

# Repairing the Delaware Aqueduct

THE NEW YORK CITY WATER SUPPLY SYSTEM

Facts on the water supply system, the repair, and plans for the aqueduct shutdown

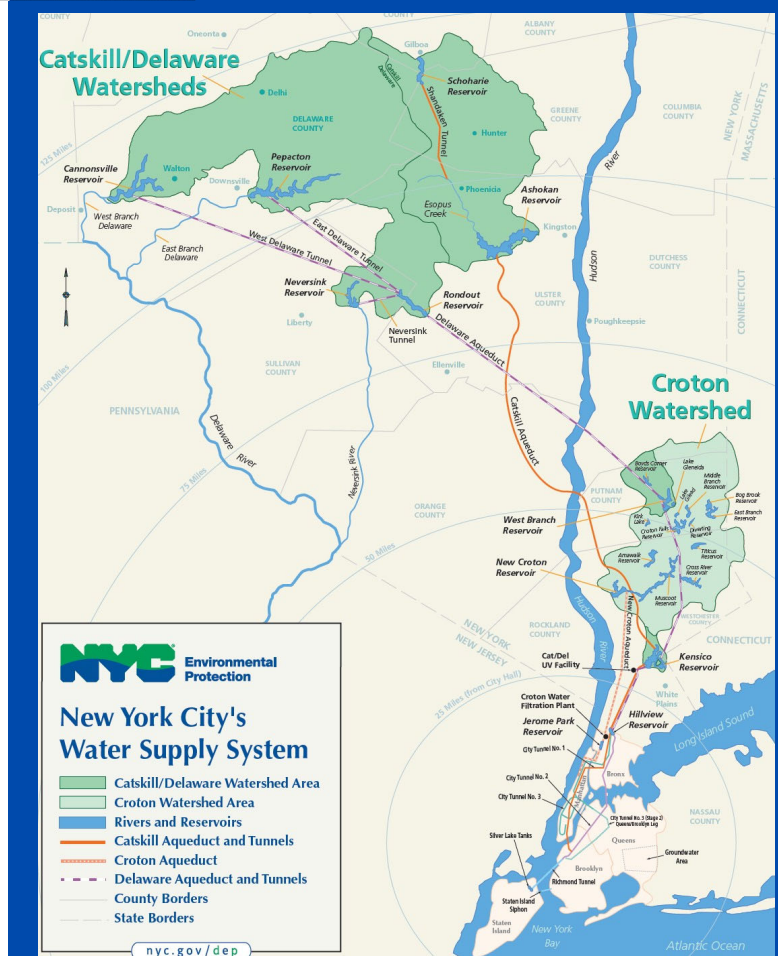


For more than two decades, the New York City Department of Environmental Protection (DEP) has been planning and working on a large capital project to repair two leaks in the Delaware Aqueduct. It is the largest and most complex repair project in the 180-year history of New York City's water supply system. DEP will be taking part of the Delaware Aqueduct out of service for up to 8 months, starting Oct. 1, 2025, to complete the repair. The City's world-class water service will continue uninterrupted during the project.

This is a summary of the project and a description of how DEP will operate the water supply system during the aqueduct shutdown.

This map shows New York City's reservoir systems spanning 2,000 square miles across eight upstate counties. The system's 19 reservoirs and three controlled lakes have a total capacity of 570 billion gallons

- New York City has the largest municipal water supply system in the United States.
- The systems provide about 1.1 billion gallons of drinking water each day to nearly 10 million people, including all of New York City and many communities throughout the Hudson Valley.
- New York City's water supply is comprised of three separate reservoir systems – the Croton, Catskill and Delaware systems. On average, 50 percent of daily consumption comes from the Delaware system, 40 percent from the Catskill and 10 percent from the Croton.



## About New York City's Water Supply System

- New York City's Water Supply is made up of three upstate watershed systems working together to provide high-quality water to about half of New York State's population, including all of New York City as well as communities north of the City throughout Westchester, Putnam, Orange and Ulster counties.
- The Catskill and Delaware reservoir systems in the upstate Catskill Mountains — spanning up to 125 miles from Manhattan — typically work together providing about 90 percent of the City's water supply, and is unfiltered. The Croton system is treated at a filtration plant in the Bronx.
- All water from the two systems in the Catskill Mountains is conveyed to New York City through two large aqueducts, the 92-mile-long Catskill Aqueduct, which first went into service in 1915, and the 85-mile-long Delaware Aqueduct, which went into service in 1944. The entire length of the Delaware Aqueduct was bored through bedrock deep underground and is the longest tunnel in the world.

### What does this all mean for my drinking water?

DEP has done years of planning and pre-shutdown work to ensure an ample supply of the high-quality drinking water New Yorkers expect during the repair of the Delaware Aqueduct.

DEP will enhance water quality monitoring and treatment, but the different characteristics in the reservoir systems may naturally result in subtle variations in taste. The enhanced filtration treatment of the Croton System in the Bronx includes granular activated carbon, which can mitigate issues with taste or scent.

Any issues with in-City water quality should be immediately reported to 311.



Inspecting the completed bypass tunnel deep under the Hudson River

## About the Delaware Aqueduct Repair Project

- The Delaware Aqueduct leaks in two locations – near the Hudson River north of the City of Newburgh, and in the Ulster County Town of Wawarsing. The leaks can amount to more than 30 million gallons per day, more than the total water usage in the City of Yonkers.
- DEP has been working for more than two decades on the design and implementation of a repair for the leaks, including upgrades to the other aqueduct systems, complex computer modeling and a full environmental review.
- The largest leak, along the Hudson River north of Newburgh, is being repaired through the construction of bypass tunnel that will connect to structurally sound portions of the existing Delaware Aqueduct and convey water around its leaking section. The other leaks will be patched from inside the aqueduct.
- The Delaware Aqueduct Bypass Tunnel is 2.5 miles long and about 600 feet below the Hudson River.
- DEP has finished the excavation of the bypass tunnel and lined it with steel and concrete.
- The northernmost 44 miles of the Delaware Aqueduct must be shut down for up to 8 months, starting Oct. 1, 2024, to connect the new bypass tunnel to the existing aqueduct.

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