



# 2018 Strategic Plan: *Year Three Progress Report*

Delaware Aqueduct  
Bypass Tunnel

**NYC**  
Environmental  
Protection



Work on steel liners for the Delaware Aqueduct Bypass Tunnel (each liner section is 16' in diameter and 40' long)

## Introduction

Over the last three years, the New York City Department of Environmental Protection (DEP) has furthered our vision of being a world-class water and wastewater utility, while building a sustainable future for all New Yorkers. Many of the accomplishments described in this update were completed from April 2020 through April 2021, a time during which the Coronavirus pandemic stole our loved ones, disrupted our routines, and created financial hardship for families and cities across the world. DEP has successfully carried out our mission and vision during these trying times thanks to the diligent efforts of our employees to overcome unprecedented challenges.

When we set forth the 43 initiatives in *Strategic Plan 2018: Enriching Our Legacy*, we were building on a strong history of strategic planning spanning more than two centuries. We outlined not only what we intended to accomplish, but how we planned to do it. Our plans, as well as our eight core values of safety, integrity, service, support, diversity, transparency, sustainability, and innovation, guided us through an unpredictable year and kept us accountable to our customers and stakeholders.

DEP's employees rose to meet the occasion with selflessness, innovation, and hard work. Throughout the pandemic, DEP's essential employees continued to provide water and wastewater services to more than eight million New Yorkers – and more than half of our employees continued to report in person throughout the pandemic to ensure continuity of services. Whether in person or virtual, our employees demonstrated resilience, patience, and creativity as they all adapted to changing workplace protocols seemingly overnight.

Not only did DEP staff continue to advance the agency's mission and vision, as detailed in this progress report, but many also lent their time and energy to NYC's broad COVID recovery efforts through packaging food for homebound New Yorkers, manufacturing hand sanitizer, inspecting businesses for health and safety compliance, distributing face coverings in public spaces, and staffing vaccine distribution centers. New York City has a history of resiliency in the face of crises, such as 9/11 and Hurricane Sandy, and that resiliency is a testament to the spirit of the city and the fortitude of its workers.

Despite our best efforts, DEP, like much of the city, experienced tragic loss as a result of the pandemic. Several employees passed away, leaving behind grieving relatives, friends, and colleagues. Those employees are missed and their families will be in our collective thoughts and prayers.



## GOAL

### Provide world-class and sustainable water and wastewater services now and for future generations

Rondout Reservoir

DEP conducts frequent facility inspections to assess the resiliency and long-term preparedness of our water and wastewater infrastructure. Over the last year, DEP has undertaken the third round of facility inspections, evaluating all fourteen of our Wastewater Resource Recovery Facilities (WRRFs), the majority of pumping stations, and critical water supply locations. Beginning this year, and continuing into the future, the results of the inspections are incorporated into a new business case submittal process for funding requests, enabling asset conditions to inform our capital plans.

Since 2019, DEP has been eagerly anticipating the launch of our new customer billing system, Billing for the Future, which will replace the existing software that has been in operation for over 20 years. The new system focuses on the user experience of water rate payers, making it easier to access account information, pay and understand bills, and navigate the software interface. Billing for the Future will not only improve the customer experience, but also make it easier to hire information technology personnel with the skills necessary to operate the system. The age of our existing billing system means the infrastructure runs on outdated, legacy source code, making it difficult to find staff familiar with the software. Over the last year, significant progress has been made towards deployment and onsite training is scheduled to begin July 2021 with a planned launch date of September 2021.

DEP continues to make steady progress on the source water protection program. In 2018, the National Academies of Science, Engineering and Medicine convened an expert panel to evaluate New York City's source water protection program. Over approximately two years, the panel engaged in a comprehensive process, which included eight meetings, dozens of














presentations by DEP staff and watershed stakeholders, a number of site visits in the watershed, countless information requests and hundreds of hours of discussion and drafting. Their final report was released in July 2020. The report includes a strong endorsement of the work DEP has undertaken over many years, stating the programs "have admirably supported water quality" with "strong indications" they will continue to be effective in the future. The report also included 63 recommendations, ranging from straightforward and relatively modest program adjustments to out-of-the-box thinking. DEP and watershed stakeholders are currently reviewing and evaluating the panel's recommendations.






With the Delaware Aqueduct repair project underway, supporting the development of backup water supplies for upstate watershed communities has never been more urgent. The Delaware Aqueduct Bypass Tunnel is the largest repair project in the 178-year history of New York City's water supply system and will mark the first time that the Delaware Aqueduct will be drained since 1958. DEP has monitored two leaking sections of the Delaware Aqueduct—one in Newburgh, and the other in the Ulster County town of Wawarsing—since the early 1990s. The leaks release an estimated 20 million gallons per day, about 95 percent of that escaping the tunnel through the leak near the Hudson River in Newburgh. To prepare for the Delaware Aqueduct shut down, DEP has been upgrading and rehabilitating the Catskill Aqueduct to maximize the volume of water it can convey to the city each day. The Catskill Aqueduct was shut down for 10 weeks from November 2020 - January 2021 to facilitate work inside the structure and at facilities connected to it. DEP worked in close coordination with communities in the Hudson Valley where aspects of the

construction were happening. DEP also collaborated with 20 towns, cities, villages and water districts north of the City that draw all or some of their drinking water from the Catskill Aqueduct to prepare and confirm the readiness of their backup water supplies before and during the shutdown. DEP continues to engage with upstate water supplies and State and Local health departments in support of ensuring adequate redundancy and resiliency of their water supplies.

Over the last two years, DEP has conducted significant outreach and stepped up enforcement efforts to protect the water supply system from cross-contamination. NYC's drinking water is pushed from the city's water main into each property's plumbing by pressure but sometimes, due to pressure changes in pipes, the water can flow backwards into city water lines. New York State law requires certain properties and businesses to install, maintain and test backflow prevention devices, which stop water from flowing backwards into the main water supply. DEP conducted a rigorous analysis of City Owned or operated facilities and targeted high-risk businesses, such as laundromats and dentists offices, with cease and desist orders to bring them into compliance with required backflow prevention devices. DEP also updated our website to ensure guidance on annual testing requirements for backflow prevention devices was clear and easy to understand, launched a new webform for property owners/agents to register for electronic reminder notices for annual tests, and distributed an informational bill insert to all of our customers.

DEP's 14 Wastewater Resource Recovery Facilities generate over 1,200 wet tons of biosolids per day. After DEP collects and dewateres the biosolids, third-party contractors collect, haul, and dispose of or recycle the biosolids. Due to a combination of cost and a lack of beneficial use processing capacity in the Northeast region, the majority of biosolids end up in landfills, contributing to the City's greenhouse gas emissions. In alignment with the City's goals of reducing emissions 50% and sending zero waste to landfills by 2030, DEP formed an internal working group in 2020 that surveyed the market seeking collaborative opportunities to recover the city's biosolids as a resource. DEP has since identified a pool of vendors capable of helping the City achieve its goals. The vendors are working to develop and expand beneficial use processing capacity in the region. Through long term agreements expected to begin later this year, DEP will divert a significant percentage of waste currently sent to landfills.

Strategic Initiative	Status
1 Develop a coordinated long-range master plan for our water and wastewater systems.	
2 Manage our assets to ensure the long-term sustainability and optimal efficiency of our water and wastewater services.	
3 Maintain rates and sustain revenue to fund DEP's operations now and in the future.	
4 Strengthen DEP's environmental health and safety culture.	
5 Leverage technology to increase the security of DEP's infrastructure and network.	
6 Manage the watershed to ensure long-term protection of New York City's water supply.	
7 Support the development of backup supplies for upstate water supply systems in our region.	
8 Expand outreach and enforcement efforts to protect the water supply system from cross-contamination.	
9 Enhance sewer planning efforts.	
10 Expand sewer infrastructure to underserved areas.	
11 Reduce sewer backups and improper disposal of grease.	
12 Transition wastewater treatment plants to wastewater resource recovery facilities.	
13 Launch a comprehensive effort to reduce the improper disposal of "flushable" wipes.	

-  Complete
-  On Track
-  Delayed
-  Cancelled
-  Not Started



# GOAL Control local sources of pollution to improve quality of life

Wetland expansion in Flushing Bay

In April 2021, DEP launched the Harbor Protectors initiative during an Earth Day cleanup in the Coney Island section of Brooklyn. The innovative stewardship program recruits volunteers to partake in activities such as cleaning catch basins, stenciling educational/informational messages on the sidewalks near catch basins, caring for rain gardens and participating in shoreline cleanups. These stewardship actions simultaneously beautify communities while keeping pollution out of New York City's waterways, aiding DEP in its critical mission to protect and improve water quality across the five boroughs.

Idling emissions from gasoline and diesel motor vehicle engines are known contributors to health-related impacts, including asthma, respiratory and cardiovascular harm. Idling for longer than three minutes or more than one minute while adjacent to a school is illegal. In 2018, DEP began a "Citizens Air Complaint Program" where individuals who witness and record a truck or bus idling can file a complaint online with DEP and collect 25% of the penalty, \$87.50 of a \$350 fine. DEP launched a Citizen Air Complaint Program where New Yorkers that witness illegal idling can file an anonymous complaint online or by calling 311. In the eight-month period between May 2019 and December 2019, 3,329 idling complaints were filed across five boroughs. In 2020, with a full year of complaints captured, the agency received 5% fewer complaints. If the trend continues, citizen complaints can help curtail illegal idling emissions and contribute to improved air quality in the city.

Strategic Initiative	Status
14 Improve air quality by reducing airborne pollutants.	●
15 Improve the quality of our waterways.	●
16 Minimize odors from our industrial facilities.	●
17 Reduce noise pollution throughout New York City.	●
18 Increase asbestos audits.	●
19 Participate in the remediation of Superfund-designated sites.	●

● Complete   
 ● On Track   
 ● Delayed  
● Cancelled   
 ● Not Started



# GOAL

## Reduce our carbon impact and mitigate the effects of climate change

Harbor Seals in Jamaica Bay

During the last year, DEP advanced several important energy projects. In early 2021, DEP, the New York Power Authority, and the NYC Department of Citywide Administrative Services kicked off the design of more than 10 megawatts of innovative solar photovoltaic systems—such as canopy-style installations over parking lots and wastewater treatment tanks—at several locations across NYC and the watershed. The design was completed and construction began for the organic Rankine cycle technology demonstration project at Port Richmond WRRF. DEP partnered with National Grid to construct a groundbreaking project that directly injects renewable natural gas from Newtown Creek WRRF into the local distribution system for residential and commercial beneficial use. DEP advanced the development of new hydroelectric projects from feasibility assessment to capital planning at the Catskill-Delaware Interconnection and Croton Lake Gate House, while also beginning the process of rehabilitating the seventy-year-old Neversink and West Delaware Tunnel Outlets’ turbines to continue renewable energy generation for the long term. Finally, the DEP Energy and Carbon Neutrality Plan studied, for the first time ever at DEP, the feasibility of several cutting-edge renewable energy technologies, such as effluent hydropower and sewer thermal energy recovery, helping chart the pathway to energy and carbon neutrality by 2050.

In the two years since the release of the *2018 Water Demand Management Plan*, DEP has launched several new projects and built upon existing partnerships to advance additional water conservation measures. In 2019, New York City’s average daily water demand dropped to the lowest in at least the last 60 years. The COVID-19 pandemic in 2020 and the corresponding economic downturn caused further declines in water demand. DEP will continue to monitor trends and adjust its demand management programming

based on the most cost-effective savings opportunities. Continued savings will help provide a critical buffer during the repair of the Delaware Aqueduct, help optimize reservoir water levels during times of drought, and reduce the energy and greenhouse gas emissions associated with conveyance and treatment of water and wastewater.

To date, DEP has built more than 4,000 rain gardens within the streets and sidewalks of New York City, with approximately 5,500 more in construction and thousands more planned for the next several years. In November 2020, DEP completed the installation of 170 specially designed curbside rain gardens and infiltration basins in the southeast Queens neighborhoods of Queens Village, Wayanda and Cambria Heights that have reduced roadway flooding and improved safety. Each installation has the capacity to collect and absorb up to 2,500 gallons of stormwater during each rainstorm and it is estimated that in total they will capture over 17 million gallons of stormwater annually.

Strategic Initiative	Status
<b>20</b> Reduce greenhouse gas emissions and expand renewable energy sources.	●
<b>21</b> Restore natural habitats throughout New York Harbor.	●
<b>22</b> Expand the green infrastructure program.	●
<b>23</b> Expand integrated water management through water conservation, water reuse, and resource recovery.	●

- Complete    ● On Track    ● Delayed
- Cancelled    ● Not Started



**GOAL** Increase public awareness of our operations and improve service to our customers and the business community

DEP Education Office presentation to students

In 2020, DEP successfully transitioned our education program to virtual learning and continued to offer an array of free programs and resources for pre-Kindergarten through college students, classroom teachers, school administrators, and non-formal educators. We engaged thousands of students and educators through virtual field trips of the Newtown Creek Wastewater Resource Recovery Facility, Trout in the Classroom virtual tank demonstrations, the annual Water Resources Art and Poetry Contest, professional learning opportunities, and live-streamed theatrical performances of The City that Drinks the Mountain Sky and The Rejuvenary River Circus in partnership with BMCC Tribeca Performing Arts Center and the Arm of the Sea Theater. DEP developed several exciting NYC Water Virtual Tours, featuring video interviews, in the field footage, historical images, interactive maps, and at-home activities. In collaboration with the NYC Mayor’s Office of Climate Policy and Programs, we also launched a first-ever Climate Change Education Module on our website and hosted a series of virtual workshops to help teachers implement these new resources in their classrooms. By creating innovative and accessible virtual learning experiences, DEP has continued to reach New Yorkers across the five boroughs and throughout upstate watershed communities.

In February 2021, DEP launched a new online permitting system, the Permit and Review Information System (PARIS), previously known as Water & Sewer Permitting System (WSPS). The system was developed to provide timely, responsive, and accurate information to the applicant community. It establishes a centralized electronic system and improves review turnaround times. In August 2019 DEP, piloted an online application for Hydrant Flow Tests, which included an electronic payment function through the Department of Finance that enabled the use of credit cards and eChecks and an accompanying mobile application to capture inspection results to streamline the process. Since the system launched, DEP collected \$1,236,000 in fees and received 2,472 applications. After the successful pilot program, the system was officially rolled out on February 16, 2021 and includes water and sewer repair/relay permits as well as the hydrant flow tests. The new system is geared toward professional applicants: Professional Engineers, Registered Archi-

ects, Licensed Master Plumbers, and other users. DEP will continue expanding the permits available in PARIS, including for new sewer connections, sewer plugs, and tap/wet connections.

DEP recognizes that Minority and Women Owned Business Enterprises (M/WBEs) are key partners for delivering our essential services and after COVID-19’s fiscal impact on the city, we acknowledge the importance of increasing M/WBE participation in our contracts to ensure they are included in the city’s economic recovery. DEP named a Chief M/WBE Officer to ensure we use creative thinking to achieve our broad M/WBE goals. The Chief M/WBE Officer works closely with the Agency Chief Contracting Office to serve as a liaison between our executive team, program units, M/WBEs, and other external stakeholders to ensure that DEP’s procurement practices are aligned with the City’s M/WBE program. DEP hosts targeted M/WBE meet and greet events throughout the year to inform M/WBE’s of upcoming contracting opportunities with the agency. Building M/WBE availability, capacity and opportunities will always be an ongoing effort for DEP given the size, complexity, and location of our work.

Initiative 27 was cancelled due to budget constraints caused by the COVID-19 pandemic.

Strategic Initiative	Status
24 Increase the public’s awareness of DEP’s mission and responsibilities.	●
25 Expand education opportunities for local communities and external stakeholders.	●
26 Enhance the customer’s experience when calling DEP.	●
27 Employ digital communication to better serve our customers and employees.	●
28 Streamline the permitting process for water and sewer connections.	●
29 Increase opportunities for minority and women-owned business enterprises (M/WBE).	●

● Complete   
 ● On Track   
 ● Delayed  
● Cancelled   
 ● Not Started



Recently hired DEP workforce

At DEP, our employees are our greatest asset and we are committed to helping our team members thrive physically, mentally, and emotionally by fostering a culture that increases awareness of our struggles, values diversity, and promotes respect for one another. This past year, DEP encouraged employees to have thoughtful conversations about the emotions they experienced throughout the pandemic, with employee newsletters focused on grief, anger, burnout, stress, anxiety, and loneliness. To open dialogue and help employees realize they are not alone, the agency began hosting recurring virtual support groups for coping with pandemic stress, coping with isolation and loneliness, and multitasking parenting support.

As the nation grappled with heightened racial tensions, DEP responded by hosting several virtual conversations that spurred thoughtful discussions about systemic racism and allyship in the workplace. Throughout the year, DEP invited staff of various backgrounds to share their experiences and perspectives in a series of virtual open discussions on racial equity. A qualified outside individual guided the conversations with employees and produced recommendations for the agency following the events. Acting on those recommendations, DEP has continued to demonstrate its commitment to diversity, equity, and inclusion by hosting virtual events every month to deepen the conversations that began over the summer and inspire more employees to become allies. With workshops and conversations like these, DEP employees can come together to learn and develop better communication amongst peers and between managers, supervisors and subordinates.

The City Cleanup Corps is a New Deal-inspired economic recovery program that will revitalize New York City's public spaces and neighborhoods, focusing on key areas identified by local communities and those hit hardest by the COVID-19 pandemic. For several years, DEP has been actively recruiting talent from historically underrepresented communities for our Green Infrastructure (GI) seasonal maintenance program. This year, as part of the City Cleanup Corps, DEP will double the number of recruits for the GI maintenance program. DEP will also hire approximately 150 additional Cleanup Corps members to paint fire hydrants, stencil education messages adjacent to catch basins, and supplement cleaning and greening of Bluebelts in Staten Island and Queens as well as the Jerome Reservoir and Croton Filtration Plant in the Bronx.

Strategic Initiative	Status
30 Attract and hire highly qualified, diverse talent.	●
31 Provide career opportunities to communities or demographics that have been historically underrepresented.	●
32 Leverage workforce diversity, employee engagement, and inclusion in the workplace.	●
33 Enhance the talent pipeline for the future.	●

● Complete	● On Track	● Delayed
● Cancelled	● Not Started	





**GOAL** Maximize operational efficiencies across the agency

Electric Vehicle being charged at a DEP facility

DEP has continued to expand our in-house planning, design, and construction management capabilities over the last year. In an effort to provide guidance, best practices, and tools in key areas of project delivery to our in-house project management and engineering staff, DEP developed a training program in 2020 and launched the first training session in January 2021. The program curriculum was designed to fit the complex and unique nature of DEP’s capital projects. Course content is developed and provided by experienced in-house technical experts, allowing for critical-thinking group exercises with practical and relevant project scenarios. The training course covers topics such as project delivery basics, best practices, sustainable design, health and safety, leadership, and project controls. Another goal and outcome of this successful program is that it ensures the in-house staff are managing our projects consistently and effectively across the board. The training program has helped build and strengthen the skills and expertise within our own team and has reduced our reliance on consultant support.

As of March 2021, our in-house design team has been involved in the design or construction phases for 30 projects valued at more than \$3.75 billion, an increase of 10 percent from March 2020. The in-house design team’s current portfolio covers a wide range of complex work including process-related upgrades at wastewater resource recovery facilities and deep rock tunnel construction in the upstate watershed. In 2020, in-house staff performed construction management services for one of the final steps in the activation of City Water Tunnel No. 3 in Queens. DEP engineers and inspection staff were deployed to oversee logistics, coordination, high-profile stakeholder agreements and review initial submissions and plans provided by the contractor so they could mobilize and begin work in the first quarter of 2021.

DEP relies on a robust fleet of vehicles to effectively execute our mission; comprised of dozens of types of vehicles such as catch basin trucks, electric sedans, forklifts, and flusher trucks, the fleet is critical to delivering our 24/7 operations and responding to emergencies in a timely manner. To monitor vehicle in service rates, pinpoint trends and highlight opportunities for improvement, DEP

relies on data visualization systems. Since September 2019, the agency has distributed a daily fleet report that highlights vehicles that are out of service each day based on assigned location, allowing us to respond by redeploying vehicles to yards where there are impending vehicle shortages. The daily service reports also indicate when any type of vehicle is critically out of service so that DEP can prioritize that vehicle type for immediate repair. The implementation of a daily fleet report has increased transparency and safety across the board.

In alignment with NYC Clean Fleet, an effort to dramatically expand the number of electric vehicles in NYC and to create the largest municipal electric fleet in the world, DEP has rapidly expanded our electric fleet and charging capabilities. Since 2018, we have increased our electric and hybrid vehicle count and more than doubled our electric charging ports from 63 to 157 across 32 locations, with dozens of new locations planned for the coming year. To reduce accidents and improve pedestrian safety, DEP has also spearheaded the installation of 360 degree cameras on our heavy duty trucks; to date more than 100 vehicles have been outfitted with these cameras, and more are being installed each year.

**Strategic Initiative** **Status**

- 34** Insource in strategic areas to improve capital program delivery and operations. ●
- 35** Streamline procurement processes. ●
- 36** Use predictive analytics to drive operational efficiency. ●
- 37** Develop agency-wide data visualization systems. ●
- 38** Optimize DEP’s vehicle fleet. ●

● Complete   
 ● On Track   
 ● Delayed  
● Cancelled   
 ● Not Started



## GOAL Leverage innovative approaches to improve performance

Drone Survey at Ashokan Reservoir

To stay at the forefront of the industry, DEP's interdisciplinary research team continued their efforts to undertake innovative research and maximize efficiency. In partnership with the Water Research Foundation, DEP participated in 20 project advisory committees consisting of representatives from across the agency, attended the Water Research Foundation's Leadership Innovation Forum for Technology platform, and received "SEE IT" scholarships to visit two partnering utilities to learn about their innovative technologies and processes and novel approaches to service, operations, and finance. All of these research activities enable DEP to deepen our knowledge of the technology, operation, and management of water supply and wastewater treatment systems, protecting drinking water quality and improving water service to the public for years to come.

Compliance with the environmental, health, and safety (EHS) rules that govern our operations has consistently been a top priority for all of our employees and contractors, from the scientists who conduct 500,000 water quality tests every year to the operators who handle wastewater treatment chemicals and the engineers and workers on our construction sites. This year, DEP developed and implemented a benchmarking and EHS award recognition protocol to better evaluate the effectiveness of our key program areas. The protocol benchmarks our EHS performance parameters against other utilities nationwide and will be conducted on an annual bases going forward. During 2020, the benchmarking software identified safety accomplishments three areas of DEP's for zero occurrences of occupational injuries or illnesses involving days away from work or fatalities for a period of at least 12 consecutive months.

DEP was awarded a \$6 million grant from the US Environmental Protection Agency to develop a new integrated hydrodynamic and water quality model for Long Island Sound. When completed in 2025, the model will consist of calibrated and validated hydrodynamic, water quality, watershed terrestrial models and ecosystem models, as well as a graphical user interface to assist in model usability and transparency. The purpose of this modeling effort is to assist the City and other stakeholders in integrated water management planning and assessment activities that will allow us to assess for example, the impacts of climate change or sea level rise on water quality and living resources on this ecologically and economically important estuary.

Strategic Initiative	Status
<b>39</b> Engage in cutting-edge research and influence national policymaking.	●
<b>40</b> Improve DEP's environmental, health, and safety (EHS) measurement and performance.	●
<b>41</b> Develop an integrated water quality and hydrodynamic model of New York City's open waters.	●
<b>42</b> Build in-house capacity to facilitate process improvement projects.	●
<b>43</b> Expand the use of technology to improve performance.	●

- Complete   ● On Track   ● Delayed
- Cancelled   ● Not Started



# Summary of Strategic Initiatives

Delaware bypass tunnel construction

## Provide world-class and sustainable water and wastewater services now and for future generations

- 1 Develop a coordinated long-range master plan for our water and wastewater systems. ●
- 2 Manage our assets to ensure the long-term sustainability and optimal efficiency of our water and wastewater services. ●
- 3 Maintain rates and sustain revenue to fund DEP's operations now and in the future. ●
- 4 Strengthen DEP's environmental health and safety culture. ●
- 5 Leverage technology to increase the security of DEP's infrastructure and network. ●
- 6 Manage the watershed to ensure long-term protection of New York City's water supply. ●
- 7 Support the development of backup supplies for upstate water supply systems in our region. ●
- 8 Expand outreach and enforcement efforts to protect the water supply system from cross-contamination. ●
- 9 Enhance sewer planning efforts. ●
- 10 Expand sewer infrastructure to underserved areas. ●
- 11 Reduce sewer backups and improper disposal of grease. ●
- 12 Transition wastewater treatment plants to wastewater resource recovery facilities. ●
- 13 Launch a comprehensive effort to reduce the improper disposal of "flushable" wipes. ●

## Control local sources of pollution to improve quality of life

- 14 Improve air quality by reducing airborne pollutants. ●
- 15 Improve the quality of our waterways. ●

- 16 Minimize odors from our industrial facilities. ●
- 17 Reduce noise pollution throughout New York City. ●
- 18 Increase asbestos audits. ●
- 19 Participate in the remediation of Superfund-designated sites. ●

## Reduce our carbon impact and mitigate the effects of climate change

- 20 Reduce greenhouse gas emissions and expand renewable energy sources. ●
- 21 Restore natural habitats throughout New York Harbor. ●
- 22 Expand the green infrastructure program. ●
- 23 Expand integrated water management through water conservation, water reuse, and resource recovery. ●

## Increase public awareness of our operations and improve service to our customers and the business community

- 24 Increase the public's awareness of DEP's mission and responsibilities. ●
- 25 Expand education opportunities for local communities and external stakeholders. ●
- 26 Enhance the customer's experience when calling DEP. ●
- 27 Employ digital communication to better serve our customers and employees. ●
- 28 Streamline the permitting process for water and sewer connections. ●
- 29 Increase opportunities for minority and women-owned business enterprises (M/WBE). ●

## Cultivate a diverse and highly qualified workforce to meet future challenges

- 30 Attract and hire highly qualified, diverse talent. ●
- 31 Provide career opportunities to communities or demographics that have been historically underrepresented. ●
- 32 Leverage workforce diversity, employee engagement, and inclusion in the workplace. ●
- 33 Enhance the talent pipeline for the future. ●

## Maximize operational efficiencies across the agency

- 34 Insource in strategic areas to improve capital program delivery and operations. ●
- 35 Streamline procurement processes. ●
- 36 Use predictive analytics to drive operational efficiency. ●
- 37 Develop agency-wide data visualization systems. ●
- 38 Optimize DEP's vehicle fleet. ●

## Leverage innovative approaches to improve performance

- 39 Engage in cutting-edge research and influence national policymaking. ●
- 40 Improve DEP's environmental, health, and safety (EHS) measurement and performance. ●
- 41 Develop an integrated water quality and hydrodynamic model of New York City's open waters. ●
- 42 Build in-house capacity to facilitate process improvement projects. ●
- 43 Expand the use of technology to improve performance. ●



Harbor Water Quality Sampling



# FATBERGS

form when grease, wipes and other stuff get flushed, clogging pipes and draining wallets.

**TRASH IT. DON'T FLUSH IT.**

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**NYC** Environmental Protection



Bill de Blasio  
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Commissioner