

Cleanup of our water continues: NJ 2020, the year of COVID-19

JON HURDLE, CONTRIBUTING WRITER | DECEMBER 31, 2020 | WATER, ENERGY & ENVIRONMENT Advocates cite progress in lead-line replacement, curbing sewage overflows and state funding

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An aeration tank at a wastewater treatment facility



New Jersey made progress this year in its efforts to remove contaminants from drinking water, upgrade its antiquated system of storm drains in 21 cities and ensure that new real-estate developments include measures to control stormwater.

Newark replaced most of the lead service lines that poisoned drinking water for thousands of people; Gov. Phil Murphy's midyear budget included for the first time a \$60 million line item for water-infrastructure upgrades and state officials sued a South Jersey chemical company for polluting water and soil with toxic "forever chemicals" that may threaten public health.

The advances, though slowed by the COVID-19 pandemic's domination of nearly every aspect of daily life, suggest a growing public awareness of, and support for, renewing the state's aging water infrastructure following decades of neglect, advocates said.

"The engagement of people is a lot more rigorous today than it has been ever before," said Mark Mauriello, co-chair of Jersey Water Works, a collaborative group that has drawn the support of hundreds of organizations for a multibillion-dollar upgrade of leaking water and sewer pipes. "At a time when it's so easy to be distracted, it would be so easy for people to just check out, but we're not seeing that."

Jersey Water Works estimates that upgrading the water network will cost \$25 billion over 20 years, a sum that overshadows the new water-infrastructure money in the state budget, but represents a down-payment on a much bigger future investment, and a sign that government gets it, Mauriello argued.

"The \$60 million may be a drop in the bucket but you've got to start somewhere," said Mauriello, a former commissioner of the Department of Environmental Protection. "It's not like the angels are going to drop billions of dollars for this. It shows increased awareness at the highest levels of the seriousness of the problem."

Newark gets the lead out

Among the big successes this year was Newark's ongoing replacement of an estimated 18,000 lead service lines that connect drinking water mains to individual houses in a two-year, \$118 million program that began in March 2019. By late December this year, the city had replaced more than 16,000 of the lines with copper piping so that residents of affected homes will no longer have to drink bottled water.

Although the need for water-infrastructure renewal may seem overwhelming, Newark's lead-pipe replacement is a sign of tangible progress, and an example to other cities that are grappling with lead and other water-supply problems, Mauriello said. "It gives other cities a road map, and it certainly gives them cause for optimism," he said.

Under the state's Water Quality Accountability Act of 2017, utilities are required to report their plans for repair or replacement of pipes and drains to the state, using a water-industry practice called "asset management." Although the law is an important step in the massive upgrade process, its results are not yet clear because the requirements are relatively new, and because this year the challenges of running a utility during the pandemic have sidelined planning for the future, said Dan Van Abs, a professor in the Rutgers School of Environmental and Biological Sciences, and an expert on public water-supply issues.

"It's extraordinarily difficult for them to be doing lots of new things as well as trying to keep the utility running," he said.

Eliminating combined sewer overflows

The state took another step toward eliminating a major source of water pollution this year when it collected plans from 21 municipalities to overhaul their combined sewer overflows (CSOs) — old drains that mix stormwater and untreated sewage during heavy rains, bypassing treatment plants and flooding into rivers, streets or even basements.

Publicly owned water utilities in the so-called CSO communities submitted proposals to the DEP in October on a Long-Term Control Plan to identify ways of eliminating or reducing the discharges.

The submissions were an important part of resolving a major source of environmental pollution and a threat to public health, said Van Abs.

"That's an enormous step because it's a multibillion-dollar process that we're going to be going through over the next couple of decades," he added.

One of the communities is Bayonne, which estimated that it could cut its CSO outflows by 73% to some 205 million gallons a year by installing tanks, improving a pumping station and installing green infrastructure such as rain gardens that allow stormwater to soak into the ground naturally rather than becoming contaminant-laden runoff from impervious surfaces.

The city estimates the plan will cost \$321 million, and it is working with seven other communities whose sewage is treated at the same plant, the Passaic Valley Sewerage Commission, to try to find a way of jointly financing the work. After submitting their plans to the DEP in October, they have another six months to look for a joint-financing solution, and if that can't be found, the plans will be implemented on a municipal rather than regional basis.

The DEP is expected to finalize all the control plans in 2021. When that happens, the department will require Bayonne and other CSO water authorities to implement their plans as part of their permits to operate.

"That's where the rubber hits the road, because once components of those plans get into the next five- year permit, then utilities are going to be held accountable for implementation schedules," Van Abs said.

Ratepayers will have to chip in

To pay for the works, utilities may be eligible for low-interest or principal-forgiveness loans from the New Jersey Infrastructure Bank, a state agency, but those sources won't be enough to fund all the necessary work, so ratepayers will have to help pay off the loans with higher rates, he said.

The on-time filing of the CSO plans suggests that municipalities or utility authorities are increasingly understanding the problem and are poised to address it, said Mauriello of

Jersey Water Works.

"With all the attention that we've seen on water infrastructure, I think these plans are going to include considerations that maybe they wouldn't have a few years ago to help mitigate the adverse impacts of urban flooding that ultimately lead to the overflows," he said.

Another step toward controlling stormwater came this year when the DEP finalized rules that will require municipalities to ensure that new development is built with green infrastructure that curbs runoff from storms. The measure is in part a response to the bigger and more frequent storms that are expected to come with climate change. Municipalities have until March 2021 to update their land-use ordinances to include the stormwater rule.

Punishing polluters

In another effort to enforce clean-water standards, the DEP and the attorney general's office in November sued Solvay Specialty Polymers, a chemical manufacturer, claiming the company had leaked PFAS chemicals into the water and soil near its Gloucester County plant for years, and had not done enough to clean them up. The suit followed a directive by the DEP to Solvay and four other chemical companies last year, ordering them to pay for the investigation and cleanup of the toxic chemicals that are more prevalent in New Jersey than in many other states.

This year's developments highlight both the urgency of New Jersey's water-infrastructure needs and the progress that's being made to meet them, said Chris Sturm, managing director for policy and water at New Jersey Future, a nonprofit that is active in the sector.

While some cities were still threatened by raw sewage overflows and contaminated water still affected some areas, Newark led the way in replacing lead lines, and the Murphy administration showed an awareness of the issues by appropriating money for water-infrastructure renewal in the budget for the first time, Sturm said.

"If we build on this momentum in 2021, and can engage federal support, we can start to turn the corner on ensuring safe, clean water for everyone," she said.