

# Weekly Pipeline

**Natalie Parker and Nick Giordano** deploying “under ice” buoys to monitor water quality in the **Ashokan Reservoir.**

December 3, 2025



# Commissioner's Corner



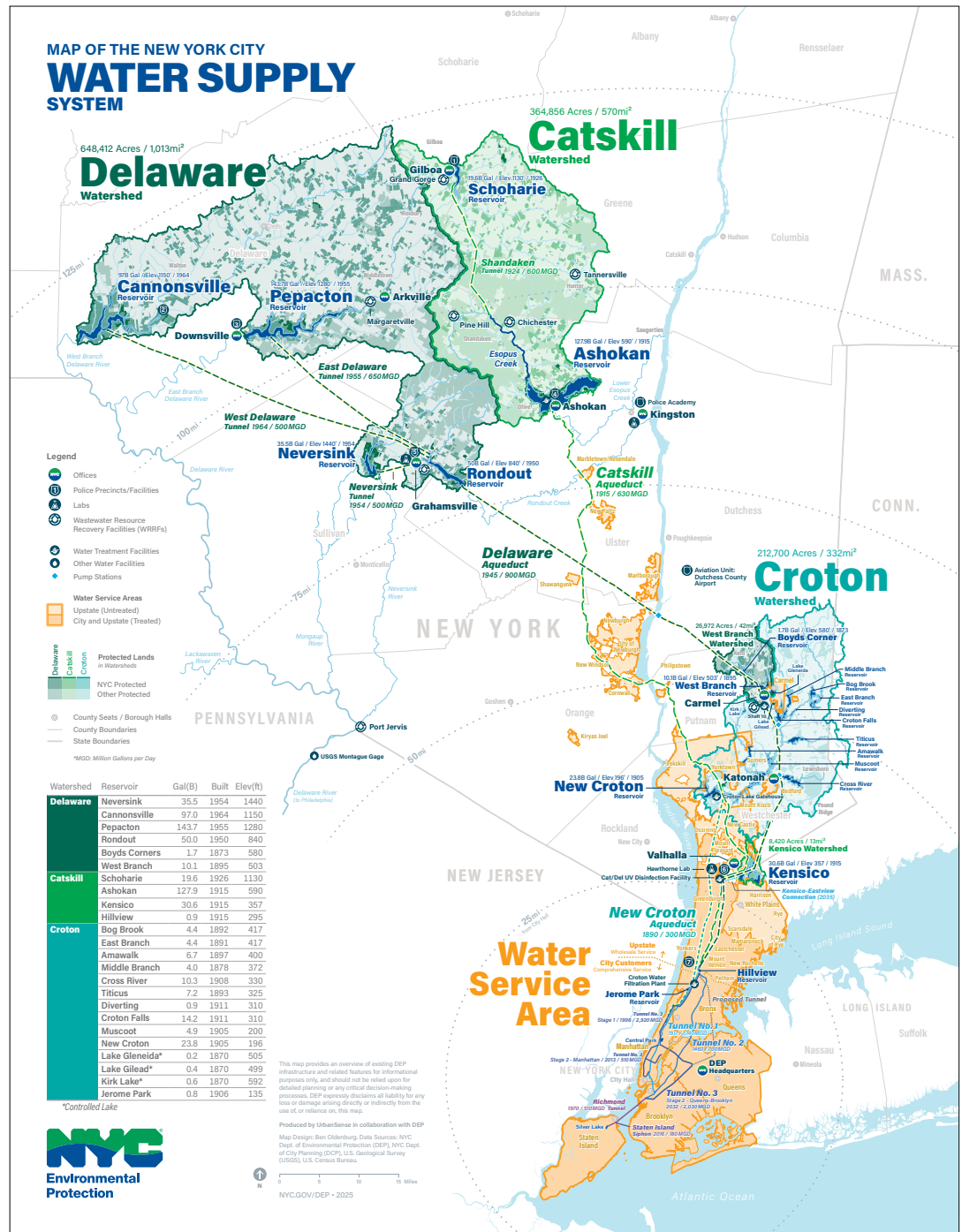
**Rohit T. Aggarwala**

I'm pleased to announce that the newly updated DEP maps are now complete and ready for use. This has been a major collaborative effort over the past several months, and I want to thank everyone who contributed.

These maps represent a significant accomplishment for DEP. They provide a clearer, more comprehensive view of our operations while preserving the high-level concepts conveyed in previous versions.

Here's a quick overview of the new maps:

- Flood Protection System Map:** highlights coastal protection projects under construction or in planning across the city, including East Side Coastal Resilience, Red Hook Coastal Resilience, and South Shore Staten Island.
- Historic Wetlands** (additional content): depicts shorelines, streams, beaches, dunes, tidal marshes, and freshwater wetlands.
- Wastewater System Map:** shows the city's 14 wastewater resource recovery facilities and their sewersheds. The legend details each plant's year of construction, capacity, wet-weather flow, population served, and drainage acreage.
- Wastewater Vessels** (additional content): features images of the six sludge vessels, along with harbor survey, shoreline survey, and skimmer vessels.
- Water Delivery System Map:** traces the New Croton, Catskill, and Delaware aqueducts from the upstate watershed through



Jerome Park and Hillview reservoirs, then into water tunnels No. 1, 2, and 3. The legend also identifies DEP offices, police precincts, labs, customer service facilities, maintenance and repair yards, treatment facilities, and sampling sites.

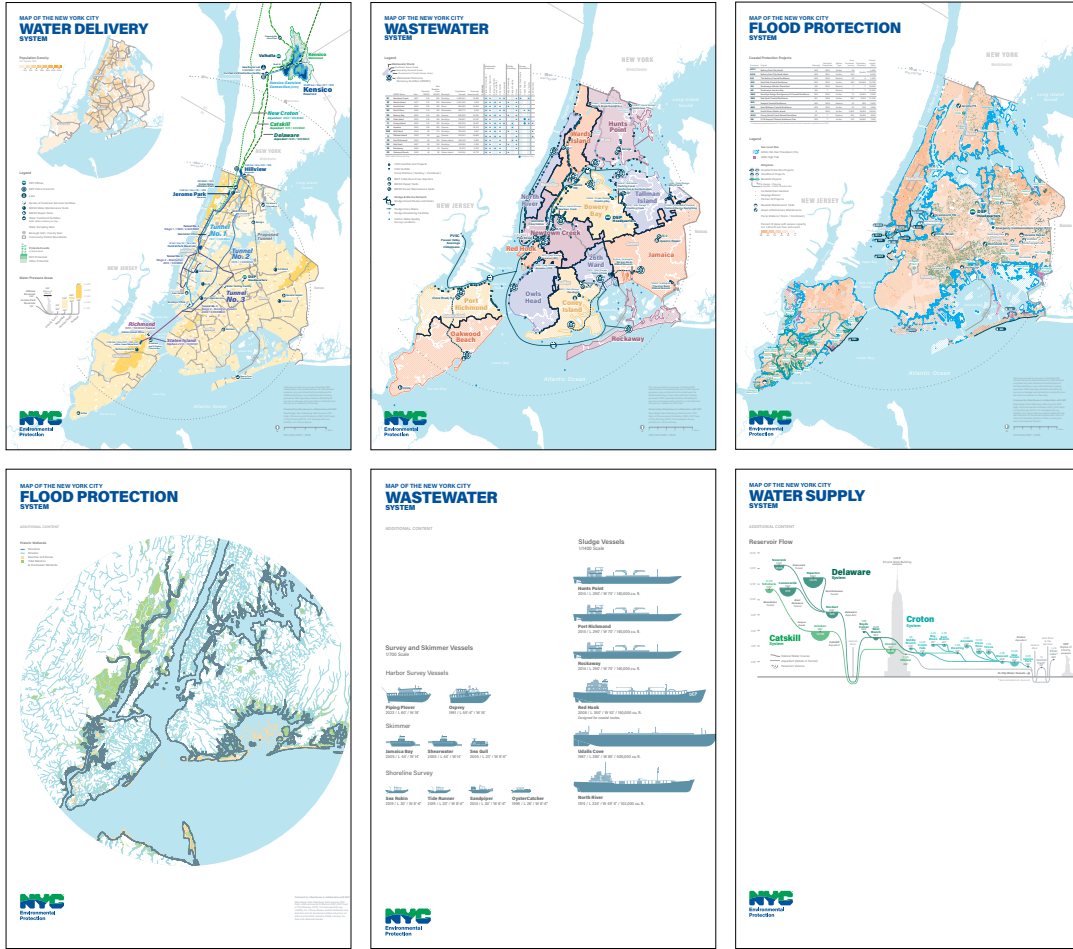
- Reservoir Flow** (additional content): illustrates volume

and elevation of the system's 19 reservoirs, compared to landmarks like the Empire State Building and Statue of Liberty. (A reminder: our system's engineering brilliance lies in its gravity-fed design.)

- Water Supply Map:** delineates the Delaware, Catskill, and Croton water-

shed boundaries, including the protected acres and square miles, reservoir locations, aqueduct tunnels, and the city and upstate service areas.

I encourage everyone to begin [using these maps](#) in all relevant materials and communications.



Please click to enlarge maps.

## Tree Task Force Gets New Garage New Sewage Treatment Workers



Last week, DEP's West-of-Hudson Tree Task Force celebrated the completion of a new garage in Arkville, designed to accommodate its 13-foot-high bucket truck. When the crew's office was built in 2020, the original garage proved too small, prompting construction of this larger facility. The new space will house the bucket

truck along with other essential tree-removal equipment, including a stump grinder, chipper, and mini excavator. The West-of-Hudson Tree Task Force and the East-of-Hudson Tree Task Force work to remove hazard trees from across the watershed and have even deployed to New York City to assist during major storms.



Seven new sewage treatment workers recently attended graduation at the 26<sup>th</sup> Ward Wastewater Resource Recovery Facility in Brooklyn and received their diplomas, as well as an introduction to the agency from Deputy Commissioner **Angela DeLillo**, and Assistant Commissioner for Operations **Elio Paradis**. We hope everyone

will join us in welcoming them to DEP!

**Lashuana Benjamin, Vincent Loverde Sr., Kevin Guthrie, Rafael Dominguez, Colin Fredericksen, Andrew Tardona, and Harith Wickramaratne**, Bureau of Wastewater Treatment.

## Gilboa Dam Restoration Project *In Memoriam*



As the Gilboa Dam Restoration Project enters its final phase, DEP is turning its attention to the land that surrounds it. Years of construction have left their mark on the landscape, and now it's time to restore, replant, and renew. Teams are currently working to reforest upland habitats, restore five acres of freshwater wetlands, and reintroduce native wildflower meadows. The progress has been remarkable: more than 100,000 native trees, shrubs, and plants have already been planted. Red maple, black cherry, eastern cedar, northern red oak, wild bergamot, and lowbush blueberry are just a few of the indigenous species taking root. To

help this new growth thrive, approximately 10,000 feet of fencing has been installed to protect plantings from deer. Originally built in the 1920s, the Gilboa Dam has undergone major upgrades since 2005 to meet modern safety standards — including structural anchoring to bedrock, façade repairs, improved hydraulic performance, and a new reservoir drain/outlet. But this project has always been about more than just concrete and engineering. As it nears completion, it stands as a testament to the balance between infrastructure and ecology — where safety, sustainability, and stewardship go hand in hand.

## Changing Buoys at Ashokan

Last month, staff from the Bureau of Water Supply (BWS) removed the four buoys used to monitor water quality in the Ashokan Reservoir during warmer months and deployed two “under ice” buoys designed to withstand several months beneath large sheets of ice. These buoys use waterproof, low-power dataloggers that operate for 3–4 months, transmitting data once a day to conserve battery life. They are also equipped with solar panels that recharge the batteries when exposed above the ice. This ensures that even in freezing conditions, the reservoir is closely monitored to safeguard the city's water supply. The data collected also supports scientists



in building predictive models of water quality under varying environmental conditions — from floods and droughts to seasonal transitions — helping DEP anticipate challenges and maintain New York City's high drinking water standards.

## Out of the Archives



Catskill water travels many miles over and under the landscape, including this hill in Westchester named Turkey Mountain. Once it reaches NYC and several towns along the way,



It is with heavy hearts that we mourn the passing of longtime DEP employee **Michael Nardiello**. Michael began his career with the City of New York on September 14, 1986, serving in the Department of Parks & Recreation. He joined DEP on March 20, 1995 as a City Laborer and, through dedication and hard work, was promoted to Supervisor on June 8, 1998. After more than 30 years of faithful service, Michael retired from Fleet Services on October 6, 2025, where he spent the final years of his career. His familiar and friendly presence, along with his commitment

and contributions to the City, will be remembered with deep gratitude. Funeral services will be held at 9:30 a.m. on Thursday at Our Lady of Fatima R.C. Church in East Elmhurst, followed by burial at Mount St. Mary Cemetery in Flushing.

it flows from taps to boil potatoes for mash, make brine, wash apples for pie, quench thirst, and clean dishes... thankfully! You can view more images from the [DEP Archives on Flickr](#).