

Water and Wastewater Rate Outlook for the Fiscal Year Beginning July 1, 2024

May 29, 2024



Today's agenda

- Recent DEP highlights
- **Rate proposal and financial update**
- Update on customer affordability and collections strategy
- Public hearings and contact information for public testimony

Recent DEP highlights



DEP's 2023 water quality report highlighted the quality and safety of the City's drinking water

THE NEW YORK CITY 2023 DRINKING WATER QUALITY TESTING RESULTS

Detected Conventional Physical and Chemical Parameters
This table summarizes the monitoring results for all detected parameters in 2023

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG (Ideal Goal)	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Alkalinity (mg/L CaCO ₃)	-		308	14 - 74	22	No	Erosion of natural deposits
Aluminum (µg/L)	50 - 200 ⁽¹⁾		309	8 - 57	15	No	Erosion of natural deposits
Barium (mg/L)	2	2	309	0.01 - 0.04	0.02	No	Erosion of natural deposits
Bromide (µg/L)	- ⁽²⁾		8	8 - 35	20	No	Naturally occurring
Calcium (mg/L)	-		309	5 - 26	7	No	Erosion of natural deposits
Chloride (mg/L)	250		308	10 - 71	19	No	Naturally occurring; road salt
Chlorine Residual, Free (mg/L)	4 ⁽³⁾		15,217	ND - 1.3	0.5	No	Water additive for disinfection
Chromium (µg/L)	100	100	309	ND - 2	ND	No	Erosion of natural deposits
Color - distribution system (color units - apparent)	-		13,894	3 - 350	7	No	Presence of iron, manganese, and organics in water
Color - entry points (color units - apparent)	15		1,320	3 - 11	6	No	Presence of iron, manganese, and organics in water
Copper (mg/L)	1.3 ⁽⁴⁾	1.3	309	ND - 0.053	0.007	No	Corrosion of household plumbing; erosion of natural deposits
Corrosivity (Langelier index)	- ⁽⁵⁾		279	-2.77 to -1.19	-2.22	No	
Fluoride (mg/L)	2.2	4	2,166	ND - 0.8	0.7	No	Water additive which promotes strong teeth; erosion of natural deposits
Hardness (mg/L CaCO ₃)	-		308	17 - 102	26	No	Erosion of natural deposits
Hardness (grains/gallon[US]CaCO ₃) ⁽⁶⁾	-		308	1 - 6	2	No	Erosion of natural deposits
Iron (µg/L)	300 ⁽⁷⁾		309	ND - 108	31	No	Naturally occurring



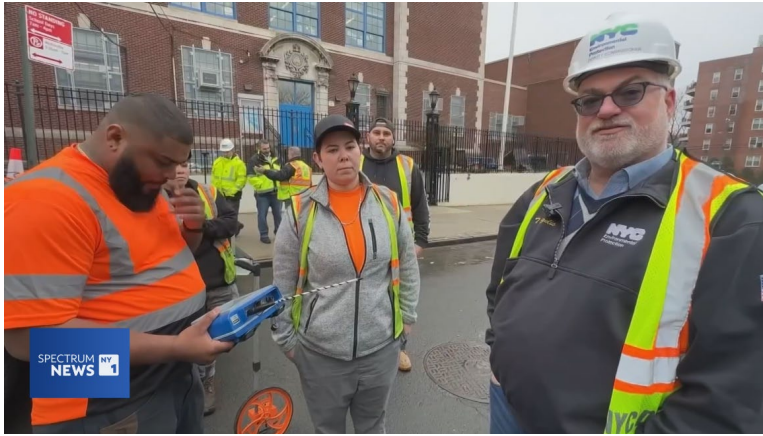
DEP Scientists continuously sample and conduct analyses for hundreds of water quality parameters

HOW TO READ THE NEW YORK CITY 2023 DRINKING WATER QUALITY TESTING RESULTS

The following section of this report compares the quality of your tap water to federal and state standards for each parameter (if applicable). The monitoring results show that New York City's drinking water continues to be of excellent quality.

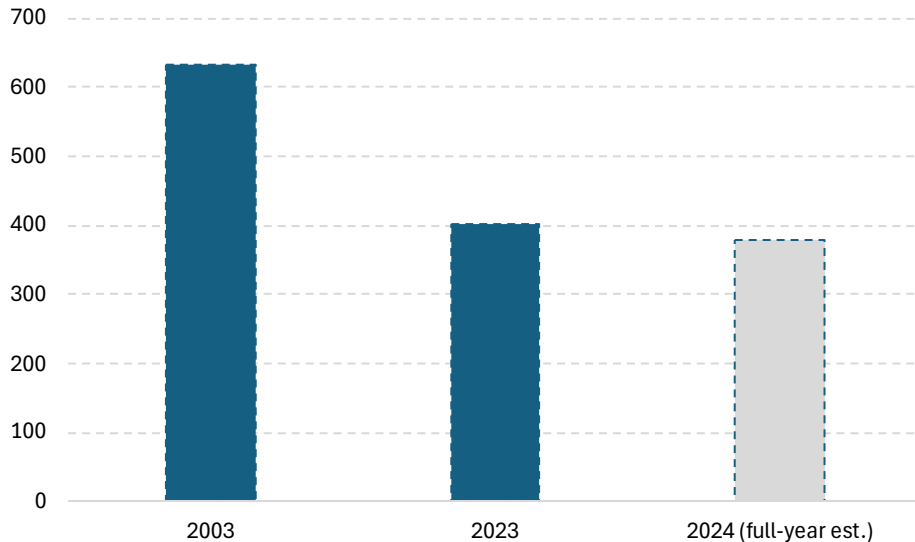
The following tables reflect the compliance monitoring results for all regulated and non-regulated parameters, the number of samples collected, the range of values detected, the average of the values detected, and the

The agency is currently on track to have its lowest year on record in terms of water main breaks



- Water main breaks are a significant issue facing all municipal water systems, and an issue of particular importance for cities with a large physical footprint that contain a mix of older and newer water piping
- When water mains break, area flooding and property damage can result and water service is disrupted to properties served by the main
- Construction also usually requires a street closing, traffic disruption, and some excavation to repair the damaged section of pipe
- New York 1 featured the DEP Bureau of Water and Sewer Operation's deployment of innovative leak detection asset maintenance practices

Water main breaks by fiscal year

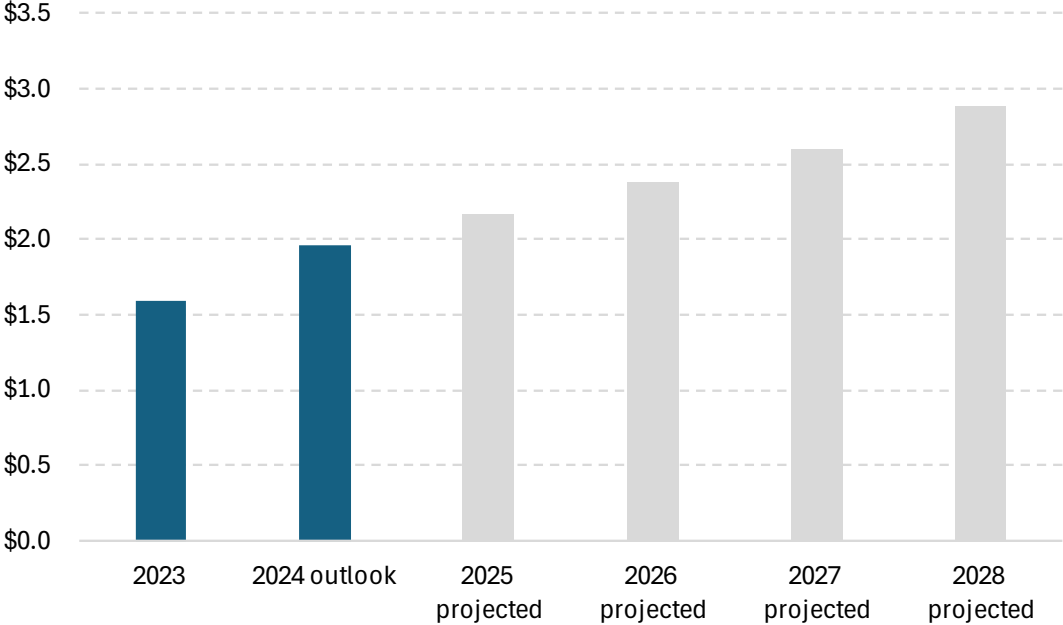


Source: images provided by NYC DEP Bureau of Public Affairs and Communications; New York 1, May 1, 2024 ("DEP team stops water main breaks before they happen," Roger Clark Queen)
Note: 2024 number based on annualized rate of results through March

Construction work continues to be at DEP’s core, and the agency is on track to reach \$3 billion of capital commitments as part of a \$29 billion capital program

Capital Improvement Program Fiscal Years 2024 - 2033	Dollars in billions
Sewers	\$9.2
Water pollution control	8.9
Water distribution	6.4
Water supply and transmission	3.7
Equipment	0.8
Total	\$29.0

Historical and forward-looking cash spending on construction and capital equipment purchases (dollars in billions)



The agency achieved 103% of its capital contracting goal in FY 2023, committing \$2.4 billion to new contracts

Notes: capital funds are presented on City-funded basis
Sources: NYC DEP Budget Office, NYC Municipal Water Finance Authority

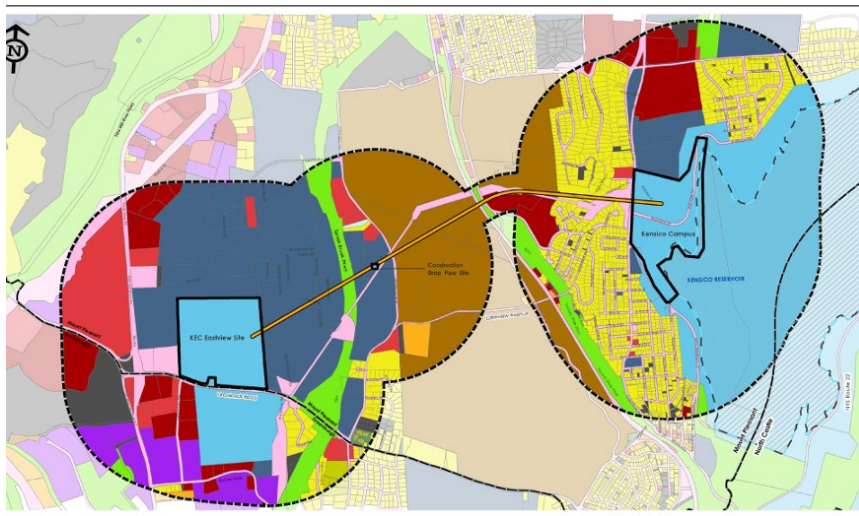
The agency's climate and resiliency staff are leading an evaluation of stormwater resilience across NYC in the face of increasingly frequent and severe storm events

- DEP assessed what it would take to equip flood-prone parts of the City with the capacity to adjust to a stormwater inundation at a rate of 2.1 inches per hour, for purposes of providing protecting against 5-10 year intensity rainfall
- The analysis yielded important results, including these findings and conclusions:
 - Identification of key flooding locations and connections to the drainage area, based on a comprehensive drainage computer model
 - The cost effectiveness of grey infrastructure, as an important tool for managing stormwater
 - The appropriateness of green infrastructure, provided that siting decisions are made carefully and aligned with other public and private land uses
- A comprehensive grey and green City-wide infrastructure program could cost up to \$30 billion, depending on the scale of the program and the type of assets constructed
- DEP will make its findings available to the public through a report



Key project milestones were achieved toward construction of DEP's \$1.9 billion Kensico water tunnel project

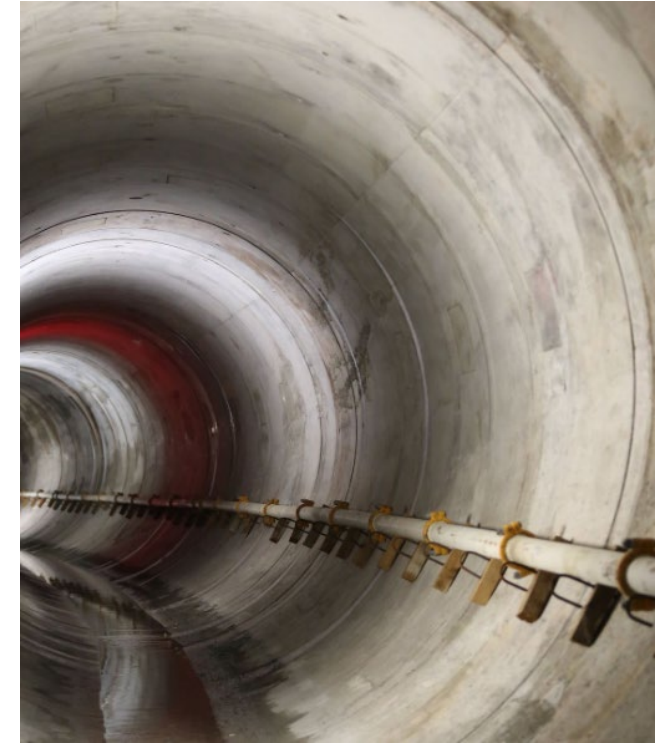
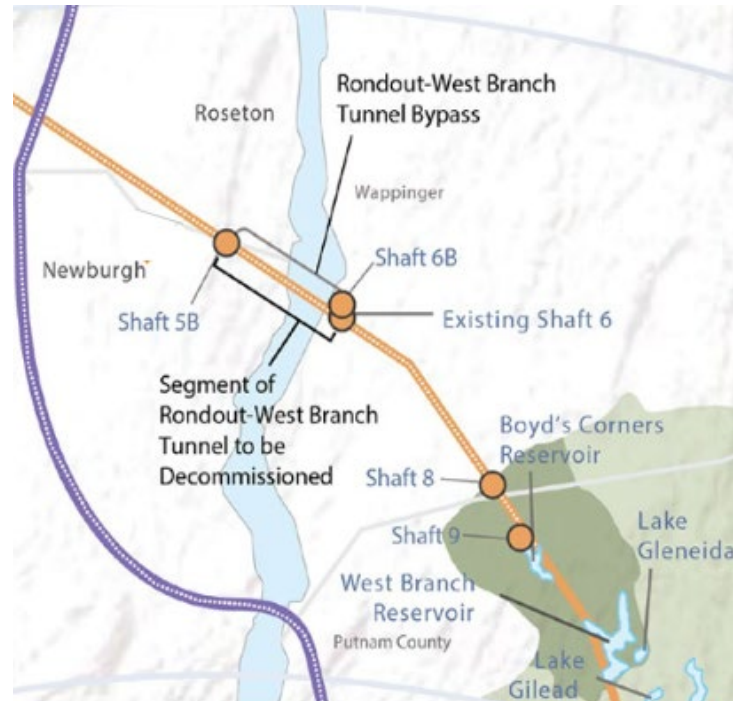
- The Kensico-Eastview Connection project centers around the construction of a new water tunnel between Kensico Reservoir and DEP's existing water treatment facility in Westchester County
- Kensico Reservoir and the water treatment plant work along with sections of the Catskill and Delaware Aqueducts to transport and treat water originating in the west of the Hudson river watersheds across the Hudson, through Westchester County, and into New York City



- The new tunnel will provide water conveyance capacity that by itself would exceed the City's daily water demand and match the daily water supply from a single supply source to the treatment plant's designed throughput capacity
- Final environmental impact statement completed in October 2023
- Construction work commencing in the first half of calendar 2024
- Shoreline stabilization of the reservoir is also a project priority

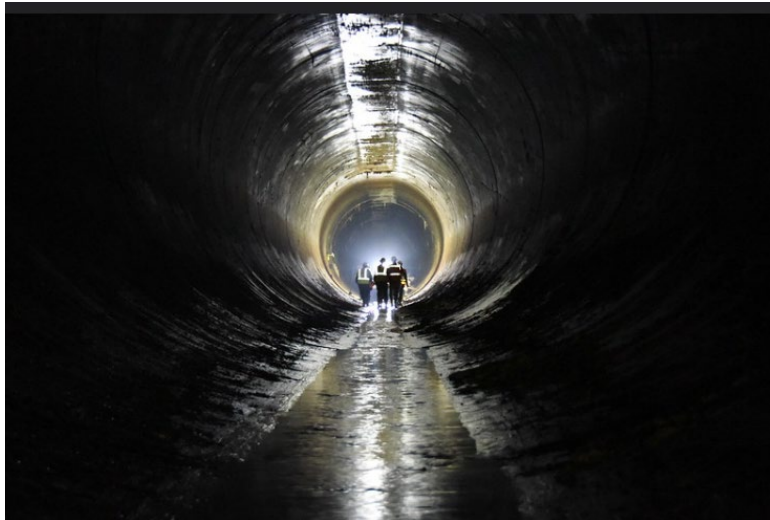
Work on the Rondout-West Branch Bypass Tunnel is complete, and preparatory work for the Delaware Aqueduct repair is underway for a temporary repair shutdown later this year

- The work on the Rondout West Branch tunnel is a state of good repair project to provide for reliable water supply through the Delaware Aqueduct, as sections of the Rondout West Branch section of the Aqueduct are repaired, including the replacement of the below-Hudson River section of the tunnel with a new bypass tunnel
- Core construction work on the bypass tunnel was completed in calendar year 2022
- The closure of the Rondout West Branch sections of the Aqueduct is expected to commence in October 2024 and is expected to last for an 8 month time period, during which time the bypass tunnel will be connected to the unimpacted sections of the Rondout West Branch Tunnel
- Water will be conveyed through the system from all three watersheds during the repair work, through the Catskill Aqueduct and Croton system, and through sections of the Delaware Aqueduct not under repair
- Total remaining capital plan commitments for the project of \$95 million are included in the capital plan



The Queens-Brooklyn Section of Water Tunnel Number 3 is fully-funded in the current capital plan, with core construction work expected to be completed by 2027

- The extension of the Manhattan sections of water tunnel number 3 into Queens and Brooklyn is a water supply reliability project to create an additional and newer water conduit
- Shaft-related construction work is anticipated to be complete by 2027, with final completion and operational readiness expected in 2032
- Total remaining capital plan commitments of \$421 million for Stage 2 of the project are included in the capital plan



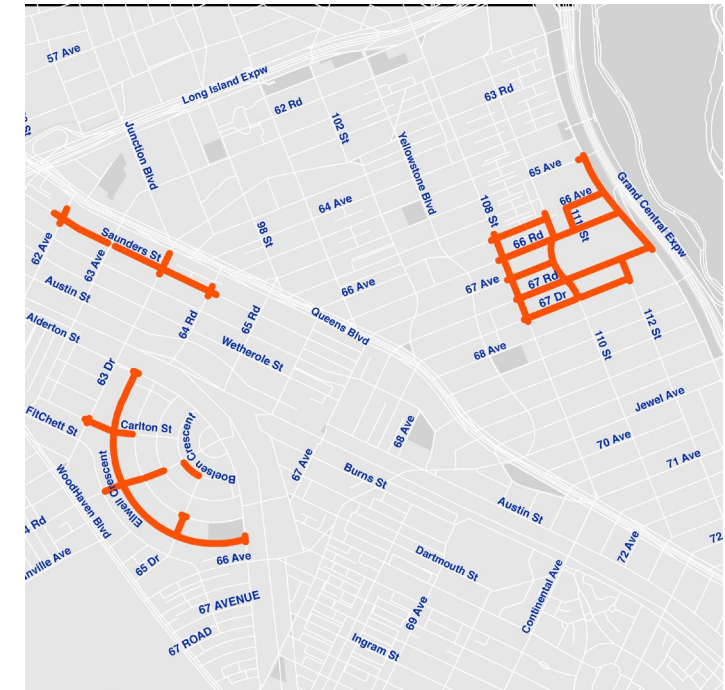
Important improvements to Hillview Reservoir are also funded as part of the April 2024 capital plan update



- As part of a 2019 agreement with federal regulators, DEP agreed to make certain improvements to Hillview Reservoir, in order to ensure water quality and facility soundness
- The improvements include constructing a new on-site facility to manage the water treatment processes employed at the Reservoir, including space to store water treatment supplies and to collect measurements from the reservoir, as well as the construction of a second on-premise facility to administer flow control
- DEP is in discussions with construction market participants about proposals to construct the buildings that would comprise the water treatment facility
- The improvements to Hillview Reservoir would ensure DEP's compliance with the 2019 consent decree and 2022 modifications to the agreement

Water mains are being upgraded in central Queens, with below-budget and timely project completion

- Water main upgrades involving approximately four miles of water mains located in the central Queens neighborhoods of Rego Park and Forest Hills were completed by the City, with the upgrades jointly performed by DEP and the City's Department of Design and Construction
- The water main upgrades involved installing new mains to replace sections with older mains still in service
- The project was completed significantly below budget and six months earlier than the original construction schedule



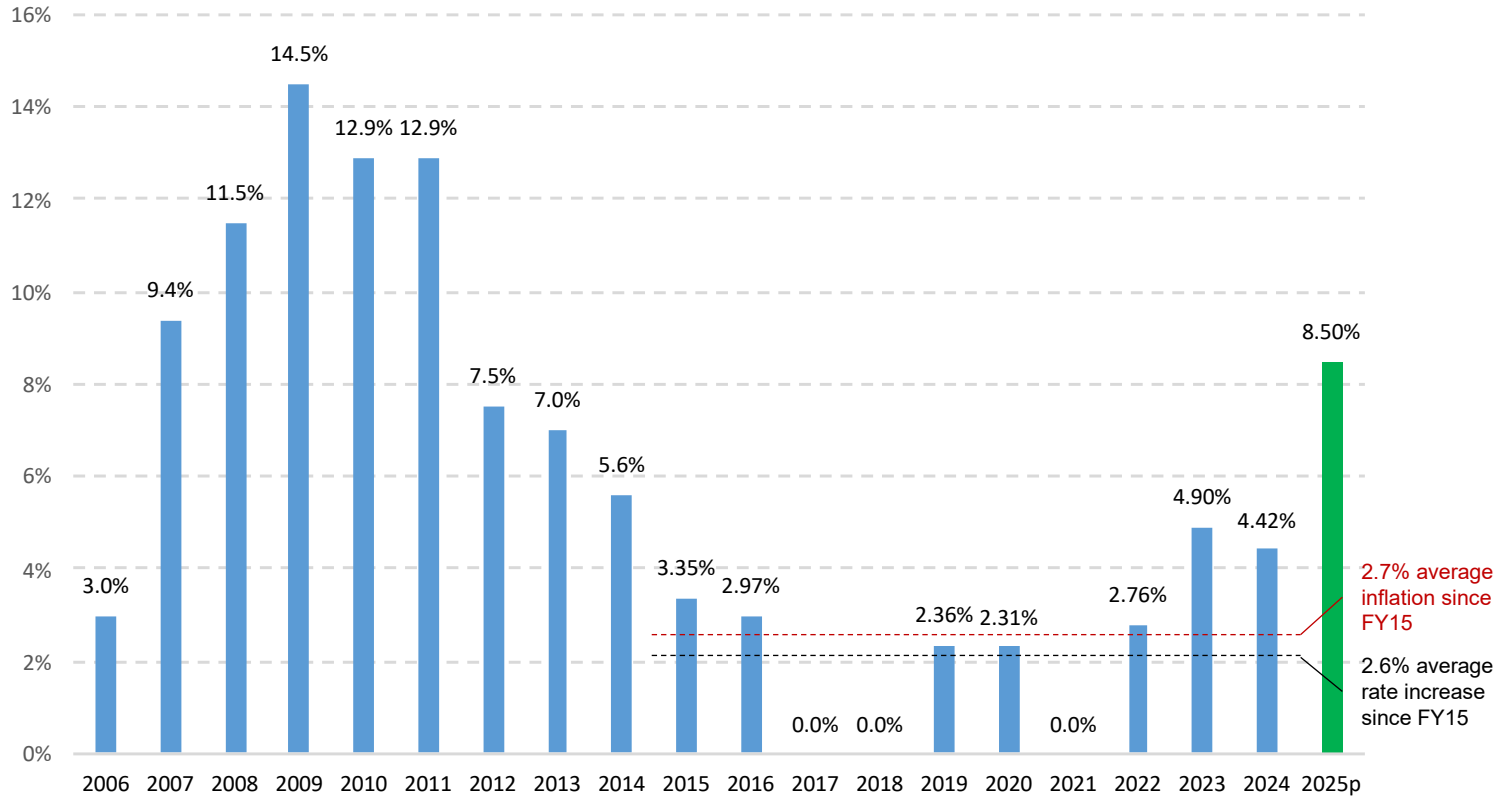
Rate proposal and financial update



DEP is recommending an 8.5% NYC rate increase for Fiscal Year 2025

- The proposed rate increase:**
- Ensures the system will continue to produce the revenues necessary to support strong bond ratings, an especially important consideration in light of the interest rate volatility of the last several years
 - Aligns rates with consumer and utility inflation trends – the 10-year average water rate increase is below the NYC metro rate of inflation
 - Is comparable to the 8-9% rate increases some other large cities in the Northeast and Mid-Atlantic region are proposing or have adopted
 - Is comparable to recent regulatory rate case approvals, which have included mid- to high-single digit increases

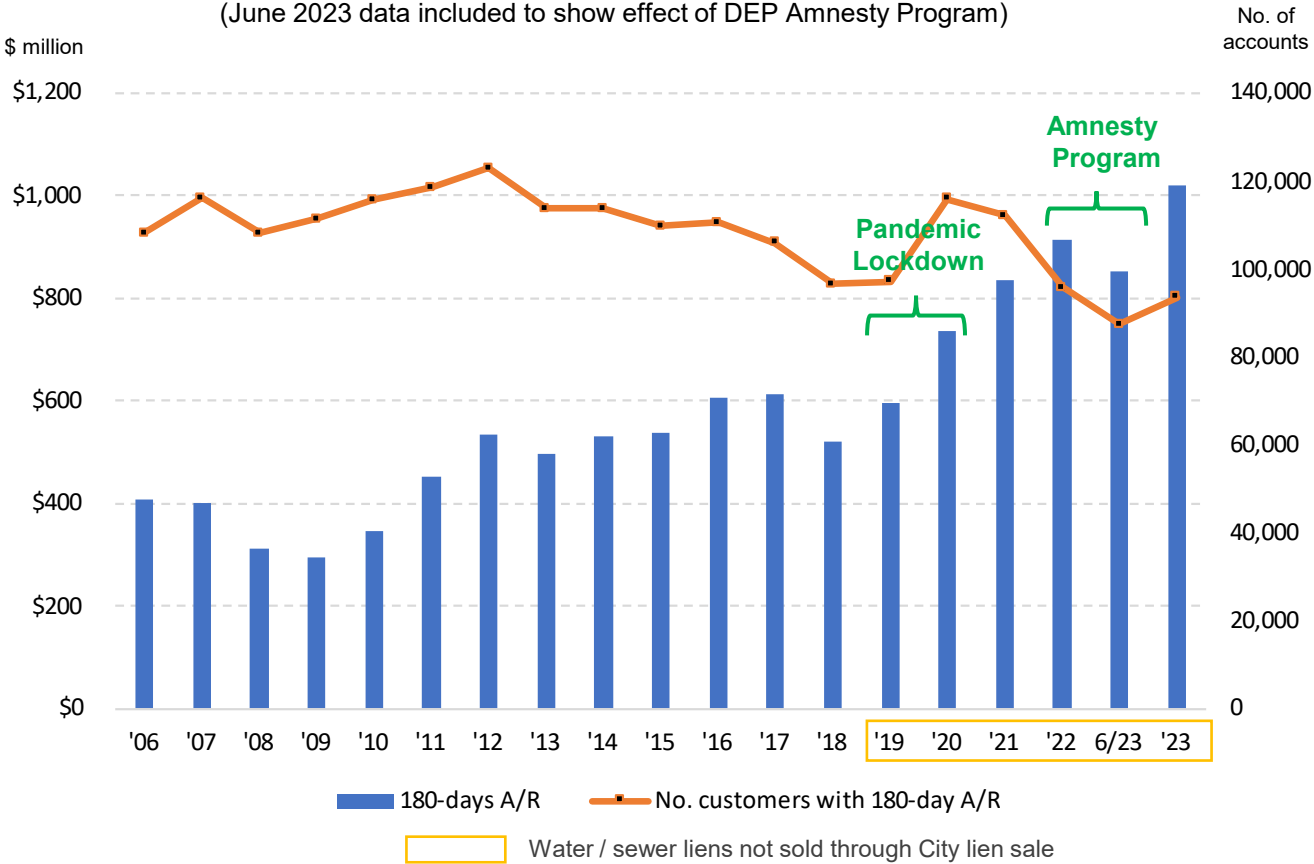
Historical NYC Water and Wastewater Rate Increases



Revenue protection and customer service are focuses for DEP, with the 2023 amnesty program supplemented by independent revenue collection efforts

Accounts receivable 180 days or more past due as of December 31

(June 2023 data included to show effect of DEP Amnesty Program)



- DEP’s 2023 **Amnesty Program** resulted in **\$105 million** of incremental customer payments, and delivered a **\$22 million** affordability benefit to eligible DEP customers
- **Water shut-off notices** began at the end of 2023; more than 600 properties have received notices, resulting in **\$3 million** of incremental cash revenues
- BCS is partnering with outside counsel to assist with collecting past due balances from accounts with large amounts owed, including multifamily properties
- While these efforts have significantly lowered delinquent accounts, chronic delinquency, rate increases, and higher interest rates are resulting in a growing **AR balance >\$1 billion**
- Through mid May, revenues were \$3.71 billion, 2% more than FY23, but -1% below projections for this year

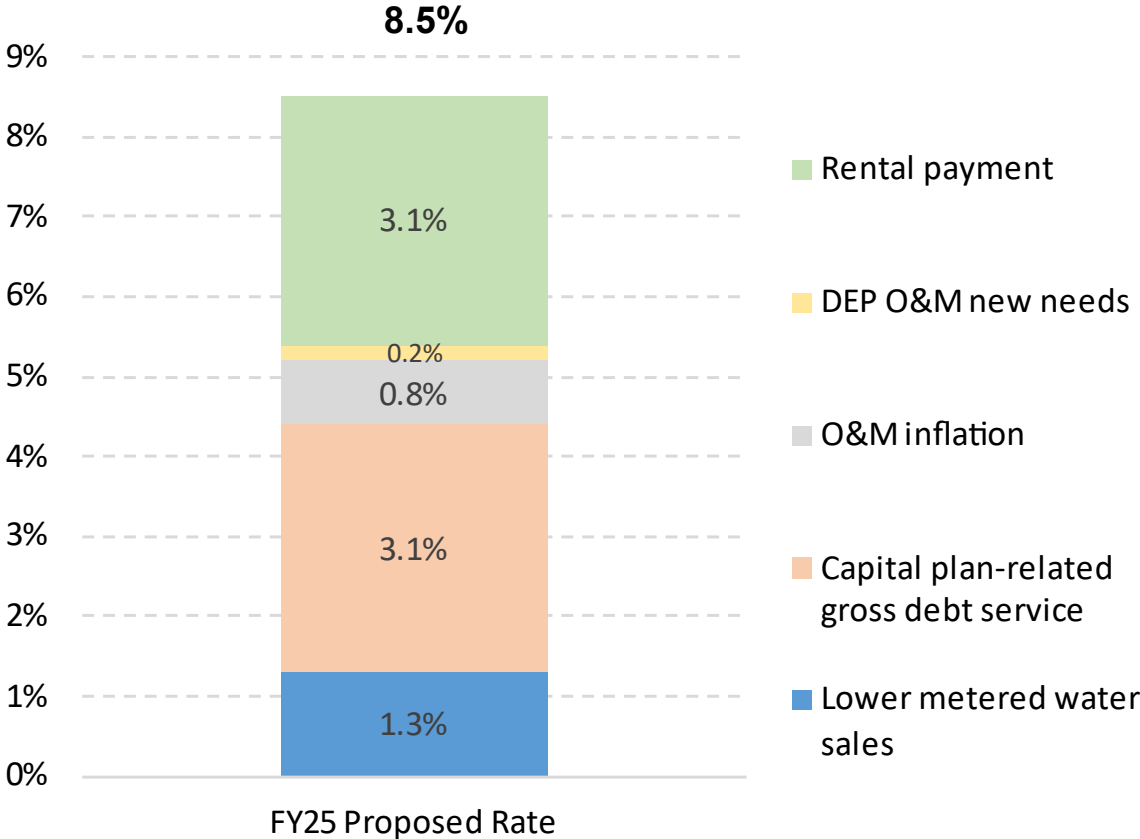
While recent City tax lien sales did not include water and sewer receivables, the next cycle of reauthorization of lien sale legislation may include water and sewer bills

- The Administration is working with the City Council to reauthorize lien sale, which has been an effective tool in the past for purposes of managing past due water and sewer receivables
- Since 2019, the City lien sales have not included water and sewer arrears, whereas previous lien sales included a combination of liens secured by property tax, water and sewer, and emergency repair charges, which has led to increased accounts receivable balances
- The sale of liens during previous fiscal years, together with the pre-sale notification process, resulted in substantial revenues to the system and supported lower required rate increases
- Without the lien sale, other categories of revenue protection are available, including negotiating installment agreements with customers, enforcing property liens outside of the lien sale process, and reliance on the court system
- A reauthorized lien sale may include program changes and exemptions to protect vulnerable populations

The proposed rate increase reflects a combination of factors, which together point to a recommendation for a larger rate increase than in recent years

Key drivers of the proposed change in rates:

- Previously un-forecast rental payment requests
- O&M increase for system new needs, emphasizing stormwater programs
- Operating and expense budget inflation due primarily to personnel cost increases: collective bargaining and fringe benefits
- Debt service related to on-going and expanded capital program
- Revenue declines (metered consumption, interest earnings)



The City's recent financial plans signal an intent to include the rental as a recurring feature of the City's budget

- Payment of rents to the City for use of water and wastewater assets owned by the City is allowed by the 1985 lease agreement between the City and the Water Board that was signed following passage of the legislation creating the current legal structure of the water and wastewater system in 1984
- The rental payment was part of the lease for two reasons – to provide a mechanism for the City to obtain reimbursement for the cost of water and wastewater debt issued prior to 1985, and to reflect the economic value of an important part of the City's asset base
- When the City requests rent, the amount of rent represents both an additional cost to the water and wastewater system that must be recouped through rates as well as an additional revenue source to the City that becomes part of the City's general funds available to fund City programs
- The City's financial plan released in April 2024 reflects a partial \$145 million rental payment in Fiscal Year 2024 and full annual rental payments from Fiscal Year 2025 through Fiscal Year 2028

Since the lease was first signed, the City's financial practice involved requesting rents from the Water Board in most years

Rental payment requests by the City – historical and projected



- The rental payment is one mechanism available to the City to obtain funding for City expenses and municipal programs, including expense categories such as Police, Fire, and Sanitation that directly benefit and protect the water and wastewater system
- Since municipal assets are usually tax-exempt, municipalities wishing to generate revenues from municipally-owned assets often look to charge fees for use of the assets or to otherwise development payment structures resembling property taxes, such as the rental payment, as alternatives
- Since the lease agreement was first signed, the City has requested rental payments from the Water Board in most year

Residential use charges in FY 2025 will continue to remain lower than the average charge in other large cities

Typical Annual Residential Water Charges

Based on
70,000 gallons
per year

	New York City	30 Large City Average ¹	NYC vs. Average
2019	\$945	\$1,119	-15.5%
2020	\$967	\$1,173	-17.6%
2021	\$967	\$1,216	-20.5%
2022	\$994	\$1,262	-21.2%
2023	\$1,041	\$1,309	-20.5%
2024	\$1,088	\$1,372	-20.7%
2025	\$1,181	NA	NA

Note 1: based on rates in effect as of February of each calendar year, using rates in effect during each fiscal year to calculate representative charges

Residential customers with average levels of water use would see a moderate increase to their monthly bills

Annual water and wastewater charges	FY 2024	Proposed FY 2025	Monthly Increase
Average Single-Family Charge (70k gallons per year)	\$1,088	\$1,181	\$7.71
Average Multi-Family Metered Charge (52k gallons per year)	\$808	\$877	\$5.73
Multi-Family Conservation Program (per residential unit)	\$1,184	\$1,285	\$8.39
Minimum Charged Properties (using less than 75 gallons per day)	\$463	\$463	\$0.00

Note: representative charges are calculated using projected actual billing rates, rounded to two decimal places; year-over-year change in illustrative billed amounts may be slightly different than 8.5% due to rounding

The preliminary financial outlook reflects a \$4.4 billion annual budget, including debt service, O&M, and other system costs

Preliminary financial outlook ¹

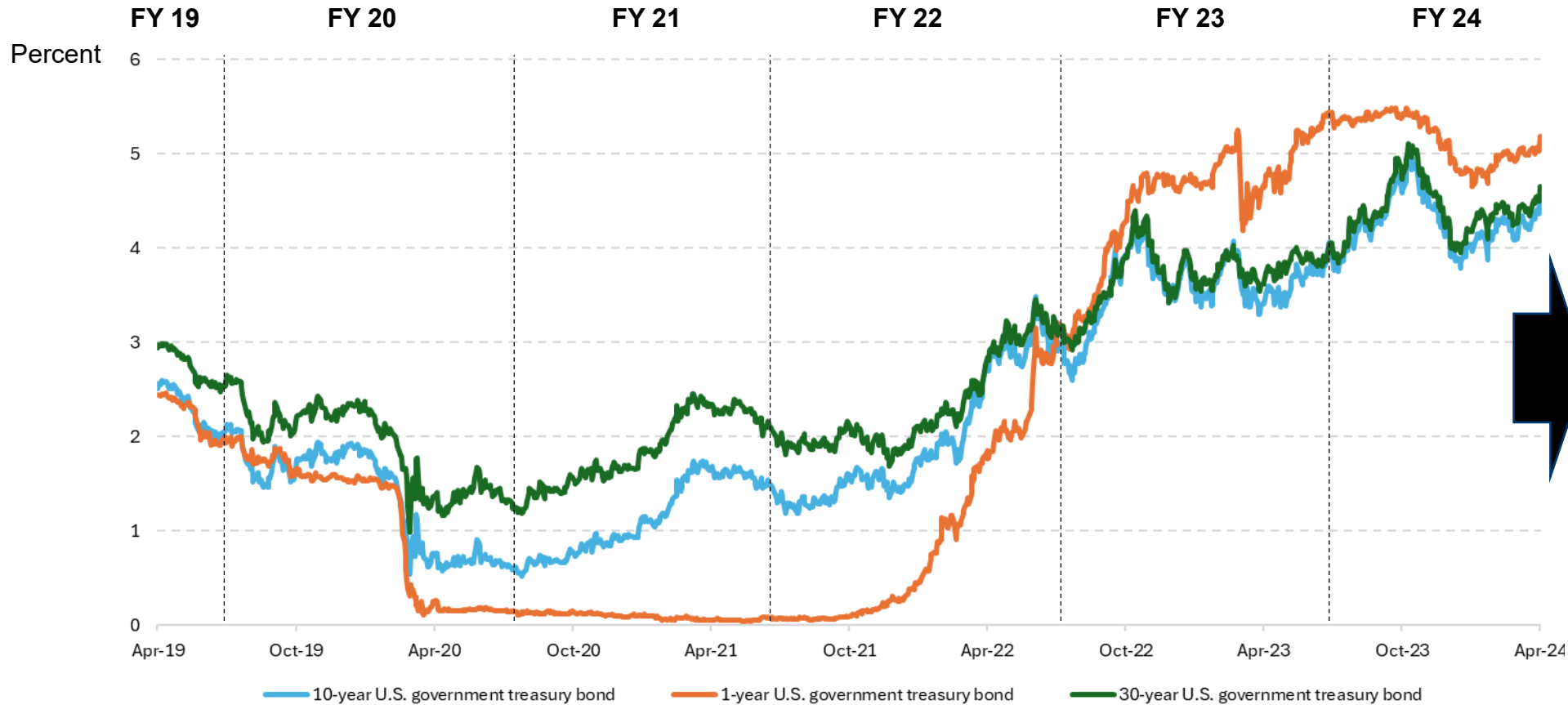
\$ in millions	FY 2024 Forecast	FY 2025 Budget	Dollar \$ Change FY24 - FY25
Customer revenues for use of system	\$4,030	\$4,329	\$299
Other revenues	119	95	(25)
Total revenues	\$4,149	\$4,423	\$274
Utility operation and maintenance expense	\$1,923	\$1,956	\$34
Debt service, net of rollforward and escrows	1,799	1,744	(55)
Capital market funds/PAYGO	198	325	127
Water Board and Water Authority admin. costs	109	124	14
Operations and maintenance expense true-ups	(24)	(14)	10
Rental payment	145	289	144
Total forecast expenses	\$4,149	\$4,423	\$274

Note 1: the proposed budget for FY 2025 will be presented at the Board's June 13, 2024 meeting
Source: rate financial model as of April 24, 2024

The proposed rate increase supports several high priority O&M and capital construction projects

- The Fiscal Year 2025 Executive Budget includes several priority capital construction budget additions and operation and maintenance program and expenditure additions
- Key budget initiatives are reflected in the rate proposal
- The **investments in infrastructure construction** and upgrades include the following programs and initiatives:
 - Hillview Reservoir water treatment improvements
 - Customer billing and water conservation technology investments, across the metering and transmission areas
 - Costs related to the final repair work on the Delaware Aqueduct water distribution
 - Stormwater management, including four in-City pump station upgrades
 - Aggregate incremental debt service to fund the programs of \$683 million during the 10-year forecast period
- Operation and maintenance increment of \$11 million to fund new initiatives in **stormwater resilience**

DEP's capital construction work is mostly financed by bonds – higher and more volatile market-wide rates increase budgetary risk and cost



- Through the NYC Municipal Water Finance Authority, DEP borrows most of the funding for capital projects by selling bonds in the debt capital markets
- The realized cost of debt capital increased significantly during FY23, with the higher borrowing costs persisting into FY24
- Benchmark Treasury rates in FY24 are about $\frac{3}{4}\%$ higher than during FY23 across the 1/10/30 year maturities
- Municipal borrowing indices show a similar interest rate trend

The interest rate savings available from refinancing old debt are currently lower than in earlier years, and rate volatility along with higher market interest rates has resulted in costs that are closer to forecast amounts than during earlier budget cycles

The proposed rate increase will help to maintain the water system's strong financial fundamentals that are evaluated by credit rating agencies

The City's water system issues debt in its own name and enjoys high credit ratings

	Moody's	S&P	Fitch
Senior debt	Aa1	AAA	AA+
Junior debt	Aa1	AA+	AA+

Credit ratings are supported by factors that include:

- Legal structure that balances strong bondholder protections while ensuring sufficient funds for operational and construction purposes
- Practice of pre-funding part of annual debt service costs for future fiscal years
- Required role for a consulting engineer and revenue consultant
- Quality of the City's administrative, technical, and financial management

Credit rating agencies are cautious, and monitor issuers for signs of positive or negative change

- Large balance of existing water and sewer debt – approximately \$33 billion
- Debt service coverage based on net revenues compared to debt service, and leverage ratios based on debt compared to revenues, are in line with similarly situated issuers
- Economic fundamentals such as City labor market health, private sector industry composition, tourist numbers, and property market dynamics all have bearing on how water and sewer bonds are rated

Update on customer affordability and collections strategy



A key DEP theme throughout 2023-2024 was balancing the goals of water bill affordability with a mandate to bill and collect from customers

Special affordability programs managed in partnership with NY State:

- DEP and the Board's partnership with NY State on the **Federal Low Income Household Water Assistance Program** resulted in **\$33 million** of customer benefits
- LIHWAP participants received another **\$8 million** of customer affordability benefits through DEP and the Board

Board-sponsored billing programs and affordability initiatives:

- The Board's new program for **affordable multi-family properties** has delivered **\$7.5 million** of affordability to 229 properties to date, with additional properties potentially eligible
- The **Multi-Family Water Assistance Program** will provide **\$12 million** of bill credits to customers this month to support to affordable rental properties in FY 2024
- The **Home Water Assistance Program** for small residential property owners will provide as much **\$14 million** of affordability benefits to customers this month
- In addition to affordability programs, DEP's customers saved than \$2.7 million through the **autopay enrollment incentive**, offered to customers enrolling in monthly electronic billing and signing up for automatic payments through the MyDEP account portal

DEP recommends reauthorization of the Board's >\$30 million customer program budget

	Proposed Annual Program Budget Reauthorization	Program Summary
Multi-Family Water Assistance Program (4-unit +)	\$12 million	MWAP program supports multifamily properties with long-term rental affordability agreements in place
Home Water Assistance Program (1-4 unit)	\$14 million	HWAP focuses on owner-occupied tax class one residential properties
Proposed Total Funding Reauthorization	\$26 million	The \$26 million core budget would allow the Board's bill credit portfolio to reach as many as 145,000 accounts
Leak Forgiveness Program	\$5 million	Program in line with current terms, 50% bill credit for self-reported leaks that are fixed

Note: budgeted funds available for the Leak Forgiveness Program are an estimate; program funding can be increased based on availability of a pool of qualifying program applicants

DEP is exploring pathways to more closely align the MCP rate with affordability and conservation goals

- The Multifamily Conservation Program (MCP) rate was introduced to provide billing certainty for affordable properties, while incentivizing conservation oriented building improvements
- As a result of evaluating approaches to take with buildings not in administrative compliance with the program terms, DEP and the Board identified an opportunity to prospectively better align the program with the affordability and conservation goals on which the rate is based
- While a review of evaluation of affordability enhancing modifications and alternatives to the MCP is undertaken, DEP is proposing that the Board continue to pause the surcharge for Fiscal Year 2025
- DEP plans to provide the Water Board with an update on affordability rates and the MCP in the fall, and will also be releasing the results of DEP's sustainable rate structure analysis later this year

Public hearings schedule and contact information for public testimony



Calendar of events leading up to the start of the next fiscal year

Event	Date	Location	Time
DEP rate proposal to Water Board	Friday May 3	NYC OMB 255 Greenwich St., 8th floor conf. room Manhattan	9:15 a.m.
Staten Island Public Hearing	Tuesday May 28	Bernikow JCC of Staten Island 1466 Manor Road, Staten Island	6:00 p.m.
Manhattan Public Hearing	Wednesday May 29	NYC OMB 255 Greenwich St., 8th floor conf. room Manhattan	2:00 p.m.
Queens Public Hearing	Wednesday May 29	JFK Jr. School 57-12 94th Street, Queens	6:00 p.m.
Bronx Public Hearing	Thursday May 30	Mercy University 1200 Waters Place, Bronx	6:00 p.m.
Brooklyn Public Hearing	Tuesday June 4	Saint Francis College 179 Livingston Street, 5th Floor, Brooklyn	6:00 p.m.
Water Board meets to vote on budget and final rate	Thursday June 13	NYC OMB 255 Greenwich St., 8th floor conf. room Manhattan	9:15 a.m.

Recap and thank you

- In-City proposed rate increase of 8.5% beginning July 1, 2024
- Public hearings are taking place throughout the boroughs between May 28 and June 4, followed by a **Board meeting and vote on June 13**
- Testimony, comments, or questions regarding the proposed rate, the hearings, and any prepared testimony, as well as requests to register to speak at the hearings, should be directed to:

NYC Water Board

Preferred contact methods:

nycwaterboard@dep.nyc.gov

718-595-3591 (weekdays between 9:00am - 5:00pm)

If by mail:

59-17 Junction Boulevard

8th Floor

Flushing, NY 11373

Questions?