

**Testimony of Vincent Sapienza, P.E.
Acting Commissioner, New York City Department of Environmental Protection
before the
New York City Council Committee on Environmental Protection
concerning the
FY 2018 Preliminary Budget**

**Committee Room – City Hall
Thursday, March 23, 2017, 10:00 am**

Good morning Chairman Constantinides and Members. I am Vincent Sapienza, Acting Commissioner of the New York City Department of Environmental Protection (DEP). I am joined today by Chief Financial Officer Joseph Murin, Deputy Commissioner for Public Affairs Eric Landau, as well as other senior managers. Thank you for the opportunity to testify on DEP's Fiscal Year 2018 Preliminary Budget.

As you very well know, DEP has overall responsibility for the City's water supply and sewer system, including providing drinking water to all New Yorkers, maintaining pressure to fire hydrants, managing storm water, and collecting and treating wastewater. In addition, DEP also regulates air quality, hazardous waste, and critical quality of life issues, including noise. All of our water-related expenses—both operational and capital—are paid for with the money collected from the water and sewer rate charge billed to all New York City property owners and authorized annually by the New York City Water Board.

In May 2016, the NYC Water Board adopted a rate package that included:

- 2.1% increase, the lowest increase in 16 years
- freezing of the minimum charge of \$1.27 per day for the third consecutive year, which benefits more than 150,000 customers who use fewer than 100 gallons of water per day
- expanding of the Home Water Assistance Program to any property owner who makes less than \$50,000 per year, providing a \$118 credit
- creating the Multi-family Affordable Housing Credit, which would provide a \$250 credit to any residential property that signs, at a minimum, a fifteen-year affordability agreement with NYC Housing Preservation and Development or the NYC Housing Development Corporation

Additionally, as part of last year's budget, Mayor de Blasio fully eliminated the rental payment, five years sooner than originally projected.

As part of the FY 17 Water Rate, the NYC Water Board adopted a one-time credit of \$183 to all Tax Class 1 properties, which includes 1-, 2-, and 3-family homeowners.

As you all know, the FY 17 Water Rate and \$183 credit were challenged by the Rent Stabilization Association. Based on an original ruling from the NYS Supreme Court, as well as a subsequent ruling from the Appellate Division, First Department, we are currently unable to implement the FY 17 rate, associated program expansions, and the \$183 credit. The Water Board is seeking leave

to appeal this decision, and we will be sure to keep you all apprised of that process. The Water Board is also in the process of determining how it will proceed this spring with setting rates for FY 2018 and we will be sure to keep you updated.

Before I get to the substance of my testimony today, I want to briefly touch on the quality of New York City's drinking water. Water quality in Flint, Michigan, Hoosick Falls, and Newburgh continue to be covered widely in the news. Much has been made of late about elevated lead levels in some NYC school fixtures (fountains, sinks, etc.). I want all New Yorkers to rest assured that New York City's drinking water is of the highest quality and the water delivered from the upstate reservoir system is lead free. We spend substantial time and resources testing the water quality from 1,000 water quality testing locations around the five boroughs, as well as testing water quality upstate in our reservoirs, lakes, and tunnels. In total, DEP conducts over 600,000 water quality tests every year. The Department of Education is currently completing citywide testing of all water fixtures in City schools. Any drinking or cooking water fixture with results over 15 parts per billion is immediately taken offline and remediated.

Again, while New York City's water is lead-free when it is delivered from our reservoir system, water can absorb lead from pipes, fixtures, and solder (material used to join pipes) found in the plumbing of some buildings or homes. To help reduce the risk that lead can dissolve from a homeowner's plumbing/service line into their tap water, DEP carefully monitors pH levels (a measure of acidity/alkalinity) of the water and adds phosphoric acid, which creates a protective film, reducing the release of metals from household plumbing.

Property owners interested in testing their water for lead can contact DEP for a free lead kit by calling 311. Upon receiving the water sample, DEP will test the water and send the property owner the results within 30 days. Should the results show an elevated level, DEP shares the results with the Department of Health and Mental Hygiene, and the City will inform the property owner of some recommended next steps.

Key Accomplishments and Updates

Let me start by providing some context to our capital and expense budgets, including some recent accomplishments, updates on our initiatives as part of OneNYC, a brief overview of a number of performance metrics, and an update on key programs and projects.

This past year we:

- completed a \$1 billion project to upgrade four wastewater treatment plants and reduce nitrogen discharges into local harbor waterways by 60%
- completed construction and activated a \$260 million water tunnel connecting Brooklyn and Staten Island, creating additional redundancy
- began a \$132 million sewer upgrade project in College Point, Queens, to mitigate street flooding and improve harbor water quality of Flushing Bay
- began a \$34 million dredging project in Flushing Bay
- began a \$56.5 million project in Canarsie, Brooklyn, to reduce flooding and upgrade water mains

- opened an additional 2,600 acres for recreation in the watershed – more than 133,000 acres are now open for fishing, hiking and other low-impact recreation
- reauthorized the lien sale with the strong support of the City Council, the Department of Finance, and Housing Preservation & Development, providing DEP the ability to sell liens on delinquent water rate payers, ensuring that everyone who benefits from our water and wastewater systems pays their fair share, as well as helping us keep water rates as low as possible.

Update on OneNYC

Playing a major role in our activities is Mayor de Blasio's OneNYC plan, released on April 22, 2014. OneNYC includes several initiatives that DEP is hard at work on, including:

- protecting the city's water supply and maintaining the reliability and resiliency of the water supply system
- installing or repairing 500 water fountains and water bottle refilling stations across the five boroughs
- expanding green infrastructure and diversifying techniques for stormwater management in neighborhoods across the city
- reducing pollution from stormwater runoff

To meet the City's water supply needs, New York City has a robust water-supply infrastructure investment program, including projects such as a new tunnel to bring water from Kensico Reservoir to the Catskill/Delaware Ultraviolet Disinfection Facility, significant upgrades to the Hillview Reservoir in Yonkers, and the optimization of the Catskill Aqueduct.

In 2016, DEP continued detailed discussions with State regulators on renewing the Filtration Avoidance Determination (FAD), which allows the City to continue to deliver safe, unfiltered drinking water to more than eight million residents. In March 2016, DEP completed a comprehensive assessment of the existing program and of water quality trends. The summary confirmed that the programs and investments the City has made over the past two decades in watershed protection and infrastructure have maintained the high quality of our water supply. In December 2016, DEP put forward a comprehensive plan for the next decade of source water protection, which will be the basis for the City's next FAD, expected to be issued by the New York State Department of Health later this year.

In February 2016, DEP substantially completed construction of the first phase of a \$1.0 billion project to replace a leaking section of the Delaware Aqueduct. We are in the process of constructing the "Bell Out" chamber now, which is a large area where the tunnel boring machine (TBM) will be assembled and will also serve as a staging area for mining the tunnel. In the coming months, the City will begin boring the 2.5 mile bypass tunnel more than 600 feet under the Hudson River.

As a result of this project, water from the Delaware system will be unavailable for approximately five to eight months while the new bypass tunnel is connected to the existing tunnel. DEP has developed a comprehensive program to ensure reliable water delivery during the construction

period, including an expansion of water conservation retrofits at 280 schools and 370 parks across all five boroughs in 2016. We anticipate that the project will be completed in 2023.

A reliable water supply is only as valuable as it is accessible and readily available for all New Yorkers. In 2015, the City launched a new program to install or repair 500 water fountains and water bottle refilling stations citywide, encouraging residents to drink tap water. An interagency task force selected three different models of outdoor fountains that make it convenient for New Yorkers to fill their water bottles while in transit across the city. The task force identified 30 schools and 42 parks as priority sites for the first phase of installations, and has developed a GIS map to identify existing drinking fountains and potential placement options moving forward. We are pleased to report that 82 fountains have been installed and four replaced, and we expect to have installed another 80 by the end of June. In addition to schools and parks, five of these fountains have been installed in public plazas, and the Department of Design and Construction has installed 17 in connection with new construction.

While DEP continues to be vigilant about protecting our water supply, we must also seek creative ways to manage the water that falls onto our streets and enters our sewers and wastewater infrastructure. Since the 1990s, the City has pursued a dual approach to alleviating flooding and protecting our surrounding waters through an expansive build-out of gray and green infrastructure. In 2012, DEP launched a green infrastructure program in the combined sewer areas of the City to reduce combined sewer overflows (CSOs). DEP has worked diligently over the last five years to advance construction of green infrastructure in priority CSO tributary areas, which reduces the amount of stormwater runoff entering the wastewater system and adds multiple co-benefits for New Yorkers, such as increased shade and community greening. From its outset, DEP committed \$1.5 billion for the entirety of this program, of which \$923 million has been allocated to green infrastructure through fiscal year 2027. This funding will continue to be used to build right-of-way rain gardens and stormwater greenstreets, as well as green infrastructure within public parks, public schools, and public housing developments. To date, DEP has constructed more than 3,000 green infrastructure assets, the majority of which are located in the right of way. Looking ahead, DEP intends to increase investment in public- property retrofits, as well as incentives for private property owners to retrofit their roofs, parking lots, and other impervious surfaces.

While the City continues to make new strides in reducing CSOs, we are also developing a comprehensive plan to address water quality from stormwater runoff in separately sewered areas. On August 1, 2015, New York State issued a Municipal Separate Storm Sewer System (MS4) Permit to New York City that requires the City to develop a stormwater management program (SWMP) plan and submit it to the State by August 1, 2018. DEP was delegated in 2013 to coordinate the efforts of City agencies with respect to the MS4 Permit, and as such DEP has been hosting multiple interagency and stakeholder working groups to evaluate best practices and develop plans to address issues such as floatables (street litter that makes its way into receiving waters), good housekeeping for municipal facilities, and industrial and commercial stormwater sources, as required by the MS4 Permit. I appreciated the opportunity to testify this past December before this Committee on Intro. 1346, which gives DEP the authority it needs to fulfill the permit requirements from the State; I look forward to its passage and thank the Chair for his leadership.

Alleviating flooding in Southeast Queens is also a major piece of OneNYC. In 2015, Mayor de Blasio and DEP announced a \$1.5 billion program to substantially accelerate flood relief in Southeast Queens by undertaking a significant build-out of sewer infrastructure, as well as the use of green infrastructure throughout the region. As part of this effort, DEP launched and completed an in-depth engineering assessment to evaluate on-the-ground conditions in 50 of the highest complaint areas within Southeast Queens. Armed with this data, DEP has identified near-term interventions as well as mid- to long-term capital projects (including DOT-partnered solutions) that can provide relief to these property owners. To date, nine capital projects funded through the Southeast Queens program have received notices to proceed, and three are anticipated to receive notices before the end of Fiscal Year 2017. In addition to the projects that have received notices to proceed, DEP has submitted 20 other Capital Project Initiations to the Department of Design and Construction for project starts.

Operational Status and Performance Metrics

Water and Sewer Operations

A major component of DEP's work is related to our water and sewer operations. This year, we continued to focus on preventive maintenance techniques, with the aim of improving efficiency and the operations of our vast infrastructure network. Some examples include:

- inspecting and maintaining key valves and pressure regulators in our water system in order to reduce the potential for water main breaks due to pressure changes
- cleaning, repairing or replacing sewer segments with recurring issues
- working with the Office of Emergency Management and the Departments of Sanitation and Transportation, we pre-inspect historically flood-prone areas in advance of major rain events
- inspecting all 148,000 catch basins annually, and cleaning and repairing any as needed

One key issue to highlight that the Committee is well aware of is the significant impact on sewer backups due to fat, oil, and grease buildups. While we have seen the percentage slightly decrease this year, it still is the cause of approximately 66% of confirmed backups. Grease entry into sewers is preventable and relies on choices made by individuals. Focusing on public education and outreach, we have worked closely with schools, community organizations, and elected officials, to help reduce the occurrence of grease being poured down the drain. Additionally, using Southeast Queens as a pilot area, staff distributed information door-to-door, where we reached over 50,000 homes in these neighborhoods. Finally, our staff follows up directly with restaurants in areas where there is persistent grease buildup in the sewers to ensure proper use of grease traps.

We believe our focus on enhancing operational efficiency and targeting our resource deployments has effected a positive trend in our metrics. Some key performance statistics showing changes from FY 12 to FY 16 include:

- Sewer backup resolution time: 33% decrease
- Catch basin resolution time: 26% decrease
- Number of catch basins with open work orders: 38% decrease
- Confirmed sewer backups: 25% decrease

- Sewer segments with recurring backups: 55% decrease
- Sewer segments with recurring backups in dry weather: 47% decrease
- Proactive sewer cleaning: 133% increase
- Reactive sewer cleaning: 67% decrease

Air/Noise

Since the passage of the updated Air Pollution Control Code last year, the City has met with agencies and external stakeholders to craft the necessary regulations to implement the updated Air Code. All rules necessary to be promulgated in association with the new Air Code have been promulgated, with the final one regarding cook stoves having been approved by the Law Department and the Mayor's Office of Operations earlier this month.

Customer Services

As the Committee knows, DEP operates a customer service office in each borough, in addition to a Call Center, to collect water and sewer rate payments, enroll customers in payment agreements, and answer questions. We have improved our call center response time and now consistently meet our Service Level Goal of answering 80% of all calls within 30 seconds or less. We have achieved this through process improvements and the continued use of our "virtual call center" during peak call times.

Key Programs and Projects

Land Acquisition

DEP is in the final year of the 10-year Filtration Avoidance Determination (FAD) secured in 2007. Land acquisition continues to be an important part of our source water protection program, and DEP remains on track to meet the land solicitation goals established in the FAD. We continue to prioritize solicitation, taking into account the high levels of protection we have attained in many parts of the watershed. Since 1997, DEP has acquired 144,840 acres of land in the watershed. Including lands protected by other entities, more than 38% of all land in the Catskill/Delaware portion of our watershed is now protected from development.

Green Infrastructure Program

Expanding further on our Green Infrastructure (GI) Program, DEP continues implementation of the program, which incorporates different techniques to reduce stormwater runoff into the combined sewer system and ultimately reduce CSOs. The GI program reflects the City's goal to improve water quality, as outlined in the NYC Green Infrastructure Plan, by reducing CSOs into waterways by 40% by 2030.

DEP has developed strong partnerships with City agencies in order to implement the Green Infrastructure Program: specifically the Departments of Transportation, Parks and Recreation, Design and Construction (DDC), and the Economic Development Corporation (EDC) to design and construct green infrastructure in the public right of way; and the Departments of Education, Parks and Recreation, and NYC Housing Authority to construct green infrastructure on public property. To date, DEP has completed 20 public retrofit projects with our partners. An additional 28 are in construction and 200 are in various design stages.

DEP, with the support of EDC and DDC, is designing and constructing green infrastructure in priority watershed areas of the Bronx, Brooklyn, and Queens including:

- Hutchinson River, Westchester Creek, and Bronx River in the Bronx
- Flushing Bay, Flushing Creek, Newtown Creek, and Jamaica Bay areas of Queens
- Gowanus Canal, Newtown Creek, and Jamaica Bay areas of Brooklyn, and
- Work in select areas of the East River and the Open Waters watershed in all three boroughs

Automated Meter Reading

As the Committee knows, DEP began installing Automated Meter Reading (AMR) transmitters in early 2009. AMR has played a vital role in ensuring that all property owners are appropriately and accurately billed for their actual water usage, leading to significantly fewer estimated bills. In January 2009, 17.4% of bills were estimated, while in February 2017, less than 3% of bills were estimated. As of February 28, 2017, AMR transmitters have been installed for almost 824,000 meters, representing almost 98% of meters citywide (based on a citywide total of approximately 843,400 meter registers).

Service Line Protection Program

As the Committee knows, the water and sewer service lines that connect homes to the City-owned water and sewer mains are the responsibility of the homeowner. Repairs to broken service lines can cost between \$3,000 and \$15,000, and can be financially devastating to a homeowner. Therefore, in January 2013 we announced the availability of an optional Service Line Protection Program (SLPP). Under the SLPP, American Water Resources (AWR) will cover repairs to an enrolled customer's leaking water service line or a broken or clogged sewer service line. Homeowners who choose to enroll in the program sign a contract with AWR and have the convenience of paying the small monthly enrollment fees—currently \$4.49 per month for the water service line and \$8.47 for the sewer service line—through their water bills. In a little over three years, over 237,000 customers have enrolled in the Plan, with 97% of subscribers having enrolled in both the water and sewer plans. These enrolled customers generated nearly 5,900 claims in Fiscal Year 2016, with SLPP coverage saving them more than \$20 million.

The Preliminary FY 2018 Budget

Turning now to our Preliminary FY 2018 Expense and Capital Budgets:

Expense Budget

The projected Expense Budget for the current fiscal year, FY17, is \$1.6 billion, including approximately \$300 million in Community Development Block Grant funds for the "Build it Back" program, for which DEP serves as the contracting entity for the City. So, backing out Build it Back, DEP's FY18 Preliminary Expense Budget is \$1.2 billion.

The Preliminary FY 18 Expense Budget breaks down into the following large categories:

- \$516 million (42%), in personal services to pay the salaries for our nearly 6,000 funded positions

- \$701 million (58%), for other than personal service costs (OTPS), which includes:
 - Taxes on upstate watershed lands, which account for \$167 million or nearly 14% of the expense budget. As you know, the ownership of watershed lands represents a critical investment in maintaining the high quality of the City’s drinking water by protecting it at the source and ensuring that it does not require more expensive treatment, such as filtration. I am pleased to report that we have successfully negotiated agreements with upstate jurisdictions to make our tax obligations more stable and predictable.
 - DEP’s energy costs, including heat, light and power, account for \$92 million or 8% of the FY18 Expense Budget. DEP is the third-largest municipal consumer of electric power in New York City after the Department of Education and NYC Health + Hospitals, and our consumption will grow as we bring online new treatment processes for wastewater. To control energy costs and meet Mayor de Blasio’s major commitment to reduce greenhouse gas emissions, DEP is investing in projects to reduce energy needs, including a cogeneration plant at the North River Wastewater Treatment Plant.
 - Chemicals are estimated to cost \$57 million in FY18 or about 5% of the Expense Budget. For drinking water, DEP continues to add chlorine and fluoride to Cat/Del water in order to meet federal, state and city treatment requirements. Also for drinking water, the treatment processes at the new Croton Water Filtration Plant require chemical additions. Our wastewater plants rely on the addition of polymers and other chemicals to improve removal rates and continue to disinfect their effluent with chlorine.
 - Sludge management of 1,200 tons per day is projected to cost about \$51 million in FY18, or about 4% of the Expense Budget.

FY18 Preliminary Ten-Year Capital Plan (FY18 - 27)

DEP’s FY18 Preliminary Ten-Year Capital Plan (Plan) is approximately \$17.7 billion for FY 18 - 27, as presented by Mayor de Blasio on January 24, 2017. This is a \$2.7 billion, or an 18 percent increase, over the FY 17 September Capital Improvement Plan (and OMB’s FY18 Preliminary Ten- Year Capital Plan Target) of \$15 billion. Major changes in the Plan for Fiscal 2018 - 2027 include:

City Tunnel No. 3

As you know, the City began construction of City Water Tunnel No. 3 in 1970, and it is one of the largest and longest-running public works projects in the City’s history. The tunnel is a crucial conveyance that moves water from Hillview Reservoir into the city, and will provide redundancy for City Water Tunnels No. 1 and No. 2. In 2013 we activated the final leg of the Manhattan portion of the tunnel and laid the groundwork to get water flowing into the Brooklyn-Queens leg of the tunnel. The tunnel and most of the infrastructure shafts that support it are complete – just two shafts remain to be designed and constructed.

Last year, Mayor de Blasio prioritized the construction of the remaining two shafts. As part of last year’s Executive Budget, the Mayor allocated:

- \$357 million for site acquisition, design, excavation, and construction of shafts 17B and 18B – the two remaining shafts;
- \$21 million to immediately disinfect and test the Brooklyn-Queens section of Tunnel No. 3, making it activation-ready, meaning that the tunnel will be ready as a backup to deliver potable water should the City confront an emergency that would require additional redundancy to existing Tunnel No. 2;
- \$7 million to construct a new connection between Water Tunnel No. 3's Brooklyn-Queens section and the Richmond Tunnel to Staten Island, which will ensure that Staten Islanders have yet another back-up connection.

As part of this year's Capital Plan, the Mayor kept his commitment from last year and allocated the additional \$300 million needed for the installation of mechanical and electrical equipment for the two shafts. This funding keeps us on schedule for the previously announced accelerated initiation of construction of the shafts in 2020. As you know, these efforts are essential to our City, and they come on top of multiple layers of redundancy already built into our water-supply infrastructure. Our drinking water is frequently renowned as the best in the country, exceeding all federal and State standards for quality. The system that delivers it is safe, reliable, and secure. I thank the Mayor for continuing to prioritize this essential project and ensuring that the kinds of water challenges happening elsewhere around the country and the world could not happen here in New York City.

Kensico – Eastview Tunnel

An additional \$716 million has been allocated for the Kensico-Eastview Connection Tunnel for a total of \$1.2 billion for this project. When completed this project will provide additional redundancy to NYC's water delivery system.

North River Structural Improvements

An additional \$350 million is allocated for structural improvements at the North River Wastewater Treatment Plant for a total of \$360 million.

Ashokan Reservoir/Olive Bridge Dam/Dividing Weir Bridge

An additional \$567 million was added in the Plan for a total of \$733 million to ensure continued compliance of the Ashokan Reservoir's dams and dikes with New York State dam safety regulations. This construction will also ensure that selective withdrawals of water from the Ashokan Reservoir to the Catskill Aqueduct (40% of daily supply) continue uninterrupted to New York City residents and the continued safety of the public traveling over the Dividing Weir Bridge.

Additional highlights of the FY18 Preliminary Ten-Year Capital Plan include:

Wastewater Treatment

The Plan projects a \$6.6 billion investment in wastewater treatment projects, \$3.8 billion of which is for the upgrade, reconstruction or replacement of components of the wastewater treatment plants and pumping stations.

The remaining \$2.8 billion investment will be used to mitigate combined sewer overflows, with \$922 million for green infrastructure such as green roofs and rain gardens, and the remainder for gray infrastructure, such as tanks and tunnels to store wastewater.

Included in the Plan is \$220 million to upgrade the Hunts Point Wastewater Treatment Plant, located in the Bronx, by installing digester eggs, which will more effectively break down organic matter, reducing the amount of residual solids that need to be trucked from the site through the neighborhood. More methane gas will also be produced, which will be used to offset purchased fuel.

Reservoirs, Dams, Treatment Facilities and Water Mains

For FY18-27, the Administration is proposing to significantly invest in protecting the quality of our reservoirs and the integrity of our dams, providing for treatment where necessary, and maintaining and repairing the water main system conveying potable water to all New Yorkers.

We have budgeted a total of \$1.9 billion for projects upstate, including \$101 million for closeout work for the Croton Filtration Plant, \$130 million for the continuation of our current FAD programs and \$997 million for the reconstruction of dams in our three watersheds.

There is also \$2.1 billion available for the replacement of in-City water mains, which includes \$1.4 billion in specific water main work, \$91 million for the accelerated replacement of underground water distribution infrastructure, \$237 million for emergency contracts for water distribution, and \$159 million for state of good repair

Long-Term Control Plans

There is \$1.8 billion of funding to cover planned consent-order work related to the Long-Term Control Plans for combined sewer overflows and stormwater control. As the Committee knows, DEP is in the midst of an unprecedented period of investments to improve water quality in New York Harbor. Since 2002, projects worth almost \$11.4 billion have been completed or are under way, including projects for nutrient removal, CSO abatement, marshland restoration, among many other projects. DEP has committed a total of \$5.4 billion toward reducing CSOs with both gray and green infrastructure, about half of which has already been incurred. By way of example, DEP has completed four CSO storage tanks (combined volume of 118 million gallons), floatable control projects and dredging of Paerdegat Basin and Hendrix Creek. Projects under way include dredging Flushing Bay and sewer work in areas of Queens. DEP, through the Long-Term Control planning process, which includes robust public participation, has proposed yet more projects, with additional Long-Term Control Plans under development.

Sewers

The Plan for FY18 - 27 projects \$4.3 billion of spending on sewers, which includes the build-out in Southeast Queens for \$1.3 billion. In addition, there are:

- \$2 billion for replacement of sewers (storm, sanitary or combined), including the Mayor's initiative for accelerated replacement
- \$2 billion for new sewers (of all types) of which

- Storm sewers as a category by itself (either new or reconstructed) accounts for \$1.6 billion of projected spending, of which \$137 million is for high-level storm sewers, and
- \$392 million of the total is for both conventional sewers and the lands necessary to create Bluebelt systems, which are being extended beyond Staten Island to Springfield Lake in Queens, Van Cortlandt Park, the Bronx Botanical Garden, and other locations

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On behalf of the almost 6,000 employees of the Department, I want to express our appreciation for Chairman Constantinides's strong leadership, and our continued commitment to work closely with the members of this committee and the Council as a whole.

This concludes my prepared statement. I thank you for the opportunity to present testimony today and look forward to answering any questions you have.

**TESTIMONY OF
LAWRENCE LEVINE
SENIOR ATTORNEY
NATURAL RESOURCES DEFENSE COUNCIL**

**BEFORE THE
NEW YORK CITY COUNCIL
COMMITTEE ON ENVIRONMENTAL PROTECTION**

**FISCAL YEAR 2018 PRELIMINARY BUDGET, MAYOR'S FY '17 PRELIMINARY MANAGEMENT
REPORT AND AGENCY OVERSIGHT HEARING**

MARCH 23, 2017

**Re: City Council Oversight of the Department of Environmental Protection's Water
Quality Improvement Programs**

Good morning Mr. Chairman and members of the Committee. I am Lawrence Levine, Senior Attorney in the Water Program at Natural Resources Defense Council. I appreciate the opportunity to testify today.

I also serve on the Steering Committee of the Storm Water Infrastructure Matters (S.W.I.M.) Coalition. S.W.I.M. represents over 70 organizations dedicated to ensuring swimmable and fishable waters around New York City through natural, sustainable stormwater management practices in our neighborhoods. The Coalition's members are a diverse group of community-based, citywide, regional and national organizations, water recreation user groups, institutions of higher education, and businesses. While I do not testify today on behalf of the Coalition, the views expressed here are fully aligned with the Coalition's efforts.

The biggest ongoing sources of water pollution to New York City waters are raw sewage discharges (i.e., combined sewer overflows or CSOs) from the combined sanitary/storm sewers that serve about half of the City's land area, and polluted stormwater runoff from the City's municipal separate storm sewer system (MS4), which serves about a third of the City's land area, and. Both CSO and MS4 discharges are triggered by excessive stormwater runoff entering the sewer system. CSO and MS4 pollution fouls our waters, often rendering them unsafe for recreation and degrading habitat for fish and wildlife. DEP studies indicate that we cannot clean up our waters without addressing both of these stormwater pollution problems.

My testimony today is focused on DEP's efforts to reduce CSOs, including the installation of "green infrastructure" that captures stormwater on land before it causes pollution problems in our waterways. I will also address issues with DEP's water/sewer rate structure, which provides the revenues necessary for DEP's water pollution control efforts.

A successful green infrastructure program can not only to improve water quality, but also to leverage DEP's investments to make quality-of-life improvements in underserved neighborhoods, create green-collar jobs, and support the City's climate resiliency.

NRDC commends DEP for the substantial progress it has made since the 1990s in reducing CSOs, but we emphasize that the problem is far from solved. The City still has over 20 billion gallons of overflow per year, so much more remains to be done.

We ask that the Committee exercise its oversight responsibility to ensure DEP's efforts are directed towards effective, sustainable solutions that protect our waters for both human recreation and ecosystem protection. We also ask the Committee and the City Council to use their authorities to support and enable DEP's success.

In short, we are very concerned that:

1. DEP is seeking state approval, through back-room negotiations, of CSO cleanup plans that will not meet federal health standards and will leave hundreds of millions or billions of gallons of CSO in each waterbody annually, dozens of times per year, for many decades to come
2. DEP has not met its green infrastructure goals to date, and lacks a plan to meet its progressively larger goals in the future;
3. DEP's rate structure does not provide a fair and equitable means of generating sufficient, sustainable funding to support long-term efforts to reduce pollution from CSOs and polluted runoff.

I also would like to address DEP's capital budget for green infrastructure reflected in the Jan. 2017 Capital Commitment Plan. A recent Independent Budget Office report shows that DEP's capital program includes \$787 million in spending on green infrastructure from FY17-FY20. A bar graph in the report also indicates that, from the inception of DEP's green infrastructure program through FY16, total capital spending was around \$350 million. The Jan. 2017 capital commitment plan also includes a number of green infrastructure line items from FY21 -FY27, which, by my count, add up to \$230.5 million.

We highly commend DEP for committing such a substantial budget to green infrastructure. Indeed, DEP's green infrastructure plan called for spending \$1.5 billion through 2030 to meet DEP's goals for the amount of runoff to be captured by new green infrastructure.

However, the timing of the spending in the capital budget raises some questions, when compared to the interim and final green infrastructure targets under DEP's CSO Consent Order. Those targets require an increasing rate of installing green infrastructure in 5-year increments, with milestones in 2015, 2020, 2025, and 2030. By 2020, for example, DEP's milestone is about 40% of the total amount of green infrastructure to be built by the year 2030. Yet, the capital budget shows 73% of DEP's anticipated \$1.5 billion green infrastructure program being expended by 2020. Since DEP is already far behind on meeting even its 2015 target (it achieved only 40% of what was required by 2015), it seems unlikely that the explanation for these budget numbers is

that DEP is planning to meet its upcoming targets far ahead of schedule and would be able to meet its long-term targets even with a sharp decline in spending after 2020.

Instead, a possible explanation is suggested by the concerns we raise in the rest of this testimony – i.e., that DEP may be pulling back from its long-term performance targets for green infrastructure, even while continuing to spend money on green infrastructure projects. Simply spending money is not an acceptable metric for success. This Committee should exercise its oversight responsibilities to ensure that DEP meets its green infrastructure targets and maximizes water quality and community benefits from green infrastructure, not merely that DEP spends the promised amount of money on these projects.

In the remainder of this testimony, I provide background on several key concerns with DEP's overall CSO program and its green infrastructure program, and identify questions that this Committee should be asking of DEP to ensure that the agency's efforts will achieve our shared goals – embodied in the federal Clean Water Act -- of "fishable, swimmable waters" throughout New York City.

1. CSO Consent Order / Long Term Control Plans

- *CSO Order negotiations with NYSDEC: More than a year ago, DEP said that it was re-negotiating the 2012 CSO Consent Order, which defines the extent of DEP's CSO control obligations. But DEP has said nothing publicly about this for over a year. With earlier CSO Consent Orders (in 2005 and 2012), DEP negotiated with the State in secret and presented the results to the public, whose waterways are fouled with raw sewage when it rains – and to local elected officials who represent them -- only after DEP signed the agreement.¹ This invites the following questions:*
 - **Is DEP still in negotiations with NYSDEC for a new CSO Consent Order?**
 - **Is it true that a new Consent Order would determine what happens with CSOs for the next 25 years?**
 - **Will City Council members and our constituents have a voice in shaping the requirements of a new Consent Order, before it is signed by DEP?**
- *Waterbody-specific CSO Long Term Control Plans: DEP's proposed CSO plans that will not meet federal health standards (which EPA says the state is required to adopt). The plans will leave hundreds of millions or billions of gallons of CSO in each waterbody annually, dozens of times per year, for 25+ years.² This invites the following questions:*
 - **Why does DEP believe it is acceptable to proposed CSO plans that would continue massive overflows indefinitely?**
 - **How will DEP ensure that CSO controls, together with stormwater pollution controls in the separately sewered ("MS4") areas, will clean up our water bodies in a reasonable period of time?**

- How does DEP's respond to concerns about its proposal to disinfect CSO discharges with chlorine in some areas (Alley Creek, Flushing Creek, Hutchinson River), rather than actually reducing the volume of overflow?

2. Green Infrastructure Program

- DEP's level of commitment to meeting GI goals: DEP reported to NYSDEC that it is far behind on meeting its green infrastructure targets for 2015 in CSO areas. It also reported that its "Contingency Plan" to make up the difference no later than 2020 (i.e., five years late), is to continue with more of the same approach DEP has used to date, which has not succeeded in meeting targets (i.e., focusing almost exclusively on GI in the public right of way). DEP has presented no plan for meeting its much higher 2020 GI targets. DEP also suggested in the Contingency Plan that current green infrastructure targets should be reconsidered, and potentially reduced.³ As noted earlier in this testimony, DEP's capital budget through 2027 also raises concerns about DEP's intentions. This invites the following questions:
 - Is DEP backing off from its current green infrastructure targets under the 2012 CSO Order?
 - Does DEP intend to invoke a clause in the CSO Order that could allow it to redirect investments from green infrastructure to gray infrastructure?⁴
 - Are the GI funds in DEP's capital plan sufficient to meet the current CSO Order's green infrastructure targets for the years 2020 and 2025, and to ensure adequate progress towards the ultimate 2030 target?
 - What will DEP do *differently* to make sure it gets back on track with its green infrastructure targets, and meets even higher targets set for the years ahead?
 - If DEP does not believe it can meet its targets, how much GI does DEP think can be installed instead? What analysis has DEP done to come up with any potential new targets?
 - What help can City Council provide to ensure DEP meets its targets?
- Specific aspects of DEP's GI program that need significant improvement:
 - More effective stormwater rules for development projects: As part of DEP's Green Infrastructure Plan, DEP adopted a rule for development in the combined sewer portions of the city that requires "detention" of runoff (i.e., capture and slow release into the sewers). In the 5 years since DEP adopted the rule, DEP reports that it has resulted in little or no actual green infrastructure, but rather things like underground holding tanks for runoff.⁵ When DEP adopted the rule, it promised to revisit them to consider changing to a more effective "retention" standard (i.e., capture without release), which would result in more use of green infrastructure practices.⁶ In the MS4 portions of the

City, DEP proposes (under pending legislation, Int. 1346) to develop a new “retention” standard, but only for the MS4 areas of the city. This invites the following questions:

- **Doesn’t this experience with the detention rule indicate that the rules for the CSO area need to be improved?**
- **Is DEP working on updating the stormwater standards in the CSO areas, to include a retention requirement? If not, why not? If yes, when does DEP expect to propose and adopt such rules?**
- *Retrofit of public facilities: Although DEP has built some GI retrofits on public properties outside the right-of-way, it does not appear to have a full-scale program to maximize these opportunities. DEP’s GI capital program, to date, has focused on projects in the right-of-way. This invites the following questions:*
 - **Does DEP have plans to ramp up its efforts to install GI retrofits in public facilities?**
 - **What challenges does DEP face in coordinating with other agencies?**
 - **How can City Council support DEP’s efforts to green public facilities?**
- *Private property retrofits: DEP’s efforts to promote green infrastructure private retrofits on private property have focused on the Green Infrastructure Grant Program. Since the inception of the GI program around 5 years ago, the grant program has funded some very good, high-visibility projects. But the total number of projects funded and built has been very small, and the program is not currently designed to be “scalable” to achieve significant amounts of cost-effective GI citywide. DEP’s Green Infrastructure annual reports and the Mayor’s OneNYC plan reported that DEP is developing an improved approach. In the fall of 2016, DEP released a Request for Information, seeking recommendations for launching a new program to build green infrastructure managing runoff on 1,000 acres of private property.⁷ By the end of November, DEP had received responses representing over 100 organizations. This invites the following questions:*
 - **What is the status of DEP’s efforts to develop a private property GI retrofit program?**
 - **How much money is included in DEP’s budget for this program?**
 - **How does DEP envision its current efforts leading to a large-scale program, which can achieve significant amounts of GI citywide?**
 - **In light of DEP’s suggestions that the GI targets under the consent order should be reduced, is DEP still aiming for 1,000 acres with this private retrofit program?**

3. Funding/Financing of CSO Controls & Green Infrastructure

- *GI funded by developers: DEP's 2010 Green Infrastructure Plan, like other leading cities' GI plans, relied on private investment in new development projects to generate substantial amounts of green infrastructure, without capital expense to DEP. This was to be achieved through a DEP regulation (referenced in section 2 above) mandating on-site stormwater management in new development projects. But DEP seems to have abandoned this approach, according to progress reports submitted to NYSDEC. For example, DEP's June 2016 "GI Contingency Plan" claims credit towards GI milestones only for publicly-funded projects, and describes an approach to meeting the next set of milestones that also relies only on publicly-funded projects. DEP also reported to NYSDEC that it has not been able to track all of the privately-funded development projects covered by its stormwater rule in combined sewer areas, and therefore is unable to assess the water quality benefits of the stormwater practices included in those private projects.⁸ This invites the following questions:*
 - **When DEP reports progress towards citywide green infrastructure targets, why is DEP only claiming credit for publicly-funded green infrastructure, and not for stormwater capture in privately-funded development projects?**
 - **Why does DEP's plan for "catching up" to its missed targets also rely exclusively on publicly-funded projects?**
 - **Doesn't this approach fundamentally undermine the Green Infrastructure Plan?**
 - **Doesn't this approach shift more of the cost burden to DEP, which will need to build more publicly-funded green infrastructure to substitute for privately-funded projects, in order to meet its GI targets?**
 - **Going forward, what is DEP doing to make sure it can track stormwater practices in development projects and count them towards its GI targets?**
 - **What is DEP doing to improve its stormwater rule, to ensure developers maximize use of green infrastructure in new development projects? (See also related questions in Part 2 above.)**
- *Funding cost-effective GI retrofits on private property: Other cities have found that widespread adoption of green infrastructure retrofits at existing private development is a critical element of cost-effective GI implementation. New York City is far behind other cities on this approach. (See Part 2 above for more background on DEP's current approach to private property retrofits.) This invites the following questions:*
 - **Does DEP still believe that investing its funds in private property GI retrofits is a cost-effective way to help meet its overall GI goals?**
 - **What is DEP doing to improve its program, in order to achieve widespread adoption of GI retrofits? (See Part 2 for more detailed questions on this topic.)**

- **What can City Council do to help DEP create a successful, large-scale program for GI retrofits on private property?**

- *Water rates and equitable funding sources: DEP will soon propose its FY18 rates. Under DEP's current rate structure, revenue for stormwater management (in both the combined sewer and separate sewer systems) is generated through wastewater charges. However, wastewater rates based on the amount of drinking water used by a customer, which is completely unrelated to how much stormwater a property puts into the sewer system. DEP completed a rate study in 2009 investigating a revised rate structure that separates out stormwater charges (based on a property's impervious area) from wastewater charges.⁹ This would create incentives for property owners to reduce runoff with GI and would potentially reducing total bills for residential customers and multi-family buildings (including affordable housing).¹⁰ In the FY16 ratesetting, at least one Water Board member encouraged DEP to pursue a stormwater fee, which is commonly used in many other cities.¹¹ While DEP has proposed some important programs to reduce water and sewer bills for affordable housing properties, DEP has not proposed any core changes to the rate structure or released any follow-up analysis since the 2009 rate study. This invites the following questions:*

- **Does DEP believe that its CSO and MS4s investments are being funded in a fair and equitable way under the current rate structure?**
- **What follow-up has DEP done since the 2009 rate study that investigated a stormwater fee and tiered rates? What additional follow-up is planned?**
- **Wouldn't a separate stormwater fee based on impervious area be a more fair way to generate revenue? For example, wouldn't it reduce burdens on multi-family residents, who live in buildings that use a lot of water but have little impervious area? And couldn't it be structured to shift costs from residential to non-residential properties?**
- **Has DEP looked at the nearly 2,000 other municipalities nationwide that have a stormwater fee along these lines? Is there any reason NYC couldn't do the same?**

¹ DEC puts out a proposed consent order for public comment before it is signed. However, this public comment period happens only after years of secret negotiations, following the City's signature on the deal and the City Comptroller's approval. Given the enormous disincentive to reopening negotiations at that point, public comments virtually never – if ever – result in changes to a proposed order.

² A brief overview of S.W.I.M.'s critiques of these plans can be found here: <http://swimmablenyc.info/?p=2706>. A 2-page fact sheet on the process of developing cleanup plans can be found here: http://swimmablenyc.info/wp-content/uploads/2008/03/LTCP-general_1.3.16_updated.pdf. A full citizens' guide to CSOs and the planning process can be found here: <http://swimmablenyc.info/wp-content/uploads/2016/03/workbook-3.8.16-2-4.pdf>.

Detailed comments on DEP's proposed CSO plans, submitted by S.W.I.M. and some of our member organizations, can be found here: http://swimmablenyc.info/?page_id=8.

³ See pp. 1, 4, and 5 of the *Green Infrastructure Contingency Plan* here:

http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml.

⁴ In the 2012 CSO Consent Order, Part IV.B. para. 3 (on pages 11-12) provides that, if DEP continues to miss its GI targets, future contingency plans may substitute gray infrastructure for green infrastructure. The Order is available here:

http://www.dec.ny.gov/docs/water_pdf/csomod2012.pdf.

⁵ See DEP's GI Annual Reports here:

http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml.

⁶ See this letter from then-DEP Commissioner Strickland: <http://swimmablenyc.info/wp-content/uploads/2012/01/CHS-ltr-to-L.-Levine-re-Stormwater-Rule-12-21-2011.pdf>.

⁷ DEP, Request for Information (RFI), Management of a Green Infrastructure Private Property Incentive Program, Sept. 19, 2016, <https://a856-cityrecord.nyc.gov/RequestDetail/20160912013>.

⁸ See DEP's GI Contingency Plan; the 2015 Green Infrastructure Annual Report (footnote 5); and the 2016 GI Performance Metrics Report (footnote 10), all available here:

http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml.

⁹ See link to the full study in this DEP press release:

http://www.nyc.gov/html/dep/html/press_releases/09-14pr.shtml

¹⁰ Properties with large impervious surfaces have a greater impact on the City's stormwater management expense than those with less impervious space, or those that manage runoff from their impervious space on-site. For instance, a large non-residential property may use very little potable water but have a large amount of impervious surface, and therefore contribute a significant amount of stormwater runoff.

Conversely, multifamily residential properties use more water than such a non-residential property, but contribute much less runoff to the city sewer system because of its smaller impervious footprint. This inequitable pricing scheme puts an unfair burden on many ratepayers – including affordable housing residents – and fails to create incentives for sustainable stormwater management.

By restructuring rates to create a separate stormwater fee – based on a property's impervious area, not potable water usage – the City can create a more equitable rate structure, incentivize green infrastructure on private property, and generate a dedicated revenue source for stormwater management. Approximately 2,000 municipalities around the country, both large and small, now have a separate stormwater fee.¹⁰ (See

<https://www.wku.edu/engineering/civil/fpm/swsurvey/>.) There are many models that the City could draw from in order to implement a rate restructuring effort; for example, Philadelphia made a revenue-neutral transition to a stormwater fee from a previous rate structure that was very similar to New York's current rate structure. See <http://citylimits.org/2016/07/12/stormwater-is-new-challenge-to-citys-clean-water-plans/>.)

¹¹ The 2009 rate study also investigated “tiered rates” for water and sewer service, which would charge a lower per-gallon rate to those who use less water per housing unit. Tiered rates could also reduce bills for affordable multi-family buildings (especially if coupled water conservation assistance from DEP). At least year’s rate hearing, a Water Board member also encouraged DEP to pursue tiered rates.



**Testimony of
The American Council of Engineering Companies of New York**

Regarding the Executive Budget – Committee on Environmental Protection

March 23, 2017

Since its founding in 1921, ACEC New York has served as a source of ideas, a sounding board and a professional resource for state and city leaders, including the Department of Environmental Protection. The American Council of Engineering Companies of New York (ACEC New York) is the voice of the professional engineering community, representing over 280 member firms throughout New York State that collectively employ close to 24,000 people statewide, with a concentrated presence of firms located within the five boroughs of New York City. Of our total member firms, 50 are MWBE firms registered with the Department of Small Business Services. Our members are involved in all aspects of engineering for the public sector. We plan and design the structural, mechanical, electrical, civil, environmental, plumbing, fire protection and technology systems for the city's infrastructure, including transportation, energy, and wastewater treatment facilities. Our members are also involved in a host of planning, resiliency and environmental issues.

ACEC weighs in on many important issues of our day, from infrastructure investment, efficient energy policy and alternative delivery systems to improving procurement practices. We have a volunteer DEP liaison committee made up of licensed engineers that work with the Department of Environmental Protection providing engineering expertise when developing policy for the City.

Increasingly severe weather has put a strain not only on New York's transportation infrastructure but on its water and sewer systems and its electrical grid. The Comptroller's office has estimated New York will need to invest nearly \$80 billion in its water and sewer systems over the next 20 years. The changes in weather patterns affects all facets of environmental and energy infrastructure especially along the coastline. Oil and gas production, renewable energy resources and electrical transmission are all affected by severe weather. New York needs to improve and harden its infrastructure. Innovative designs for every sector of infrastructure can make New Yorkers safer and enhance their quality of life, but projects of this type take time and the more resources available to DEP, the sooner they can begin.

We appreciate the work that you and all of the Members of the Council do to improve New York every day and look forward to continuing to work with you on these important issues.

Thank you for the opportunity to speak before you today.



**Testimony of Stormwater Infrastructure Matters (SWIM) Coalition
Before the New York City Council, Environmental Protection Committee
Budget and Oversight Hearing March 23, 2017**

Re: Greater Oversight of NYC Water Quality Improvement Plans

My name is Shino Tanikawa and I am a SWIM Coalition Steering Committee member. Thank you for the opportunity to offer the following comments on behalf of the Stormwater Infrastructure Matters (S.W.I.M.) Coalition.

Our testimony today is focused on DEP's efforts to reduce sewer overflows and polluted runoff, including the installation of "green infrastructure" that captures stormwater on land before it causes pollution problems in our waterways.

We ask that the Committee exercise its oversight responsibility to ensure DEP's efforts are directed towards effective, sustainable solutions that protect our waters for both human recreation and ecosystem protection.

In brief, the testimony highlights the following issues and recommendations:

CSO Long Term Control Plans and the Stormwater Management Plan for the Separate Storm Sewer System

- City Council Members sign up for sewage overflow/sewage spill alerts
- Aligning the City's water quality improvement/stormwater management plans for the combined sewer areas and separate storm sewer ("MS4") areas of the City.
- Rejecting chlorination disinfection
- Reducing overflow volume
- Sewage Spills and Illegal Discharges: More stringent fines and enforcement against violators

CSO Consent Order and Green Infrastructure Plan goals

- Ensuring that DEP does not roll back of green infrastructure goals in the Consent Order
- City Council briefings on the Consent Order negotiations

Green Infrastructure Plan:

- Missed goals to date
- Expanding green infrastructure to the MS4 Area of the City
- Diversifying green infrastructure methods beyond bioswales
- Stimulating green infrastructure on private property

Water Rate Restructuring

- Directing DEP to conduct a rate restructuring study

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The S.W.I.M. coalition is a group of 70+ member organizations who are dedicated to ensuring swimmable and fishable waters around New York City through natural, sustainable stormwater management practices. Our members are a diverse group of community-based, citywide, regional and national organizations, water recreation user groups, institutions of higher education, and businesses.

Since our founding in 2007, (by several members of a Citizens Advisory Committee convened by NYCDEP in 2004 for the Waterbody Watershed Plans and the development of the 2005 CSO Consent Order) SWIM has closely followed the development of and amendments to the CSO Consent Order, and called for the development of the City's Sustainable Stormwater Management Plan, inclusion of Green Infrastructure in the City's stormwater management plans and provided input for the development of the current Green Infrastructure Plan along with the Green Roof tax abatement and the Green Infrastructure Grant program. SWIM steering committee members have also participated in an ongoing and productive dialogue with Commissioners and Deputy Commissioners and their staff at DEP over the past decade and are members of the NYC DEP current Water Infrastructure Steering Committee.

The development of all of the above-mentioned plans, orders, and programs can provide a comprehensive blueprint for how we'll all make New York City more resilient in the years ahead, improve water quality in our waterways, provide green jobs for our citizens, and make our waterways safe to access for recreational and educational purposes. We commend NYC DEP for their diligence and contribution to the implementation of the plans and programs in place and in development today. We recognize that the above plans are underway for a multitude of reasons that are vital to the NYC economy and ecosystem; including the goal of improving the City's waterways in order to make them more accessible to New Yorkers for recreation by the year 2030.

SWIM has kept the 2030 goal in mind and maintained it as one of the guiding principles for the work we've done over the past decade to influence the development of sustainable stormwater management practices that are necessary to make NYC's waterways fishable and swimmable. It is in that vein that we reiterate in our testimony today that widespread on-land stormwater management can make it possible for New York City waters to meet the Clean Water Act standards for safe swimming and fishing, while meeting local sustainability goals of creating more green open space, cooling and cleaning the air we breathe, reducing our energy costs, and generating accessible green jobs.

We are aware that the challenges to accomplishing the fishable swimmable water quality goals are great and constantly changing, and certainly hurricane Sandy brought a whole new level of awareness about our land management and development practices and many lessons learned. Though the challenges are many, we cannot afford to delay or postpone the development and implementation of stormwater management plans and water quality improvement plans, with a balance of both green and grey solutions to substantially reduce the volume of sewage and stormwater that currently flows into our local waterbodies each year.

The biggest ongoing sources of water pollution to New York City waters are stormwater runoff from the City's municipal separate storm sewer system ("MS4"), and raw sewage discharges ("combined sewer overflows" of



S.W.I.M. Coalition

Stormwater Infrastructure Matters: utilizing
stormwater as a resource, not a waste!

“CSOs”) from the combined sanitary/storm sewers. MS4 and CSO pollution contaminate the waterways where New Yorkers wade, swim, fish, boat, and play. The overflows and runoff along with our toxic industrial sites both current and past, make many of our waterways unsafe for recreation and degrade habitat for fish and wildlife. DEP studies indicate that we cannot clean up our waters without addressing both of these stormwater pollution problems.

CSO Long Term Control Plans and the Stormwater Management Plan for the Separate Storm Sewer System

Over the past few years SWIM has been closely monitoring and commenting on the City’s individual CSO Long Term Control Plans for the combined sewer system as well as the forthcoming Stormwater Management Plan for the City’s separate storm sewer system.

At the moment, these two programs are not on the same timeline and the orders that inform them remain separate and distinct which is causing them to in some ways defeat one another rather than join forces. For instance, nearly all of the CSO Long Term Control plans that have been submitted to the State thus far reference the fact that the waterways the CSO Control Plans are meant to improve cannot actually be improved through volume reduction due to “other sources” namely stormwater runoff and illegal discharges that are slated to be dealt with under the Stormwater Management Plan for the separate sewer system (MS4). To us, this means the City’s CSO Long Term Control Plans currently under review by the State would, if approved, all stand to leave billions of gallons contaminated sewage in our waterways annually, for at least many decades to come.

Additionally, some of the CSO Long Term Control Plans (namely for Alley Creek, Flushing Creek and the Hutchinson River) propose using disinfection with Chlorine rather than reducing the volume of CSO. This is a band-aid solution that creates a new pollutant (chlorine, which can harm habitats and the local waterway ecosystems). There are better solutions for CSO volume reductions that include both green infrastructure and grey infrastructure solutions.

We urge City Council members and members of the Committee for Environmental Protection to become more actively engaged in the Combined Sewer Overflow Long Term Control Plans to ensure that DEP is proposing solutions which will have a positive impact on your districts and constituents.

If you haven’t already done so, we encourage the members of the Committee for Environmental Protection to sign up for the sewage spills alert system managed by the NY Department of Environmental Conservation so that you can see how often sewage overflows and illegal discharges take place in your districts, and we encourage you to make other City Council members aware of the alert system so they can warn their constituents about contamination in their local waterways. Under the State’s Sewage Right to Know Act, DEP must notify the State of a sewage spill within two hours, and the public within four hours. You can sign up for alerts in your county through the NY Alert page to see the frequency of these events and be reminded of the issue. This alert system is not widely known and the State doesn’t do a very good job of building awareness



about the system. You can find instructions to sign up for these alerts here:
http://www.dec.ny.gov/docs/water_pdf/pubvideotrans.pdf.

As an example of this lack of knowledge about the alert system, the recent issue of (possibly years long) illegal discharge of 200,000 gallons per day of raw sewage into Coney Island Creek from a large apartment complex (that diverted its sanitary sewage to storm sewer pipes which caused untreated sewage to discharge directly into the Creek) was not known to local elected officials (nor were they alerted directly by the City or the State of the matter, but the discharges were listed on the DEC alert system's site and anyone who was signed up for the alerts would have received word about the discharges), or to citizens who were conducting religious ceremonies, shoreline clean-up activities, education programs, fishing, boating and wading in the Creek and along its shoreline during the time these discharges were pouring into the Creek. This is a municipal failure that does not and did not provide for proper procedures to be implemented for the protection of the many citizens of New York and visitors who visit Coney Island and as importantly, the local Coney Island community who uses the Creek on a regular basis year - round for a wide variety of activities. **Also, as testified by members of the public at the city Council's December 13 public hearing, the current MS4 legislation in the Intro. 1346-2016 bill, to give DEP greater authority to enforce higher fines for illegal discharges, the bill as it stands now does not provide for punitive enough enforcement. We recommend that the City Council consider a more stringent enforcement process and impose higher fines for violations. Many perpetrators know how low the fines are and are willing to pay them rather than conform to best practices.**

CSO Consent Order and Green Infrastructure Plan goals

Based on analysis by the Independent Budget Office, DEP's Capital Commitment Plan includes \$787 million in spending on green infrastructure from FY17-FY20. We highly commend DEP for committing such a substantial budget to green infrastructure.

It falls to this Committee to ensure that DEP spends those funds as effectively as possible, to achieve the City's green infrastructure targets and maximize water quality and community benefits. Unfortunately, despite DEP's accomplishments installing thousands of "bioswales" in many neighborhoods, we have serious concerns that the DEP's green infrastructure program is not heading in a direction that will achieve those overarching goals.

Importantly we note that, as of this hearing date, the City and State are currently renegotiating the CSO Consent Order. Based on, among other things, DEP's shortfalls to date on meeting its green infrastructure targets to date, and DEP's suggestion in reports to the State that the targets should be revisited, we have serious concerns that a renegotiating Consent Order may substantially weaken DEP's green infrastructure obligations. The current goal is stated in DEP's Green Infrastructure Plan and in the current Consent Order: **to manage stormwater on 1.5% of impervious surfaces in combined sewer areas within the first five years of the program, and 10% by the end of the 20-year plan.** Last year, in the fifth year of the plan, DEP released a Contingency Plan stating they missed their first target by more than half. Their proposed solution for "catching up" over the next 5 years was, essentially, to do more of the same. Further, DEP provided no



explanation of how they could not only catch-up to missed targets, but also meet the much higher green infrastructure target set for 2020, which is to manage runoff from 4.0% of impervious area and ultimately 10 % by 2030. We are very concerned that rolling back these vital milestones or removing them from the Consent Order -- thereby removing all accountability for long-term results -- will decrease DEP's motivation to manage stormwater runoff sustainably and lessen the ability to accomplish the CSO volume reduction necessary to make our waterways clean enough for fishing, swimming and recreation.

The City's current OneNYC plan applauds and supports DEP's Green Infrastructure Plan and we see no reason to abandon the GI Plan's and the CSO Consent Order's key goal. In fact we believe the MS4 Stormwater Management Plan, which DEP is currently developing, should expand on the goal and include extensive Green Infrastructure to manage stormwater runoff. **This is an area we think the City Council Committee on Environmental Protection can offer encouragement both on maintaining and expanding the GI goals, and in budget discussions to allocate monies for GI in the MS4 area in the forthcoming 2018 Stormwater Management Plan for the separate storm sewer system which serves nearly 30% of NYC neighborhoods. Additionally, as per our December 13, 2016 testimony on the Intro. 1346, we request that City Council amend the bill so the post-construction section which directs DEP to develop retention standards, applies citywide, not just in the MS4 area.**

Additionally, the City and State are not including the general public in the matters they are considering for the renegotiation of the CSO Consent Order. While NYCDEP has met with us to discuss the proposed changes to the Green Infrastructure goal, we cannot assess that matter without a full understanding of the entire Consent Order and are concerned that it appears that neither City Council members, nor advocates, nor the general public will see the new consent order until it has already been signed by the City, leaving us with little practical opportunity to seek improvements to a legally binding order that will impact our communities for generations to come. **We call on the City Council members of this committee and all City Council Members to seek briefings from DEP and the Mayor's Office on the CSO Consent Order renegotiations, in order to be in the loop (and be able to inform your constituents) on how the plans will impact your districts, and to advocate for an agreement that protects your communities and the waters that all New Yorkers share.**

Through our numerous and greatly appreciated meetings with DEP, we understand that there are many challenges with green infrastructure in the right of way, including site constraints and maintenance. We certainly commend the NYC DEP for the implementation of the bioswales in the public right of way and the success they have had in terms of the amount of stormwater the bioswales divert (far more than originally anticipated when they were installed!) from the City's combined sewer system during rain and snow events. However, we believe there is opportunity to improve the green infrastructure program citywide.

First, a stormwater rule was passed in 2012 that required new developments to meet a more stringent allowable flow rate into the combined sewer system. The result of this rule has been mostly underground storage tanks and very few green infrastructure projects. We believe the rule could be strengthened to better encourage green infrastructure solutions that have ample co-benefits for the community and the watershed, and these projects should be quantified and counted towards DEP's consent order goals.



Second, we believe DEP's green infrastructure techniques can be diversified beyond the standard right-of-way-bioswale, which DEP now calls rain gardens. We've seen alternative designs for ROW green infrastructure in North-Eastern Queens after residents complained about the bioswale design. We believe a wider palette of designs will result in greater opportunities for green infrastructure in the right-of-way.

Our final point about the green infrastructure program is regarding the GI grant program to support private property retrofits. There have been very few projects awarded a green infrastructure grant (we only find public record of less than 40 over the four years of the program, and know that the number has been decreasing each year) due to the hurdles private property owners must go through to get reimbursed. We know there is much enthusiasm for green infrastructure throughout NYC, but without being able to access funding or a rebate, many property owners cannot afford even the preliminary design costs. It simply does not pay off without financial incentives.

We are aware that DEP is working to restructure and overhaul their Grant Program for GI on private property and are hopeful about their efforts to improve it. The grant program -- or successor to that program --needs to be scaled up and made more user friendly in order to fully address capturing and managing stormwater runoff. SWIM has offered our comments for this program in response to DEP's recent RFI on this matter and will follow the process carefully. **We encourage the members of the Committee to follow it as well and offer their support of the City's efforts to improve the program. There are many incentives that could be integrated into the plan and that would align with the OneNYC equity goals.**

Water Rate Restructuring

A major contribution to creating more incentives for green infrastructure would be to restructure the water bill to properly account for stormwater runoff. Currently, wastewater and stormwater are charged a single fee. Properties with large impervious surfaces (such as a parking lot) have a greater impact on the City's stormwater management expense than those with less impervious space, such as a single-family home.

Restructuring the water rate so that there is a separate fee for stormwater is a more equitable way to charge for the water, sewer and stormwater services that DEP provides. We recognize that this restructuring would have to be studied very carefully so as to avoid creating a burden on certain types of housing stock and to ensure that low income households would not be unfairly burdened by the restructuring of the rates. A separate stormwater fee, based on impervious area of a property, has already been implemented in nearly 2,000 municipalities across the country, including larger cities like DC and Philadelphia, and there are proven ways to structure the water rate so that it does not burden low-income ratepayers. A restructured water rate will create a market for green infrastructure and provide opportunities for incentives, such as rebates or credits, for green infrastructure. Without such incentive, the rate of green infrastructure retrofits on private property will continue to dwindle. **We recommend City Council work with the Water Board to develop legislation that mandates that DEP conduct a new rate study (with ample input from stakeholders and advocates from all sectors) to find a rate structure that prioritizes equity and the environment, and which ensures a reliable source of ongoing funding for green infrastructure and other stormwater management**



needs. It has been a decade since DEP conducted a rate study to evaluate options for a stormwater fee, and we have not seen any significant progress since then.

Lastly, we are concerned that the current Mayoral Office of Sustainability and Long Term Planning is largely missing in action on these issues from a public standpoint and has seemingly not made the NYC DEP's mission a priority. We are concerned that the capacity of DEP is diminished because a Commissioner has not been appointed by the Mayor's office. This is hampering the capacity of the NYC DEP at a time when the agency needs to operate at its highest potential to complete the CSO LTCP's and the MS4 Stormwater Management Plan. **We call on the City Council Committee on Environmental Protection to urge the Mayor's Office of Sustainability and Long Term Planning to engage with, monitor, and support the NYC DEP's CSO Long Term Control Plans and the MS4 Stormwater Management Plan and to help ensure that there is interagency coordination to support DEP's efforts to improve water quality in our waterways and make them safe for all New Yorkers.**

In conclusion, we know there are ways to develop collaborative solutions for all the challenges we face regarding stormwater pollution and CSOs. We invite City Council and DEP to work with the SWIM Coalition and other interested stakeholders to convene citizens over the coming years to discuss these matters and develop local solutions that can be supported by and implemented through City and State budgets.



Good afternoon. I am Matt Malina, the Director of NYC H2O. We are a nonprofit that provides education programs focused on NYC's water system and environment.

Biosolids: We applaud the DEP for taking steps to restart the biosolids recycling program. This will increase the City's recycling rate by more than 10% as 1200 tons are generated everyday. As a reference 10,000 tons of solid waste is collected by DSNY every day. We would advocate for closer coordination and funding of sludge recycling with DSNY to insure more longevity to the program. DSNY pays upwards of \$1100 per ton to recycle food scraps whereas recycling biosolids costs about \$150 per ton. Closer coordination between DSNY and DEP will also allow the expansion of processing organic waste in the digesters of sewage plants which is the EPA's recommended way to recycle organics since more methane is captured. DEP already has such a pilot program at the Newtown Creek facility.

Tibbetts Brook: We ask that DEP take an active role in daylighting Tibbetts Brook in partnership with the NYC Parks Department and its partners. NYC has been under Consent Order to reduce dry weather flow to Ward's Island since 1997. Daylighting Tibbetts Brook will reduce sewage flowing into the Harlem River when it rains. The main issue is buying land from CSX for \$10M to run the pipe to bring the brook's water to the Harlem River. Tibbetts Brook sends 4 million gallons a day (mgd) of fresh water to Wards Island via the Broadway Sewer

This is a picture of freshwater snails growing in the Broadway Sewer. The water is clean enough for the snails to grow because 4 mgd of fresh Tibbetts Brook water flows into it. I am all in favor of freshwater snails. But I ask, is the Broadway sewer where we really want to be encouraging them to grow?



Bio-swales: We ask that DEP rethink its outreach program with regards to bioswales. Bioswales get filled with trash become an eyesore and DSNY can even fine residents who aren't aware of their purpose. [Flushing residents recently organized to oppose bioswales.](#)



We recommend working with organizations that have established education programs in place - and funding them - to help with outreach about bioswales and Green Infrastructure. Perhaps education can be another component of the Green Infrastructure grant program which has been very successful.

DEP Summer intern training program: To its credit, the DEP has a robust summer intern program that employs high school and college students. We advocate that DEP offer a more comprehensive training program about NYC's water system that gives them a more wholistic understand of the incredible feature as well as the challenges of our water system. to these bright and interested interns.

NGO's which have established education and outreach programs like H2O, GCC and NCA can lead an onsite field trips / training sessions about their specialty and again it should be funded. The interns are often employed manning the portable water fountains.

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Name: Gerry Kelpin

Address: _____

I represent: DEP

Address: _____

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Name: Joel Kuperman

Address: 225 E. 11th St. 21225

I represent: NY. ENV. LAW & JUSTICE PROJ.

Address: _____

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Name: Vincent Saperia

Address: Acting Commissioner

I represent: DEP

Address: _____

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Name: Eric London

Address: Deputy Commissioner DES

I represent: Bureau of Public Affairs & Communications

Address: (At table, not testifying)

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Name: Joseph Murray Jackson Heights

Address: Chief Financial Officer (DEP)

I represent: State of New York (same as above)

Address: (At table, not testifying)

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Name: GEORGE PERESIS, PE

Address: 182-04 64th Avenue

I represent: Fresh Meadows, NY 11365

Address: ACEC 8 West 38th St

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Name: Lawrence Levine

Address: 40 W 20th St, NY NY 10011

I represent: Natural Resources Defense Council

Address: See above

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Name: SHINNO TANIKAWA

Address: 121 SIXTH AVE NY NY

I represent: SWIM COALITION

Address: _____

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☐ in favor ☐ in opposition

Date: 3/23/17

(PLEASE PRINT)

Name: Matt Malina

Address: 410 E 6th Str NY 10009

I represent: NYC H2O

Address: PO Box 20773 NY 10009

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