

NEW YORK CITY WATER BOARD MEETING

Friday, May 3, 2024 - 9:15 A.M.

Location: 255 Greenwich Street
Eighth Floor, Room S1/S2
New York, New York 10007

AGENDA

1. Roll Call
2. Resolution: Vote on Approval of Minutes of February 7, 2024 Meeting
3. Presentation: Department of Environmental Protection: Agency Update and Proposed Approach to Water and Wastewater Charges to Take Effect July 1, 2024
4. Any Other Board Business or Topics for Discussion

**MINUTES OF THE MEETING OF THE
NEW YORK CITY WATER BOARD**

February 7, 2024

A meeting of the New York City Water Board (the “Board”) was held on Wednesday February 7, 2024 at 255 Greenwich Street, Manhattan, New York in the 8th floor conference room, beginning at approximately 9:15 a.m. The following members of the Board attended the meeting:

Alfonso Carney,

Evelyn Fernandez-Ketcham,

Adam Freed,

Jonathan Goldin,

Arlene Shaw, and

Daniel Zarrilli

constituting a quorum. Alfonso Carney chaired the meeting, Albert Rodriguez served as Secretary of the meeting, joined by Board officers Executive Director Joseph Murin and Treasurer Omar Nazem.

Approval of the Minutes

The first item on the agenda was approval of the minutes of the Board’s previous meeting held on December 8, 2023. Upon motion duly made and seconded, the minutes of the meeting held on December 8, 2023 were put to the members for a vote. The members in attendance unanimously approved the minutes by a voice vote.

Proposed Real Property Transaction Involving Land in Kent, New York and the Seven Hills Lake Dam

Chairman Carney introduced the Board’s agenda item, involving a City landholding in Kent, New York. P.J. Sagar from the Bureau of Legal Affairs at the City’s Department of Environmental Protection (DEP), and Thomas Boland from DEP’s Bureau of Water Supply led DEP’s presentation. Mr. Sagar described DEP’s proposed transaction, involving 1.24 acres of land in Kent, New York. A section of an existing dam, known as the Seven Hills Lake Dam, is located on part of the landholding. The transaction involves conveying the

land along with \$1.284 million of cash to a local homeowners association that would take full ownership and full responsibility for the dam after the closing of the transaction, with DEP's fractional interest in the dam transferred along with the landholding. The proposed transaction involves land that is adjacent to other DEP landholdings which would remain accessible to DEP after conveying the 1.24 acres to the homeowners group and, since the Seven Hills Lake is not part of the City's water supply, transferring the land to the homeowners would not affect the City's water supply and the parcel would be subject to New York State Departmental of Conservation easement restrictions preventing the construction of improvements on the landholding after the transaction closes.

Member Freed asked if any DEP water supply assets are located downstream from Seven Hills Lake. Mr. Sagar and Mr. Boland jointly explained that the Boyds Corner Reservoir is located downstream from Seven Hills Lake, and that Boyds Corner Reservoir in turn flows into the West Branch Reservoir. Upon further inquiry by Mr. Freed, Mr. Boland explained that a failure of the Seven Hills Lake Dam would not have a material impact on the City's water supply, apart from a temporary increase in water turbidity, and that Boyds Corner Reservoir does not provide a large part of the City's water supply.

In response to a question by Chairman Carney, Mr. Sagar explained that the dam requires improvements in order to weather a one-hundred year storm, with the improvements including expansion of the dam's spillway capacity and elevating the dam's height by approximately two feet. Mr. Sagar further noted that by transferring the landholding, the City would also transfer full ownership of the dam to the homeowners, along with responsibility for maintaining and upgrading the dam, while relieving the City of its financial liabilities for the Seven Hills Dam after providing the homeowners group with the \$1.284 million cash payment at closing toward improvement of the dam. In response to a request from Mr. Carney for further explanation of the rationale for providing a cash payment, in addition to the transfer to the homeowners of the 1.24 acre landholding, Mr. Boland explained that providing a cash payment would cap the City's financial liability for the dam, while providing the homeowners with the financial means to independently arrange for the dam improvements. Mr. Carney inquired about the scope of the City's future liability that might arise from its status as a former dam owner. Mr. Sagar answered that the City's Law Department had analyzed the question, and

determined that the City as a former dam owner would not be liable for the dam after transferring ownership to the homeowners while the City currently, as a fractional dam owner, is jointly liable for the cost of maintaining and improving the dam. After providing an explanation of the different cost estimates for performing the work, Mr. Sagar responding to a question from Member Zarrilli, explaining that the various cost estimates were based on the assumption that the cost structure assumed the homeowners would contract for the repairs, and that the City's own cost structure would likely be higher than the homeowners, were the City to perform the repairs.

Mr. Sagar proceeded to provide the Board with an overview of the requirements of dam owners under the New York State Environmental Conservation Law that would be applicable to the City were it to retain its fractional ownership interest in the dam. The Environmental Conservation Law's requirements are extensive, and would require the City to incur significant costs.

Mr. Goldin asked if DEP had an estimate of the appraised value of the 1.24 acre landholding. Mr. Sagar explained that since the landholding is subject to conservation easements that restrict future development on the land, the marketability of the property would be limited since improving the land would be difficult due to the conservation easement and a prospective buyer would be financially liable for ongoing maintenance of the dam. Mr. Sagar proceeded to further describe the conservation easement restriction that would remain with the landholding, noting that in addition to restricting development on the landholding the easement also included a general prohibition against using the land in a way that would diminish the quality of or would otherwise interfere with the City's water supply protection, and that the easement also includes a list of construction activities and types of land use that are expressly prohibited on the land, in addition to a restrictive covenant included in the deed of transfer that would further preclude use of the land in a manner that could harm the City's water supply assets.

Member Shaw requested further information about the financial soundness of the homeowners association and its ability to maintain the dam in the future. Mr. Sagar and Mr. Boland described the homeowners association as including approximately one-hundred homes and that the homeowners had a history of securing the funding to make improvements and repairs to the lake when required.

Mr. Zarrilli then asked a two-part question, in the first part requesting information about the criteria

for when real property transactions are presented to the Water Board and, second, if there were other dams in the area of City landholdings that the Board might be asked to look at in the future. Mr. Sagar and Mr. Boland stated that DEP does own other dams, usually acquired through DEP's land acquisition program, that are not directly connected to the water supply system but that are in the watershed area, and that when these dams require improvements or structural changes, DEP is able to find an appropriate solution, a process that is simplified in most cases when DEP is the sole dam owner, and since there are not many similar City real property transactions involving dams that the Board may be asked to look at in the future. With respect to the Board's role in reviewing real property transactions, Mr. Rodriguez described real property transactions from the Board's perspective as principally governed by the Board's lease agreement with the City, that permits the City to transact water and sewer system property, provided that the Board's consent is obtained, and that the water system's consulting engineer issues a determination that the transfer of the property would not negatively impact the system's operation or finances. Executive Director Murin further explained that the City retains title to the water and sewer system assets, and that the Board is tasked with establishing the reasonableness of the City's proposed real property transactions.

Upon motion duly made and seconded, a resolution was put to the members for a vote. The members in attendance unanimously approved the resolution by a voice vote.

RESOLUTION

WHEREAS, pursuant to the New York City Watershed Memorandum of Agreement dated January 21, 1997 (the "MOA"), the City of New York (the "City"), acting by and through the New York City Department of Environmental Protection ("DEP"), is engaged in programs within the New York City Watershed communities to ensure an adequate supply of clean and healthful drinking water to millions of New York City residents, as well as to several other regions in New York State; and

WHEREAS, the City and 7 Hills Lake Property Owners, Inc. ("Seven Hills") have been engaged in discussions to reduce the burdens of shared ownership and shared maintenance responsibilities of the Seven Hills Lake Dam (the "Dam");

and

WHEREAS, significant repairs and improvements are currently necessary to maintain the Dam's safety, the total cost of which is expected to be in the range of \$1,063,000 to \$1,617,000; and

WHEREAS, the City desires to transfer potential liabilities related to owning the Dam, for reasons that include the Dam's role impounding a water body that is not part of the City's water supply system, as well as the presence of land conservation protections, as described below, that will remain with the land in the absence of City ownership; and

WHEREAS, Seven Hills understands that the proposed conveyance will be subject to all terms of the Conservation Easement NYC-MOA 141W002632 ("Conservation Easement"), which shall run with the land, to ensure that it is held in perpetuity in an undeveloped state to protect the New York City Watershed and the New York City drinking water supply; and

WHEREAS, the City has provided DEC with the requisite notice related to the Conservation Easement, and DEC has not exercised its option to purchase the landholding; and

WHEREAS, New York City Administrative Code §4-106(9) authorizes the conveyance of real property for a public purpose over water supply lands, and DEP certifies that the proposed conveyance will not endanger or injure the water supply structures or other property of the City, nor interfere with the use and operation of City assets for water supply or sanitary protection purposes; and

WHEREAS, by letter dated February 5, 2024, the Board has received certification from Eileen Proffitt, P.E. of AECOM USA, Inc., and William Pfrang, P.E., of Macan Deve Engineers, Co-Consulting Engineers to the Board, that it has evaluated the above dispositions and has confirmed that such transfers and grants would have no impact on the operation of the System, the collection of revenues of the System, or the ability of the Board to make any payments required under the Lease; it is therefore

RESOLVED, that, pursuant to Sections 11.1(d)(i) and 11.1(d)(ii) of the Lease, the Board hereby consents to the property dispositions by conveyance deed in the form approved by the New York City Law Department; and be it further

RESOLVED, that the officers of the Board are, and each of them hereby is authorized and empowered, in the name and on behalf of the Board, to grant such consent and to take such other and further actions as the officers or any officer deems necessary or appropriate to effectuate the foregoing resolution.

Member Freed requested that the members receive a briefing on the Board's authorities. Executive Murin agreed that Board staff would provide the members with a briefing on the Board's authorities, and would make sure that the Water Authority and Law Department provide feedback and comments on the briefing materials to ensure alignment on the presentation.

Adjournment

There being no further business to come before the Board, upon motion duly made and seconded, the meeting was adjourned.

/S/
SECRETARY

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

May 3, 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.

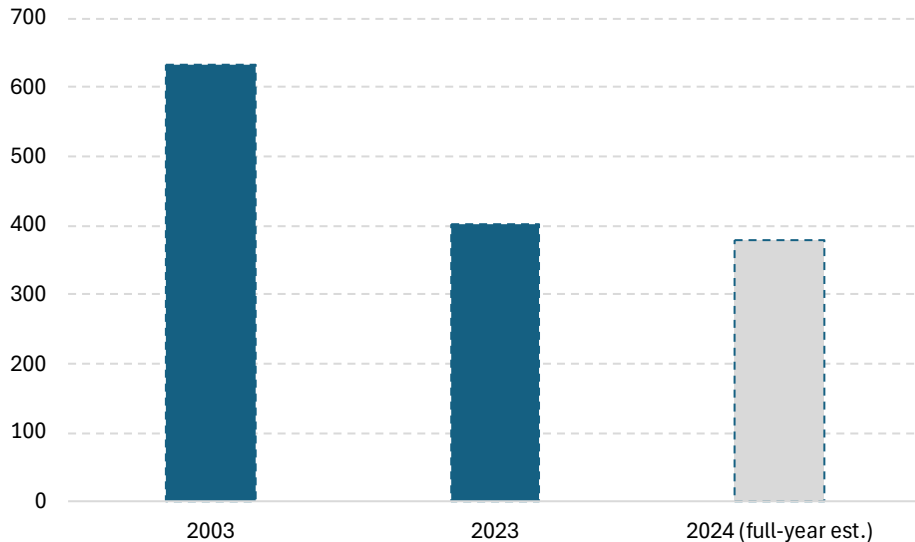
The following tables reflect the compliance monitoring results for all regulated and non-regulated parameters, the number of samples collected, the range of values detected, the average of the values detected, and the

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

The City's innovative bluebelt strategy for managing stormwater and flooding reached a new milestone, with completion of the \$110 million New Creek project in Staten Island



- DEP's bluebelt program is an innovative approach to managing stormwater and flooding throughout Staten Island, where more than 75 different bluebelt projects are part of the wastewater system's design
- The New Creek bluebelt covers a 94 acre section of Staten Island, that drains a watershed area within the borough of 2,249 acres
- Construction of the project was a positive example of governmental cooperation, with funding jointly provided by DEP, the City's Department of Transportation, and the U.S. Department of Housing and Urban Development, with project management assistance from the City's Department of Design and Construction

- Bluebelts serve different purposes, including capturing and retaining stormwater, managing water levels in existing waterbodies, and providing a habitat for vegetation and wildlife



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 and 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 be releasing a report on its findings this month

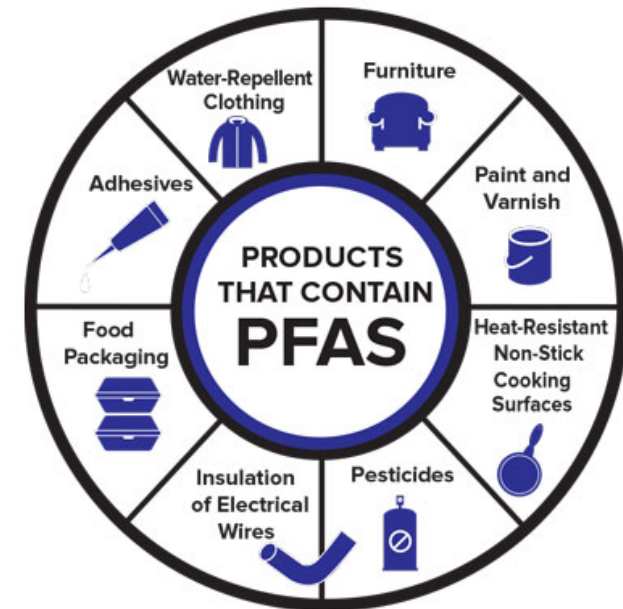


DEP's in-house scientists, technicians, and professionals are working to ensure the agency remains in compliance with emerging areas of regulatory focus

- Ensuring the quality of the drinking water distributed through the City's water supply system requires a coordinated effort by large cross-functional teams, which include important partners from governmental regulators
- **The Water Board** assisted DEP in selecting and retaining a technical advisor, authorizing funding at its October 11, 2023 meeting, and leading to the selection of a national civil engineering firm that commenced work on advisory work with DEP last month
- New York State and the U.S. EPA are both placing greater emphasis on a category of substances that are sometimes detectable in municipal water supplies, with the EPA on April 10 finalizing the federal rule stating the maximum acceptable level of five different PFAS compounds as well as establishing guidelines for mixtures including several additional compounds
- The substances are known as perfluoroalkyl and polyfluoroalkyl substances, referred to together as PFAS compounds
- PFAS was widely used for many decades in a wide range of consumer goods and household products for its antistick and water resistant properties, and was also used for firefighting purposes

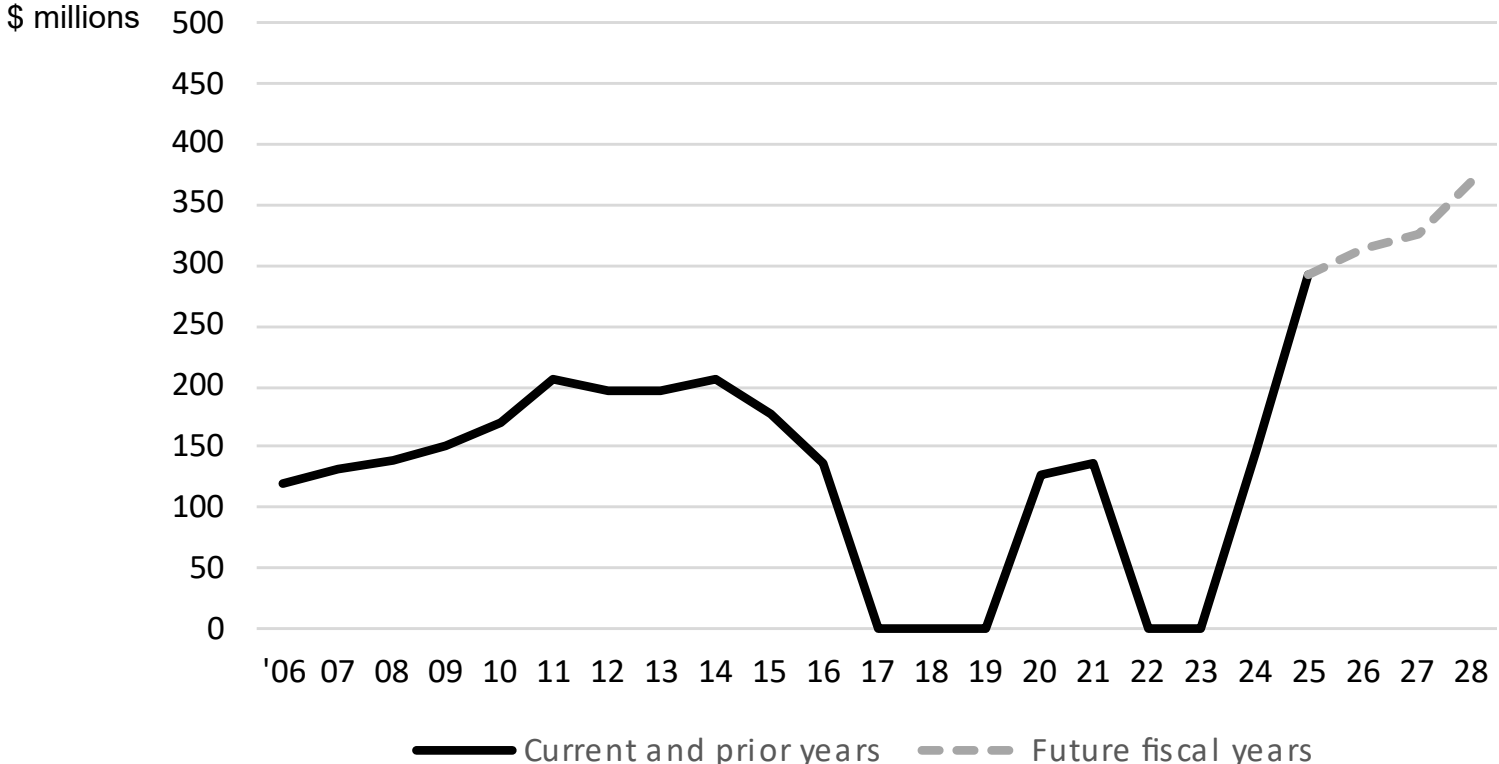


PFAS Strategic Roadmap:
EPA's Commitments to Action
2021–2024



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

Rental payment requests by the City – historical and projected



- The lease between the City and the Water Board includes the payment to the City of an annual rental payment, at the request of the City, which the City historically requested in most rate years
- The City's 2024 budget publications indicate the intent to request a 50% rental in FY24 (\$145M) and a full rental in FY25 (\$289 million)
- Projections also include anticipated annual rental payment requests for Fiscal Years 2026 - 2028

2024 is a year of significant institutional changes for DEP, and the agency is taking positive steps toward achieving its hiring goals

Organization and Management

The agency has made a number of key additions to the senior management organization changes during 2024 to-date:

- **Kathryn Mallon** joined as the agency's new Chief Operating Officer, having previously played a leadership role in DEP's engineering and design bureau
- The Office of the Chief Financial Officer hired a new Deputy Commissioner, **Patricia Lyons**, to oversee DEP's budgeting and OMB relationship
- **Laurian Farrell** joined as the DC of the newly-formed Bureau of Coastal Resiliency
- The Bureau of Environmental Compliance hired **Julie Lubin** as its new Deputy Commissioner

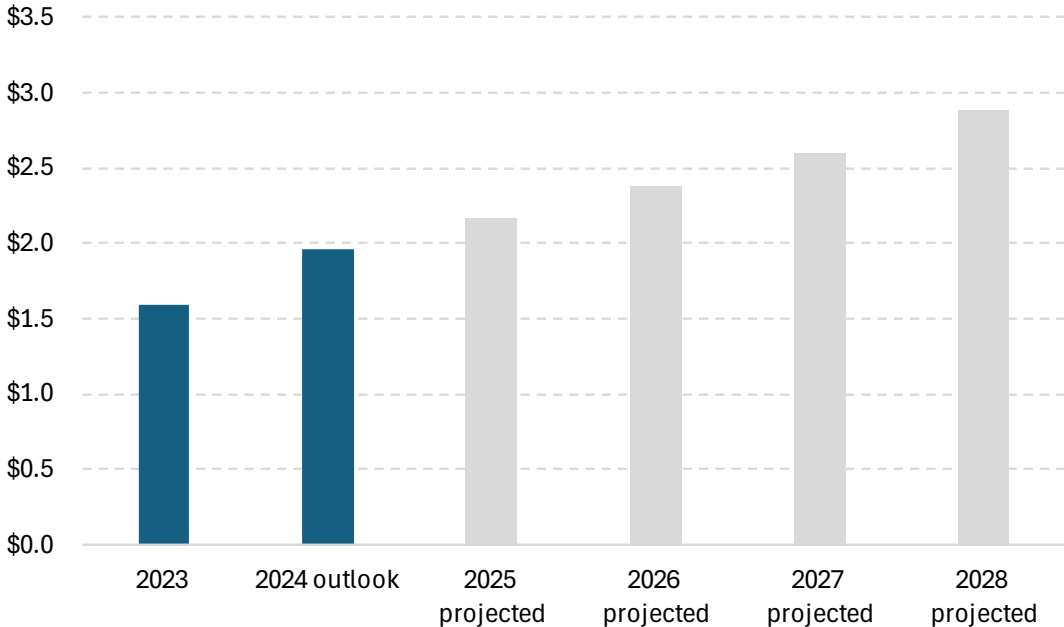
Staffing

- Agency headcount is now above 5,600 personnel, bringing the agency's net vacancy rate to 10%, an improvement from the 12% vacancy rate one year earlier
- Unfilled vacancies remain a challenge that the agency is working to address, through streamlined hiring processes and proactive hiring outreach, including working with OMB on pre-approved batch hiring initiatives

Construction work is 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)

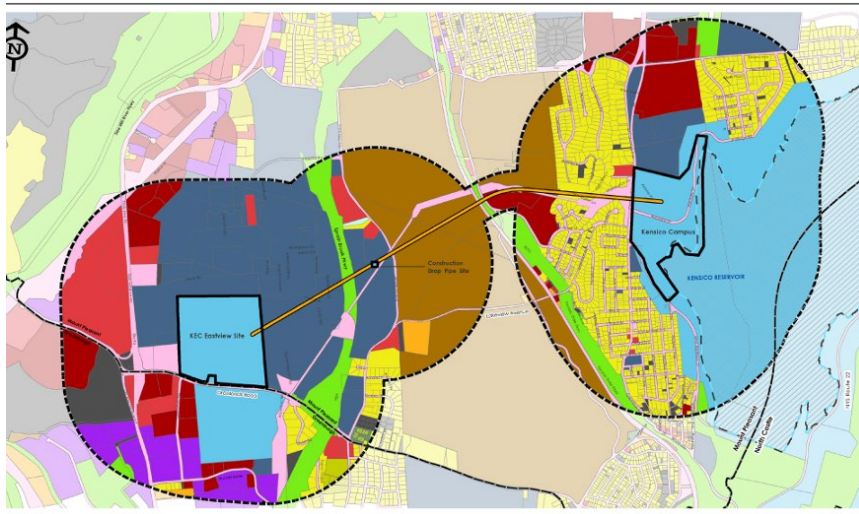


The agency achieved 103% of its capital contracting goal in FY 2023, committing \$2.4 billion to new contracts

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

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

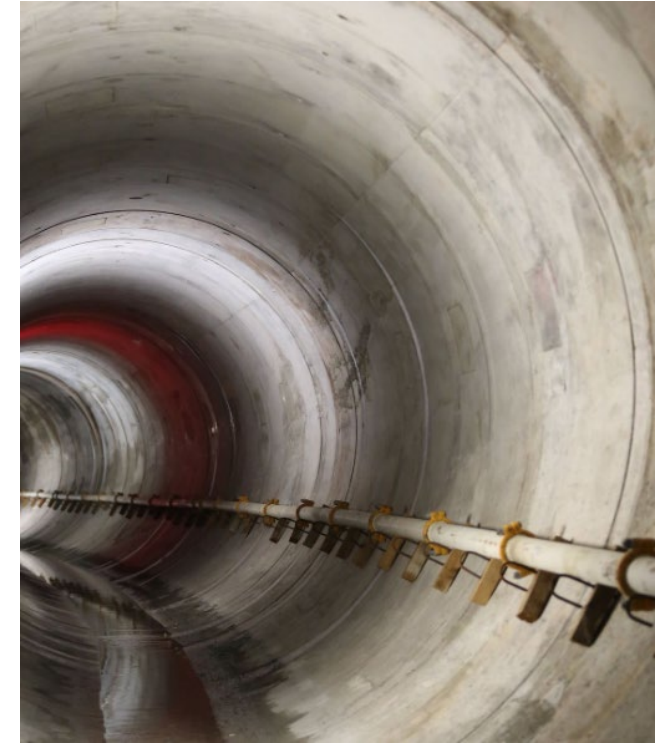
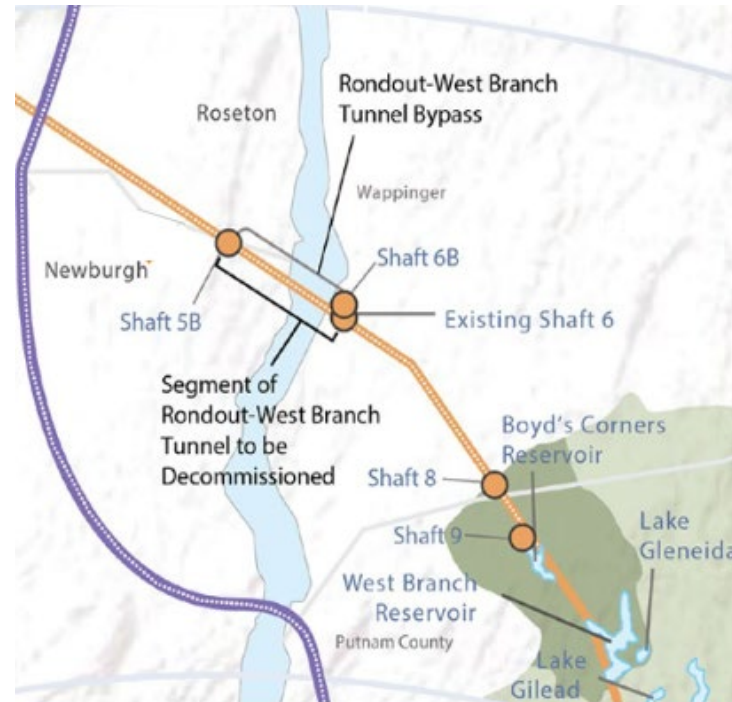
- The Kensico-Eastview Connection project centers around the construction of a new water tunnel between Kensico Reservoir and DEP's existing water treatment facility in Westchester County
- Kensico Reservoir and the water treatment plant work along with sections of the Catskill and Delaware Aqueducts 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

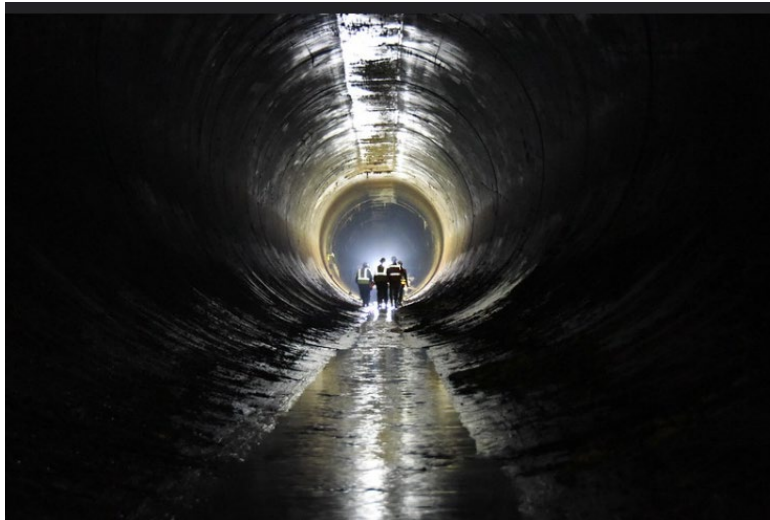
Work on the Rondout-West Branch Bypass Tunnel is complete, and preparatory work for the Delaware Aqueduct repair is underway for a temporary repair shutdown later this year

- 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 \$94 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

DEP is standing by a nearly \$2 billion commitment to address flooding in the Gowanus Canal area, with the project already underway

- Addressing combined sewer overflows in the Gowanus Canal area due to old drainage infrastructure is a longstanding DEP priority
- Following an extensive planning and public comment process, groundbreaking at the project site took place in early 2023, followed by initial construction of the first of the underground sections of the project in September 2023, involving construction of an underground concrete wall to support soil removal
- With design work on the two retention tanks substantially complete, DEP is working with outside vendor firms to arrange for the excavation and the foundation laying of each of the two tanks
- Besides creating storage for combined sewage and rainwaters, the project will create 3.6 million acres of new public space in the community



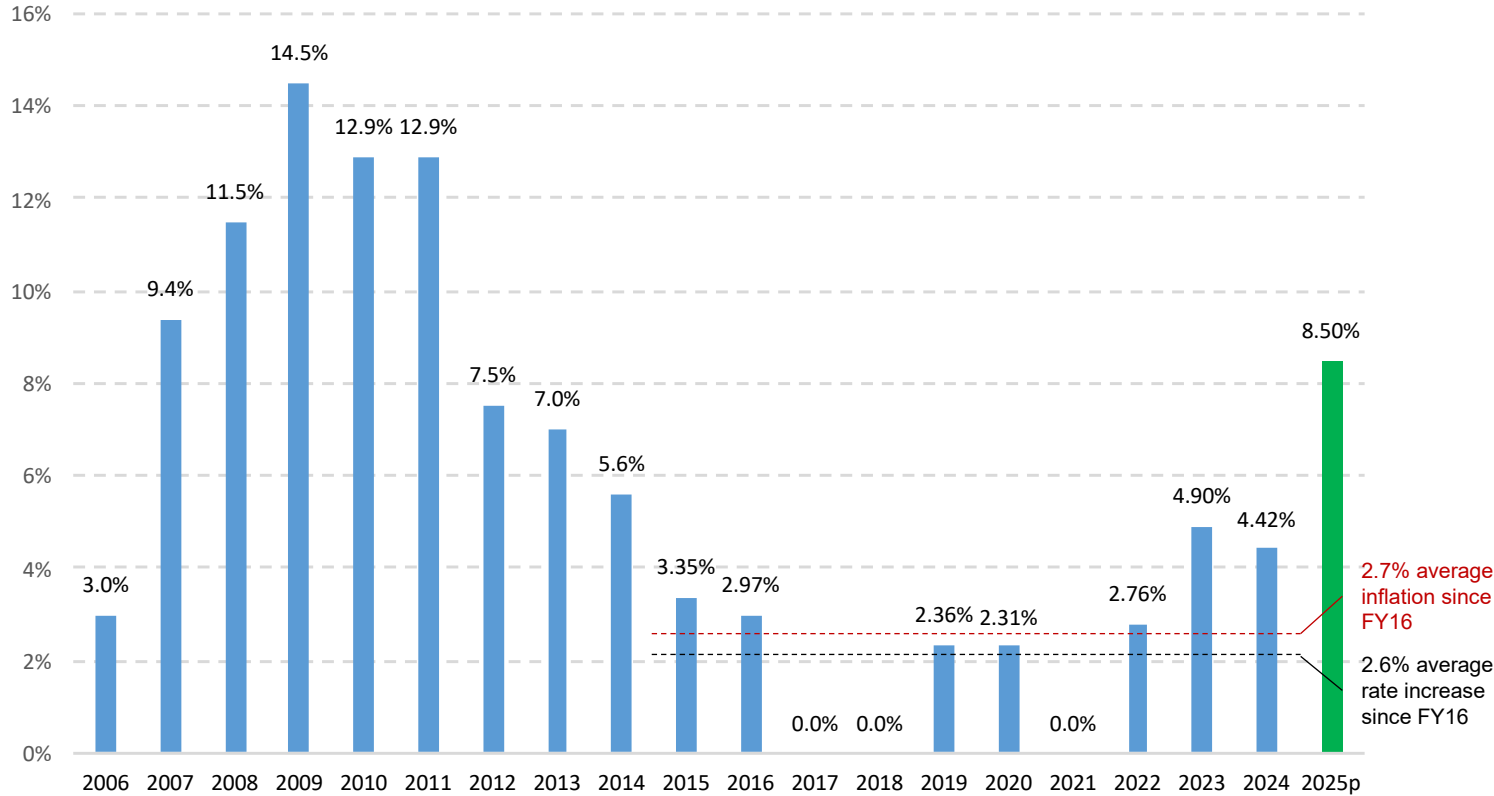
Rate proposal and financial update



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

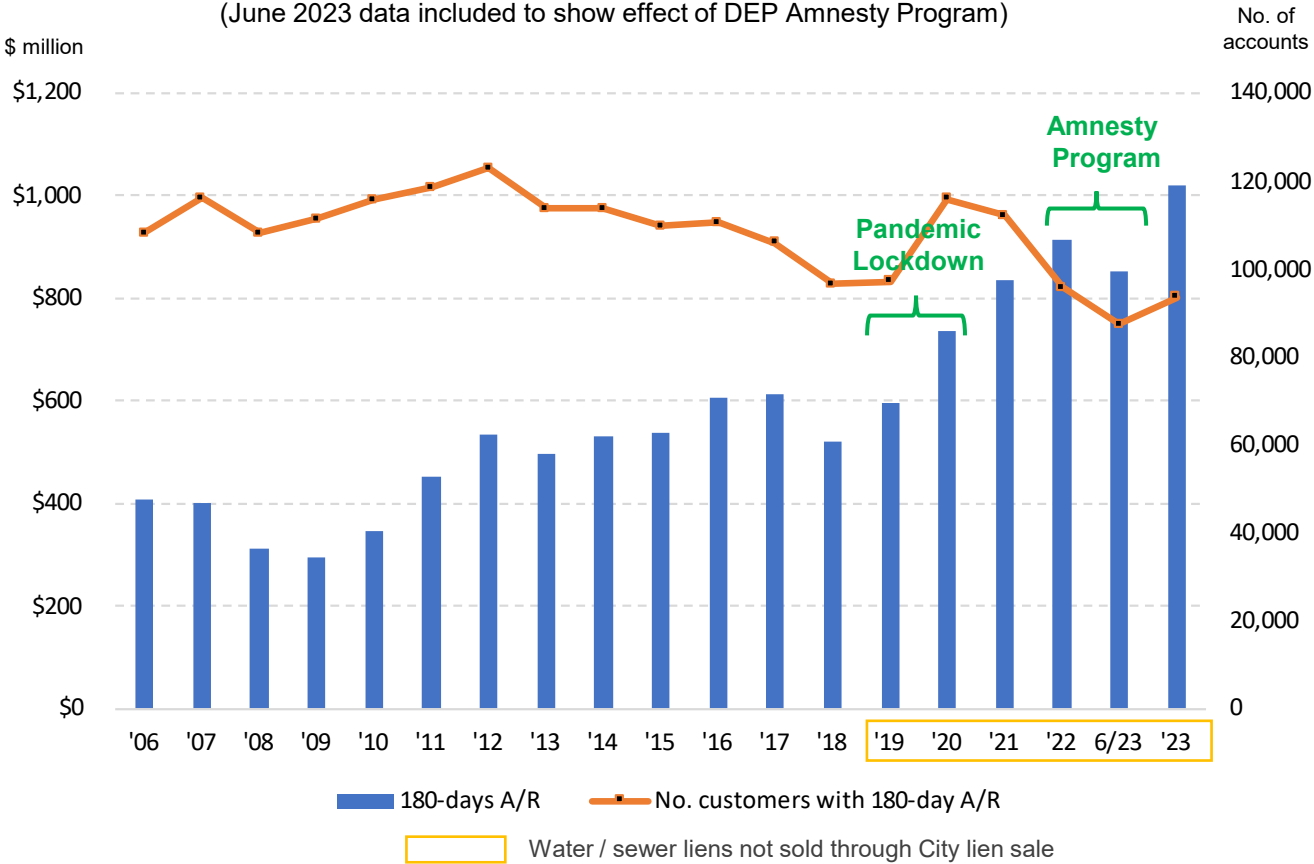
Historical NYC Water and Wastewater Rate Increases



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 April, revenues were \$3.52 billion, 2% more than FY23, but -1% below projections for this year

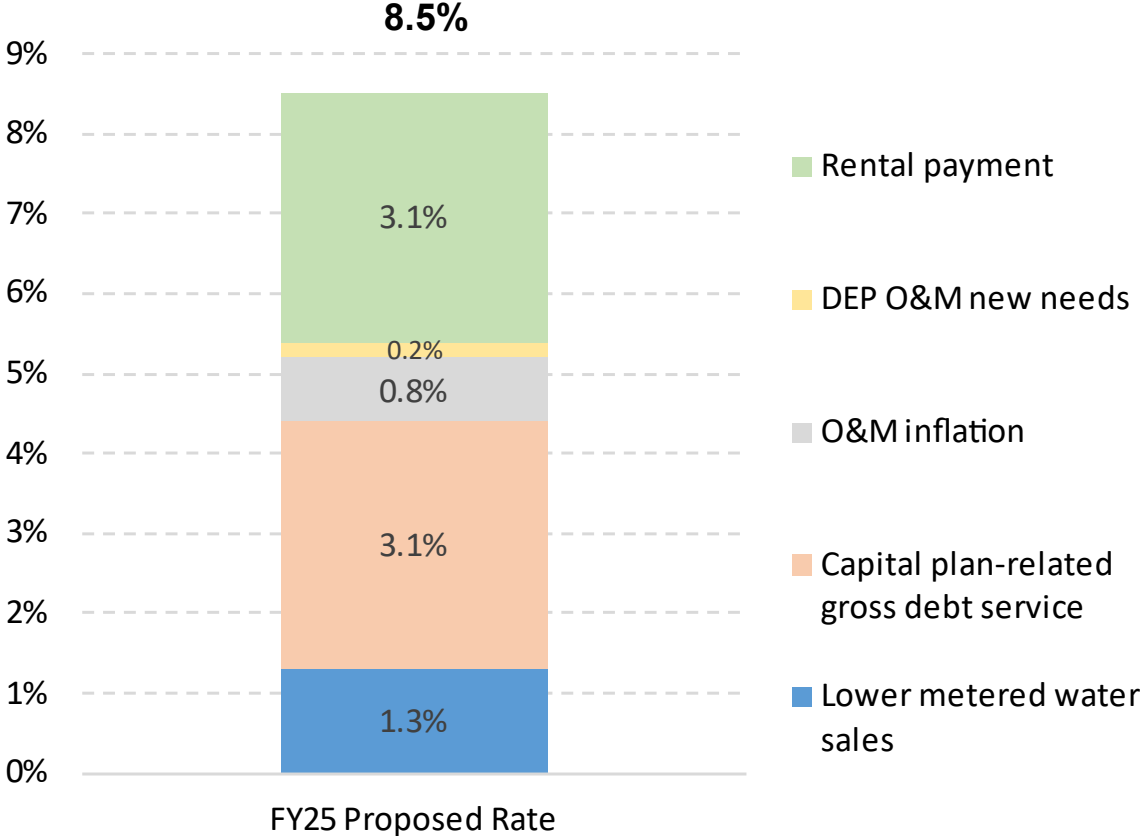
While recent City tax lien sales did not include water and sewer receivables, the next cycle of reauthorization of lien sale legislation may include water and sewer bills

- 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
- 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 in FY24 and FY25
- 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)



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

Rental payments for FY24 - FY25 are an incremental \$434 million cash cost

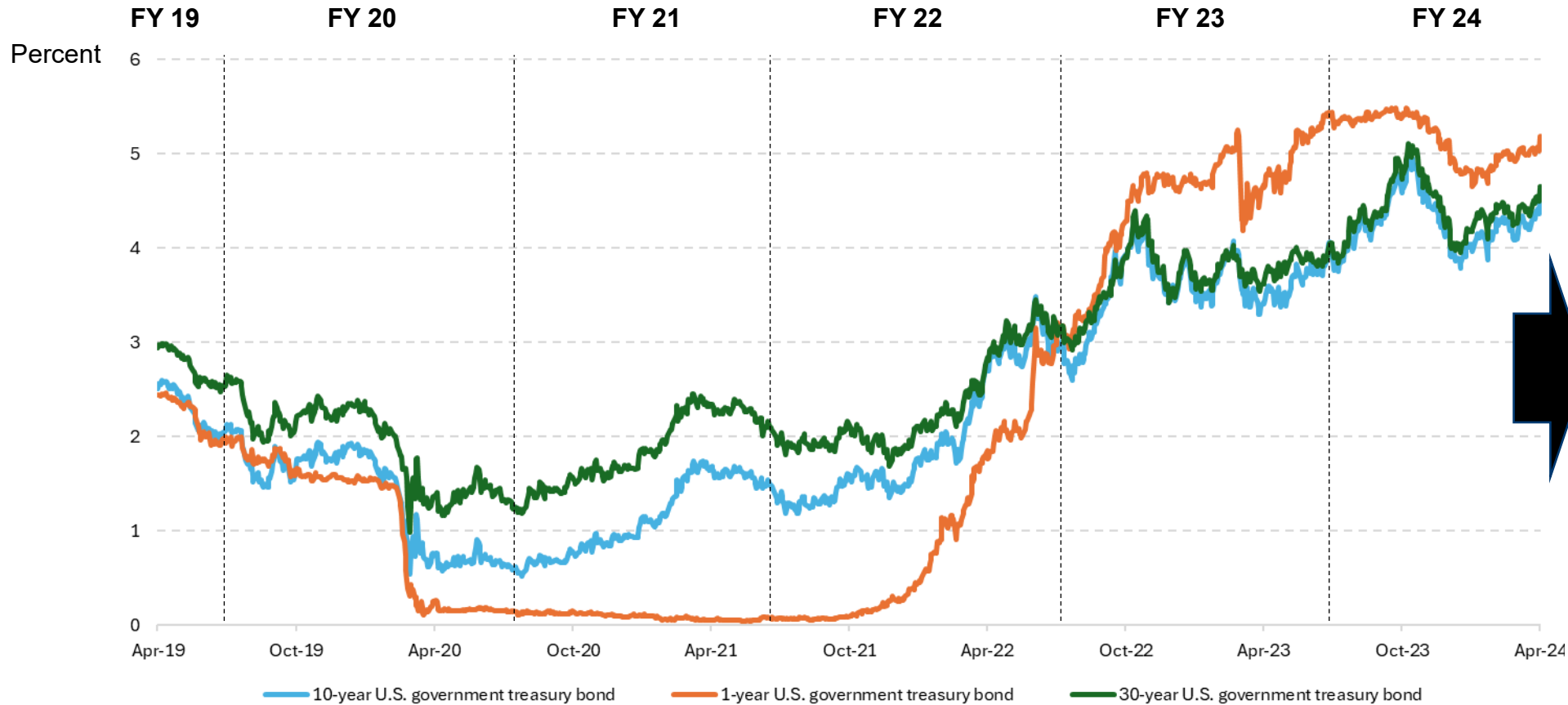


Note 1: the proposed budget for FY 2025 will be presented at the Board's June 13, 2024 meeting
Source: rate financial model as of April 24, 2024

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 borrowing 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

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:

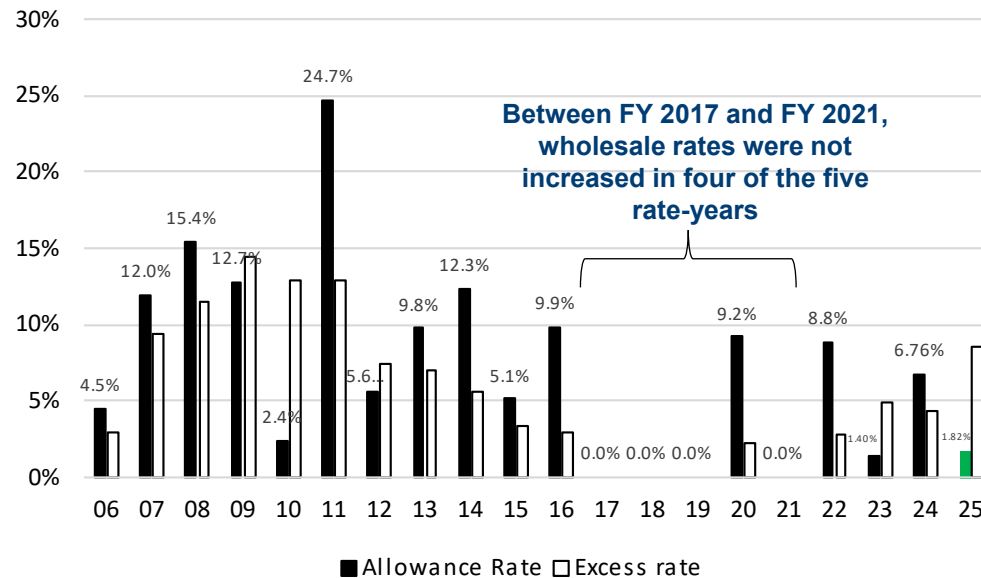
- Legal structure that balances bondholder protections with ensuring sufficient funds for operational and construction purposes
- Practice of pre-funding part of annual debt service costs for future fiscal years
- Required role for a consulting engineer and revenue consultant
- Quality of the City's 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 ratios comparing debt to revenues, or comparing revenues to principal and interest, need to conform to rating agency requirements
- 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

DEP recommends that the Board also increase water rates for wholesale customers in Fiscal Year 2025

- In addition to supplying water to the City’s residents, DEP supplies water to the water utilities that serve another one million residents who live north of the City, mainly in Westchester County
- Proposed allowance quantity **rate increase of up to 1.82%** for wholesale customers north of NYC
- A typical end consumer’s water bill would increase by \$0.25/month, or \$3/year, due to the City’s wholesale price increase
- Recommended rate increase of 8.5% for water above the allowance quantity (in-City rate increase)



- Wholesale rates are calculated using a different method than in-City rates
- The wholesale rates are a water-only rate and do not include certain-in-City costs
- The rates also include a smoothing calculation designed to true-up cost recoveries from previous rate years
- There are usually few, or no, delinquent wholesale customers

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.
Upstate Rate Public Hearing in Valhalla, Westchester	Wednesday June 5	NYC DEP 465 Columbus Avenue, Valhalla, NY	11:00 a.m.
Water Board meets to vote on budget and final rate	Thursday June 13	Manhattan, location to be confirmed	9:15 a.m.

Recap and thank you

- In-City proposed rate increase of 8.5% beginning July 1, 2024
- Wholesale proposed allowance rate increase of 1.82%
- Public hearings will take place throughout the boroughs following the traditional in-person hearing format between May 28 and June 4, followed by a **Board meeting and vote on June 13**
- Westchester County hearing on Upstate rates scheduled for June 5
- 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?

The Real Deal

The Daily Dirt: City cracks down on \$1.3B in unpaid water bills

Without a lien sale, the DEP is getting creative

MAR 21, 2024, 7:30 AM

By Kathryn Brenzel

<https://therealdeal.com/new-york/2024/03/21/dep-cracks-down-on-nyc-water-bill-debt/>

The city is owed \$1.3 billion in unpaid water bills.

The Department of Environmental Protection is going after “chronically delinquent” accounts that together owe \$102 million. Those 2,400 accounts have not paid for the equivalent of 6 billion gallons of water, according to the agency.

DEP told these building owners that they have 15 days to either pay off their entire bills or enter a payment plan with the city. Otherwise, their water could be shut off.

“This is a push on all fronts to bring this unpaid money back into the system,” DEP Commissioner Rohit Aggarwala told me on Wednesday.



The properties include single-family homes, office buildings and hotels. For example, Hotel Hayden owes \$372,026; Dexter House, \$330,581; and the Draper New York, \$307,609, according to the DEP.

For indebted multifamily rental properties, the city doesn’t shut off water, but it is planning to initiate lawsuits.

Aggarwala said the lack of a tax lien sale in the city has forced the agency to take a more aggressive approach to collecting on water service debts. When the sale was in place, the city could sell such debt (along with overdue property taxes) to an investment trust, which would then charge hefty interest. If the trust could not collect the balance, it could move to foreclose and take the property.

The last lien sale was held in December 2021. The City Council has yet to revive it.

The pandemic drove up the volume of overdue taxes, but there is also a feeling that many are simply taking advantage of the system. Aggarwala cited an example of a homeowner who failed to pay water bills but managed to install a swimming pool.

Last year, the city recouped \$105 million through an amnesty program that reduced owners' bills and forgave \$22 million in interest. Aggarwala said the program helped temper rate increases last year.

Why should the real estate industry care about this? Well, higher delinquencies means higher water rates for everyone.

“We still need to raise the same amount of cash,” Aggarwala said. “If we are easy on the deadbeats, that means everybody else’s rates are going to go up.”

Send a note to kathryn@therealdeal.com.

New York 1

Buildings with overdue payments in hot water with city

By Erica Brosnan New York City

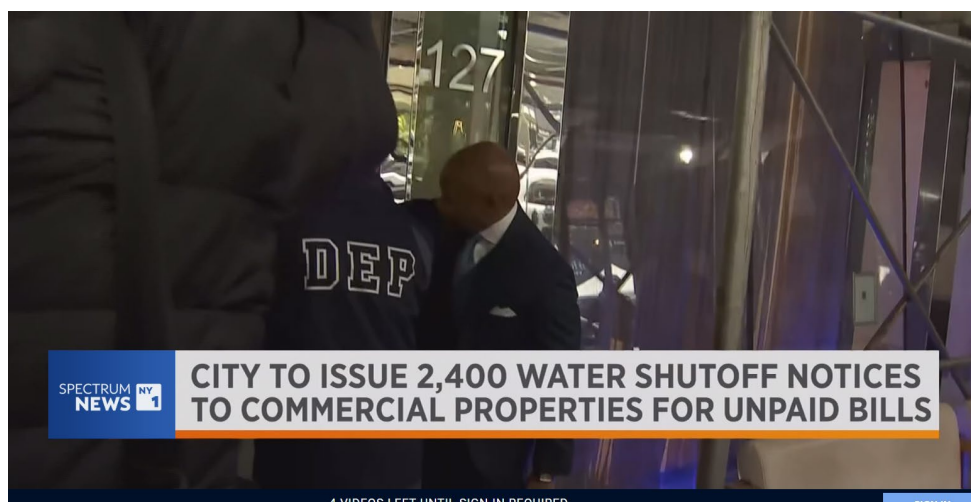
PUBLISHED 9:12 AM ET Mar. 21, 2024

Article: <https://ny1.com/nyc/all-boroughs/news/2024/03/21/buildings-with-overdue-payments-in-hot-water-with-city>

Video clip: <https://mms.tveyes.com/PlaybackPortal.aspx?SavedEditID=85626675-d837-4118-b67c-b3dce230e542>

City officials say thousands of properties are in danger of having their water service shut off because of persistent delinquencies in water bill payments.

The 2,400 properties — predominantly commercial ones such as hotels — that the city is targeting owe about \$102 million, officials said.



Commissioner Rohit Aggarwala of the city's Department of Environmental Protection, who joined "Mornings On 1" Thursday, said this is the first time in more than a decade that the city has threatened to shut off water.

"The last time that DEP undertook water shutoffs was actually 2009. And we just restarted them a year ago under Mayor Adams," he said. "In the intervening period, the main way that DEP went after people who weren't paying their bills was to put lien sales on their property. But our authorization to do lien sales has expired, and the City Council has not renewed it for several years. So, it left us in a position last year of having to start these other approaches."

Aggarwala said there had been a reluctance in resorting to shutoffs, but the debt has risen too high.

"The city's mission is to serve the public and our mission at the DEP is to provide great drinking water to people. So we don't like to shut the water off. We want to provide water. This is absolutely a last resort," he said. "But over the pandemic, our total accounts receivable — the money that is owed to us that people are late on — has doubled between now and before the pandemic. It's now actually a total of \$1.3 billion that we are owed on unpaid water bills."

At a news conference Wednesday, Mayor Eric Adams says that unpaid bills will force other New Yorkers to pick up the tab.

"When you don't pay your bill, low-income New Yorkers have to pick up the tab. That is why we don't want to increase water rates in the city. We want to keep it affordable. A penny a gallon. You can pay a penny a gallon. Pay your bill, if not, we will shut off your water," Adams said.

Water services will be restored upon payment of the entire owed amount or initiation of a payment agreement within the next 15 days, he said.

New York Times

The Hotel That Owed Over \$300,000 in Water Bills

The Hotel Hayden in Chelsea tops the list of 2,400 New York addresses where owners are chronically delinquent on water charges.

By James Barron

<https://www.nytimes.com/2024/03/21/nyregion/hotel-unpaid-water-bills.html?searchResultPosition=1>

The Hotel Hayden promotes itself as “a buzz-worthy boutique for trendsetters, stylists and sophisticates.”

City officials found it buzz-worthy for something different — its large unpaid water bill.

The city said the hotel owed \$372,026, the largest overdue balance among 2,400 chronically delinquent accounts — and enough for Mayor Eric Adams to stop by on Wednesday. He put a water shut-off notice on the hotel's front door on West 28th Street as the city moved to collect a total of more than \$102 million from tardy owners.



The city says that the bill scofflaws have used six billion gallons without paying. That's enough water to satisfy the city's thirst for four full days, as well as its needs for teeth brushing, showering and toilet flushing.

Looked at another way, the daily average for water use is about 191 gallons for a single-family home and 142 gallons per unit for a multifamily one. The city charges \$11.63 for every 100 cubic feet of water (748 gallons), which includes a charge for wastewater services. That works out to about a penny a gallon.

In January, the city said that nearly one in four water customers was behind. Water shut-off warning letters, sent last month to 2,400 overdue accounts, brought in more than \$3 million.

Still, Mayor Adams said on Wednesday, "A small percentage of customers incorrectly made the mistake of thinking they could get away with stiffing their fellow New Yorkers." He said the city was willing to work with them "one last time" before shutting off their water.

In trying to collect the overdue bills, the city said it had put an emphasis on commercial properties like hotels, office buildings and retail spaces, even though officials said in January that roughly 85 percent of the unpaid bills were from residential properties. The city said the owners of the delinquent commercial properties had not responded to communications from the Environmental Protection Department, which runs the city's water system. Nor had the owners of one-to-three-family homes.

Besides the Hotel Hayden, the department listed three other hotels that together owe nearly \$897,000. The department said the Hotel Hayden's debt stretched back four years, to when the pandemic began.

A woman who answered a call to the Hotel Hayden on Wednesday said that no one there could talk about the bill. A call to the Fortuna Realty Group, which lists the Hotel Hayden among its holdings, was not returned.

The agency said there had been a significant jump in delinquent accounts during the pandemic, both in how many fell behind on payments and in how much was owed. The total of delinquent payments nearly doubled, the agency said, to \$1.2 billion, an amount so large it threatened "a service the city could not

survive without.” The water system — the city’s 15,000 miles of water and sewer lines and its 19 reservoirs — is directly paid for by users.

The agency began an amnesty program last year that helped 100,000 account holders trim their water bill debts and avoid some \$22 million in interest payments. In all, the amnesty program brought in nearly \$105 million, the city said.

The agency also granted \$8 million in billing credits to accounts that had taken part in a state program for low-income homeowners.

The city said there are penalties for a water shut-off that go beyond a \$1,000 restoration fee. Buildings where water is turned off could be cited for violating building and fire codes as well as fire regulations. The city also warned that not having water could invalidate a building owner’s insurance policy and could damage the heating system.

Staten Island Advance

Mayor Adams says he’s ready to shut off water to some NYC residents who haven’t paid their bills

Updated: Mar. 20, 2024, 6:42 p.m. | Published: Mar. 20, 2024, 6:42 p.m.

As NYC faces climate change challenges, a new environmental tech lab will seek solutions

By Paul Liotta | pliotta@siadvance.com

<https://www.silive.com/news/2024/03/mayor-adams-says-hes-ready-to-shut-off-water-to-some-nyc-residents-who-havent-paid-their-bills.html>

STATEN ISLAND, N.Y. — About 2,400 New Yorkers chronically delinquent on their water bills may soon lose their running water, Mayor Eric Adams announced Wednesday.

In total, the group owes a total of \$102 million and will soon receive water shut-off notices from the city Department of Environmental Protection (DEP), the city agency that oversees the local water system.

When the mayor first announced a forgiveness program in January 2023, about 200,000 New Yorkers owed the city \$1.2 billion on their water bills. The mayor also extended that program in May, but he says the city has finally had enough.



The water shut-off notices will be targeted at commercial properties, like hotels, office buildings, and retail spaces, along with one-to-three family homes that have not responded to any of DEP's collection efforts.

“We gave these delinquent customers a chance to clear their water debts and save millions on interest through our water amnesty program, and while more than 100,000 took us up on our reasonable offer, a small percentage of customers incorrectly made the mistake of thinking they could get away with stiffing their fellow New Yorkers without any accountability,” Adams said.

Last year's water bill amnesty program, which offered interest forgiveness if debtors started a payment plan, helped more than 100,000 New Yorkers reduce their water bill debts, while saving them more than \$22 million.

Having water shutoff at a property can subject owners to code violations from the New York City Department of Buildings, the New York City Department of Health and Mental Hygiene, and the Fire Department of the City of New York. Properties might also receive vacate orders.

Property owners with chronically delinquent water bills will have previously received a 'water shutoff warning' letter in the mail but will now receive notices instructing them to resolve their outstanding balances or enter into a payment agreement with DEP within 15 days.

If balances are not resolved within that timeframe, DEP will begin the process of shutting off water service.

“DEP is serious about collecting the outstanding money owed from delinquent accounts and we will be shutting off water service for customers that don't resolve their overdue bills,” DEP Commissioner Rohit Aggarwala said. “Delinquent customers who refuse to pay their water bills force everyone else to pay higher rates. That is simply not right, and it must stop. Everyone must pay their fair share to support our critical water system.”

Harlem World

Mayor Adams Urges Water Bill Dodgers To Pay Up Or Risk Losing Water Access

March 20, 2024

<https://www.harlemworldmagazine.com/mayor-adams-urges-water-bill-dodgers-to-pay-up-or-risk-losing-water-access/>

New York City Mayor Eric Adams and New York City Department of Environmental Protection (DEP) Commissioner Rohit T. Aggarwala made an announcement today.

They announced that the city has initiated the next phase of its expanded collection enforcement actions against approximately 2,400 chronically-delinquent water service accounts that owe the city a total of \$102 million. As part of the effort, DEP will send out ‘Water Shutoff Notices’ to these customers, informing them that water service to their property could be shut off unless the entire owed amount is paid or they enter into a payment agreement within the next 15 days. This enforcement action is targeted towards commercial properties, including hotels, office buildings, and retail spaces, as well as one-to-three family homes that have not responded to any of DEP’s extensive outreach efforts over the past year. Earlier this year, DEP sent out ‘Water Shutoff Warning’ letters, which resulted in the agency recouping more than \$3 million dollars from more than 400 overdue accounts.

“We gave these delinquent customers a chance to clear their water debts and save millions on interest through our water amnesty program, and while more than 100,000 took us up on our reasonable offer, a small percentage of customers incorrectly made the mistake of thinking they could get away with stiffing their fellow New Yorkers without any accountability,” said Mayor Adams. “We’re not going to allow big commercial properties and others leave the rest of us holding their water bills. DEP is sending ‘Water Shutoff Notices’ to 2,400 chronically-delinquent customers who owe over \$102 million in unpaid bills. While we aim to work with these customers one last time, we will not look away while landlords and property owners ignore their obligations to their neighbors and their city.”

“DEP is serious about collecting the outstanding money owed from delinquent accounts and we will be shutting off water service for customers that don’t resolve their overdue bills,” said DEP Commissioner Aggarwala. “Delinquent customers who refuse to pay their water bills force everyone else to pay higher rates. That is simply not right, and it must stop. Everyone must pay their fair share to support our critical water system.”

During the pandemic, DEP saw a significant increase in the number and balance of delinquent accounts. The total of delinquent payments nearly doubled to \$1.2 billion, which threatened the operations and capital needs of a service the city could not survive without. In 2023, DEP initiated a successful amnesty program that helped more than 100,000 New Yorkers reduce their water bill debts, while saving them more than \$22 million in interest. Of the nearly 200,000 customers who owed money on late water bills when the program started, more than 50 percent participated in the popular program — bringing in nearly \$105 million in payments from substantially past due accounts. To help low-income customers, during the amnesty program, DEP granted \$8 million in additional billing credits to those accounts that had participated in New York state’s Low Income Homeowner Water Assistance Program.

Shutting off water service can have serious consequences and may subject property owners to code violations by the New York City Department of Buildings, the New York City Department of Health and Mental Hygiene, and the Fire Department of the City of New York, as well as the potential for an Order to Vacate the Premises. Water service shutoffs may also affect a property owner’s insurance policy and/or mortgage. Additionally, a loss of water could impact a property’s heating system; owners should consult whoever maintains the property’s boiler or furnace as to whether any special actions must be taken if there is a loss of water.

Money recouped through enforcement actions will be used by DEP to keep water rates low for all customers, and all bill payments are used to fund maintenance, upgrades, and repairs to almost 15,000 miles of water and sewer mains, 19 reservoirs, 12,000 rain gardens, and 14 wastewater resource recovery facilities. Nearly half the population of New York state enjoys New York City's tap water.

Customers with chronically delinquent water bills who previously received a 'Water Shutoff Warning' letter in the mail are now receiving a 'Water Shutoff Notice' instructing them to resolve their outstanding balances or enter into a payment agreement with DEP within 15 days.

If balances are not resolved within that timeframe, DEP will begin the process of shutting off water service. Outstanding accounts will have a 'Water Shutoff Notice' posted on their property's front door and the street or sidewalk in front of the property will be spray-painted to indicate where the service line will be disconnected from the DEP water main. If water service is shut off, affected customers will be required to pay a \$1,000 restoration fee and pay the past due balance in full, or enter into a payment agreement with a 25 percent down payment, in order to have their service restored.

Customers can make payments or enter into a payment agreement online, by calling 866-622-8292, paying in-person at a borough office, or by mailing in payment to the New York City Water Board. Convenience fees apply to credit/debit card payments, but no fee is charged by the Water Board if payment is made by a checking or savings account. DEP also offers a number of financial assistance programs to assist property owners in paying their water bills, including a leak forgiveness program and a multi-family water assistance program.

New York 1

DEP team stops water main breaks before they happen

By Roger Clark Queens

PUBLISHED 6:50 AM ET Mar. 01, 2024

When a water main breaks, it can cause havoc underground, and in the streets.

[Please note that most of the coverage is a 2 minute news segment, available at the following link:]

Video clip and article: <https://ny1.com/nyc/all-boroughs/public-safety/2024/02/29/dep-team-stops-water-main-breaks-before-they-happen>

Stopping the rupture of the pipes that carry New York City water is the job of a leak detection team from the city's Department of Environmental Protection (DEP). You might call them pipe doctors.

"Similar to when you go to a doctor's visit and he gives you the stethoscope, we use the equipment to listen for water escaping pipes," said Tasos Georgelis, deputy commissioner of the Bureau of Water and Sewer Operations at DEP.

The team works by night, because it's quieter and easier to hear without the sounds of the city. They use a device called an Lmic, which can be attached to a water valve to listen for sounds indicating a main or a pipe is leaking.

Typically, a crew hits 40,000 feet of main each night. If they hear nothing, they move on. If they detect a leak, more high tech acoustical equipment is brought in to pinpoint exactly where the leak is so it can be repaired.

“What we look for is low points and then a peak, and that’s how we find where the leak is,” said Andres Serrano, a DEP construction laborer using a correlator device to help detect the location of a leak in Corona, Queens.

So far, in the fiscal year that started in July 2023, the city has had the fewest amount of water main breaks on record. Only 55 breaks occurred compared to 95 over the same period the year before. The DEP attributes the decrease to the work of this team and more advanced gear.

“The technology is getting better and the crews are getting better, so now they are getting trained on the new equipment and we are picking up stuff early on,” said Georgelis. “We always want to catch a leak before it becomes a water main break.”

Using the detection equipment, the team was able to pick up on 80 leaks that could have become water main breaks.

What You Need To Know:

- The NYC Department of Environmental Protection (DEP) has a leak detection team to track down leaks in water mains and pipes
- The team works at night using high tech acoustical equipment, listening for leaks in the pipes that bring water to homes and businesses
- When leaks are detected, crews are called in to make repairs. There are 6,800 miles of water mains in the five boroughs