

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

**OVERSIGHT HEARING ENTITLED
THE CITY'S WASTEWATER INFRASTRUCTURE –
CURRENT CONDITION AND FUTURE PLANS**

DECEMBER 13, 2017

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.

NRDC fully endorses the Coalition's testimony today. We join with our coalition partners in sounding the alarm bells over the Department of Environmental Protection's (DEP's) plans to reduce combined sewer overflows (CSOs). These Long Term Control Plans (LTCPs) will condemn waterways across the City to massive amounts of sewage pollution, indefinitely into the future. Under the plans – as is the case today – CSOs will far too often make the city's waterways unfit for recreation and continue to despoil coastal fish and wildlife habitat.

Since last month, more than 2,500 NRDC members and online activists sent messages to the Mayor, DEP Commissioner, City Council Speaker, and the Chair of this committee, urging the City to do much, much better. The Mayor has provided no response so far. DEP held an annual public meeting in November to promote its plans and take limited questions, but has yet to offer a forum for substantive, two-way dialogue to address community concerns about each LTCP and explore alternative approaches. We sincerely thank the Speaker and the Chair for convening this oversight hearing to investigate the concerns that have been raised by so many community and environmental organizations and individuals across the city.

You will hear today from many witnesses about many specific ways the City can and must improve its approach. Rather than re-tread the same ground, I will focus my testimony on two specific issues: (1) revamping the City's efforts to stimulate green infrastructure on private

property; and (2) reforming DEP's rate structure to equitably generate the funds needed for clean water investments.

On those issues, we make three specific requests of the City Council:

- Stormwater rules for development projects: City Council should pass legislation directing DEP to adopt on-site stormwater retention standards for development in the combined sewer portions of the city and track the CSO reductions achieved by implementing the new standard.
- Grant program for green infrastructure retrofits on private property: NRDC urges City Council to work with DEP to ensure that an innovative, scalable, new green infrastructure program has the backing it needs from the Office of Management and Budget, the Mayor's Office of Sustainability, and other city agencies, and to ensure that the program launches in 2018 and succeeds in reaching communities most in need.
- Rate restructuring: City Council should pass legislation requiring DEP to conduct a study and develop recommendations for restructuring the City's water rates to simultaneously promote (i) equitable generation of needed revenues, (ii) widespread use of green stormwater infrastructure, and (iii) water conservation practices. The study should be required to address at least three new rate structure components: a separate stormwater fee; tiered water and wastewater rates; and expanded low-income assistance programs.

More broadly, in regard to the City's CSO program, we ask the Committee and the Council to exercise your oversight authority, as well as your legislative authority, to ensure that the City implements effective, equitable, sustainable solutions that clean up our waters, protect public health, improve neighborhood quality-of-life, create green-collar jobs, and improve the City's resilience to climate change. We ask you to *hold DEP and its sister agencies accountable* for achieving those goals and *empower these agencies to succeed*.

1. The City Must Revise its Deeply Flawed CSO Long Term Control Plans to Achieve “Fishable, Swimmable” Waters.

NRDC commends DEP for the substantial progress it has made since the 1990s in reducing CSOs and improving water quality, which enables millions of New Yorkers to enjoy our waterways and waterfronts in ways that were not possible in decades past. But we cannot emphasize strongly enough that the problem is far from solved.

In most of the city, if it has not rained recently, the water is typically clean enough to swim, wade, or paddle safely, and people in waterfront parks can enjoy the fresh air. But, far too often, after even small rain events, our waters are not clean enough to touch and the smell of sewage wafts ashore. In the majority of the City that is served by combined sanitary and storm sewers, polluted runoff from even small rain events (as little as one-tent of an inch) overwhelms the system, triggering sewage overflows that foul our waters with disease-causing microorganisms,

toxic chemicals, trash, and other pollutants, rendering them unsafe for recreation and degrading habitat for fish and wildlife.

The City’s sewer system dumps over 20 billion gallons of raw sewage mixed with polluted runoff into local waters in a typical year – more than any other city in the country – from over 400 locations, in all five boroughs. DEP reported these overflows on 85 days last year and 100 days so far this year.¹

I encourage you to look at the “Open Sewer Atlas” online, which provides an interactive map, using DEP data, that shows for every outfall how many overflow events and how much total overflow volume occurred in 2016.² I also encourage you to sign up for the alert system managed by the NY Department of Environmental Conservation so 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.³

Under the federal Clean Water Act, the City’s CSO Long Term Control Plans are supposed to be the means for solving this problem – for ensuring that sewage overflows are controlled so our waters can be “fishable and swimmable.” These plans determine what investments will be made – or will not be made – over the next 25 or more years to reduce sewage overflows.

Unfortunately, DEP has produced a series of plans – for rivers, creeks, and bays in Queens, the Bronx, and Brooklyn – that will leave hundreds of millions or billions of gallons overflowing into each waterbody annually, on dozens of occasions per year. Moreover, these plans will not come close to meeting federal health standards. And, where they do propose CSO reductions, the capital improvements are delayed on average more than a decade, and in some cases as much as 18 to 25 years.⁴

Plans remain under development for the city’s largest water bodies, including the Hudson River, East River, Harlem River, Jamaica Bay, Upper and Lower New York Bay, Arthur Kill, and Kill van Kull. But DEP has long suggested that it does not believe significant further reductions are needed in these places. If DEP takes that approach, total CSO volumes citywide will be not much smaller in the 2040s than they are today – it appears that around 18 billion gallons of CSOs will remain.

¹ NRDC has extracted all of New York City’s CSO event reports from the state’s “sewage right to know” database. We have organized the data in a spreadsheet, showing the dates of every overflow report from October 2015 through November 2017. The spreadsheet can be viewed here:

<https://drive.google.com/open?id=1kxmNcKtSGazfTpr7Qe5XccSx1phfQNmbNjl7QMM1dEU>.

² <http://openseweratlas.tumblr.com/wetweathermap>.

³ You can find instructions to sign up for these alerts here:
http://www.dec.ny.gov/docs/water_pdf/pubvideotrans.pdf.

⁴ For further details, see the fact sheets and other resources available on the S.W.I.M. Coalition website at <https://www.swimmablenyc.org/cso-ltcp>.

To put this in a broader historical context, when the last plan is fully implemented at least 25 years from now, total CSO volume would decrease by only about one-third as compared to levels four decades earlier (27 billion gallons per year in the early 2000s). Most of that reduction has already occurred today – which means the next 25 years would bring little improvement to most waterways in the city.

The City can and must do much better than these plans. In short, the City must do more to reduce the volume and frequency of overflows, rather than redirecting overflows from one place to another or dumping chlorine into the sewers as is proposed in many of the LTCPs. The City must engage in-depth with local stakeholders and instill confidence that their concerns will be heard and addressed. The City must adopt plans that meet the U.S. Environmental Protection Agency's recreational water quality standards and expedite implementation timelines, in order to realize the promise of fishable, swimmable waters.

I refer you to the testimony of the S.W.I.M. Coalition for more details on how the City must improve the LTCPs. And I urge each of you and your colleagues on the Council to press DEP for answers and hold the City accountable for results.

2. The City Must Take Bold Action to Stimulate Green Infrastructure on Private Property

DEP reported last year that it is falling far short of its targets under its 2010 Green Infrastructure Plan and the 2012 CSO Consent Order, achieving less than half of the amount of green infrastructure it was supposed to achieve by 2015. DEP's official "contingency plan," which the state recently approved, anticipates taking another five years, until 2020, just to meet that missed target – and an unknown amount of time to achieve the higher target originally set for 2020. DEP's Contingency Plan also called into question whether it should even continue to aim for its existing long-term green infrastructure targets, suggesting that large portions of the City simply do not need any new green infrastructure.⁵

There are many opportunities for DEP to improve upon its current green infrastructure program. Other cities around the country have implemented or are implementing all of them, in one form or another. Today's testimony from the S.W.I.M. Coalition identifies the full range of improvements that are needed for DEP's green infrastructure program to succeed in the long term. I will focus here on strategies to expand green infrastructure implementation on private property.

a. DEP must strengthen its stormwater management rule for new development in CSO areas and track the benefits of implementing the rule.

DEP's 2010 Green Infrastructure Plan, like other leading cities' green infrastructure plans, relied on private investment in new development projects to generate substantial amounts of green

⁵ See DEP's "Contingency Plan" and DEC's approval letter here:
http://www.nyc.gov/html/dep/html/stormwater/nyc_green_infrastructure_plan.shtml.

infrastructure, without capital expense to DEP. This was to be achieved through a DEP regulation mandating on-site stormwater management in new development.

In January 2012, 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) – an approach that DEP acknowledges is less effective than “retention” (i.e., using green infrastructure to capture runoff for infiltration, evapotranspiration, and/or reuse, without release into the sewers). Unsurprisingly, DEP reports that, over the last five years, the rule has resulted in little or no actual green infrastructure, but rather things like underground holding tanks.⁶

Over time, DEP seems to have abandoned the use of stormwater rules as a tool for implementing green infrastructure. When DEP adopted the stormwater detention rule, it promised to revisit the rule to consider replacing it with a more effective retention standard.⁷ But, although DEP is developing a new retention standard for separately sewered portions of the city, it is taking no action to develop or apply such a rule in the combined sewer portions of the city. Further, DEP reported last year that it has not even tracked the CSO-reduction benefits of the existing “detention” rule.⁸

DEP must embrace this essential tool in the green infrastructure toolkit. Since DEP has not taken the initiative, City Council should pass legislation directing DEP to adopt on-site stormwater retention standards for development in the combined sewer portions of the city and to track the CSO reductions achieved by implementing the new standard.

b. The City should launch a new, large-scale grant program for green infrastructure 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 green infrastructure implementation. New York City is far behind other cities on this approach.

DEP’s efforts to promote green infrastructure retrofits on private property have focused on the Green Infrastructure Grant Program. While that program has funded some very good, high-visibility projects over the last 5-6 years, the total number of projects funded and built has been

⁶ See DEP’s GI Annual Reports here:

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

⁷ 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>.

⁸ DEP’s June 2016 “GI Contingency Plan,” which reported on progress towards green infrastructure milestones, claims credit towards those 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 has 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. 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.

very small, and the program is not currently designed to be “scalable” to achieve significant amounts of cost-effective green infrastructure 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.⁹ By the end of November, DEP had received responses representing over 100 organizations.

In August 2017, NRDC and the NYU Stern Center for Sustainable Business published a report that provides a roadmap to revamp this program. The report’s detailed recommendations are based on more than 250 expert interviews, stakeholder meetings, and the work of an NRDC finance analyst working from DEP’s offices. These recommendations were endorsed by a wide range of environmental and community-based organizations.¹⁰

The report calls for an innovative, community-supported grant program to fund and build green infrastructure retrofits on privately-owned land. It explains how this program can be designed not only to improve water quality, but also to leverage DEP’s green infrastructure investments to make quality-of-life improvements in underserved neighborhoods, support affordable housing goals, create green-collar jobs, and improve the city’s climate resiliency.

A summary of the report’s recommendations is appended to my testimony.¹¹ We would welcome the opportunity to brief you further on the details.

We understand that DEP is now developing a program along these lines. It would be a tremendous shift in the way DEP has approached green infrastructure retrofits on private property. The innovative nature of the program will require collaboration across multiple city agencies, and presents many opportunities to integrate green infrastructure into existing OneNYC green building initiatives. Moreover, to launch the program, DEP will likely need the Office of Management and Budget (OMB) not only to approve a budget request, but also to approve novel ways of deploying city funds in public-private partnership.

NRDC urges City Council to work with DEP to ensure that this innovative program has the backing it needs from OMB, the Mayor’s Office of Sustainability, and other city agencies, and to ensure that the program launches in 2018 and succeeds in reaching communities most in need.

⁹ DEP, Request for Information (RFI), Management of a Green Infrastructure Private Property Incentive Program, Sept. 19, 2016, <https://a856-cityrecord.nyc.gov/RequestDetail/20160912013>.

¹⁰ See the report here, which includes a list of the supporting organizations in a letter that prefaces the report: NRDC, *Catalyzing Green Infrastructure on Private Property: Recommendations for a Green, Equitable, and Sustainable New York City* (2017),

<https://www.nrdc.org/resources/catalyzing-green-infrastructure-private-property-recommendations-green-equitable-and>

¹¹ NRDC’s lead author of the report also provided an overview in a blog post here:
<https://www.nrdc.org/experts/alisa-valderrama/paying-private-property-owners-nyc-go-green>.

c. DEP should create financial incentives for green infrastructure as part of a restructured water and sewer rate.

NRDC's August 2017 report also strongly recommended using stormwater fees, based on a property's impervious area, as an incentive for green infrastructure on private property. Lessons learned from other cities show that the most effective green infrastructure retrofit grant programs are coupled with stormwater fees – and, specifically, with the availability of reduced fees, on an ongoing basis, for properties that retrofit with green infrastructure to reduce their runoff.

This topic is discussed in detail in the section below, as part of a broader discussion of the need to restructure DEP's water and sewer rates.

3. The City Should Reform the Water and Sewer Rate Structure to Promote Equitable Generation of Revenue for Water Quality Improvements and Create Incentives for Sustainable Water Management.

DEP's current 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 stormwater runoff.

As DEP has been developing the LTCPs over the last 4-5 years, it has emphasized in virtually every public presentation its belief that spending more than DEP proposes to spend would be “unaffordable” for ratepayers – especially for low-income households. Indeed, many of DEP's LTCPs devote nearly as much space to arguing that greater investment in CSO controls would be unaffordable as they devote to technical evaluations of alternative CSO control measures.

DEP's affordability analyses suffer from many flaws. Most significantly, DEP takes the current rate structure as a given, and models the extent to which increased DEP capital spending would translate into higher water and sewer costs at the household level, especially for low-income households. The problem with this approach is that DEP's current rate structure does not equitably allocate the burdens of paying for the water and sewer system. It unnecessarily places too much of the responsibility of paying for increased investment on low-income households, making these investments seem less affordable than they are for a city with as many resources as New York. This is a solvable problem.

It is well past time for the City to reform its water rate structure to allow DEP to raise the revenue needed for clean water investments without imposing undue burdens on lower-income households. A new rate structure also should be designed to create incentives for green infrastructure and water conservation. There are many models to draw from in other cities.

To spur immediate action, City Council should pass legislation requiring DEP to conduct a study and develop recommendations for rate restructuring that simultaneously promote (i) equitable generation of needed revenues, (ii) widespread use of green stormwater infrastructure, and (iii) water conservation practices. The study should be required to address at least three new rate structure components, which are discussed further below: a separate stormwater fee; tiered water and wastewater rates; and expanded low-income assistance programs. The legislation should

charge DEP with developing options in time for consideration during the FY20 rate-setting cycle (which will take place in the spring of 2019). The legislation should also require stakeholder participation in DEP’s study, such as through the creation of a rate restructuring advisory committee.

a. Stormwater fees

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, in reality, is *completely unrelated* to how much stormwater a property puts into the sewer system.¹²

Properties with large impervious surfaces have a greater impact on the City’s stormwater management expenses than properties with less impervious space, or properties 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, a multifamily residential property uses much more water than such a non-residential property, but typically contributes much less runoff to the city sewer system because of its smaller impervious footprint.

Under DEP’s current rate structure, in which stormwater revenues are generated based on drinking water usage, the large impervious property in the above scenario pays virtually nothing towards the City’s stormwater costs, while the multi-family residential property pays vastly more than its fair share. 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 storm water management. At least 1,600 municipalities around the country, both large and small, now have a separate stormwater fee, typically based on impervious area.¹³ There are many models that the City can draw from; 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.¹⁴

With a revenue-neutral transition to a well-designed stormwater fee structure, it should also be possible not only to reduce total costs for multi-family buildings, but also to reduce (or at least

¹² Currently, wastewater and storm water are calculated as a single amount, which is 159% of the metered water charge.

¹³ See “2016 Western Kentucky University Stormwater Utility Survey,” <https://www.wku.edu/engineering/civil/fpm/swusurvey/>.

¹⁴ A July 2016 *City Limits* article provides more context on the stormwater fee issue in New York City, including a comparison to Philadelphia. *City Limits*, “Stormwater is New Challenge to City’s Clean Water Plans,” July 12, 2016, <http://citylimits.org/2016/07/12/stormwater-is-new-challenge-to-citys-clean-water-plans/>.

hold steady) the total bill for single-family homeowners, since a stormwater fee will tend to shift burdens overall from residential properties to large commercial and industrial properties. NRDC and Riverkeeper are currently working with a rate consultant to evaluate the impacts of various stormwater fee structures on different categories of ratepayers.

In 2009, DEP completed a study on potential rate structure reforms, including a separate stormwater fee.¹⁵ At that time, DEP stated that it would “seek input from property owners and other stakeholders, which will be used to develop recommendations for rate-structure modifications that will be presented to the water board this spring [of 2010].”¹⁶ DEP has yet to propose any modifications to the rate structure, except for a very small “pilot” project for stand-alone parking lots. Nor, to our knowledge, has DEP done any follow-up analysis to the 2009 study to help develop such a proposal. (During the FY16 rate setting process, at least one Water Board member, Adam Freed, encouraged DEP to pursue a stormwater fee, but we have seen no follow-up by DEP in the FY17 or FY18 rate setting process.)

b. Tiered (or “inclining block”) rates for water and wastewater

DEP’s 2009 rate study also investigated tiered (or “inclining block”) rates for water and sewer service, which would charge a higher per gallon rate for increments of water beyond a certain level of use (e.g., based on reasonable per-household or per-resident usage). This could allow most residential users to pay lower per gallon rates, while incentivizing conservation among high-volume residential and non-residential users. NRDC is not aware of any follow-up by DEP after the 2009 rate study. (During the FY16 rate setting process, Water Board member Adam Freed again encouraged DEP to pursue tiered rates.)

Tiered rates are widely used around the country. Like a separate stormwater fee, tiered rates have the potential to reduce bills for affordable multi-family buildings – especially if coupled with water conservation assistance from DEP. As explained in a recent 2016 report by the U.S. Environmental Protection Agency, tiered rates have both equity benefits and conservation benefits:

Water pricing should encourage and reward water conservation, while also ensuring that utility costs are adequately covered. This is often accomplished with an increasing block rate system which—in addition to the flat fee for fixed costs—includes a variable rate for volume of water consumed, with higher rates as water consumption increases. Increasing block rates (also called inclining or tiered block rates) can be structured with a reasonably priced first tier for water quantities that provide for essential household needs, and increasing price signals

¹⁵ See link to the study in this DEP press release: http://www.nyc.gov/html/dep/html/press_releases/09-14pr.shtml. A longer version of the rate study is available here:

http://www.nyc.gov/html/dep/pdf/water_board/dep_water_rate_study_03182010.pdf.

¹⁶ See DEP’s press release on the study: http://www.nyc.gov/html/dep/html/press_releases/09-14pr.shtml

at higher use rates that represent more discretionary use. This allows for equitable provision for basic needs and avoids burdening low-income customers.¹⁷

c. Enhanced low-income customer assistance programs

There is a growing awareness within the water industry that effective affordability policies are needed to facilitate if the water infrastructure investments that are necessary to protect water quality for people and the environment. Moreover, advocates for social, economic, and environmental justice have increasingly called attention to the harms of unaffordable water bills – including water shutoffs that can lead to loss of housing and even temporary loss of custody of children.

DEP is to be commended for being among the minority of water and wastewater utilities nationwide that offer customer assistance programs to help low- and fixed-income households afford their water and sewer bills. Yet, DEP's current programs likely do not meet the full need – and that need will increase over time, as rates continue to rise to meet the City's full range of water infrastructure investment needs.

“Low-income customer assistance programs” are common for electric and gas utilities, but they are much less common for water and sewer utilities, both nationally and in New York State. In the energy sector, there is both federal funding support (the Low-Income Home Energy Assistance Program, or LIHEAP) and, as of 2016, a New York State Energy Affordability Policy that funds additional low-income customer assistance, for customers with household income up to 200% of the poverty level.¹⁸ But no analogous federal or state programs exist for the water sector – either in New York or in other states.

In response to this challenge, some water and sewer utilities around the country – though by far a minority – are adopting various types of low-income customer assistance programs. A 2016 U.S. Environmental Protection Agency (EPA) report found that many of these programs offer only short-term relief for customers facing temporary financial hardship, or “flexible” payment terms to customers already in arrears, while others include “bill discounts” or “lifeline rates,” which provide a long-term reduction in low-income customers’ bills. A small number provide targeted water efficiency assistance to help customers reduce bills by using less water.¹⁹ Additionally, since EPA published that report, Philadelphia’s municipal water and sewer utility this year became the first in the nation to adopted another type of low-income assistance program, known as a “percentage-of-income payment plan.” For customers with household

¹⁷ EPA, *Best Practices to Consider When Evaluating Water Conservation and Efficiency as an Alternative for Water Supply Expansion* (2016), <https://www.epa.gov/sustainable-water-infrastructure/best-practices-water-conservation-and-efficiency-alternative-water>

¹⁸ Office of Governor Andrew Cuomo, “Governor Cuomo Announces New Energy Affordability Policy to Deliver Relief to Nearly 2 Million Low-Income New Yorkers,” May 19, 2016, <https://www.governor.ny.gov/news/governor-cuomo-announces-new-energy-affordability-policy-deliver-relief-nearly-2-million-low>.

¹⁹ EPA, Office of Wastewater Management, *Drinking Water and Wastewater Utility Customer Assistance Programs* (April 2016), available online at https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf.

income up to 150% of the federal poverty line (or higher in some cases), the city now offers water and sewer service on a sliding scale based on a percentage of household income. Through this new program, which has gained national attention, 60,000 customers will be eligible for discounted bills as low as \$12 per month.²⁰

In New York City, DEP's Home Water Assistance Program (HWAP) provides an annual bill discount of approximately \$116 to low-income, disabled, and senior citizen one- to four-family homeowners who qualify for certain other means-tested government benefits. DEP this year also adopted an innovative Multifamily Water Affordability Program (MWAP), which provides per-unit bill credits to building owners who make long-term, binding commitments to maintain affordable rents and meet certain water efficiency requirements.²¹

To our knowledge, DEP has never done a study of whether, and to what extent, these programs fall short of meeting the needs of low-income residents. It seems very likely that they do not. For example, since the HWAP credits are a flat amount for all eligible participants, the credits are unlikely to meet the full needs of participants on the lower end of the income scale (and may not even meet the full needs of those at the higher end). It is also unclear whether the eligibility criteria are sufficient to include all of those in need of assistance. Further, DEP does not provide targeted water efficiency assistance for low-income customers. Since these customers tend to live in older housing, they are more likely than others to have older, inefficient plumbing fixtures and leaky pipes. Targeted water efficiency assistance would help these customers reduce their bills while supporting DEP's systemwide water conservation goals.

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Thank you for the opportunity to testify today. NRDC looks forward to working with the Committee and City Council to ensure our waterways are fishable and swimmable, while ensuring that all New Yorkers have affordable access to safe and sufficient water and sewer service.

²⁰ City of Philadelphia, Office of the Mayor, "Philadelphia Launches New, Income-Based, Tiered Assistance Program," June 20, 2017, <https://beta.phila.gov/press-releases/mayor/philadelphia-launches-new-income-based-tiered-assistance-program/>; J.B. Wogan, The Cost of Water Is Rising. Philadelphia Has an Unprecedented Plan to Make It More Affordable, *Governing*, July 5, 2017, <http://www.governing.com/topics/transportation-infrastructure/gov-philadelphia-income-based-water-bills.html>.

²¹ DEP Home Water Assistance Program, http://www.nyc.gov/html/dep/html/customer_assistance/home_water_assistance_program.shtml; DEP Multi-Family Water Assistance Program, http://www.nyc.gov/html/dep/html/customer_assistance/multifamily_water_assistance_program.shtml.

Recommendations at a Glance
from

Catalyzing Green Infrastructure on Private Property: Recommendations for a Green Equitable and Sustainable New York City (August 2017)

Natural Resources Defense Council & NYU Stern Center for Sustainable Business

1. Make water and sewer rates more fair and equitable by restructuring them to include a separate stormwater fee, and create a strong stormwater management rule that requires the use of green infrastructure in development projects:

- Base property owners' stormwater-related fees on the amount of stormwater their property creates, rather than, as currently done, on the potable water they use, which bears no relation to stormwater costs. This fee re-alignment can not only create a more fair and practical water rate structure, but can also improve the affordability of water and sewer service for low- and moderate-income New Yorkers.
- Adopt on-site stormwater retention rules for new and redevelopment projects, so that additional development does not increase the City's existing stormwater burdens.

2. Commit decisively to make green infrastructure on private property a core component of the City's green infrastructure and sustainability efforts: Clear indications of DEP's commitment such as public statements, long-term budgets, and timelines are needed to spur the private sector and community actors to invest the time and effort to become the strong partners that DEP requires to make its program a success. Additional steps that help demonstrate commitment include:

- Use capital dollars to enable the new private grant program to scale and to ensure long-term funding.
- Develop a plan for long-term operation, maintenance, and monitoring of private green infrastructure.
- Make publicly available the full cost of building *public* green infrastructure to use as a ceiling for what DEP should offer to pay for *private* green infrastructure.

3. Create a new grant program, which works in combination with a new stormwater fee, to motivate private property owners to retrofit existing properties with green infrastructure: More than 50 percent of the land targeted for green infrastructure is privately owned, and DEP has recognized that it cannot reach its mandated green infrastructure goals by focusing only on the public right-of-way. To reach those goals, the City needs to motivate private property owners to install green infrastructure on existing development. DEP can achieve this by doing the following:

- a) Provide grants to pay for the construction of cost-effective green infrastructure on private land, learning from DEP's existing, small-scale grant program and the experiences of other cities. To successfully attract property owners citywide, a new

program should provide a direct financial benefit to property owners—beyond reimbursing the direct costs for green infrastructure.

- b) Design the program to be as transparent, simple and flexible as possible for property owners.
 - Encourage project bundlers to bring multiple green infrastructure projects to DEP.
 - Guarantee payments for pre-development costs and facilitate project financing, so property owners are not burdened with out-of-pocket costs.
- c) Engage a third-party to administer the new program by hiring a professional program manager, partnering with another city agency or quasi-public agency, or creating a new not-for-profit organization. Contract with the third-party on a pay-for-performance basis to help ensure effective use of DEP funds and ensure that the third-party takes on some of the risk of program execution.
- d) Bring community-based organizations (CBOs) into the program as important partners to help the program succeed and help achieve OneNYC goals.
 - Partner with CBOs from program design through implementation, and institutionalize their role through a new formal advisory body.
 - Integrate equity metrics, environmental justice considerations, and climate change vulnerability indicators when prioritizing where DEP grant funds are spent.
 - Ensure that CBOs have the support they need to play diverse roles in the new grant program.
- e) Look to affordable housing as an opportunity for green infrastructure to support both clean water goals and broader OneNYC goals.
 - Partner with HPD in the near-term and use DEP capital funds to build GI on affordable housing at a large scale.
 - Leverage state and federal programs that promote sustainable and green housing.
 - Consider marketing to Housing Development Fund Corporation co-ops, which offer opportunities for green infrastructure.

4. DEP cannot do this alone. The City should integrate green stormwater infrastructure throughout all relevant city agencies, programs, and policies:

- Integrate green infrastructure into all OneNYC building initiatives, taking advantage of the capacities of existing city-supported entities focused on making energy-related improvements in buildings.
- Enhance the Cool Neighborhoods NYC Initiative by including green infrastructure installations with new DEP support.
- Bundle green roofs with solar power.