



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Vincent Sapienza, Commissioner

WHAT WE DO

The Department of Environmental Protection (DEP) protects public health and the environment by supplying clean drinking water, collecting, and treating wastewater, and reducing air, noise and hazardous materials pollution. The Department manages the City's water supply, which provides more than one billion gallons of high quality drinking water daily to more than half the population of New York State. It builds and maintains the City's water distribution network, fire hydrants, storm and sanitary sewage collection systems and Bluebelt and green infrastructure systems, and manages 14 in-City water resource recovery facilities as well as seven water resource recovery facilities in the upstate watershed. DEP also implements federal Clean Water Act rules and regulations, handles hazardous materials emergencies and toxic site remediation, oversees asbestos monitoring and removal, enforces the City's air and noise codes, bills and collects on approximately 836,000 water and sewer accounts and manages citywide water conservation programs.

FOCUS ON EQUITY

The Department of Environmental Protection has the critical mission to enrich the environment and protect public health for all New Yorkers by providing high quality drinking water, managing wastewater and stormwater, and reducing air, noise, and hazardous materials pollution. In July, 2015 DEP announced a new series of programs to provide additional assistance to its most vulnerable customers. The City froze the minimum charge, preventing any increase in water and sewer charges for many single-family homeowners and undertook a major expansion of the Home Water Assistance Program (HWAP), a billing program that provides a credit to low-income homeowners who qualify for the federal Home Energy Assistance Program. In 2016, the Department undertook a further expansion of the HWAP credit to include additional low-income senior and disabled homeowners who receive a New York City Department of Finance property tax exemption. Then, in Fiscal 2018, DEP implemented the Multifamily Water Assistance Program (MWAP), which provides a bill credit to multifamily buildings that conserve water and enter into an agreement to keep rents affordable. In Fiscal Year 2020, DEP continued both the freeze of the minimum charge and the income-tested HWAP credit. In addition, the system has for many years offered a bill amnesty program, in which high water charges that are attributable to leaks that are fixed receive a partial reduction in charges. The Department's two major bill credit programs together provide assistance to almost 90,000 households each year, covering approximately 237,000 New Yorkers, including both renters and owner-occupants.

OUR SERVICES AND GOALS

SERVICE 1 Ensure the sufficiency, quality and security of the City's drinking water supply.

- Goal 1a Comply with all federal and State drinking water quality standards.
- Goal 1b Assure the integrity of the drinking water supply and distribution systems.

SERVICE 2 Maintain the City's water delivery and sewer collection systems.

- Goal 2a Resolve emergencies and perform preventive maintenance and required repairs to the water distribution and wastewater collection systems in a timely manner.

SERVICE 3 Treat wastewater and sewage to protect water quality in the receiving waters surrounding the City.

- Goal 3a Maintain high levels of compliance with federal and State treatment standards for wastewater and sewage entering receiving waters.

SERVICE 4 Bill and collect revenue for water and sewer usage.

- Goal 4a Ensure that customer billing is accurate, transparent and fair.
- Goal 4b Meet revenue targets established by the NYC Water Board.

SERVICE 5 Enforce City laws relating to air pollution, noise pollution and hazardous materials.

- Goal 5a Investigate complaints in a timely manner.

HOW WE PERFORMED IN FISCAL 2020

SERVICE 1 Ensure the sufficiency, quality and security of the City's drinking water supply.

Goal 1a Comply with all federal and State drinking water quality standards.

By regularly collecting water samples at nearly 1,000 water quality sampling stations throughout the City and conducting analyses for a broad spectrum of microbiological, chemical and physical measures of quality, the Department ensures that all federal and State standards for drinking water, including those for coliform bacteria, are consistently met. In Fiscal 2020, DEP collected 36,300 samples from the City's distribution system and performed approximately 456,500 analyses, meeting all state and federal monitoring requirements. Additionally, approximately 262,500 analyses were performed on 15,000 samples, and 2 million robotic monitoring measurements were recorded from the upstate water supply watershed. The Department continues to diligently optimize treatment and New York City's water continues to meet all applicable standards.

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Samples testing positive for coliform bacteria (%)	0.47%	0.31%	0.36%	0.25%	0.14%	*	*	Down	Down
★ In-City samples meeting water quality standards for coliform bacteria (%)	100%	100%	100%	100%	100%	100%	100%	Neutral	Up
Acres of land solicited in watershed area	45,569	34,475	20,613	44,236	8,848	*	*	Down	*
★ Critical Indicator	"NA" Not Available	↑↓ Directional Target				* None			

Goal 1b Assure the integrity of the drinking water supply and distribution systems.

While overall enforcement activity has been declining for several years as there has been better compliance with the Department's rules, the further decline during the reporting period was probably fueled by a decrease in visitors due to the COVID-19 pandemic.

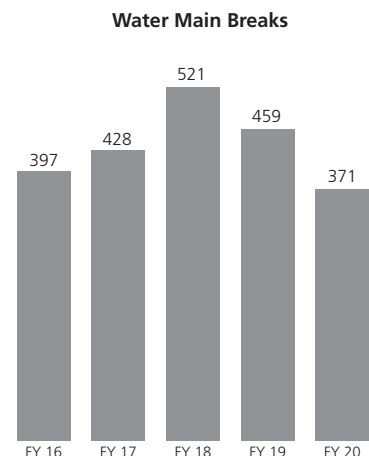
Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Water supply - Critical equipment out of service (%)	1.0%	0.9%	0.7%	0.4%	0.4%	*	*	Down	Down
★ Facility security checks	293,199	286,589	270,831	312,500	308,235	275,000	275,000	Neutral	Up
Overall enforcement activity	1,658	1,893	1,377	1,328	1,159	*	*	Down	*
★ Critical Indicator	"NA" Not Available	↑↓ Directional Target				* None			

SERVICE 2 Maintain the City's water delivery and sewer collection systems.

Goal 2a Resolve emergencies and perform preventive maintenance and required repairs to the water distribution and wastewater collection systems in a timely manner.

By proactively coordinating inspections with the Department of Transportation, the Department was able to reduce the number of street cave in complaints received by 18 percent and reduce the time to make these conditions safe to 1.2 days, a 36 percent improvement over the performance in the prior period. Seven additional staff/supervisors were hired in FY18 to coordinate with the Department of Transportation to proactively investigate and discover infrastructure defects earlier, allowing repairs to be made before a street failure or collapse occurs.

The Department's focus on a more frequent inspection cycle as well as the significant increase in catch basin cleanings during the last three years helped to reduce the number of complaints received related to clogged catch basins by 38 percent. Staff have also focused on reducing the repairs backlog, which has also contributed to the reduction in complaints received.



New York City experienced the fewest water main breaks in any year on record during the reporting period with 371 breaks. This represents a 19 percent reduction from the previous period and a 40 percent drop from Fiscal 2000, when there were 621 reported breaks. While fluctuations in the number of water main breaks are expected year to year due to weather and other factors, the Department makes efforts to reduce the potential for water main breaks through pressure management, programmatic pressure regulator maintenance, utilization of predictive modeling, as well as prioritizing replacement of mains with the highest history of breakage.

The catch basin inspection target was modified from 100% to 50% in Fiscal 2020. Historically, the Department had been inspecting catch basins once every three years. Local Law 48 of 2015 mandated the annual inspection of all DEP catch basins for three years beginning with Fiscal 2017. This law sunset at the end of Fiscal 2019 and the Department has now right-sized the inspection frequency to once every two years.

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Sewer backup complaints received	10,469	12,133	11,303	11,965	10,768	*	*	Neutral	*
Sewer backup complaints resolved - Confirmed (on City infrastructure)	2,503	2,649	2,389	2,177	2,051	*	*	Down	Down
– Unconfirmed (not on City infrastructure or unfounded)	7,960	9,489	8,904	9,796	8,707	*	*	Neutral	*
★ Sewer backup resolution time (hours)	3.7	3.8	3.7	3.6	3.1	7.0	7.0	Down	Down
Street segments with confirmed sewer backup in the last 12 months (% of total segments)	1.1%	1.2%	1.0%	0.9%	0.9%	*	*	Down	Down
★ Street segments with recurring confirmed sewer backups in the last 12 months (% of total segments)	0.3%	0.3%	0.3%	0.3%	0.2%	0.6%	0.6%	Down	Down
Street cave-in complaints received	4,174	3,847	3,769	3,769	3,103	*	*	Down	Down
Average time to respond to street cave-in complaints and make safe (days)	4.6	1.9	1.9	1.9	1.2	*	*	Down	Down
Water main breaks	397	428	521	459	371	*	*	Neutral	Down
Water main breaks per 100 miles of main in the last 12 months	5.7	6.1	7.4	6.6	5.3	*	*	Neutral	Down
★ Average time to restore water to customers after confirming breaks (hours)	4.2	4.4	4.5	4.7	4.9	6.0	6.0	Up	Down
★ Broken and inoperative hydrants (%)	0.52%	0.54%	0.40%	0.46%	0.39%	1.00%	1.00%	Down	Down
★ Average time to repair or replace high-priority broken or inoperative hydrants (days)	2.9	2.5	2.9	2.5	2.3	5.0	5.0	Down	Down
Catch basin complaints received	8,020	8,942	7,673	10,662	6,613	*	*	Neutral	Down
★ Catch basin backup resolution time (days)	4.0	5.0	6.9	7.8	7.8	9.0	9.0	Up	Down
Catch basins surveyed/inspected (%)	31.7%	98.3%	99.3%	103.4%	53.1%	50.0%	50.0%	Up	*
Catch basins cleaned	30,778	52,057	39,098	49,005	40,631	*	*	Up	*
★ Backlog of catch basin repairs (% of system)	0.7%	1.8%	3.8%	4.4%	2.8%	1.0%	1.0%	Up	Down
Leak complaints received	3,642	3,673	4,367	3,791	3,212	*	*	Neutral	*
★ Leak resolution time (days) (City infrastructure only)	10.2	10.0	10.2	8.4	9.6	12.0	12.0	Down	Down
★ Critical Indicator	"NA" Not Available		↑↓ Directional Target		* None				

SERVICE 3 Treat wastewater and sewage to protect water quality in the receiving waters surrounding the City.

Goal 3a Maintain high levels of compliance with federal and State treatment standards for wastewater and sewage entering receiving waters.

In order to better identify maintenance and replacement cycles and increase equipment reliability on wastewater resource recovery equipment, the Department utilizes predictive maintenance methods, such as measuring mechanical wear on equipment parts and using thermographic cameras to examine electrical systems. In Fiscal 2020, the percent of critical equipment out-of-service (% below the minimum) remained well below the target of five percent at 1.6 percent.

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
★ Water resource recovery facility (WRRF) effluent meeting State Pollutant Discharge Elimination Standards (%)	99.5%	99.8%	99.7%	99.6%	99.9%	100.0%	100.0%	Neutral	Up
Harbor survey stations meeting applicable waterbody standards for dissolved oxygen (%)	90%	91%	92%	90%	89%	89%	89%	Neutral	Up
WRRFs - Critical equipment out-of-service (% below minimum)	2.1%	1.8%	1.5%	1.0%	1.6%	5.0%	5.0%	Down	Down
★ Critical Indicator	"NA" Not Available		↑↓ Directional Target	* None					

SERVICE 4 Bill and collect revenue for water and sewer usage.

Goal 4a Ensure that customer billing is accurate, transparent and fair.

Automated meter reading technology allowed the Department to produce accurate billing based upon actual usage, reducing the proportion of estimated bills issued to just 2.4 percent.

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
★ Estimated bills (%)	3.0%	2.8%	3.0%	2.8%	2.4%	4.0%	4.0%	Down	Down
★ Critical Indicator	"NA" Not Available		↑↓ Directional Target	* None					

Goal 4b Meet revenue targets established by the NYC Water Board.

Effective collection tools and accurate billing based upon actual usage allowed the Department to collect \$3.8 billion in revenue during the reporting period, which was just 0.6% below the target established by the NYC Water Board despite the impact of the COVID-19 pandemic.

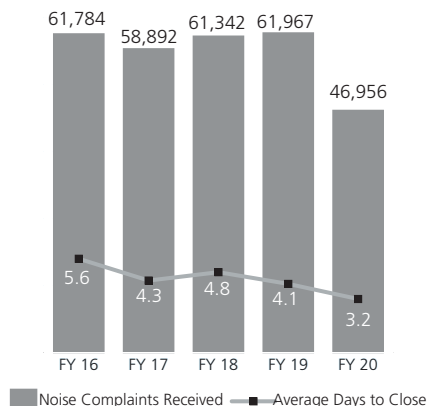
Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Total revenue collected (\$000,000)	\$3,852.6	\$3,852.0	\$3,602.3	\$3,824.8	\$3,800.0	\$3,816.1	\$3,320.7	Neutral	Up
★ Total revenue as percent of target (%)	104.5%	104.3%	99.8%	101.4%	99.6%	100.0%	100.0%	Neutral	Up
Accounts receivable - Total balance (\$000,000)	\$1,666	\$1,633	\$1,709	\$1,741	\$1,810	*	*	Neutral	Down
Billed amount collected in 30 days (%)	63.1%	60.8%	60.5%	62.0%	61.1%	*	*	Neutral	Up
★ Critical Indicator	"NA" Not Available		↑↓ Directional Target	* None					

SERVICE 5 Enforce City laws relating to air pollution, noise pollution and hazardous materials.

Goal 5a Investigate complaints in a timely manner.

The average time it took the Department to close air, noise and asbestos complaints declined by 27, 23 and 28 percent respectively during the reporting period due to the expanded use of electronic inspection and reporting software. At the same time, the Department continued to meet and beat its targets for responding to these complaints. The number of complaints received declined during the reporting period largely due to the closure of construction activities and many commercial businesses due to the COVID-19 pandemic.

Noise Complaints Received and Average Days to Close



Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Air complaints received	9,858	8,807	8,276	8,295	7,789	*	*	Down	*
Air complaints responded to within seven days (%)	95%	96%	97%	99%	100%	88%	88%	Neutral	Up
★ Average days to close air quality complaints	4.0	2.5	4.2	3.9	2.9	7.0	7.0	Neutral	Down
Noise complaints received	61,784	58,892	61,342	61,967	46,956	*	*	Down	*
★ Average days to close noise complaints	5.6	4.3	4.8	4.1	3.2	7.0	7.0	Down	Down
Noise complaints not requiring access to premises responded to within seven days (%)	97%	98%	99%	99%	100%	88%	88%	Neutral	Up
Asbestos complaints received	1,855	1,425	1,338	1,902	1,019	*	*	Down	*
★ Average days to close asbestos complaints	0.34	0.34	0.74	0.91	0.65	1.00	1.00	Up	Down
Asbestos complaints responded to within three hours (%)	100%	100%	100%	100%	100%	100%	100%	Neutral	Up
★ Critical Indicator "NA" Not Available ⬆️⬇️⬆️ Directional Target * None									

AGENCY-WIDE MANAGEMENT

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Total violations issued	14,753	16,149	12,851	21,394	19,839	*	*	Up	*
Violations admitted to or upheld at the Environmental Control Board (%)	93.8%	92.8%	91.5%	90.0%	89.0%	*	*	Neutral	Up
Collisions involving City vehicles	380	413	398	427	241	*	*	Down	Down
Workplace injuries reported	352	359	238	158	40	*	*	Down	Down
★ Critical Indicator "NA" Not Available ⬆️⬇️⬆️ Directional Target * None									

AGENCY CUSTOMER SERVICE

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Customer Experience									
E-mails responded to in 14 days (%)	93%	100%	100%	100%	100%	95%	95%	Neutral	Up
Letters responded to in 14 days (%)	99%	99%	99%	99%	99%	95%	95%	Neutral	Up
Calls answered in 30 seconds (%)	73%	79%	72%	68%	84%	76%	76%	Neutral	Up
Average customer in-person wait time (minutes)	5	4	4	4	NA	5	5	NA	Down
Completed customer requests for interpretation	13,685	13,783	13,848	14,548	NA	*	*	NA	*
Visitors rating customer service at borough centers as good or better (%)	95.0%	93.0%	95.0%	96.0%	NA	90.0%	90.0%	NA	Up
CORE customer experience rating (0-100)	100	97	95	NA	99	90	90	NA	Up
★ Critical Indicator "NA" Not Available ⬆️⬆️ Directional Target * None									

Performance Indicators	Actual					Target		Trend	
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	5-Year	Desired Direction
Response to 311 Service Requests (SRs)									
Percent meeting time to first action - Sewer Maintenance - Catch Basin Clogged/Flooding (6 days)	91%	89%	86%	84%	90%	85%	85%	Neutral	*
Percent meeting time to first action - Sewer Maintenance - Sewer Backup (0.25 days)	90%	88%	89%	91%	92%	85%	85%	Neutral	*
Percent meeting time to first action - Water Maintenance - Hydrant Running (2 days)	85%	86%	82%	76%	89%	85%	85%	Neutral	*
Percent meeting time to first action - Water Maintenance - Hydrant Running Full (1 day)	88%	89%	86%	77%	90%	85%	85%	Neutral	*
Percent meeting time to first action - Water Maintenance - Leak (0.7 days)	79%	81%	77%	82%	87%	85%	85%	Neutral	*
★ Critical Indicator "NA" Not Available ⬆️⬆️ Directional Target * None									

AGENCY RESOURCES

Resource Indicators	Actual ¹					Plan ²		5yr Trend
	FY16	FY17	FY18	FY19	FY20	FY20	FY21	
Expenditures (\$000,000) ³	\$1,267.2	\$1,435.9	\$1,432.1	\$1,433.0	\$1,464.7	\$1,489.5	\$1,438.8	Up
Revenues (\$000,000) ⁴	\$27.3	\$26.3	\$29.3	\$27.0	\$19.9	\$21.3	\$19.2	Down
Personnel	5,946	6,011	6,099	6,195	6,105	6,367	6,426	Neutral
Overtime paid (\$000,000)	\$40.6	\$49.9	\$44.5	\$48.8	\$45.6	\$44.6	\$45.8	Neutral
Capital commitments (\$000,000)	\$1,590.1	\$2,490.6	\$1,925.2	\$2,031.5	\$1,029.4	\$2,305.1	\$2,727.6	Down

¹Actual financial amounts for the current fiscal year are not yet final. Final fiscal year actuals, from the Comptroller's Comprehensive Annual Financial Report, will be reported in the next PMMR. Refer to the "Indicator Definitions" at nyc.gov/mmr for details. ²Authorized Budget Level ³Expenditures include all funds "NA" - Not Available * None

⁴DEP revenues shown here do not include any of the approximately \$1.5 billion the City receives annually from the NYC Water Board in reimbursement for operations & maintenance and in rent.

SPENDING AND BUDGET INFORMATION

Where possible, the relationship between an agency's goals and its expenditures and planned resources, by budgetary unit of appropriation (UA), is shown in the 'Applicable MMR Goals' column. Each relationship is not necessarily exhaustive or exclusive. Any one goal may be connected to multiple UAs, and any UA may be connected to multiple goals.

Unit of Appropriation	Expenditures FY19 ¹ (\$000,000)	Modified Budget FY20 ² (\$000,000)	Applicable MMR Goals ³
Personal Services - Total	\$583.9	\$617.8	
001 - Executive and Support	\$41.7	\$42.7	All
002 - Environmental Management	\$30.3	\$28.3	5a
003 - Water Supply and Wastewater Collection	\$221.1	\$225.9	1a, 1b, 2a, 3a, 5a
007 - Central Utility	\$79.9	\$88.0	1a, 4a, 4b
008 - Wastewater Treatment	\$210.8	\$232.9	2a, 3a
Other Than Personal Services - Total	\$849.1	\$846.9	
004 - Utility	\$644.1	\$699.1	1a, 1b, 2a, 3a, 5a
005 - Environmental Management	\$142.4	\$80.8	1a, 1b, 2a, 3a, 5a
006 - Executive and Support	\$62.6	\$67.0	All
Agency Total	\$1,433.0	\$1,464.7	

¹Comprehensive Annual Financial Report (CAFR) for the Fiscal Year ended June 30, 2019. Includes all funds. ²City of New York Adopted Budget for Fiscal 2020, as of June 2020. Includes all funds. ³Refer to agency goals listed at front of chapter. "NA" Not Available *None

NOTEWORTHY CHANGES, ADDITIONS OR DELETIONS

- The indicator 'Acres of land solicited in watershed area' is being discontinued. The recent National Academies of Science, Engineering and Medicine review of the New York City Watershed Protection recommended moving away from this metric in recognition of the maturation of the land acquisition program. Consequently, the metric is not a meaningful gauge of the success or rate of the Department's overall efforts to protect water quality.
- Due to improvements in water quality over the last two decades the metric 'Percent of harbor survey stations meeting the fishable standard of 5mg/L for dissolved oxygen' has outlived its usefulness, as high attainment is consistently achieved, with differences in the attainment levels driven by weather conditions rather than water quality. Since this metric no longer reflects improvements made in water quality, the Marine Science Section is working on developing a metric that will better reflect yearly aggregate improvements in water quality, likely through the definition of a water quality index that incorporates multiple parameters currently being measured by the City's Harbor Survey program.

ADDITIONAL RESOURCES

For more information on the agency, please visit: www.nyc.gov/dep.

