



**Environmental  
Protection**

Michael R. Bloomberg, Mayor  
Carter H. Strickland, Jr., Commissioner

# STRATEGY 2011-2014



## 2012 PROGRESS REPORT

# LETTER FROM THE DEPUTY MAYOR FOR OPERATIONS



Caswell F. Holloway  
Deputy Mayor for Operations

Dear Friends,

The New York City Department of Environmental Protection (DEP) is the largest municipal water utility in the nation, delivering one billion gallons of drinking water to more than nine million people and treating 1.3 billion gallons of wastewater each day.

Two years ago, DEP released *Strategy: 2011-2014*, a bold agenda with distinct and achievable initiatives designed to make DEP the most efficient, affordable and sustainable water and sewer utility in the country. A key focus was strengthening DEP's customer service—to the 835,000 ratepayers who pay the water bills, to the more than nine million people in New York City and the surrounding region who rely on our services every day.

Since 2011, DEP has achieved nearly 60% of the initiatives set forth in its strategic plan, and overall, 87% are complete or substantially under way. But more important than any single milestone, DEP has built the principle of continuous improvement into all of its operations, and the nearly 6,000 men and women who serve nine million people every day are always thinking about how they can make the system work better, and taking the steps necessary to make it happen. This ethos is just one of many reasons that the Association of Metropolitan Water Agencies awarded DEP the Platinum Award for Utility Excellence in 2012.

I'm pleased to see that DEP has achieved so many of the goals we laid out two years ago, and look forward to much future success.

All the best,

A handwritten signature in black ink, appearing to read 'Caswell F. Holloway'. The signature is fluid and cursive, with a large initial 'C'.

Caswell F. Holloway  
Deputy Mayor for Operations

## LETTER FROM THE COMMISSIONER



Carter H. Strickland, Jr.  
Commissioner

Dear Friends,

In *Strategy 2011–2014* DEP committed to being the safest, most efficient, cost-effective, and transparent water utility in the nation. We set forth 29 broad goals that further our mission, 100 specific initiatives to measure our success, and an overarching objective to ensure the safety of all our employees and contractors. The 2012 Progress Report provides an overview of DEP's progress on each and every initiative and provides accountability to our ratepayers and other stakeholders.

In October 2012, Hurricane Sandy made landfall in the Northeast, bringing fierce winds and unprecedented tidal storm surge to New York City. The storm caused more than \$90 million in damages to ten of the City's 14 wastewater treatment plants and 42 of 96 pumping stations. DEP rapidly deployed in-house and contract resources to restore operations, and within two days of the storm surge 99% of the City's wastewater was being treated. Both during and after the storm DEP provided uninterrupted safe drinking water to the City.

I am proud to share some of the most notable accomplishments of the past year, in which we:

- Launched the Service Line Protection Program for water and sewer service lines;
- Completed the citywide installation of AMR devices;
- Completed construction of the Catskill/Delaware Ultraviolet Disinfection Facility;
- Opened a hands-on water and sewer training facility; and
- Signed an amended Consent Order with the New York State Department of Environmental Conservation implementing the NYC Green Infrastructure Plan.

Thanks to the hard work of our nearly 6,000 dedicated employees, DEP has accomplished more than half of the initiatives set forth in *Strategy 2011-2014*. In addition, we have made significant strides toward achieving our remaining goals and becoming exactly what New Yorkers deserve: the best water utility in the nation.

Sincerely,

A handwritten signature in black ink that reads "Carter H. Strickland, Jr." in a cursive script.

Carter H. Strickland, Jr.  
Commissioner



In 2012, DEP opened more than 6,100 acres of watershed lands to recreation.

# INTRODUCTION

Two years ago, the New York City Department of Environmental Protection (DEP) released *Strategy 2011–2014*, a far-reaching plan that set forth 29 goals and 100 specific and measurable initiatives to make DEP the safest, most efficient, cost-effective, and transparent water utility in the nation. Each of these initiatives directly support DEP’s mission: to protect public health, improve water quality in the harbor, support economic development, and enhance New Yorkers’ overall quality of life by delivering clean drinking water, managing stormwater, collecting and treating wastewater, and reducing air, noise, and hazardous materials pollution.

The *2012 Progress Report* demonstrates progress toward our goals over the past two years. Since 2011, we have fully achieved 57 of the 100 initiatives, partially achieved 30, and initiated 13 others.

Thanks to the dedication of our nearly 6,000 employees, DEP is well on its way toward achieving the 29 goals and 100 initiatives outlined by the plan. As we begin the third year of *Strategy 2011–2014*, this report serves as a benchmark by which the public can measure our success in meeting our objectives.

Status		2011	2012
Achieved and Ongoing	◆◆◆+	11	54
Achieved	◆◆◆	3	3
Partially Achieved	◆◆◇	49	30
Initiated	◆◇◇	36	13
Deferred	◇◇◇	1	0

Initiatives are:

- **Achieved and Ongoing** if they have met the milestones set forth in *Strategy 2011-2014* and DEP has incorporated the initiative into ongoing operations.
- **Achieved** if they have met the milestones set forth in *Strategy 2011-2014*.
- **Partially Achieved** if they have met significant milestones and are on track to be completed on schedule.
- **Initiated** if they are still in the early stages of development but are still on track to be completed on schedule.
- **Deferred** if they have been significantly delayed by choice or mandate, or they will be achieved through a different strategy.

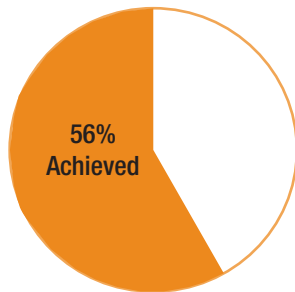




DEP constructed a hands-on water and sewer operations training facility in 2012.

## Customer Service

DEP is committed to providing transparent, high-quality and efficient customer service to the 836,000 customers who pay for the water and sewer services that fund the city's water and wastewater system, the nine million people who use our water every day, including eight million residents of New York City and nearly one million people who live in Westchester, Putnam, Ulster and Orange counties, and the developers, engineers, construction companies, and plumbers that need DEP permits to continue the city's growth.

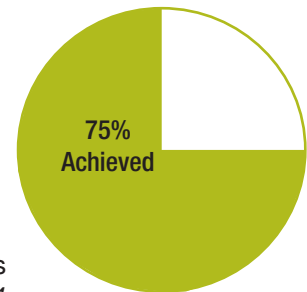


### Key 2012 Customer Service Milestones:

- Substantially completed the installation of Automated Meter Reading devices
- Launched the Service Line Protection Program
- Consolidated boiler conversion permits
- Promoted NYC Water through an expansion of Water-On-the-Go

## Worker Safety, Public Health, and Environmental Protection

The ambitious goals of *Strategy 2011–2014* can only be met if conditions are safe for DEP's nearly 6,000 employees and hundreds of on-site contractors at critical facilities. This requires continuous training, rigorous compliance, and open communication among DEP staff. DEP's annual Environmental Health and Safety (EHS) Survey in 2012 found that 90% of respondents agree that DEP communicated EHS information well and 85% indicate that they feel safe on the job and receive the necessary EHS training to do their job safely. Since 2007, EHS audit findings and observations have dropped 92% agency-wide.



### Key 2012 Worker Safety Milestones:

- Completed implementation of programmatic EHS audits throughout the agency
- Constructed a hands-on water and sewer operations training facility

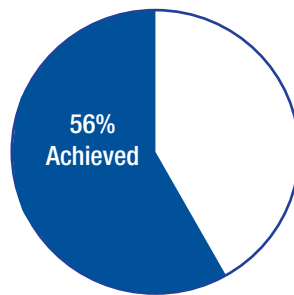




Through enhanced programmatic maintenance, DEP reduced confirmed sewer backups for the six consecutive year in 2012.

## Operations

DEP has a vital responsibility to manage a vast system comprising 19 reservoirs, 295 miles of aqueducts, 6,600 miles of water mains, 7,400 miles of sewers, 965 water quality monitoring stations, 109,000 fire hydrants, 144,000 catch basins, and 14 in-city wastewater treatment plants.



DEP's ability to confront future operational challenges—both planned and unanticipated—is vital to the health, safety, and economic development of New York City and the upstate watersheds.

In 2012, Hurricane Sandy tested DEP's wastewater conveyance and treatment system with fierce winds and an unprecedented tidal surge. In preparation for the storm, DEP deployed extra sewer maintenance crews to inspect catch basins at 115 flood-prone locations, moved equipment to higher ground, topped off all fuels, chemicals, and supplies, scheduled additional staff, and placed more than 3,500 sandbags around wastewater treatment plants located in evacuation zones. Even with these preparations, many of our facilities including ten of 14 wastewater treatment plants and 42 of 96 pumping stations experienced severe flooding and electrical outages. Thanks to the dedicated work of our employees, within two days of the storm surge DEP was able to treat 99% of wastewater, and 100% within two weeks.

## Key 2012 Operations Milestones:

- Maintained the city's Filtration Avoidance Determination
- Completed construction of the Catskill/Delaware Ultraviolet Disinfection Facility
- Supported economic development in the watershed through flood-relief grants and an expanded boating program
- Optimized water delivery by integrating the Operations Support Tool into daily operations
- Expanded sewer network in Queens and Staten Island
- Decreased water main breaks to the lowest level in ten years and sewer backups to the lowest level in six years
- Expanded catch basin cleanings and eliminated the catch basin repair backlog
- Updated the New York City Plumbing Code to reflect grease trap regulations
- Completed construction of a nitrogen removal process at Wards Island
- Completed installation of a computerized monitoring at wastewater treatment plants and pumping stations

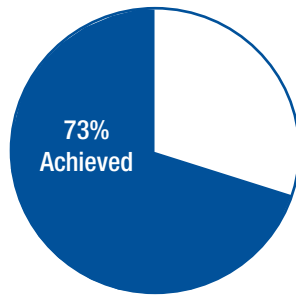




In 2012, DEP continued the implementation of the *NYC Green Infrastructure Plan* and unveiled the standard right-of-way bioswale.

## Capital

DEP has the largest capital program of any city agency and one of the largest construction budgets in the region, with \$11 billion in current construction and \$3 billion more in the planning or design stages. *Strategy 2011–2014* included initiatives to ensure that projects remain on time and on budget in order to keep water rates as low as possible.

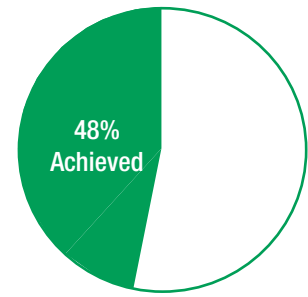


### Key 2012 Capital Milestones:

- Implemented new project controls business processes
- Expanded the Project Management Information System
- Published a database-driven webpage to display real-time information on open bids, bid results, and plan holders list
- Implemented an Asset Management Program
- Improved the Standard Construction Contract
- Strengthened minority and women owned business participation in DEP projects

## Sustainability

DEP promotes the public health, economic development, and quality of life of New York City by developing sustainable environmental policies and enforcing regulations designed to reduce air and noise pollution and to control asbestos removal. DEP administers New York City's air pollution control code, which is currently undergoing a major overhaul to update existing provisions and to look at new strategies to improve the city's air quality.



### Key 2012 Sustainability Milestones:

- Signed an amended consent order implementing the *NYC Green Infrastructure Plan*
- Expanded water quality testing sites
- Restored wetland habitats in Jamaica Bay
- Improved responses to hazardous materials
- Reduced air emissions from idling

The *2012 Progress Report* provides a detailed assessment of our advancements on each initiative over the past year. Over the next two years and beyond, we will continue to implement this plan and publish annual progress reports.









# STRATEGIC PLANNING AND PERFORMANCE

Strategy	Progress to Date	Status	
1	Launch H <sub>2</sub> OStat to ensure the efficient and cost-effective operation of the water system and the entire agency.	In 2012, DEP expanded the quarterly H <sub>2</sub> OStat meetings to include additional operations, energy, and other cost measurements as well as the Bureau of Environmental Compliance. DEP continues to identify and refine key performance indicators to better understand progress and make certain the agency is achieving its goals.	Achieved and Ongoing ◆◆◆+
2	Innovate and implement best practices through active engagement with our partner water utilities and stakeholder organizations around the country and the world.	In June 2012, DEP completed the first phase of Operational Excellence, or OpX. In the first six months of the program DEP and our partner Veolia Water North America identified opportunities to reduce operating expenses through optimizing asset maintenance, changing contract specifications, and better managing the wastewater treatment process. In addition, strategic replacement of select large meters could improve revenue collection by \$43 million per year. DEP is already implementing many of the changes identified through OpX, leading to a sustained annual reduction in operational expenditures of more than \$9 million. In October 2012, DEP was awarded the Association of Metropolitan Water Agencies' Platinum Award for Utility Excellence in recognition of its innovative and cost-effective operations. DEP maintains an active presence on the Water Research Foundation, Association of Metropolitan Water Agencies, the American Water Works Association, and the National Association of Clean Water Agencies. At the annual New York Water Environment Association conferences DEP staff presented a variety of technical and policy papers—43 in 2012.	Achieved and Ongoing ◆◆◆+

# CUSTOMER SERVICE

Strategy	Progress to Date	Status	
Goal: Provide the highest quality service to nine million New Yorkers, including our 836,000 bill-paying customers.			
3	Substantially complete the installation of Automated Meter Reading (AMR) devices citywide by January 2012 and continue to improve the online AMR tool.	DEP substantially completed installing the AMR network in early 2012 and by the end of 2012 more than 96% of our customers have AMR devices. AMR technology has resulted in a five-year low in billing disputes and a 60% reduction in the number of estimated bills. To date, 230,000 customers have registered their accounts through our online platform "My DEP Account," allowing them to monitor daily water consumption, view and pay water bills, and track the status of a billing dispute online. AMR devices have also allowed DEP to target billing relief efforts to customers affected by Hurricane Sandy.	Achieved ◆◆◆
4	Develop a leak detection system for customers who want to know when their water use deviates from normal consumption patterns.	In 2012, DEP expanded the Leak Notification Program to include residential properties with four or more units and commercial buildings. These larger customers now have the ability to customize their own leak alert parameters based on their individual needs. Since the program's inception in 2011, DEP has sent more than 31,600 leak notifications, saving our customers more than \$26 million in water and sewer charges - the equivalent of 2.2 billion gallons of wasted water.	Achieved and Ongoing ◆◆◆+
5	Reduce call response time to 30 seconds or less.	DEP is committed to providing quality customer service in a timely manner. In 2012, DEP Call Center representatives answered all calls, on average, in 66 seconds, and 67% of all calls in 30 seconds or less.	Initiated ◆◇◇
6	Continue and expand programs for customers in financial distress.	In 2012, DEP assisted 146 customers at risk of mortgage foreclosure through the Water Debt Assistance Program. DEP has also created new consolidated monthly payment agreements for more than 12,000 customers. Monthly billing helps our customers keep track of and budget for their water bills. New payment agreement terms do not require a down payment and payments can be spread out over 10 years. In November 2012, DEP deferred water bills for customers whose properties were severely damaged by Hurricane Sandy. DEP also waived standard fees for properties where water service has been disconnected due to storm damage and will suspend interest fees and collection actions on affected properties. DEP continues to explore new ways to assist customers in financial distress.	Achieved and Ongoing ◆◆◆+






7	Offer customers a service line protection plan.	In 2012, DEP selected American Water Resources to launch a water and sewer service line protection program. In January 2013, DEP launched the Service Line Protection Program, available to more than 640,000 customers.	Achieved and Ongoing 
8	Promote NYC Water by building partnerships with community organizations, businesses, and other city agencies.	In 2012, DEP served more than 500,000 New Yorkers through Water-On-the-Go and the program has become a key initiative of the Mayor's Obesity Task Force. Following Hurricane Sandy, DEP deployed ten Water-On-the-Go fountains in the Rockaways and Manhattan, providing drinking water to those without power and distributing more than a thousand water bottles.	Achieved and Ongoing 
<b>Goal: Ensure effective and fair revenue collection.</b>			
9	Replace the DEP customer information data system and convert to monthly account billing.	DEP is currently modernizing the existing customer information system. The project is expected to be operational in 2013.	Partially Achieved 
10	Convert customers to paperless billing and specific online payment methods.	More than 51,000 customers – 27% of all registered My DEP Account users – have signed up for paperless billing. To increase participation in this program, DEP includes a brochure outlining the benefits of a My DEP Account and paperless billing to any customer that contacts us by mail. DEP will continue to advertise our electronic billing and payment options via mailings and customer outreach events.	Partially Achieved 
11	Increase revenue collection with new collection tools and by targeting specific customer segments.	DEP has entered into a contract with Municipal Services Bureau (MSB), a third-party collection agency to improve revenue collection. In early 2013, DEP will send our most delinquent single family customers to MSB in an effort to ensure that all New Yorkers pay their fair share for water and sewer services.	Partially Achieved 
12	Renew and expand DEP's lien sale authority.	DEP has successfully conducted two lien sales since the City Council reauthorized our authority in 2011 to keep water rates as low as possible and to ensure that all New Yorkers pay their fair share for water and sewer service. Beginning January 1, 2012, all customers who enter into a payment agreement with DEP now receive monthly water and sewer bills. New payment agreement terms do not require a down payment and payments can be spread out over 10 years. DEP is preparing for a third lien sale in 2013.	Achieved and Ongoing 
13	Replace approximately 30,000 large meters on industry-recommended cycles over the next 10 years.	DEP is developing a methodology to prioritize large meter replacements. We will continue to refine our large meter replacement program based on results from the ongoing pilot phase, which has already replaced 130 meters that were not functioning correctly. DEP has registered three installation contracts, all of which are expected to be operational in early 2013, in anticipation of program expansion next year.	Initiated 
14	Evaluate new water rate structures.	<p>In 2012, DEP converted more than 30,000 customers from frontage rates to the Multifamily Conservation Program (MCP). As a part of this conversion, customers are required to meet certain conservation requirements and will be eligible to participate in our Toilet Replacement Program. DEP launched an online Metered Billing Comparison tool to help our customers determine if they should switch from the MCP program, which is based on a per-unit charge, to metered billing. This tool allows customers to see what their bill would be through both the flat-rate Multifamily Conservation Program and regular metered billing. While DEP does not advise customers whether they should convert from flat-rate to metered billing, the tools offered help our customers evaluate which option is right for their property. In 2012, nearly 2,000 customers opted to switch from flat-rate to metered billing.</p> <p>In 2011, DEP piloted a new stormwater charge of \$0.05 per square foot for stand-alone parking lots that do not receive or pay for water service but that discharge stormwater to our swers. In 2012, DEP billed 364 accounts for a total of \$188,000. The charge continues to generate revenue for important stormwater related expenditures and targets existing private development, in conjunction with DEP's stormwater performance standard. In 2012, DEP used updated data to capture additional stand-alone parking lots not originally charged in 2011, and will begin billing these additional accounts in 2013. DEP continues to explore other potential stormwater charges and reforms.</p>	Partially Achieved 

Goal: Encourage economic development by simplifying and improving permitting processes.			
15	Increase online permitting for businesses, engineers, and contractors.	Through the online Water and Sewer Permitting System, accessible through My DEP Account, Licensed Master Plumbers can apply for and receive permit approvals without visiting a DEP office. In 2012, DEP continued to work to publish additional permits online, and will move water service and meter permits online as part of the Water and Sewer Permitting System in 2013.	Partially Achieved 
16	Consolidate permitting functions to simplify customer interactions with DEP.	In 2012, DEP completed simplifying the permitting process for converting boilers from high-sulfur residual fuel oil to cleaner fuels. Permits for converting boilers to cleaner fuels require approval from both the Department of Buildings and DEP. In order to make the system as efficient and integrated as possible, DEP worked with DOB to design a shared system that avoids duplicity, speeds up permitting processes, and ultimately simplifies customer interactions with DEP.	Achieved and Ongoing 
17	Update and improve DEP's air permitting database.	In 2012, DEP launched the Clean Air Tracking System (CATS), a new online program designed to expedite boiler and equipment registrations and renewals, enable online payment of fees, and consolidate registration filings for building owners and property managers. New Yorkers can now register boilers and equipment online, saving paperwork and in-person visits to DEP offices while also reducing the costs of complying with new boiler emissions standards and the New York City Air Code.	Partially Achieved 
18	Publish an annual regulatory agenda.	DEP published a regulatory in 2012 and will publish the 2013 regulatory agenda in the spring of 2013.	Achieved and Ongoing 
19	Publish regulatory guidance manuals.	In 2012, DEP drafted an Automotive Industry Guide and a Hospital Industry Guide, which will both be published in early 2013. In 2012, DEP produced a video on grease traps for the restaurant industry and is developing two additional videos for businesses on commercial music and backflow prevention devices.	Achieved and Ongoing 
20	Simplify the reporting process for businesses and other entities that are required to report their hazardous substances to DEP.	The Community Right-to-Know Tier II Filing System (Tier II) is a web-based system that allows facilities to submit their annual chemical inventories online. In 2012, DEP improved the Tier II system by adding more online payment options. DEP continues to provide assistance to the filing community in the transition to online submissions. Last year, approximately 330 facility owners or their representatives visited DEP for assistance with their Tier II submissions. In 2012, more than 75% of facilities filed online, and we will continue to work with the remaining facilities to increase online filing next year.	Achieved and Ongoing 





## WORKER SAFETY, PUBLIC HEALTH, AND ENVIRONMENTAL PROTECTION

Strategy	Progress to Date	Status
Goal: Run the safest operations and capital program in the country with the best environmental compliance record of any large water and wastewater utility.		
21	Measure EHS performance and demand success.	In 2012, DEP fully implemented programmatic audits throughout the agency, as well as bureau-level environmental health and safety (EHS) regulatory compliance audits to better gauge EHS performance. DEP also revised the EHS Metrics Guidance to ensure accurate and consistent reporting and analysis of the performance indicators used to monitor progress and verify the effectiveness of the EHS Compliance Program.  In 2013, DEP will participate in a national water utility EHS metrics benchmarking campaign in conjunction with the American Water Works Association Safety Committee. DEP's Bureau of Engineering, Design and Construction is also developing an electronic submission system to gather EHS metrics from capital construction sites.
		Achieved and Ongoing 







22	Integrate EHS compliance into every aspect of DEP operations and construction.	<p>Results from DEP's annual EHS survey indicate that DEP has effectively integrated EHS compliance into all aspects of operations and construction. More than 90% of respondents of the annual survey agree that DEP is doing a good job communicating EHS information and 85% of respondents indicate that they feel safe on the job and receive the necessary EHS training to do their job safely. DEP's new EHS programmatic audits better identify program strengths and weaknesses and involve employees directly in the development of corrective actions.</p> <p>EHS audit results show continuous improvements in workplace safety. For example, EHS audit findings and observations have dropped 92% since 2007, from 11,836 to 950 in 2012. Similarly Priority II findings, which indicate a higher degree of risk or a program gap, have decreased 75% since 2007, from 600 to 150 in 2012.</p>	<p>Achieved and Ongoing</p> 
23	Ensure effective EHS training and education for all employees.	<p>In 2012, DEP completed construction of a hands-on water and sewer training facility, which was designed to integrate safety into equipment training. This investment in training has helped reduce recordable injuries for water and sewer operations field staff 40% compared to 2011. DEP continues to develop its Training Tracking and Recording System to better manage the courses offered and deliver electronic training to all employees. In 2012, DEP offered classroom courses in Effective Communication in the Workplace and Supervisory Training four times each month. DEP will continue to offer new computer-based training courses in 2013 including Hazard Communication/Right-to-Know for office employees, Office Ergonomics, a Workplace Violence Refresher, and an Emergency Action Plan Refresher.</p>	<p>Partially Achieved</p> 
24	Encourage open, frequent, and candid communication about EHS issues.	<p>In 2012, DEP shared EHS information through "Spotlight on Safety," a weekly segment in DEP's electronic newsletter, <i>Weekly Pipeline</i>, and published four issues of <i>EHS Matters</i>, which showcases studies of EHS incidents and scenarios. In 2012, DEP began testing digital signage that can provide facilities real time information on EHS metrics, policies, training, and other news, and will install this digital signage at wastewater treatment plants in 2013. In addition to the EHS Concerns Hotline, DEP created an email address where employees can send questions and suggestions about EHS.</p>	<p>Achieved and Ongoing</p> 

## WATER SUPPLY



Strategy		Progress to Date	Status
<b>Goal: Supply high quality drinking water.</b>			
25	Maintain the city's Filtration Avoidance Determination (FAD).	<p>In December 2011, DEP submitted its long term Filtration Avoidance Determination (FAD) plan to the New York State Departments of Health and Environmental Conservation, which includes program proposals for 2012-2017. Throughout 2012, DEP continued discussions with our regulators to finalize the next FAD update. Funding for FAD programs has been included in the 10-Year Capital Plan.</p>	<p>Achieved and Ongoing</p> 
26	Purchase watershed lands that protect water quality.	<p>In 2012, DEP solicited approximately 63,000 acres of land in the watershed and closed on 7,087 acres in fee or easement, including Watershed Agricultural Farm Easements, to meet the requirements of the Land Acquisition Program, a mandated component of the Filtration Avoidance Determination. Since the inception of this program, New York City has protected more than 128,000 acres of watershed land—including more than 83,000 since 2002—in the Catskill/Delaware and Croton watersheds.</p>	<p>Achieved and Ongoing</p> 
27	Complete and operate the Catskill/Delaware Ultraviolet (UV) Disinfection Facility to comply with the federal mandate for secondary disinfection of the Catskill and Delaware water supplies.	<p>In 2012, DEP completed 90% of the construction of the \$1.6 billion Catskill/Delaware Ultraviolet Disinfection Facility, the largest facility of its kind in the world. Since mid-October, DEP has been treating all New York City tap water with ultraviolet disinfection.</p>	<p>Achieved and Ongoing</p> 
28	Complete and operate the Croton Water Filtration Plant by 2013.	<p>In 2012, DEP continued construction of the \$3.2 billion Croton Water Filtration Plant, and began field testing of system process equipment. In June 2012, DEP completed construction of a plug in the New Croton Aqueduct to separate raw and treated water. In 2013, DEP will complete and begin operating the plant.</p>	<p>Partially Achieved</p> 








Goal: Protect New York City's watershed.			
29	Protect the water supply from hydrofracking for natural gas in the New York City watershed.	In 2012, DEP continued to advocate for strong protections for the water supply infrastructure. In early November, DEC applied for and received a 90 day extension on the draft regulations for high-volume hydrofracking and on November 30, 2012 released revised regulations. DEP submitted comments on the revised regulations in January 2013.	Partially Achieved 
30	Support economic development compatible with watershed protection.	DEP continues to work with watershed communities and partners to support economic development initiatives throughout the watershed. In 2012, DEP worked with the Catskill Watershed Corporation to implement a \$6 million flood relief grant program for storm-ravaged businesses and funded economic development loans totaling more than \$4 million. DEP also worked with watershed communities to implement an expanded boating program, opening three new reservoirs to recreational boating access to enhance tourism throughout the watershed region.	Achieved and Ongoing 
31	Expand recreational opportunities in the city's watershed.	In 2012, DEP expanded recreational boating opportunities to the Pepacton, Neversink, and Schoharie reservoirs after the successful completion of a pilot program on the Cannonsville Reservoir. DEP issued nearly 1,000 boat tags, mostly for access to the Pepacton Reservoir. DEP also opened 5,207 acres of new recreational land and converted 1,323 acres from "entry by permit" to Public Access Areas to remove barriers for public use. DEP developed two designated use areas in Prattsville and on the Kensico Dam and expanded bow hunting areas on the Ashokan Reservoir. To expand deer hunting opportunities and reduce the negative impacts associated with deer on forested watershed lands, DEP secured 42 Deer Management Assistance Permits from the New York State Department of Environmental Conservation and distributed them to local hunters.  In January 2013, DEP announced a pilot program allowing the use of electric trolling motors for permitted boats fishing at Cannonsville Reservoir. The pilot will begin in April 2013.	Achieved and Ongoing 
Goal: Maintain robust, secure, and cost-effective water supply infrastructure and improve operational efficiency with new technology.			
32	Develop and implement a plan to repair the Delaware Aqueduct.	Through Water For the Future, DEP will repair leaking sections of the Delaware Aqueduct, ensuring reliable water for decades to come. DEP released a Request for Proposals for the construction of the shafts in Newburgh and Wappinger in April 2012 and registered the contract in December 2012. DEP will begin site preparation and construction on the two shafts in January 2013. The construction of the bypass tunnel and repair of the leaking section in Wawarsing is being designed and should be complete by September 2014. DEP expects to begin tunnel construction in 2015.  After a detailed analysis, DEP determined that there is almost no risk of liner failure while the existing tunnel is dewatered, and water inflows during construction will be manageable. The combination of these findings means that construction of a plug in the existing tunnel is not required and DEP can phase the work. This results in a shorter shutdown period and less of a need for augmentation of water supplies. Consequently, DEP has reduced the total program cost by \$400 million, to \$1.7 billion.	Initiated 
33	Pressurize the Catskill Aqueduct.	In 2012, DEP revisited plans to pressurize the Catskill Aqueduct. In 2013, DEP will analyze various options to pressurize the aqueduct, including no action, baseline pressurization, enhanced pressurization, construction of pump stations, and new tunnel construction. DEP will release a Request for Proposals for geotechnical boring work scheduled for 2014.	Initiated 
34	Connect the Delaware and Catskill aqueducts.	In 2012, DEP bid the contract to connect the Delaware and Catskill Aqueducts at Shaft 4. The contract will register in January 2013, and DEP expects to complete the project in 2015.	Initiated 



35	Develop cost-effective groundwater and other supplemental water supply alternatives.	<p>In 2012, DEP awarded the design contract for the development of Queens groundwater and began design work to supply the City with up to 30 million gallons per day from the highest quality, most productive wells during the shutdown of the tunnel, if needed. DEP is also evaluating methods to restore capacity of the Catskill Aqueduct by removing the biofilm that has formed in the aqueduct and rehabilitating sections of the aqueduct. DEP initiated a pilot study to chemically clean the Catskill Aqueduct. In 2013, DEP will complete this study and determine if chemical cleaning is an effective approach to restore capacity of the Catskill Aqueduct. Positive results could lower costs an additional \$100 million by eliminating the need to line the Aqueduct.</p> <p>DEP has also initiated a contract to design chlorination and de-chlorination facilities on the Catskill Aqueduct. The goal of the Catskill Repair and Rehabilitation effort is to ensure that the aqueduct is in a state of good repair, and restore its transmission capacity from the current 590 million gallons per day to its original 636 million gallons per day. In 2012, DEP piloted the Municipal Water Efficiency Program with efficient water fixture replacements at two Department of Education high schools and two Department of Parks and Recreation playgrounds.</p>	<p>Initiated</p> 
36	Operate and maintain DEP's network of dams.	<p>In 2012, DEP continued to implement the Dam Safety Inspection Program, performed post-incident inspections immediately after Hurricane Sandy, and conducted and submitted Engineering Assessment Reports indicating overall satisfactory conditions of structural integrity of the dams to the New York State Department of Environmental Conservation.</p> <p>Reconstruction of Gilboa Dam is 46% complete, with substantial completion expected in September 2014, nearly two years ahead of the contractual completion requirement. The reconstruction contract for New Croton Dam is scheduled to begin in January 2013, with anticipated substantial completion in January 2016 at a cost of \$13.5 million. The New Croton Dam is last of the planned major dam reconstruction projects in the Croton Watershed.</p>	<p>Partially Achieved</p> 
37	Optimize water delivery by integrating next-generation forecasting models into daily operations.	<p>In 2012, DEP finalized the Flexible Flow Management Program release rules and finalized an agreement with local stakeholders to develop a multi-year plan for 2013 and beyond using the Operations Support Tool (OST). DEP will begin full-scale testing and will use the OST for routine operations in early 2013. In addition, DEP has completed extensive modeling in conjunction with the Ashokan Release protocol and discussions are ongoing with the New York State Department of Environmental Conservation.</p>	<p>Achieved and Ongoing</p> 
38	Continue to protect the New York City watershed and water infrastructure.	<p>In 2012, DEP completed a \$15 million effort to improve water security by installing 12 online water quality monitoring station locations and integrating customer call, laboratory data, online water quality, and other data into a spatial dashboard for automatic event detection. The dashboard provides easy access to continuous online compliance data from a large network of water quality sensors located both upstate and within the distribution network. DEP also developed a crisis and consequence management plan and risk communication plan as part of the project, and undertook a series of exercises and drills to test and improve responses to a water contamination event, including a full scale compliance exercise involving DEP, the Office of Emergency Management, and the New York City Department of Health and Mental Hygiene. In 2012, DEP Police conducted 275,010 security patrols, up from 247,176 in 2011.</p>	<p>Achieved and Ongoing</p> 

## WATER DISTRIBUTION

Strategy	Progress to Date	Status	
Goal: Complete key infrastructure projects to improve the delivery of water to New Yorkers.			
39	Activate Stage 2 of City Water Tunnel No. 3.	<p>In 2012, DEP commenced construction on the final four critical water main projects and is on schedule to activate City Water Tunnel No. 3 in 2013.</p>	<p>Partially Achieved</p> 
40	Build the Staten Island Siphon.	<p>In 2012, in partnership with the Port Authority of New York and New Jersey and the New York City Economic Development Corporation, DEP launched tunneling operations for construction of the Staten Island Siphon. During Hurricane Sandy, the Staten Island shaft site was inundated with water and the tunnel boring machine was damaged, delaying the project for approximately one year.</p>	<p>Initiated</p> 

41	Build out and replace critical water supply infrastructure to support residential, commercial, and industrial growth throughout the city.	DEP continues to make substantial progress on key water supply projects in targeted areas, including Coney Island where construction is planned for the first half of 2013, Pelham Parkway where water main work is already under construction, and the Rockaways, where DEP will complete more than \$10 million in water distribution upgrades over the next three years. In 2012, DEP completed water main construction near Atlantic Yards to meet expected demand increases and support the opening of the Barclay's Center. DEP also has begun work to support the development of Hudson Yards on the west side of Manhattan.	Achieved and Ongoing 
<b>Goal: Build out sewer and stormwater infrastructure to improve water quality in New York Harbor, reduce flooding, and support economic growth.</b>			
42	Build out and upgrade the sewer network in southeast Queens, Staten Island, and other neighborhoods that need additional capacity.	DEP will continue to prioritize the extension of sanitary and storm sewers in areas that need additional capacity or to support future growth. In 2012, DEP began a \$69 million project in Springfield Gardens, which includes construction of 2.8 miles of sewer lines and nearly three miles of water mains as well as drainage improvements to Springfield Lake. DEP also completed three projects in Staten Island and five projects in Queens at a cost of more than \$40 million, including a \$14 million project in Middle Village, Queens. Designs for sewer projects in Staten Island at Sheldon Avenue and Halpin Avenue are underway, and DEP expects designs for Twin Ponds in the Laurelton section of Queens to be completed in 2013. DEP has included \$2.4 billion for sewer construction in the 10 Year Capital Plan.	Achieved and Ongoing 
43	Complete a comprehensive drainage investment strategy for the city.	In 2012, DEP continued work on the Environmental Impact Statement (EIS) for the Mid-Island Bluebelt. DEP continues to enhance its drainage planning capabilities through the use of hydraulic modeling. In 2012, DEP formed a dedicated modeling group to quickly analyze issues and evaluate alternatives to solve them, leading to faster solutions. In addition, DEP expanded drainage plan development capabilities through the addition of dedicated contract resources. DEP continues to develop the asset management program for sewer-related investments that will allow the agency to make more strategic decisions.	Partially Achieved 
<b>Goal: Increase the efficiency of field crews to optimize the maintenance and performance of the water and sewer networks.</b>			
44	Decrease water main breaks and sewer backups and improve response time.	Reported sewer backups continued to decline last year for the sixth year in a row. In 2012, DEP cleaned approximately 700 miles of sewers and continues to expand several programs to address sewer backups, including programmatic degreasing and improved sewer backup response practices. In addition, DEP launched a pilot to evaluate sewer manhole sensors. These sensors measure the elevation of wastewater in the sewer and wirelessly transmit that information to DEP's computer systems, allowing DEP to dispatch crews promptly and fix the problem before it results in a sewer backup. In November, DEP released the <i>State of the Sewers 2012</i> , which includes key performance indicators for sewer maintenance and construction for each borough.  DEP has reorganized and shifted resources to improve our approach to preventive maintenance and enhance our schedule for performing repairs on water mains. This shift has been directly responsible for a 23% reduction in water main breaks, from 428 in 2011 to 347 in 2012, the fewest in more than a decade.	Achieved and Ongoing 
45	Expand catch basin cleanings and rehabilitation to prevent flooding and protect water quality.	In 2012, DEP substantially reduced the catch basin repair backlog. Today, fewer than 750 catch basins have open work orders – only 0.5% of all catch basins citywide. Every time field crews inspect or clean a catch basin, they also determine if it requires structural repairs to keep working properly. Those that need work are placed into our computerized maintenance management system.	Achieved and Ongoing 
46	Expand the preventive maintenance program of critical water infrastructure.	In 2011, DEP created the Valve and Regulator Repair Unit to implement an enhanced preventive maintenance program for water main valves and regulators to minimize the potential for breaks. In 2012, DEP performed more than 5,300 inspections of the City's 500 water pressure regulators, which resulted in a 23% reduction in water main breaks compared to 2011. DEP averaged fewer than six breaks per 100 miles of pipe, well below the accepted industry average of 24 breaks per 100 miles annually.	Achieved and Ongoing 
47	Improve hydrant repair response time.	In 2012, DEP completed system upgrades to allow the New York City Fire Department to enter data about broken hydrants directly into DEP's computer system, minimizing the time between issue identification and resolution, reducing inspection redundancy, and eliminating duplicative data entry. Repair time for broken and inoperative high-priority hydrants reached a new low of 4.4 days in 2012, and the backlog of broken and inoperative hydrants is substantially below target.	Achieved and Ongoing 



48	Increase field crew productivity to increase maintenance and improve system performance.	During 2012, DEP evaluated the performance of mobile technology in the field and expanded wireless internet connectivity, ensuring that the mobile units can be used inside and outside the vehicles. This has made the mobile technology tools more reliable for our field staff, even in areas of the city that may have weaker connections to the network and provides a cost-effective way for our field staff to access GIS data.	Partially Achieved 
<b>Goal: Protect public health and water and sewer infrastructure by promoting and enforcing the installation of backflow preventers, grease traps, and other critical equipment.</b>			
49	Increase backflow prevention inspections.	During 2012, DEP reorganized the backflow prevention program to increase the pace and improve the quality of our inspection program. In 2012, DEP increased inspections by more than 30% compared to last year, completing more than 8,000 inspections— putting us ahead of schedule to achieve our goals.	Partially Achieved 
50	Update grease trap regulations, increase inspections, and educate the business and development communities about compliance.	In August 2012, Mayor Bloomberg signed legislation amending the Plumbing Code to include, among other changes, reference to DEP Sewer Regulations for proper sizing and installation of grease traps (Local Law 41 of 2012). DEP created an informational video for businesses on grease interceptors and distributed it to the hospitality, real estate, and plumbing industries. DEP also held workshops on grease trap regulations at the Flushing Library, the Plumbing Foundation, the Master Plumbers Council, the BuildingsNY Expo, and the Council of New York Cooperatives and Condominiums. In 2012, DEP completed 3,245 grease compliance inspections, up from 3,171 in 2011.	Achieved and Ongoing 
51	Promote and incentivize yellow grease recycling for use as a biodiesel fuel.	In October 2012, DEP and the New York City Business Integrity Commission (BIC) launched a comprehensive strategy to ensure compliance with grease hauling and disposal regulations. The interagency effort combines two components: a joint task force composed of BIC enforcement agents and DEP inspectors, and a new DEP online video to educate the food service industry on how to keep grease, fats, and oils from entering the City's sewer system. DEP also distributed 14,000 "Cease the Grease" leaflets in residential complexes. In 2012, DEP developed a pilot program with the New York City Housing Authority to educate residents about recycling used cooking oil, which will launch in early 2013.	Achieved and Ongoing 

## WASTEWATER TREATMENT





Strategy	Progress to Date	Status	
<b>Goal: Certify citywide compliance with Clean Water Act standards for secondary wastewater treatment.</b>			
52	Certify that the Newtown Creek Wastewater Treatment Plant meets secondary treatment standards by June 2011.	Under the federal Clean Water Act, wastewater must be treated to remove at least 85% of certain pollutants before post-treated water can be discharged into surrounding waterways. In May 2011, DEP certified that the Newtown Creek Wastewater Treatment Plant met Clean Water Act secondary treatment standards two years ahead of schedule, as a result of a \$5 billion upgrade that will be substantially completed in 2013. In 2012, DEP surpassed standards and removed 92% of total suspended solids and 94% of carbonaceous biological oxygen demand from the effluent at the Newtown Creek Wastewater Treatment Plant and placed the third treatment battery into service.	Achieved 
53	Complete \$2.6 billion in upgrades underway at six wastewater treatment plants.	DEP substantially completed plant upgrades at the Bowery Bay and Hunts Point Wastewater Treatment Plants in 2012 and will complete upgrades at the 26th Ward and Wards Island Wastewater Treatment Plants in early 2013. Work continues at the Jamaica and Tallman Island Wastewater Treatment Plants with construction completion expected in mid-2015 and late 2014, respectively. Despite the impact from ongoing construction activities, DEP is routinely able to meet or exceed the step-down limits for nitrogen discharges into New York water bodies needed to comply with the Clean Water Act standards.	Partially Achieved 

Goal: Continue to improve water quality in New York Harbor to facilitate new development and increased waterfront access for all New Yorkers.			
54	Implement the NYC Green Infrastructure Plan.	<p>In 2012, DEP continued to invest in cost-effective grey infrastructure and system improvements to reduce combined sewer overflows. DEP completed the first two-year cycle of interceptor cleaning, removing 30 million pounds of material from the largest sewers, and increasing storage capacity by more than three million gallons. DEP estimates that this will reduce combined sewer overflows by 100 million gallons annually. In 2012, DEP also completed the inspection of all tide gates, including associated repairs and replacement.</p> <p>Under the CSO grey infrastructure program, DEP completed construction on the Shellbank Basin Destratification Facility, the Avenue V Pump Station, and the Bronx River Floatables Control Facility, as well as force main upgrades in 2012. DEP continued construction of the Newtown Creek-Enhanced Aeration Facility in Lower English Kills, which will be completed in 2013.</p>	Partially Achieved 
55	Activate the SHARON and ARP treatment technologies to remove oxygen-depleting nitrogen from wastewater.	In September 2012, the New York State Department of Environmental Conservation (DEC) certified completion of the Stable High Ammonia Removal Over Nitrite process at the Wards Island Wastewater Treatment Plant. DEP, in consultation with DEC, terminated the Ammonia Removal Process contract in favor of construction of a glycerol facility at the Jamaica Bay Wastewater Treatment Plant. This alternative will meet requirements of the Jamaica Bay Agreement, and will remove 3,000 pounds of ammonia per day from the effluent discharged into Jamaica Bay.	Achieved and Ongoing 
Goal: Optimize the efficiency and reliability of wastewater treatment operations.			
56	Pilot contracting competition between city workers and private contractors.	In 2012, DEP awarded two contracts to DEP employees as part of the insourcing pilot. At the North River Wastewater Treatment Plant, DEP employees replaced a sump pump for \$30,000 less than the lowest contractor bid. Similarly, at the Port Richmond Wastewater Treatment Plant, DEP staff upgraded the roof drains for \$40,000 less than the lowest contractor bid.	Partially Achieved 
57	Improve inventory management and planning.	<p>In 2012, DEP installed the Computerized Maintenance Management and Inventory Control System at all fourteen wastewater treatment plants and all 96 pump stations. Facilities are currently inputting up-to-date information on assets, preventive maintenance schedules, and inventory. In 2013, DEP will complete preventive maintenance scheduling at all facilities.</p> <p>DEP also began developing design standards for various unit processes and equipment at wastewater treatment plants and pumping stations to streamline the design process and improve the efficiency and ability to maintain our equipment in 2012. To date, DEP has completed design standards for main influent gate actuators, non-submersible centrifugal pump packing seal, and programmable logic controller memory, and has an additional 27 standards in the planning and approval stages.</p>	Partially Achieved 
58	Use new technology to constantly monitor pump stations and other infrastructure and reduce staff inspections.	In December 2012, DEP installed the Citywide Collection Facilities Integrated Supervisory Controls and Data Acquisition System (SCADA) at 101 regulators, 95 pumping stations, influent gates at 14 wastewater treatment plants, five combined sewer overflow facilities, and three in-line throttling gates. In January 2013, DEP completed installation by updating documents and finalizing operations and maintenance manuals and as built drawings.	Achieved and Ongoing 
Goal: Evaluate the economic, ecological, and social effects of DEP's capital investments and wastewater treatment operations.			
59	Develop and implement a long-term citywide sludge management program.	DEP continues to evaluate its biosolids management program and has undertaken a study to further evaluate improvements to the sludge treatment processes, measures to reduce DEP's carbon footprint and treatment/handling costs, and innovative technologies to beneficially reuse biosolids while reducing the overall disposal costs. In 2012, six contractors managed DEP's sludge production through land application or landfilling in various states throughout the Northeast. Approximately 40% of New York City's biosolids are beneficially used.	Achieved and Ongoing 
60	Expand and strengthen DEP community partnerships throughout the five boroughs.	In June 2012, DEP co-hosted a Citywide Public Kickoff Meeting and Open House to begin water quality planning processes for LTCPs to address combined sewer overflows with the New York State Department of Environmental Conservation. More than 60 stakeholders from 30 different non-profit, community planning, environmental, economic development, governmental organizations, and the broader public attended the event. On October 24, 2012 DEP held the Alley Creek LTCP Kickoff Public Meeting to discuss DEP's planned improvements to Alley Creek, public participation plans, and schedule.	Achieved and Ongoing 


# CAPITAL






Strategy		Progress to Date	Status
<b>Goal: Implement strong capital project controls to deliver projects on time and on budget.</b>			
61	Implement new project controls business processes.	DEP continues to implement industry best management practices with regard to project controls, including routine governance of all capital projects. Standardized reporting of project risks and issues related to safety, quality, cost, and schedule have improved project communications and timely issue resolution. In 2012, DEP developed a standard Work Breakdown Structure to capture cost and project scope, and analyze trends and variances across the capital program. DEP will begin implementing the standard Work Breakdown Structure in 2013 on new projects to collect uniform data on project execution and develop key performance indicators.	Achieved and Ongoing ◆◆◆+
62	Create a Project Controls Division.	The Program Controls Division continues to support project teams with complex schedule and delay analyses, claims support, and cost estimating. In 2013, DEP will introduce a schedule management training program to improve consistency across the program.	Achieved and Ongoing ◆◆◆+
63	Create a New Project Management Information System.	In 2012, DEP expanded the Project Management Information System to include several automated workflows for project initiation, scope changes, and project baseline approvals to enhance visibility of scope, cost, and schedule across the agency. DEP has selected a consultant to develop Phase II of the Capital Management Information System, who has begun developing a detailed master plan for the next generation system design. Next steps will include merging existing databases into a centralized, accessible system and evaluating the capability of the existing platform to host additional functionalities. DEP expects Phase II to be completed in 2014.	Achieved and Ongoing ◆◆◆+
64	Provide public transparency into DEP capital projects.	Beginning in March 2012, DEP began publishing real-time information on bid results, plan holders lists, and upcoming bids on our website. This information can be found here: <a href="http://www.nyc.gov/html/dep/html/businesses/pact_bid_results.shtml">http://www.nyc.gov/html/dep/html/businesses/pact_bid_results.shtml</a>	Achieved and Ongoing ◆◆◆+
<b>Goal: Achieve \$100 million in savings through value engineering and by deferring projects.</b>			
65	Implement an Asset Management Program to make the right decisions at the right time.	DEP's Asset Management Program ensures that the right capital investments are made at the right time and stores critical information on DEP's wastewater, water supply, and other critical facilities. To date, we have scored more than 26,000 vertical assets and have used that information to prioritize more than 400 repair and replacement projects. In 2012, DEP launched an asset database tool to track age, condition, performance, replacement cost, and performance of various assets.  In 2012, DEP began incorporating existing pipe data and information from our comprehensive Geographic Information System database into a state-of-the-art forecasting modeling tool to prioritize the replacement of water and sewer mains as part of a Linear Asset Management Plan. DEP also held a series of interactive workshops with DEP staff and experts in the field to establish a framework to manage risk in alignment with DEP's Vertical Asset Management Program. This will ensure that the two programs are compatible and will improve the prioritization for future field inspection work and data gap closures.  In 2013, DEP will reinspect our wastewater, water supply, and other facilities to update asset scores and business cases. DEP will use the data collected to develop a 50-year rehabilitation and replacement cost projection for linear assets, with anticipated completion in 2013.	Achieved and Ongoing ◆◆◆+
66	Develop a 10-year capital plan that prioritizes funding for critical assets and minimizes the need for future water rate increases.	DEP uses data from the Asset Management Program to develop business cases that are used to produce the 10-Year Capital Plan, which was released by the Office of Management and Budget in January 2013. DEP continues to update ranked business cases on a biannual cycle to amend and prioritize the 10-Year Capital Plan.	Achieved and Ongoing ◆◆◆+
<b>Goal: Strengthen technical expertise in design and construction management.</b>			
67	Enhance expertise through reduced dependency on consultant support.	DEP continues to recruit new talent and expand in-house design capabilities on major capital construction projects. DEP designed and is managing construction oversight of the New Douglaston Pump Station and the Throgs Neck Pumps Station Projects to provide challenging assignments to in-house staff and reduce project costs.	Partially Achieved ◆◆◇




68	Recruit top engineering talent to pave the way for future success.	In 2012, DEP launched a year-round internship program across the agency, hosting more than 110 interns over the summer and during the fall semester. DEP also launched a series of recruitment improvements on our website, including online intern applications and the Faces of DEP module, which introduces prospective candidates to current DEP employees. DEP also worked with the Office of Management and Budget (OMB) to expedite the hiring of top engineering talent. In 2013, DEP will continue to work with OMB and launch a recruitment video on our website. In December 2012, DEP hired a Deputy Commissioner for Organizational Development who will direct the recruitment of top talent to fill critical positions, ensuring that the hiring processes are efficient and transparent to candidates and the hiring bureaus.	Partially Achieved 
69	Implement a workforce development program.	In June 2012, DEP completed an employee survey to determine what steps we need to take to become the safest, most effective, cost-efficient, and transparent water utility in the nation. In December 2012, DEP hired a Deputy Commissioner for Organizational Development to implement a workforce development strategy. The Deputy Commissioner for Organizational Development will direct, integrate, and improve the organizational functions that span the entire life-cycle of the employee experience at DEP. This person will also oversee an integrated training system that begins with an employee's first day on the job, develops employees to assume additional responsibilities, and provides incentives to retain employees in a competitive job market. Working with key managers, the Deputy Commissioner for Organizational Development will also develop bureau-specific leadership development plans.	Initiated 
<b>Goal: Become the owner of choice in the regional and national design and construction community.</b>			
70	Improve DEP's standard construction contract language and processes.	In 2012, DEP continued to work closely with the Law Department to develop changes to the City's Standard Construction Contract. DEP expects that the revised language will be released in early 2013 by Corporation Counsel. In 2012, DEP also launched a contractor environmental health and safety (EHS) management system, including a contractor orientation program, EHS standards training, and an EHS pocket-guide, focused on minimizing risks at worksites.	Achieved and Ongoing 
71	Strengthen outreach to design and construction industry partners and expand minority- and women-owned business participation.	In 2012, DEP continued quarterly meetings of our Minority and Women Owned Business Enterprise (MWBE) Advisory Board and implemented a number of its recommendations, including improvements to our website so that it now displays real-time information on bid results, upcoming bids, and planholders lists. DEP also enhanced "How to Do Business with DEP" events by partnering with the Environmental Facilities Corporation and issued a request for qualifications for the Construction Mentorship Program, due in February 2013.  As a result of our continued efforts to strengthen outreach to the MWBE community, participation rates have increased across all three procurement areas since Fiscal Year 2010. In FY 2012, 42% of DEP's micropurchases were from MWBE firms, up from 25% in FY 2010. DEP's small purchases increased from 11% in FY 2010 to 24% in FY 2012, and MWBE subcontractors increased from participation rates of 27% in FY 2010 to 40% in FY 2012.	Achieved and Ongoing 




## REGULATORY RELATIONSHIPS AND POLICY

Strategy	Progress to Date	Status
<b>Goal: Enlist stakeholders to develop investment priorities and help secure funding for water and wastewater infrastructure.</b>		
72 Form a clean water and clean air partnership with civic groups, customers, regulators, and other stakeholders.	In 2012, DEP held public Long Term Control Plan (LTCP) meetings, including the Citywide Public Kickoff Meeting and Open House and the Alley Creek LTCP Kickoff Public Meeting. Numerous stakeholders from the non-profit, community planning, environmental, economic development, and governmental sectors attended to provide feedback and participate in the development of waterbody-specific and citywide LTCPs. In addition, DEP held three Green Infrastructure Steering Committee meetings, at which three separate working groups organized around specific concentrations of DEP's green infrastructure implementation strategy: Green Jobs, Education and Engagement, and Technical Advice and Research. DEP sent more than 16,000 postcards to all mailing addresses within a three block radius of green infrastructure construction sites.  DEP continued to advance clean water agendas with various stakeholder groups, including: The Metropolitan Waterfront Alliance, Downtown Boathouse, Going Coastal, NYC Water Trail Association, The River Project, the SWIM Coalition, The Plumbing Foundation, Community Board 11, Douglaston Manor Association, Auburndale Homeowners Association, NYC Environmental Justice Alliance, Brooklyn Botanical Gardens, Wildlife Conservation Society, and the Ashokan Release Working Group. As part of its Air Code revision process, DEP has engaged with environmental groups such as the Natural Resources Defense Council and the Environmental Defense Fund, as well as the filing community and organizations representing the oil and building industries.	Partially Achieved 

73	Advocate for federal funding for water and wastewater infrastructure.	In 2012, DEP coordinated with the Association of Metropolitan Water Agencies to provide written comments on a draft Water Resources Development Act that includes a Water Infrastructure Finance and Innovation Act pilot program that would allow the US Environmental Protection Agency (EPA) and US Army Corps of Engineers to provide loans and loan guarantees for a variety of water infrastructure projects. DEP has continued to participate in the National Association of Clean Water Agencies' "Money Matters Task Force" for smarter investments in clean water programs and is currently working with the US Conference of Mayors and EPA to improve the criteria for analyzing affordability.	Partially Achieved 
<b>Goal: Engage state and federal regulators in proactive regulatory review and reform to incorporate sustainability principles into clean water regulations and initiatives.</b>			
74	Accelerate meaningful regulatory reform.	Throughout 2012, DEP continued to engage with its regulators directly and through partner stakeholder associations. DEP developed agendas and commented on the US Environmental Protection Agency's (EPA) recreational water quality criteria, stormwater performance, wet weather legislation, and affordability criteria. To this end, DEP furthered our participation within the Water Utility Climate Alliance, the National Association of Clean Water Agencies, the New York Water Environment Association, the Clean Water America Alliance, the American Water Works Association, the Association of Metropolitan Water Agencies, and the US Conference of Mayors. In 2012, DEP provided feedback on EPA's draft guidance on Activities to Promote Environmental Justice in the Permit Application Process, which was well received by EPA, and DEP will be consulted in developing their guidance moving forward.  Effective July 4, 2012, DEP's stormwater performance standard came into effect as an amendment to Chapter 31, Title 15 of the Rules of the City of New York. The standard modifies the flow rate of stormwater to the city's combined sewer system for new and existing development, as part of sewer availability and connection approvals. In 2012, DEP successfully worked with our regulators to reduce the level of fluoride added to the drinking water supply and to permit the electronic delivery of consumer confidence reports. In 2013, DEP will continue to negotiate the requirements of the State Pollution Discharge Elimination System with our state and federal regulators and ensure that final regulations regarding hydrofracking protect the integrity of the water supply.	Partially Achieved 
75	Advocate for flexible new state and federal regulations that accommodate local conditions.	DEP provided written comments on the US Environmental Protection Agency's (EPA) draft framework on integrated planning in February 2012 and Commissioner Carter Strickland testified to Congress in July 2012 on the final EPA Integrated Planning Framework released this summer. Additionally, DEP submitted comments to EPA on their "Retrospective Study on the Cost of EPA Regulations" in July 2012. Commissioner Strickland and Deputy Mayor Cas Holloway co-authored an article "The Solution, not the Problem" for the September/October issue of The Environmental Law Forum, arguing for a flexible, adaptive approach to regulations that empower local decision making and prioritization. In 2012, DEP joined the New York Water Environment Association's Utility Executive Council, which successfully advocated for a balanced State Sewage Right-to-Know bill.	Achieved and Ongoing 
76	Seek affordability criteria that make sense for urban areas.	DEP examined the limitations of the US Environmental Protection Agency's (EPA) Financial Capability Guidance, and explored alternative metrics and indicators to better capture affordability concerns of utilities and ratepayers. These findings were presented at the National Association of Clean Water Agencies' summer conference in July 2012, and to the US Conference of Mayors and EPA in October 2012 at the Mayors Water Summit. In 2012, DEP opened dialog with other municipalities and regulators on this issue, participated in a review group of a US Conference of Mayors, Water Environment Federation, and American Water Works Association workbook on affordability, and played a supporting role in efforts to engage with EPA on affordability criteria. In January 2013, EPA issued a memo "EPA's Dialogue with Local Government – Financial Capability Framework" stating their commitment to continued dialogue on this issue and plans to develop an "approach to provide clarification" on the financial capability analysis. DEP's study has helped guide this discussion and DEP will continue to provide input as needed into this approach.	Achieved and Ongoing 
77	Press for state and federal adoption of a watershed management approach to environmental compliance.	On March 8, 2012, the New York State Department of Environmental Conservation (DEC) and DEP signed a groundbreaking agreement to reduce combined sewer overflows (CSO) using a hybrid green and grey infrastructure approach. As part of this agreement, DEP will develop ten waterbody-specific Long-Term Control Plans (LTCP) and one citywide LTCP to reduce CSOs and improve water quality in New York City's waterbodies and waterways. The goal of each LTCP is to identify the most cost-effective CSO controls necessary to achieve waterbody-specific water quality standards in line with the federal CSO policy and the Clean Water Act.	Achieved and Ongoing 



<p><b>78</b> Develop adaptable risk-based criteria to guide dissolved oxygen and pathogen compliance based on best use designations within the framework of the Long Term Control Plans and other water quality improvement programs.</p>	<p>Long-Term Control Plans (LTCP) under the 2012 Combined Sewer Overflow Consent Order will include Use Attainability Analyses (UAA) where existing water quality standards do not meet the Fishable/Swimmable goals of the Clean Water Act, or where the proposed controls in the LTCP will not attain existing water quality standards or the Fishable/Swimmable goals. UAAs will identify alternative water quality scenarios and provide the waterbody's "highest attainable use."</p>	<p>Initiated  </p>
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## HARBOR WATER QUALITY



Strategy	Progress to Date	Status
<p><b>Goal: Maximize the use of green infrastructure and other source controls to improve water quality.</b></p>		
<p><b>79</b> Reduce runoff from new and existing development by capturing one inch of rainfall on 10% of the impervious areas in CSO watersheds over the next 20 years.</p>	<p>In 2012, DEP continued to partner with the Green Infrastructure Task Force to initiate ten on-site green infrastructure projects at New York City Housing Authority, Health and Hospitals Corporation, Department of Consumer Affairs, and Department of Education properties. The Task Force also collaborated to build the first 45 Right of Way Bioswales using the nine standards established by DEP this summer. DEP substantially completed construction of, and initiated performance monitoring for, two neighborhood demonstration area projects in the Hutchinson River watershed and the Jamaica Bay watershed, and retained a contractor for the third Demonstration Area in the Newtown Creek watershed. DEP has identified fifteen Priority CSO Tributary Areas in the Bronx, Queens, and Brooklyn, and initiated several Area-Wide Right of Way Bioswale contracts with DEP consultants as well as agency partners including the Departments of Design and Construction, Parks and Recreation (DPR), and the New York City Economic Development Corporation. DEP has funded five DPR Right of Way green infrastructure maintenance staff positions in Brooklyn and will hire a Queens crew in the coming months. DEP has also awarded \$4.2 million to twelve Green Infrastructure Grant Program grantees in 2012, and announced \$6 million for the 2013 grant cycle.</p> <p>During 2012, DEP worked with the Mayor's Office of Long Term Planning and Sustainability, the New York City Department of Buildings, the Department of Finance, and the Office of Management and Budget, as well as environmental advocates and green roof designers to modify and extend the NYC Green Roof Tax Abatement through 2018. DEP met with stakeholders and incorporated much of their feedback to improve the next version and increase the number of green roofs in the city. Proposed changes include an increase in the abatement value to account for 2012 construction costs, a doubling of the abatement cap to encourage rooftop farms, text allowing native species and agricultural plants, and allowing more time to meet plant coverage requirements. DEP will also fund an outreach position to educate applicants, assist them through the abatement process, facilitate application approval, and respond to issues that may arise. The draft bill is currently pending review from city officials and state legislators.</p> <p>Effective July 4, 2012, DEP's stormwater performance standard came into effect as an amendment to Chapter 31, Title 15 of the Rules of the City of New York. The standard modifies the flow rate of stormwater to the city's combined sewer system for new and existing development, as part of sewer availability and connection approvals.</p>	<p>Partially Achieved  </p>
<p><b>80</b> Expand the number of water-quality parameters and testing sites in the New York Harbor Survey.</p>	<p>In 2011, DEP expanded the number of harbor monitoring stations from 65 to 72 testing sites citywide. As part of the development of Long-Term Control Plans, DEP will determine additional harbor water quality monitoring sites to gather data on the effectiveness of various combined sewer overflow projects. As these projects are finalized, DEP will add monitoring stations at least six months prior to project construction and continue monitoring activities for ten years following construction completion.</p> <p>In addition to routine monitoring, DEP also monitors harbor water quality on an as-needed basis. In November 2012, DEP monitored harbor water quality in conjunction with the Department of Health and Mental Hygiene (DOHMH) because of Hurricane Sandy-related raw sewage discharges by local and neighboring wastewater treatment plants. In addition, DEP conducts Regional Bypass Modeling training for DOHMH and New York State Department of Environmental Conservation staff as well as local community organizations.</p>	<p>Achieved and Ongoing  </p>
<p><b>81</b> Measure CSO volumes.</p>	<p>In 2012, DEP installed telemetry equipment at five combined sewer overflow (CSO) outfall locations to more accurately measure the volume of combined sewer overflows. DEP is working with the contractor to continue to improve the accuracy and validity of measurements from CSO monitors.</p>	<p>Achieved and Ongoing  </p>



**Goal: Restore natural systems that can reduce pollution while providing recreational opportunities, habitat, and climate adaptation benefits.**

82	Restore wetlands habitat in and around Jamaica Bay.	<p>DEP continues to restore wetlands habitat in and around Jamaica Bay through a variety of pilots, including programs to increase oyster and ribbed mussel populations. Oyster size has continued to increase and laboratory testing of oyster tissue samples indicates that the oysters are growing and healthy. The ribbed mussel biofiltration pilot has shown a successful natural colonization after a full year of monitoring, and DEP expects the mussels to grow to a similar size as natural growing mussels in the surrounding area.</p> <p>Preliminary data from DEP's eelgrass meadows in Jamaica Bay indicates that the eelgrass did not survive the significant environmental and physical stressors present at that location, including blue mussel colonization and strong sediment movement (sand waves), which buried many of the tender shoots. The potential causes of low survival rate for eelgrass at all pilot sites will undergo further assessment, and DEP will continue to collect and analyze the data to determine the long term efficacy of this particular restoration method.</p> <p>DEP continues to work as a local cost sharing partner with the US Army Corps of Engineers to restore eroded salt marsh islands in Jamaica Bay. In 2012, contractors began construction on the 42 acre Yellow Bar project with the placement of sand and planting of low marsh vegetation, and placed sand on Black Wall (22 acres) and Ruler's Bar (12 acres) marshes. To date, 76 acres of eroded salt marsh have been restored.</p>	<p>Achieved and Ongoing  </p>
83	Expand the Staten Island Bluebelt.	<p>In 2012, DEP continued to expand the Bluebelt into Queens with the groundbreaking at Springfield Lake. In September 2012, DEP completed construction of the first Bluebelt in the Bronx at the New York Botanical Garden. This project alleviates recurring flooding in the area and creates a wetland that will manage stormwater in a sustainable manner. DEP is in the planning stages for a Bluebelt project at Van Cortlandt Park in the Bronx.</p> <p>In 2012, DEP continued to construct the Bluebelt in South Richmond, Staten Island in conjunction with the storm sewer network according to the Bluebelt drainage plans. DEP is acquiring property in the three Mid-Island Bluebelt watersheds—New Creek, South Beach, and Oakwood Beach. The first capital project in the Mid-Island Bluebelt, scheduled for construction in December 2013, will be the restoration of New Creek's west branch.</p>	<p>Partially Achieved  </p>

## ENERGY

Strategy	Progress to Date	Status
<b>Goal: Reduce DEP's carbon footprint.</b>		
84 Implement strategy to reduce DEP greenhouse gas emissions by 30% from 2006 levels to meet PlaNYC goals.	<p>Since their peak in 2008, greenhouse gas emissions from DEP facilities have decreased by 14%. The steady decrease can be attributed to increased capture of fugitive emissions at wastewater treatment plants, as well as decreased natural gas consumption and reduced carbon intensity of the city's electricity supply.</p> <p>Our current Capital Improvement Plan includes projects DEP will complete by 2017 that will reduce greenhouse gas emissions by 225,000, MT CO<sub>2</sub>e (approximately 75% of the emissions needed to meet the 2017 goal). At Oakwood Beach Wastewater Treatment Plant, DEP has already realized greenhouse gas emission reductions by repairing digester gas pipes and eliminating leaks. Other projects to reduce greenhouse gas emissions in the capital plan involve improving capture and use of digester gas at wastewater treatment plants to meet on-site power and heating needs.</p>	<p>Partially Achieved  </p>
<b>Goal: Reduce electricity demand.</b>		
85 Ensure the reliability of our power supply.	<p>DEP continues to work in partnership with utilities and state and federal regulators to update protocols for maintaining power reliability during peak demand periods. In 2012, DEP, the New York State Department of Environmental Conservation (DEC), and Con Edison renegotiated and implemented a memorandum of understanding for operation of emergency generators during emergency conditions. DEP also developed streamlined communication protocols with Con Edison for advanced power quality and reliability notifications for wastewater treatment plants and expanded the protocols to include wastewater pumping stations. During multiple summer heat waves in 2012, Con Edison relied on DEP cogeneration systems at the Owls Head and Coney Island Wastewater Treatment Plants to help prevent power disruptions on the local power grid and at the plants. In 2012, DEP advanced plans for a similar cogeneration system at the North River Wastewater Treatment Plant, which will enable the plant to play a major role in reducing demand on the grid on peak or otherwise constrained days.</p>	<p>Partially Achieved  </p>

86	Implement aggressive demand-side management practices to mitigate projected 53% increase in electricity demand over the next five years.	DEP's latest analysis of projected electricity use, taking into account implemented energy efficiency projects, shows an expected increase of 44% from 2012-2017. In 2012, DEP's electricity use decreased approximately 2%. While less rainfall and a milder winter were major factors for this decrease, energy efficiency projects also played a role. For example, lighting upgrades and modification of heating, ventilation, and air conditioning operating protocols at the Kingston office resulted in a 24% reduction in energy use at that facility. In addition, through the Operational Excellence program (OpX) DEP determined that dissolved oxygen levels at the wastewater treatment plants could be trimmed back without affecting process quality. To date four plants have been able to reduce energy consumption as a result of this initiative. In 2012, DEP completed facility-level energy audits at all 14 wastewater treatment plants, and energy and greenhouse gas reduction recommendations are being compiled into a Greenhouse Gas Strategy document to guide the types of process changes and projects to implement.	Partially Achieved 
87	Facilitate new gas transmission projects into New York City to lower gas and power prices, increase the reliability of power and gas supply, and decrease fuel oil consumption.	In May 2012, the Federal Energy Regulatory Commission approved the Spectra Energy bid to move forward with construction of a natural gas pipeline that will connect on the West Side of Manhattan. New York City also gave the Williams project in Brooklyn a declaration of no negative environmental consequences. The Williams pipeline received congressional approval and President Obama signed HR 2606 – the New York City Natural Gas Supply Enhancement Act on November 27, 2012.	Achieved and Ongoing 
<b>Goal: Explore and invest in cost-effective clean energy projects.</b>			
88	Develop 30-50 megawatts of clean energy supply at DEP facilities to ensure the reliability of our core operations and to reduce the net consumption, energy costs, and emissions across the agency.	<p>In March 2012, DEP and the New York City Economic Development Corporation (EDC) issued a Request for Proposals for the long-term lease of approximately 75 acres of land on and adjacent to the former Fresh Kills Landfill to develop solar and wind energy facilities. DEP and EDC are currently evaluating these responses. Other clean energy projects include solar panel installation at the Port Richmond Wastewater Treatment Plant (1.1 MW), cogeneration at the North River Wastewater Treatment Plant (15 MW), and hydroelectric development on three upstate reservoirs (16 MW).</p> <p>In 2012, the City completed a power purchase agreement to begin installation of solar panels in 2013 at the Port Richmond Wastewater Treatment Plant. Once completed, this project will rank as one of the largest rooftop solar installations in New York City, providing 1.1 MW of renewable power to the plant.</p> <p>In February 2012, DEP submitted a final license to the Federal Energy Regulatory Commission for the development of a hydroelectric facility at the Cannonsville Reservoir (14 MW). DEP will also submit final license applications to Federal Energy Regulatory Commission for two additional hydroelectric facilities at Neversink and Pepacton Reservoirs (2 MW combined). In 2013, DEP will submit a request for proposals for the design and development of hydroelectric facilities at these two reservoirs.</p>	Initiated 
89	Work with regulators to promote competitive energy markets and efficient and fair energy incentives for New York City.	In 2012, DEP continued to support energy initiatives, including the extension of a New York City property tax abatement and a New York State sales tax exemption for solar photovoltaic systems. DEP also cooperated in stakeholder reviews in the support of an expansion of the New York State Energy Research and Development Authority incentives for solar photovoltaic systems.	Partially Achieved 

# HAZARDOUS MATERIALS

Strategy		Progress to Date	Status
<b>Goal: Prevent public and ecosystem exposure to contaminated sediments and soils, return water to providing ecological services, and reuse clean soils and sediments.</b>			
90	Continue to work with EPA to clean up Superfund-designated sites.	<p>Over the past year, DEP continued to work with the Newtown Creek Group to investigate the degree of contamination in the Creek, in addition to potential health and environmental risks. The Newtown Creek Respondents, which includes the City and five other named parties – Exxon, BP, National Grid, Phelps Dodge Refining Company, and Texaco – have completed the first phase of environmental sampling in the Creek to satisfy Superfund requirements. This included sampling sediment, surface water, and air in the Creek.</p> <p>DEP continued to analyze samples to compare conditions before and after upgrades to the Gowanus pump station and flushing tunnel have been completed. In 2012, the City began a combined sewer overflow (CSO) sampling program to determine whether and to what extent current CSO discharges may be contributing to ongoing contamination of the Canal. In addition, the has been working with the other parties to identify additional entities that may have contributed to the contamination. DEP will continue to work with the US Environmental Protection Agency and the New York State Department of Environmental Conservation to define our next steps as we work together to improve the water quality of both Superfund-designated sites.</p>	Partially Achieved 
91	Secure the repeal of GASB Standard 49.	In 2011, New York State adopted legislation permanently enabling the city to continue using capital funds for remediation costs incurred as a component of larger capital projects. However, even under this waiver, much of the remediation work at the two Superfund sites will not be capitably eligible.	Achieved 
92	Promote beneficial use determinations (BUDs)	In 2011, DEP submitted a draft interagency agreement to the New York State Department of Environmental Conservation (DEC) streamlining regulatory approval for reuse of non-hazardous soil and fill material. In December 2012, DEP provided DEC with responses to DEC's additional comments. DEP and DEC will meet in early 2013 to continue discussions.	Initiated 
<b>Goal: Ensure proper management of hazardous materials.</b>			
93	Continue to meet all of the requirements of the Construction, Demolition, and Abatement (CDA) laws and improve asbestos compliance.	<p>In 2012, DEP continued to enhance asbestos control citywide in compliance with the Construction, Demolition, and Abatement laws. DEP's asbestos enforcement staff conducted 6,456 asbestos-related inspections in 2012. DEP is developing the final phase of the Asbestos Reporting and Tracking System, which will be released in 2013. This phase will be incorporated into the iPad interface used by the asbestos enforcement staff and will streamline field inspection processes by prioritizing inspection activities electronically.</p> <p>In addition to asbestos inspections, the Asbestos Technical Review Unit has received more than 6,000 asbestos project notifications, including 140 emergency notifications directly associated with Hurricane Sandy asbestos cleanups and abatement. In response to Hurricane Sandy, DEP and its consultants have been collecting air samples from these locations since November 8, 2012 for the possible release of asbestos fibers, and to date all samples have been found to be below re-occupancy levels for indoor spaces as established by the US Environmental Protection Agency. DEP's enhanced certified asbestos investigator audit program (CAI), initiated in 2010, and has yielded 152 Notices of Violation against 66 CAIs with two suspensions and one revocation in 2012.</p>	Achieved and Ongoing 
94	Improve and refine hazardous material management systems.	In 2012, DEP conducted 9,170 Right-to-Know inspections in accordance with Local Law 26 and issued 560 violations. DEP also improved the online filing platform to accept online payments. In 2012, DEP collaborated with local law enforcement agents to monitor the air for toxic pollutants during major public events in 2012. Following Hurricane Sandy, DEP conducted targeted inspections of facilities within flooded areas that house hazardous materials on-site. DEP inspected 356 facilities in or near the storm surge areas to ensure that all chemicals remained safely stored. Upon inspection, DEP did not find any chemical spills or remediation needs.	Achieved and Ongoing 
95	Improve responses to emergencies.	In 2012, DEP's Emergency Response and Technical Assessment unit responded to nearly 3,000 emergencies. To improve performance, DEP implemented a new after-hours hazardous materials protocol. Under this procedure, materials reported after business hours are transported to a secure temporary storage facility at the Jamaica Wastewater Treatment Plant. During business hours, the materials are bid out and disposed of according to federal and state regulations. In 2013, DEP will work with 311 to refine scripts regarding chemical odor complaints in an effort to properly route complaints to the appropriate agency and ensure a timely response.	Achieved and Ongoing 



# AIR AND NOISE POLLUTION

Strategy		Progress to Date	Status
<b>Goal: Improve air quality and public health in New York City by controlling local sources of air pollution.</b>			
96	Reduce air emissions from idling.	Throughout 2012, DEP conducted no-idling outreach at schools and distributed posters to 1,367 parent teacher coordinators in public and parochial schools. DEP also conducted targeted surveillance at 88 schools in school districts showing the highest asthma rates. DEP issued four Notices of Violation before the end of the school year, and once classes resumed in September inspectors found that the idling campaign was working, and has not issued any subsequent violations. In 2013, DEP will continue to expand efforts to decrease idling citywide.	Achieved and Ongoing ◆◆◆+
97	Reduce local air emissions from the use of residual heating oil.	Effective July 1, 2012, all boilers using No. 6 fuel oil upon their expiration date were required to switch to low sulfur No. 4 heating oil, or to an equivalent cleaner fuel. This rule will result in a reduction of approximately 740 tons of total PM 2.5 emissions from No. 4 and No. 6 heating oil by 2030 when these units have moved to at least No. 2 fuel oil emission standards. DEP reviewed and granted three compliance agreements, providing applicants with additional time to comply with current regulations. By entering into a compliance agreement, applicants are required to submit a compliance proposal including a schedule for the conversion and/or replacement of boilers and/or burners, as well as the scale and timing of commitments to convert to the cleanest fuels. In this sense, compliance agreements are tools which have enabled DEP to track local air emissions and oversee the long-term reduction goals. In 2012, DEP also launched the Clean Air Tracking System to expedite boiler and equipment registrations and renewals, enable online payment of fees, and consolidate registration filings for building owners and property managers.	Achieved and Ongoing ◆◆◆+
98	Update the New York City Air Code for the first time since 1970.	DEP has met with the City Council and shared the draft revisions to the Air Code. DEP also met with stakeholders from January to December 2012, including environmental organizations and representatives from the real estate industry as well as with partners in city government, including the Department of Health and Mental Hygiene and the Department of Citywide Administrative Services. DEP and the Council will conduct outreach with stakeholders in anticipation of introducing a bill in 2013.	Initiated ◆◇◇
99	Expand and refine local air emission inventories with DOHMH and relevant stakeholders.	As part of its efforts to further understand and refine local air emission inventories, DEP held a City Administrative Procedure Act-related public hearing in November 2012 on a rule regarding perchloroethylene chemicals with the Department of Health and Mental Hygiene. DEP also met with the Korean Dry Cleaning Association to explain the procedures and expected results associated to the new rule. DEP republished the rule in January 2013.  Following Hurricane Sandy, DEP supervised an air monitoring system to measure air quality indicators and minimize potential health risks. In its effort to assess the city's air quality, DEP coordinated with the US Environmental Protection Agency, the New York State Department of Environmental Conservation, and the New York City Department of Health and Mental Hygiene to perform PM 2.5 monitoring and opacity readings at Floyd Bennett Field, Brooklyn, where the City is conducting part of its tree debris management plan, and in Lower Manhattan, where several backup electricity generators have been operating since the hurricane-related power outages.	Achieved and Ongoing ◆◆◆+
<b>Goal: Reduce noise by targeted enforcement and code changes.</b>			
100	Enhance the 2005 Noise Code.	DEP is currently working on stricter jackhammering guidelines and scheduling site visits in coordination with the Department of Transportation for testing proposed mitigation efforts as part of the revisions to the rules. In 2012, DEP drafted proposed area-specific changes to the Noise Code, and conducted nine Noise Code workshops with the night life industry. In addition to the workshops, DEP held a meeting with external stakeholders and organizations on September 2012. As a result of Noise Code listening tours, DEP is analyzing octave band measurements and better enforcement methods from noise from houses of worship. DEP expects to submit a draft of the proposed changes to the Law Department in 2013.	Initiated ◆◇◇