

NEW YORK · WATER UTILITIES · CAPITAL BRIEFING

New York runs America's largest water system. Its capital plan can't stand still.

An unfiltered supply protected by watershed rules, the largest tunnel repair in the city's history, first-in-the-nation PFAS limits, lead lines under the streets, and hundreds of aging upstate systems. For a utility CFO or capital lead, each of those forces reshuffles the projects on your list. Invizion helps New York utilities re-sequence a capital portfolio in a click — and defend every decision.

9M¹ People served by New York City's water system — the largest in the U.S., delivering more than a billion gallons a day.	\$1.5B² Estimated cost of the Delaware Aqueduct repair program — NYC DEP's largest-ever construction project, fixing leaks of up to 36 million gallons a day.	\$3.4B³ Awarded through New York's Water Infrastructure Improvement Act (WIIA) grants since 2015.	10 ppt⁴ New York's enforceable drinking-water limit for PFOA and PFOS — among the most stringent in the nation.
---	--	--	--

Last updated September 2026 · 15 sourced references

THE NEW YORK LANDSCAPE

Four forces are moving your project list at once

None of these is theoretical, and none of them waits for your next budget cycle. Together they mean the capital plan you approved last year may already be the wrong plan.

SUPPLY — UNFILTERED WATER & THE DELAWARE AQUEDUCT

A world-class supply held together by aging tunnels

New York City's system serves roughly nine million people more than a billion gallons a day,¹ and about 90% of it flows unfiltered from the Catskill and Delaware watersheds under a federal Filtration Avoidance Determination — a rare exemption that spares the city a filtration plant that would cost billions, but only so long as watershed protection holds.⁵

The Delaware Aqueduct — at 85 miles the world's longest continuous tunnel and the carrier of roughly half the city's water — has leaked up to 36 million gallons a day for decades. DEP's repair program, estimated near \$1.5 billion, built a 2.5-mile bypass tunnel under the Hudson; the aqueduct was shut down in fall 2024 to make the connection, a drought soon forced a pause, and full completion is expected around 2027.² That is a single asset whose timeline reshapes an entire capital calendar.

COMPLIANCE — PFAS & EMERGING CONTAMINANTS

New York set the standards, and the cleanup bills

New York adopted enforceable maximum contaminant levels of 10 parts per trillion for both PFOA and PFOS — among the most stringent in the country.⁴ Those limits grew out of real crises: in Hoosick Falls, PFOA was found at 540 ppt and traced to Saint-Gobain and Honeywell operations, ending in a \$65.25 million settlement in 2021.⁶

In Newburgh, PFOS from firefighting foam at Stewart Air National Guard Base contaminated the Washington Lake reservoir, prompting a 2016 emergency response and a switch to an alternate supply.⁷ For utilities statewide, treatment, monitoring, and source changes to meet these limits are now funded capital lines, not contingencies.

COMPLIANCE — LEAD SERVICE LINES

The pipe you can't see is now on the clock

New York is among the states with the most lead service lines, and New York City alone has an estimated 112,000 — a figure widely regarded as an undercount, since so many lines are still of unknown material.⁸

Federal rules require full inventories and, ultimately, replacement. Each line replaced is a small project multiplied across a service territory — and every one competes with PFAS work and pipe renewal for the same crews and the same dollars.

RENEWAL — AGING & FRAGMENTED SYSTEMS

Renewal backlog, spread across hundreds of small systems

Beyond the big cities, New York's water is delivered by a long tail of small systems: the Public Service Commission alone regulates about 230 private water companies, and 119 of them serve fewer than 50 customers each.⁹ These are exactly the systems with the least capacity to plan and finance renewal.

The scale of the backlog is national in character — EPA's latest survey put the country's 20-year drinking-water need at \$625 billion¹⁰ — and New York, where regulated public systems serve nearly 95% of residents,¹¹ carries a heavy share of it. Renewal doesn't replace the compliance backlog; it stacks on top of it, and something on the list has to move.

WHO RUNS NEW YORK'S WATER

One giant, a handful of large publics, and a very long tail

New York City's system dwarfs everything else, and other large metros run their own utilities. A smaller set of investor-owned providers and hundreds of tiny private systems fill in the rest, rate-regulated by the Public Service Commission. The pressures are shared; the accountability path differs.

Municipal & public utilities

Rates set by water boards and city councils · capital approved by governing bodies

NYC Dept. of Environmental Protection ~9M served · 1B+ gallons/day · largest U.S. municipal system

Suffolk County Water Authority Long Island · one of the largest U.S. groundwater suppliers

Buffalo, Rochester, Syracuse, Albany Large upstate municipal systems with old mains

Monroe & Erie County Water Authorities Regional public wholesalers & retailers

Nassau County public water districts Numerous Long Island municipal districts

Investor-owned & private systems

Rates & capital recovery regulated by the Public Service Commission

Liberty (formerly New York American Water) Long Island · acquired by Algonquin/Liberty, 2022¹²

Veolia Water New York (formerly SUEZ) Westchester & Rockland systems

~230 PSC-regulated private companies ~830,000 people statewide; many very small⁹

Numerous small & rural systems Where funding and compliance gaps hit hardest

The PSC reports that 119 of the private water companies it regulates serve fewer than 50 customers each — systems with little capacity to absorb PFAS or lead mandates.⁹

Every capital dollar has to be defensible

Whether you answer to the Public Service Commission or a municipal water board, the question is the same: why this project, why now, why at this cost? New York's oversight bodies are asking it harder than ever.

NY Public Service Commission (PSC / DPS) regulates rates and capital recovery for investor-owned water utilities — roughly 230 private companies serving about 830,000 people⁹

NY State Dept. of Health holds Safe Drinking Water Act primacy and enforces New York's 10 ppt PFOA/PFOS limits, 1,4-dioxane rules, and lead service line inventories.⁴¹¹

NY State Dept. of Environmental Conservation (DEC) permits wastewater discharges and administers the clean-water side of state and federal water programs.

Municipal water boards & city councils set rates for public systems — the NYC Water Board sets New York City's rates in public, in front of ratepayers.

The money is moving — can your plan absorb it?

New York has stood up one of the largest state water-funding platforms in the country, on top of the federal revolving funds. The constraint is no longer only dollars — it's readiness: which projects are shovel-ready, which qualify, and how the timing lines up with everything else on the list.

\$3.4B in WIIA grants since 2015 — New York's Water Infrastructure Improvement Act grants, administered by the Environmental Facilities Corporation; a \$435M round was announced in December 2025, part of a \$3.75B commitment in the state budget³

\$10.6B Drinking Water State Revolving Fund — provided to more than 1,200 projects since 1996, including federal Bipartisan Infrastructure Law supplements for lead and emerging contaminants.¹³

\$49.8B in total EFC financing since 1987 — the cumulative assistance the Environmental Facilities Corporation has delivered across the Clean Water and Drinking Water revolving funds¹⁴

WIFIA low-cost federal loans — closed for New York borrowers including the Erie County Water Authority (\$22M), the Water Authority of Great Neck North (\$14M), and the City of Cortland (\$16M).¹⁵

NEW YORK WATER, IN BRIEF

Questions New York utility leaders are asking

Short, sourced answers — the same facts we'll dig into on a call, in the context of your system.

Why is New York City's drinking water unfiltered?

About 90% of the city's supply comes from the Catskill and Delaware watersheds and is delivered unfiltered under a federal Filtration Avoidance Determination, which the city keeps through aggressive watershed protection rather than building a multi-billion-dollar filtration plant. The Croton system, by contrast, is filtered. The unfiltered exemption is a capital advantage that only holds as long as the watershed and its tunnels are protected.

What is the Delaware Aqueduct repair and why does it matter to planning?

The Delaware Aqueduct is an 85-mile tunnel — the world's longest — that carries roughly half of New York City's water and has leaked up to 36 million gallons a day. DEP's repair program, estimated near \$1.5 billion, added a 2.5-mile bypass tunnel under the Hudson; the aqueduct was taken offline in fall 2024 to connect it, a drought forced a pause, and completion is expected around 2027. A single asset on that scale sets the tempo for everything else on the capital calendar.

What are New York's PFAS drinking water limits?

New York enforces maximum contaminant levels of 10 parts per trillion for both PFOA and PFOS — among the most stringent standards in the country — along with a limit for 1,4-dioxane. The standards followed contamination crises in communities such as Hoosick Falls (PFOA at 540 ppt, a \$65.25 million settlement) and Newburgh (PFOS from firefighting foam). Meeting them is now a capital program: treatment, monitoring, and in some cases new source.

Who sets my water utility's rates in New York?

The Public Service Commission regulates rates and capital recovery for investor-owned water companies — about 230 private systems serving roughly 830,000 people. Municipal systems set rates through their own water boards and city councils; the NYC Water Board sets New York City's rates. Either way, capital spending has to be justified to a governing body and, increasingly, to ratepayers.

What funding is available for New York water infrastructure?

New York pairs one of the largest state grant platforms in the country with the federal revolving funds. The Water Infrastructure Improvement Act has awarded \$3.4 billion in grants since 2015; the Drinking Water State Revolving Fund has funded more than 1,200 projects worth \$10.6 billion since 1996; and the Environmental Facilities Corporation has delivered \$49.8 billion in total financing since 1987. Low-cost WIFIA loans are also available to larger borrowers. The constraint is readiness — which projects qualify and are shovel-ready when the money is offered.

How does Invizion help New York water utilities plan capital?

Invizion is scenario-based capital portfolio optimization for water utilities. It lets you model how a shifting Delaware Aqueduct timeline, a new PFAS or lead deadline, or a WIIA award reshuffles your whole project list, re-sequence the portfolio automatically, and keep a defensible record of every decision for the

PSC, your water board, or ratepayers. The best next step is a short first meeting to look at it against your own program.

REFERENCES

Sources

Every figure in this briefing is tied to a primary or authoritative source.

1. New York City Department of Environmental Protection, "Drinking Water" — nine million customers served, more than 1 billion gallons/day, 2025. [nyc.gov](https://www.nyc.gov)
2. Wikipedia, "Delaware Aqueduct" — 85-mi tunnel (world's longest), ~50% of NYC supply, leaks up to 36M gal/day, 2.5-mi bypass, ~\$1.5B program, 2024 shutdown/drought pause, ~2027 completion. en.wikipedia.org
3. New York State Environmental Facilities Corporation, "Water Infrastructure Improvement Act" — \$3.4B in grants since 2015; \$435M Dec 2025 round; \$3.75B state-budget commitment, 2025–2026. efc.ny.gov
4. Wikipedia, "Perfluorooctanoic acid" — New York's 10 ppt drinking-water standards for PFOA and PFOS, described as the most stringent in the U.S. en.wikipedia.org
5. Wikipedia, "New York City water supply system" — 8M city + 1M upstate served, ~1.2B gal/day, Catskill/Delaware unfiltered under federal filtration exemption, Croton filtered (2015). en.wikipedia.org
6. Wikipedia, "Hoosick Falls, New York" — PFOA at 540 ppt (2014–2015), Saint-Gobain & Honeywell, \$65.25M preliminary settlement, 2021. en.wikipedia.org
7. Wikipedia, "Newburgh, New York" — PFOS contamination of Washington Lake from Stewart Air National Guard Base firefighting foam; 2016 Superfund/emergency response. en.wikipedia.org
8. Natural Resources Defense Council, "Lead Pipes Are Widespread and Used in Every State" — New York among states with the most lead service lines; ~112,000 in New York City (likely an undercount), 2024. nrdc.org
9. New York State Department of Public Service, "Water" — PSC regulates ~230 private water companies serving ~830,000 people; 119 serve fewer than 50 customers. dps.ny.gov
10. U.S. EPA, "7th Drinking Water Infrastructure Needs Survey and Assessment" — \$625B national 20-year need, 2023. epa.gov
11. New York State Department of Health, "Drinking Water" — regulated public water systems serve nearly 95% of New York residents. health.ny.gov
12. Wikipedia, "Algonquin Power & Utilities" — Liberty/Algonquin acquired New York American Water from American Water Works in 2022. en.wikipedia.org
13. New York State Environmental Facilities Corporation, "Drinking Water State Revolving Fund" — \$10.6B provided to over 1,200 projects since 1996. efc.ny.gov
14. New York State Environmental Facilities Corporation — \$49.8B in total financial assistance to communities since 1987. efc.ny.gov
15. U.S. EPA, "WIFIA Closed Loans" — New York borrowers incl. Erie County Water Authority (\$22M, 2021), Water Authority of Great Neck North (\$14M, 2021), City of Cortland (\$16M, 2020). epa.gov

ABOUT INVIZION

Capital program optimization for utilities

Invizion is a purpose-built capital lifecycle management platform for water and wastewater utilities. It integrates budgeting, CIP, scenario analysis, and funding-source tracking in one system — so utilities can re-sequence a capital portfolio in a click and demonstrate audit-ready, defensible decisions to regulators, boards, and rating agencies.

See what a defensible New York capital plan looks like — book a 20-minute first meeting.

Book your first meeting →