

# DEPARTMENT OF ENVIRONMENTAL PROTECTION

Vincent Sapienza, Acting 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; 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 wastewater treatment plants as well as seven treatment plants 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

DEP is focused on protecting public health and the environment in an equitable manner by supplying clean drinking water, collecting and treating wastewater, and reducing air, noise and hazardous materials pollution for all New Yorkers. In July 2015 DEP announced an additional series of programs to provide assistance to its most vulnerable customers, including the lowest rate increase in 15 years. DEP froze the minimum charge for a second year in a row, preventing any increase in water and sewer charges for 25 percent of single-family homeowners. In addition, in December 2015 DEP expanded the Home Water Assistance Program, which provides an annual bill credit to low-income homeowners across the five boroughs, to 40,000 additional low-income senior and disabled homeowners, for a total of 52,000 customers.

## OUR SERVICES AND GOALS

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### **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.

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### **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.

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### **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.

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### **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.

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### **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 2016

## 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.

The percent of drinking water samples testing positive for coliform bacteria continues to be very low, evidence of the Department's compliance with the federal Total Coliform Rule. The regulations require that public water supplies must not contain coliform bacteria in more than five percent of the collected monthly samples. In Fiscal 2016 a monthly average of 0.5 percent of City drinking water samples tested positive for coliform bacteria, slightly higher than the prior year but well below the five percent water quality standard established by the Environmental Protection Agency.

The Department monitors the water quality in the distribution system regularly from nearly 1,000 sample stations located throughout New York City. The level of water quality monitoring performed by the Department 365 days/year far exceeds what is required by federal and State drinking water regulations. Sampling data is used to ensure that the highest quality water is being distributed to customers.

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Samples testing positive for coliform bacteria (%)	0.4%	0.3%	0.3%	0.3%	0.5%	*	*	Down	Up
★ In-City samples meeting water quality standards for coliform bacteria (%)	100%	100%	100%	100%	100%	100%	100%	Up	Neutral
Acres of land solicited in watershed area	69,789	62,481	44,316	32,865	47,800	*	*	Neutral	Down

★ Critical Indicator "NA" - means Not Available in this report ↕ shows desired direction

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

The Department's police force performed 5.3 percent more security checks this year. A number of factors contributed to this increase, including the full activation of the Croton Filtration Plant, where the DEP Police are now conducting regular checks, and an increase in available patrol hours as a new contract with the Environmental Police Officers extended their work week by three hours and, unlike the prior year, the DEP Police did not have to divert resources to major events such as snow storms or hurricanes in Fiscal 2016.

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Water supply - Critical equipment out of service (%)	1.6%	1.2%	1.4%	1.3%	1.0%	*	*	Down	Down
★ Facility security checks	263,436	275,098	289,759	278,439	293,199	263,000	275,000	Up	Neutral
Overall enforcement activity	1,777	983	1,207	1,206	1,658	*	*	Neutral	Neutral

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

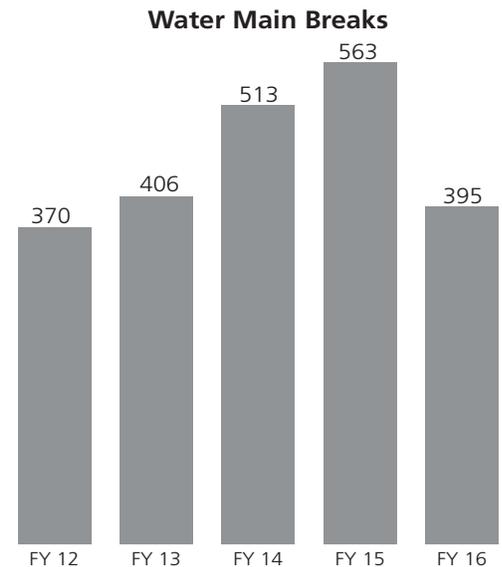
### Goal 2a

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

The Department has implemented strategies over the past several years that proactively target resources to areas with a history of confirmed (on City infrastructure) sewer backups. This has resulted in the continued downward trend in the number of backups on City infrastructure, which decreased by 12 percent compared to Fiscal 2015 and by 45 percent compared to Fiscal 2012. The decline in unconfirmed sewer backups is more difficult for the Department to analyze as, upon inspection, these complaints exhibit none of the factors that would indicate that there is or was a problem with a part of DEP's sewer system. On average, the time to resolve sewer backup complaints improved to 3.7 hours from 3.9 hours a year ago.

The average time to respond to street cave-in complaints increased by 2.1 days to 4.6 days.

The nearly 30 percent decrease in the number of water main breaks—from 563 to 395—contributed to the Department's ability to restore water to customers more quickly, an improvement of 0.9 hours on average. 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 programmatic pressure regulator maintenance as well as prioritizing replacement of mains with the highest history of breakage.



Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Sewer backup complaints received	13,933	14,911	11,637	11,435	10,469	*	*	Neutral	Down
Sewer backup complaints resolved - Confirmed (on City infrastructure)	4,567	4,221	3,224	2,846	2,503	*	*	Down	Down
- Unconfirmed (not on City infrastructure or unfounded)	8,982	10,685	8,417	8,589	7,960	*	*	Neutral	Down
★Sewer backup resolution time (hours)	5.6	4.4	3.9	3.9	3.7	7.0	7.0	Down	Down
Street segments with confirmed sewer backup in the last 12 months (% of total segments)	1.9%	1.7%	1.4%	1.2%	1.1%	*	*	Down	Down
★Street segments with recurring confirmed sewer backups in the last 12 months (% of total segments)	0.6%	0.5%	0.4%	0.3%	0.3%	1.0%	1.0%	Down	Down
Street cave-in complaints received	3,467	2,926	3,737	4,073	4,175	*	*	Down	Up
Average time to respond to street cave-in complaints and make safe (days)	3.2	2.5	2.5	2.5	4.6	*	*	Down	Up
Water main breaks	370	406	513	563	395	*	*	Down	Up
Water main breaks per 100 miles of main in the last 12 months	5.3	5.8	7.3	8.0	5.6	*	*	Down	Up
★Average time to restore water to customers after confirming breaks (hours)	4.8	4.4	4.4	5.1	4.2	6.0	6.0	Down	Neutral
★Broken and inoperative hydrants (%)	0.36%	0.31%	0.44%	0.50%	0.51%	1.00%	1.00%	Down	Up
★Average time to repair or replace high-priority broken or inoperative hydrants (days)	4.4	2.7	3.1	2.5	2.9	7.0	7.0	Down	Down

★ Critical Indicator "NA" - means Not Available in this report ↕ shows desired direction

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Catch basin complaints received	12,357	10,548	8,576	8,851	8,026	*	*	Down	Down
★ Catch basin backup resolution time (days)	5.1	3.1	3.9	3.1	4.0	9.0	9.0	Down	Down
Catch basins surveyed/inspected (%) (cumulative)	33.1%	30.0%	31.0%	31.4%	31.3%	33.3%	100.0%	Neutral	Neutral
Catch basins cleaned	24,828	31,097	29,730	31,086	30,534	*	*	Neutral	Up
★ Backlog of catch basin repairs (% of system)	1.1%	0.5%	0.3%	0.4%	0.6%	1.0%	1.0%	Down	Down
Leak complaints received	3,751	4,077	3,718	2,640	2,620	*	*	Neutral	Down
★ Leak resolution time (days) (City infrastructure only)	10.7	10.0	9.8	9.3	10.2	12.0	12.0	Down	Neutral

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## 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.

The Department has implemented predictive maintenance methods, such as measuring mechanical wear on equipment parts and using thermographic cameras to examine electrical systems on wastewater treatment equipment, in order to better identify maintenance and replacement cycles and increase equipment reliability. In Fiscal 2016 the percent of critical equipment out-of-service below the minimum remained well below the target of 5 percent.

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
★ Wastewater treatment plant (WWTP) effluent meeting federal standards (%)	99.9%	99.5%	99.6%	99.5%	99.5%	100.0%	100.0%	Up	Neutral
Harbor survey stations meeting the fishable standard of 5mg/L for dissolved oxygen (%)	87%	85%	91%	94%	90%	89%	89%	Up	Neutral
★ WWTPs - Critical equipment out-of-service (% below minimum)	3.0%	3.1%	1.9%	2.5%	2.1%	5.0%	5.0%	Down	Down

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

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

Through its aggressive approach to maintaining the components of the automated meter reading system, the Department has continued to reduce the proportion of bills issued based upon estimated usage, which reached a five-year low of 3 percent.

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
★ Estimated bills (%)	6.8%	4.9%	3.7%	3.2%	3.0%	5.0%	5.0%	Down	Down

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**Goal 4b**

Meet revenue targets established by the NYC Water Board.

Effective collection tools and accurate billing based upon actual usage help the Department to meet or exceed the revenue targets established by the NYC Water Board. In Fiscal 2016 DEP collected \$3.85 billion in revenue. More than 63 percent of the billed amount was collected in 30 days.

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Total revenue collected (\$000,000)	\$3,139.8	\$3,374.6	\$3,612.3	\$3,808.9	\$3,852.6	\$3,687.0	\$3,693.4	Up	Up
★ Total revenue as percent of target (%)	101.1%	104.4%	105.2%	105.3%	104.5%	100.0%	100.0%	Up	Neutral
Accounts receivable - Total balance (\$000,000)	\$1,487	\$1,561	\$1,750	\$1,640	\$1,666	*	*	Down	Up
Billed amount collected in 30 days (%)	54.6%	55.4%	56.7%	61.8%	63.1%	*	*	Up	Up

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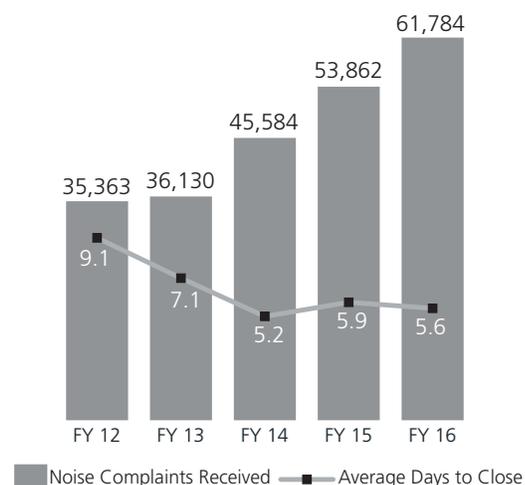
## SERVICE 5 Enforce City laws relating to air pollution, noise pollution and hazardous materials.

**Goal 5a**

Investigate complaints in a timely manner.

The Department has continued to improve its performance in addressing complaints concerning air pollution and noise. During Fiscal 2016 DEP created two new units of inspectors – one to address complaints concerning early morning construction activities and another to address overnight private carting complaints. In addition, the Department revamped its scheduling process so that inspectors spend a greater proportion of their workday in the field addressing complaints. Through these initiatives and with the addition of four new inspectors, the average days required to close air and noise complaints were faster despite a 12.3 percent increase in the number of air pollution complaints and a 14.7 percent increase in noise complaints.

**Noise Complaints Received and Average Days to Close**



Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Air complaints received	7,931	7,628	7,896	8,776	9,858	*	*	Neutral	Up
★ Average days to close air quality complaints	7.0	4.5	3.8	4.3	4.0	10.0	9.0	Down	Down
Air complaints responded to within seven days (%)	82%	93%	98%	95%	95%	85%	85%	Up	Up
Noise complaints received	35,363	36,130	45,584	53,862	61,784	*	*	Neutral	Up
★ Average days to close noise complaints	9.1	7.1	5.2	5.9	5.6	10.0	9.0	Down	Down
Noise complaints not requiring access to premises responded to within seven days (%)	88%	91%	99%	97%	97%	85%	85%	Up	Up
Asbestos complaints received	1,461	1,486	1,414	1,674	1,855	*	*	Neutral	Up
★ Average days to close asbestos complaints	0.20	0.29	0.26	0.37	0.34	1.00	1.00	Down	Up
Asbestos complaints responded to within three hours (%)	100%	100%	100%	100%	100%	90%	90%	Up	Neutral

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## AGENCY-WIDE MANAGEMENT

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Total violations issued	13,332	13,262	14,077	15,284	14,753	*	*	Neutral	Up
Violations admitted to or upheld at the Environmental Control Board (%)	87.8%	88.2%	89.7%	90.9%	93.8%	*	*	Up	Neutral
Collisions involving City vehicles	NA	296	301	337	380	*	*	Down	NA
Workplace injuries reported	NA	515	493	478	352	*	*	Down	NA

## AGENCY CUSTOMER SERVICE

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Customer Experience	FY12	FY13	FY14	FY15	FY16	FY16	FY17	Desired Direction	5yr Trend
E-mails responded to in 14 days (%)	91%	94%	88%	86%	93%	95%	95%	Up	Neutral
Letters responded to in 14 days (%)	96%	97%	97%	99%	99%	95%	95%	Up	Neutral
Calls answered in 30 seconds (%)	76%	69%	79%	68%	73%	76%	76%	Up	Neutral
Average customer in-person wait time (minutes)	5	7	7	6	5	5	5	Down	Neutral
Completed customer requests for interpretation	7,497	11,023	13,870	12,976	13,685	*	*	Neutral	Up
Visitors rating customer service at borough centers as good or better (%)	88.8%	90.8%	93.0%	93.0%	95.0%	90.0%	90.0%	Up	Neutral
CORE customer experience rating (0-100)	90	91	95	95	100	90	90	Up	Up

Performance Indicators	Actual					Target		Desired Direction	5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17		
Response to 311 Service Requests (SRs)	FY12	FY13	FY14	FY15	FY16	FY16	FY17	Desired Direction	5yr Trend
Percent meeting time to first action - Sewer Maintenance - Catch Basin Clogged/Flooding (6 days)	81%	91%	90%	93%	91%	85%	85%	Neutral	Up
Percent meeting time to first action - Sewer Maintenance - Sewer Backup (0.25 days)	78%	84%	86%	89%	90%	85%	85%	Neutral	Up
Percent meeting time to first action - Water Maintenance - Hydrant Running (2 days)	91%	86%	86%	85%	85%	85%	85%	Neutral	Neutral
Percent meeting time to first action - Water Maintenance - Hydrant Running Full (1 day)	89%	85%	87%	88%	88%	85%	85%	Neutral	Neutral
Percent meeting time to first action - Water Maintenance - Leak (0.7 days)	83%	82%	80%	80%	79%	85%	85%	Neutral	Neutral

## AGENCY RESOURCES

Resource Indicators	Actual <sup>1</sup>					Plan <sup>2</sup>		5yr Trend
	FY12	FY13	FY14	FY15	FY16	FY16	FY17	
Expenditures (\$000,000) <sup>3</sup>	\$1,059.0	\$1,727.3	\$1,192.6	\$1,216.1	\$1,418.4	\$1,542.9	\$1,450.1	Neutral
Revenues (\$000,000) <sup>4</sup>	\$22.8	\$26.8	\$29.7	\$26.6	\$27.3	\$24.3	\$24.8	Up
Personnel	5,740	5,727	5,708	5,727	5,946	6,332	6,402	Neutral
Overtime paid (\$000,000)	\$36.3	\$37.2	\$37.2	\$42.9	\$22.3	\$22.6	\$22.9	Down
Capital commitments (\$000,000)	\$1,685.5	\$1,521.0	\$1,160.0	\$2,102.8	\$1,236.3	\$2,327.0	\$3,233.8	Neutral

<sup>1</sup>Actual financial amounts for the most 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](http://nyc.gov/mmr) for details. <sup>2</sup>Authorized Budget Level <sup>3</sup>Expenditures include all funds

<sup>4</sup>DEP 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. "NA" - Not Available in this report

## NOTEWORTHY CHANGES, ADDITIONS OR DELETIONS

- During the reporting period Emily Lloyd served as Commissioner of the Department of Environmental Protection. Vincent Sapienza was named Acting Commissioner effective July 2016.
- The Department revised several Fiscal 2017 targets to reflect revised projections and more recent performance trends. The target for 'Facility security checks' increased from 263,000 to 275,000; 'Total revenue collected (\$000,000)' decreased from \$3,752.4 to \$3,693.4; and for both the 'Average days to close air quality complaints' and 'Average days to close noise complaints,' from 10 days to 9 days.
- DEP updated Fiscal 2015 data for 'Collisions involving City vehicles' from 319 to 337.
- Fiscal 2016 data for Customers Observing and Reporting Experiences (CORE) ratings represents a change in methodology. For agencies with multiple service centers, inspectors focused on sites that had historically lower scores, specifically sites that received an average overall site score of 85 or lower over the last three years and sites that received a score of 85 or lower in Fiscal 2015. If all agency service centers scored above 85 last year, the service center with the lowest overall score was inspected.

## ADDITIONAL RESOURCES

For more information on the agency, please visit: [www.nyc.gov/dep](http://www.nyc.gov/dep).

