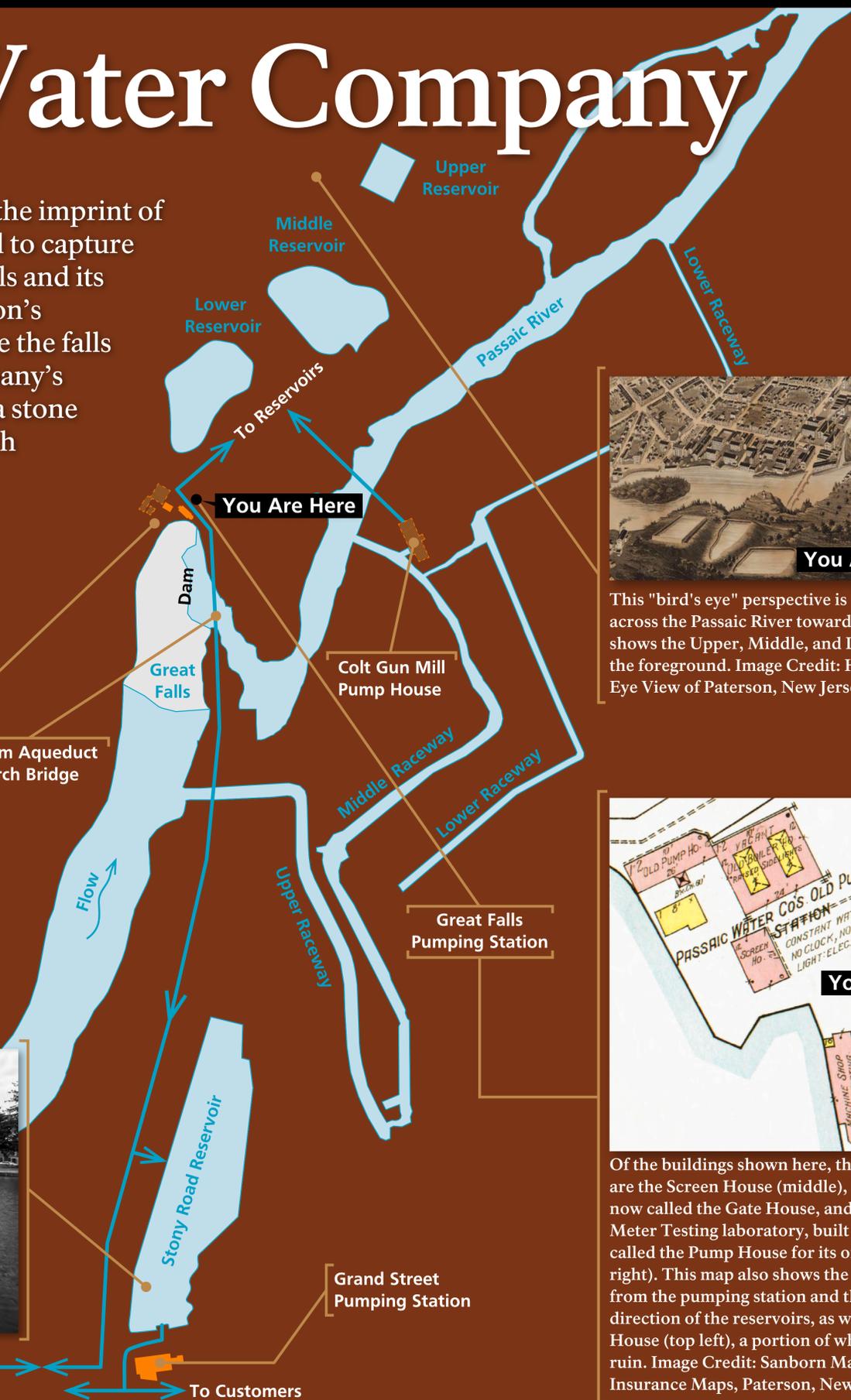
The Great Falls dominates the landscape around you, yet the imprint of urbanization, industrialization, and technologies designed to capture and redirect the flow of water have greatly changed the falls and its surroundings. From the 1860s to the 1920s, most of Paterson's drinking water was syphoned from the Passaic River above the falls to fill nearby reservoirs. Look for the Passaic Water Company's brick pumping station at the edge of the falls, the ruins of a stone dam along the top of the falls, and the chasm aqueduct arch bridge as you explore the park.

The Great Falls Pumping Station, 1870. The Passaic Water Company replaced the pictured station after 1877. The S.U.M. and the water company were in direct competition for water from the falls. Image Credit: J. Jefferson Reid.

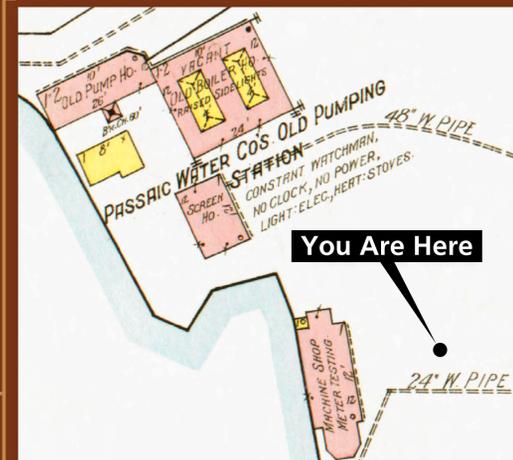


Stony Road Reservoir (Levine Reservoir) with the Grand Street Pumping Station in the background. Image Credit: Historic American Engineer Record No. NJ-155, 2019.

From Little Falls



This "bird's eye" perspective is looking south across the Passaic River toward downtown. It shows the Upper, Middle, and Lower Reservoirs in the foreground. Image Credit: H.H. Bailey, Bird's Eye View of Paterson, New Jersey, 1875.



Of the buildings shown here, the two still standing are the Screen House (middle), built in 1906-07 and now called the Gate House, and Machine Shop and Meter Testing laboratory, built about 1895 and now called the Pump House for its original use (lower right). This map also shows the water pipes leading from the pumping station and the river in the direction of the reservoirs, as well as the Old Pump House (top left), a portion of which survives as a ruin. Image Credit: Sanborn Map Company, Insurance Maps, Paterson, New Jersey, 1915.

Pumping Station

In the 1850s, the Passaic Water Company opened its first pump house at the Colt Gun Mill below the falls. This arrangement had the disadvantage of pumping water across the river and up a cliff, so the company built a dam and pumping station at the top of the Great Falls about 1862.

The station grew over the next half century with the construction of three pump houses, two boiler houses to supply steam engines, a coal house to store fuel, and a machine shop for repairs, all within the confines of what is today known as Mary Ellen Kramer Park.

Reservoirs

From the 1850s to the 1880s, the Passaic Water Company successively built four reservoirs to expand its storage capacity and meet the needs of Paterson's growing and thirsty population. The three reservoirs known as the Lower, Middle, and Upper Reservoirs, completed in 1853, 1868, and 1872, were stone-lined basins located northeast of the Great Falls, directly behind you. The final reservoir, completed in 1886, was the Stony Road Reservoir, known today as the Levine Reservoir, built on high ground about one-half mile south and to the other side of the Passaic River. Only the Levine Reservoir remains in use today, receiving its water from the filtration plant at Little Falls, which opened in 1902.

The Lower, Middle, and Upper Reservoirs ceased to be needed after the opening of Little Falls. Hinchliffe Stadium was built on the site of the Lower Reservoir in 1932. A massive stone retaining wall of the Middle Reservoir still exists, as do the footings of the Upper Reservoir.



Levine Reservoir

The Stanley M. Levine Reservoir, originally known as the Stony Road Reservoir after the nearby road that led down to the Barbour flax works mills on Spruce Street, was completed in 1886 by the Passaic Water Company. It was the fourth and last of the company's reservoirs built to store potable water pumped from the Great Falls.

Standing at a the south end of the reservoir with Garrett Mountain to your back, the reservoir stretched over 1,000 feet and overlooked the Passaic River.



The reservoir's outlet chamber pulled water from the reservoir for disinfection and distribution to customers. This outlet chamber and old chlorine station was constructed of concrete in 1932-33, replacing an earlier stone chamber.



A memorial plaque, located inside the gates, dedicated the reservoir to Stanley M. Levine (1920-1989).

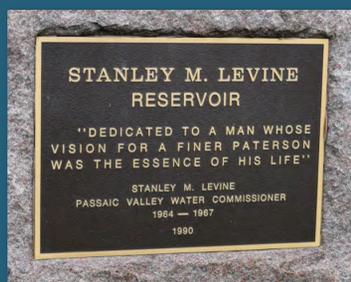
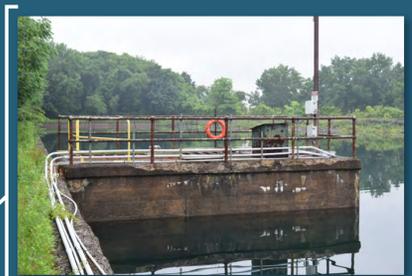
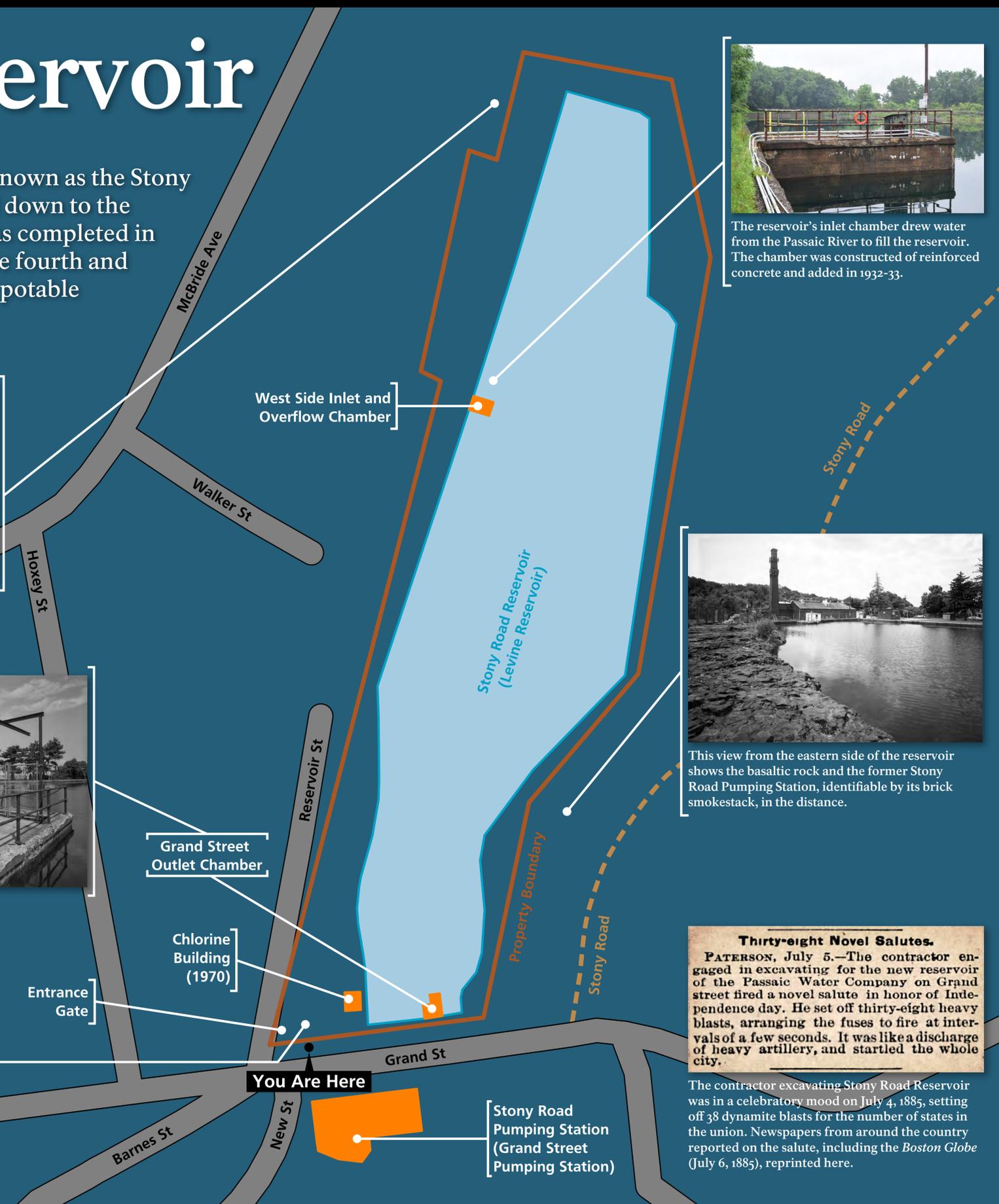


Image Credits: Photographs and map originally by Rob Tucher and Hunter Research, Inc. for inclusion in the Historic American Engineering Record (HAER), Levine Reservoir Historic Documentation, HAER No. NJ-155, 2019.



The reservoir's inlet chamber drew water from the Passaic River to fill the reservoir. The chamber was constructed of reinforced concrete and added in 1932-33.



This view from the eastern side of the reservoir shows the basaltic rock and the former Stony Road Pumping Station, identifiable by its brick smokestack, in the distance.

Thirty-eight Novel Salutes.
PATERSON, July 5.—The contractor engaged in excavating for the new reservoir of the Passaic Water Company on Grand street fired a novel salute in honor of Independence day. He set off thirty-eight heavy blasts, arranging the fuses to fire at intervals of a few seconds. It was like a discharge of heavy artillery, and startled the whole city.

The contractor excavating Stony Road Reservoir was in a celebratory mood on July 4, 1885, setting off 38 dynamite blasts for the number of states in the union. Newspapers from around the country reported on the salute, including the *Boston Globe* (July 6, 1885), reprinted here.

Three Names One Purpose

The reservoir before you, originally open like a pond and now contained within tanks, has gone under three names. It was known originally as the Stony Road Reservoir but rather quickly began being called the Grand Street Reservoir. In 1990, the Grand Street Reservoir was renamed for Passaic Valley Water Commissioner Stanley M. Levine. Through each of the name changes, the reservoir's main purpose has been to supply the residents of Paterson with clean water.

Starting in 1885, construction crews working for the Passaic Water Company blasted into the basalt ridge to create a 20-foot-deep basin. Rocks were shaped into blocks to form a heavy wall still visible along Grand Street damming the reservoir's southern end. When complete, water flowed through a pipe network from the Great Falls, across the arch bridge spanning the falls' chasm, and to a pumping station on Grand Street, which filled the reservoir and pumped water to surrounding neighborhoods.

The 20-million-gallon reservoir provided Paterson with clean water for nearly 40 years but the Passaic Water Company decommissioned the reservoir in 1921, leaving the basin dry for over a decade. In 1927, the municipalities of Clifton, Passaic and Paterson organized the PVWC, which took over the empty Grand Street Reservoir and reactivated it in 1933. The reservoir's inlet and outlet chambers were reconfigured and the reservoir refilled with treated water from the Little Falls filtration plant.

In the early 2000s, the PVWC began advancing plans to improve the safety of the Levine Reservoir by enclosing its water in tanks to prevent contamination. As part of historic preservation reviews, the reservoir was documented for inclusion in the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) collection at the Library of Congress (www.loc.gov).