

PVSC's Treatment Plant And Interceptor Line Hit Century Mark

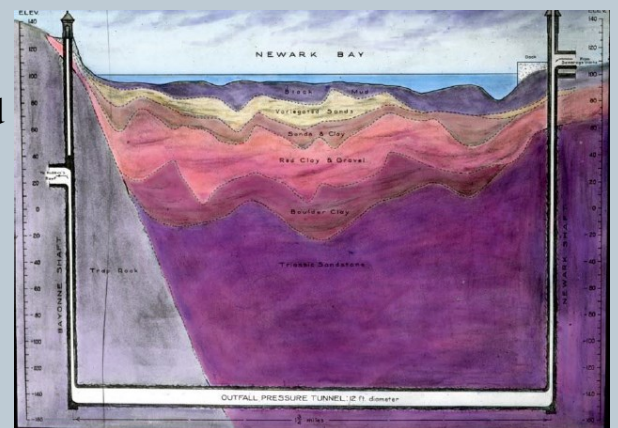
The Passaic Valley Sewerage Commission ("PVSC") celebrated its centennial anniversary back in 2002. The agency was formed by a special act of the State Legislature and tasked with the statutory mission of protecting the environment by "relieving the streams and rivers within the Passaic Valley River Basin from pollution." That includes the Lower Passaic River (from the Great Falls in Paterson to the Newark Bay).



"PVSC, in essence, became the keeper of the Lower Passaic River," said PVSC Chairman Thomas Tucci, Jr.

Meticulous design work began in 1902. That led to a massive construction effort. The substantial undertaking took 22 years to complete. The entire system went fully-operational in October 1924. Today, 100 years later, PVSC is one of the largest sewer utilities in the world. Below is a non-exhaustive timeline of our origins.

- **1894:** Direct discharges of residential and industrial waste into the Passaic River were intense due to rapid population growth. It transformed a pristine waterway into an environmental and public health hazard. A severe drought lowered the river's level dramatically, revealing clear and astonishing evidence of the colossal pollution.
- **1902:** A public outcry ensued and the State Legislature took notice. A bill was passed that would create what was then called the Passaic Valley District Sewerage and Drainage Commissioners. It was signed into law by Governor Franklin Murphy.
- **1903:** The first report of the PVSC Commissioners was presented to the State Legislature. It recommended sea disposal of PVSC's treated wastewater.
- **1908:** A final design and construction report was issued by PVSC. It called for the construction of a 22-mile main interceptor line to run along the Lower Passaic River and into a treatment facility on Newark Bay. It also included a 5-mile outfall tunnel to carry treated wastewater beneath Newark Bay and through a dispersal field at the bottom of New York Harbor. (Continued On P. 2)



Images: Construction on the original interceptor line (top photos) and the outfall (middle) in the early 1920s; a depiction to scale of the Outfall Tunnel underneath Newark Bay.

- **1912:** Construction on the entire system started.
- **1924:** The trunk interceptor was completed in August. The treatment plant on Newark Bay, pumping stations in Passaic and Clifton, the outfall tunnel, and the dispersal field were completed in October. The entire system was deemed fully operational.

Although numerous expansions, capital improvements and assessments to the system have taken place, the original interceptor, treatment plant, pumping stations and outfall are still in use a century later.

The interceptor carries approximately 230 million gallons of wastewater to the plant every day. The wastewater is then treated with the most innovative and most cutting-edge technology in the industry. Once disinfected, the effluent is discharged into the harbor.

The effective and efficient ways that the wastewater is collected and treated enable PVSC to meet all stringent discharge permits issued by the Environmental Protection Agency and the New Jersey Department of Environmental Protection. All the while, PVSC consistently maintains among the lowest user charges in the country.

In furtherance of its mission, PVSC operates its award-winning River Restoration Program, which is comprised of three elements—skimmer vessel floatable removal, volunteer shoreline clean-ups, and community-requested clean-ups. Since the program was founded in 1998, it has removed more than 14,000 tons of debris from more than 100 miles of area waterways and sponsored nearly 1,300 individual cleanups along various area shorelines.

“For more than a century, PVSC has been pushing itself to find evolving methods to fulfill its statutory mission” said Executive Director Gregory Tramontozzi. “On behalf of our current Board of Commissioners and our current leadership team, we pledge to continue to go to great lengths in successfully treating wastewater and returning it safely to the environment and in our ongoing efforts to protect local waterways from pollution.”



Images: The Venturi Meter Chamber and Wet Weather Pump Station after construction was completed at the Treatment Plant in 1924 (top photos); Salvaged sections of concrete from the original interceptor were extracted after a recent rehabilitation effort and are now being used in the landscaping in from the Administration Building (middle photo); recent aerial photos of PVSC Treatment Plant on Newark Bay (bottom left) and PVSC's Skimmer Vessel removing floatable debris from the Passaic River (bottom right).