



**TESTIMONY OF
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**BEFORE THE
NEW YORK STATE ASSEMBLY
STANDING COMMITTEE ON ENVIRONMENTAL CONSERVATION
STANDING COMMITTEE ON HEALTH
SUBCOMMITTEE ON OVERSIGHT OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**HEARING ENTITLED
“WATER QUALITY AND BUDGET IMPLEMENTATION”**

DECEMBER 4, 2017

Good morning Chairman Englebright, Chairman Gottfried, Chairwoman Fahy, and members of the Committees and Subcommittee. I am Lawrence M. Levine, senior attorney in the Water Program at the Natural Resources Defense Council (NRDC). I appreciate the opportunity to testify today on behalf of NRDC and our nearly 213,000 members and online activists in New York.

Summary of Testimony

In New York, as in much of the country, our aging infrastructure is simply not up to the twin tasks of providing everyone with affordable access to the safe water, wastewater, and stormwater services they need and keeping our waterways free of harmful pollution. Further, our source waters and recreational waters are threatened by pollution sources both new and old.

To bring New York’s water systems into the 21st Century, and protect the waters of the state for people and the environment, New York needs to continue its significant investments in water infrastructure; add a new focus on the affordability of water and sewer service for low-income customers; adopt new and stronger regulatory standards to protect drinking water sources, prevent exposure to drinking water contaminants, protect surface water quality, and improve water use efficiency; and create new accountability mechanisms and funding mechanisms that give local water, sewer, and stormwater systems the tools they need to succeed.

Specifically, NRDC offers the following recommendations:

- Water Infrastructure Improvement Act: Continue significant state grant funding for water infrastructure.
- Affordable access to clean, safe water, wastewater, and stormwater service: Adopt a new water affordability program to ensure that water and sewer service remains affordable for low-income households, even as utilities generate additional local revenue to meet clean water needs.
- Drinking water contamination: Set an enforceable standard for PFOA and PFOS levels in drinking water as soon as possible and establish clear, effective requirements for public notification when contamination is discovered.
- Source water protection: Pass a resolution calling on the Governor to vote for a full fracking ban in the Delaware River Basin, which includes a ban both on fracking and on the treatment, disposal, and storage of fracking wastewater. (Our stormwater recommendations below also serve to protect source waters from a significant pollution source.)
- Prioritizing investments to save money and water: Adopt model legislation requiring drinking water utilities to perform annual water loss audits using best practice methodologies, and legislation requiring comprehensive asset management programs for both drinking water and wastewater utilities.
- Water efficiency: Adopt pending legislation to require that all new bathroom fixtures meet modern water efficiency standards, and improve implementation of SRF policies intended to spur water conservation.
- Stormwater pollution and flood mitigation: Improve municipal stormwater infrastructure by strengthening DEC's statewide permit and adopting legislation that empowers local governments to fund effective implementation.
- Protecting recreational waters: Adopt recreational water quality standards consistent with EPA's recommendations to protect public health and, specifically in New York City, ensure that public concerns with the city's sewage overflow control plans are addressed to ensure waters in and around New York Harbor achieve those standards.

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Continue Providing Significant State Grant Funding for Water Infrastructure

First-class infrastructure to protect clean water and public health is among our most important – and most basic – needs as a nation. Across New York, as is true across the country, much of the state's municipal wastewater and stormwater infrastructure is outdated and failing due to decades

of deferred maintenance and a failure to implement up-to-date pollution control technologies. Far too often, untreated or insufficiently treated sewage and polluted runoff from cities and suburbs makes our rivers, bays, beaches, estuaries, and other inland and coastal waters both unsafe for human use and too degraded to support the fisheries and natural habitat on which we all depend for sustenance, recreation, and natural flood mitigation. Water quality in and downstream of urbanized areas is too degraded to meet water quality standards established under the federal Clean Water Act and under state law to protect drinkable, fishable, and swimmable waters.

Likewise, in regard to drinking water infrastructure, although many utilities have substantially improved treatment in recent years, our failure to invest adequately in water infrastructure means that, in too many cases, the public is still drinking water containing contaminants that pose serious health risks.¹ We remain at risk from lead, arsenic, bacteria and other pathogens, cancer-causing disinfection byproducts, the rocket fuel component perchlorate, and many other regulated and unregulated contaminants. One very visible manifestation of failing drinking water infrastructure is the all-too-common sight of water main breaks in our cities and towns.² Even more water is lost to unseen leaks and breaks that never reach the surface. This not only wastes enormous amounts of precious water and causes serious damage to roads and property, it also can pose significant public health risks. Particularly when water mains are close in proximity to sewer lines, fecal contamination can get into the drinking water after a rupture or pressure loss, posing a threat of causing a waterborne disease outbreak. Drinking water treatment plants, too, suffer from outdated infrastructure. Far too many continue to rely solely upon outdated treatment technologies such as coagulation, sand filtration, and chlorination. These can work well to remove some basic contaminants, like certain microorganisms, but cannot remove many of the modern contaminants, such as pesticides, industrial chemicals, pharmaceuticals, and other chemicals that are widespread in water.³ Further, there are an estimated 6-10 million lead service lines in the U.S. that need to be replaced,⁴ especially in older communities like so many of those in New York State.

As the need for investment to improve our aging water infrastructure has grown, the share of federal contribution to water infrastructure spending has fallen significantly over the past 30

¹ For further detail on drinking water infrastructure needs, see Testimony of Erik D. Olson, NRDC, Before the Committee on Energy and Commerce, Subcommittee on Environment, U.S. House of Representatives, Hearing Entitled “Reinvestment and Rehabilitation of Our Nation’s Safe Drinking Water Delivery Systems” (March 16, 2017), <http://docs.house.gov/meetings/IF/IF18/20170316/105711/HHRG-115-IF18-Wstate-OlsonE-20170316.pdf>.

² American Society of Civil Engineers, *2013 Report Card for America’s Infrastructure*, <http://www.infrastructurereportcard.org>.

³ NRDC, “Report Finds Deteriorating Infrastructure, Pollution Threaten Municipal Drinking Water Supplies,” 2003, <https://www.nrdc.org/media/2003/030611>; Erik Olson et al., NRDC, “What’s on Tap?” 2003, <https://www.nrdc.org/sites/default/files/whatsontap.pdf>; Brian Cohen and Erik Olson, “Victorian Water Treatment Enters the 21st Century,” NRDC, 1995.

⁴ Cornwell, David A.; Brown, Richard A.; Via, Steve H., “National Survey of Lead Service Line Occurrence,” April 2016, Journal of the American Water Works Association, vol. 108, no. 4, pages E182-E191, available online at <http://dx.doi.org/10.5942/jawwa.2016.108.0086>.

years.⁵ Looking forward, even in the best case scenario, New York cannot rely exclusively on federal funding to meet the state’s tremendous, long-term water infrastructure investment gap. While the President promised to triple funding for the State Revolving Funds, that promise was not reflected in his Administration’s budget proposal, and the dysfunctional politics in Washington, DC, cast grave doubt on whether the federal funding outlook will improve at all in the foreseeable future.

Fortunately, New York has become recognized as a national leader in state water infrastructure funding.⁶ In the 2017 budget, New York set aside \$2.5 billion for a clean water infrastructure program to fix and update the state’s aging drinking water and waste water treatment systems. This continues and expands the highly successful Water Infrastructure Improvement Act (WIIA) grant program that began in 2015, and represents a half billion dollars more the Governor’s original 2017 budget proposal, demonstrating that water infrastructure is of high importance to the legislature – as it should be. The Legislature and the Governor should work together to continue these efforts going forward, to ensure that the state’s short- and long-term water infrastructure needs are fully met.

Ensure that Water and Sewer Service Remains Affordable for Low-Income Households, Even as Utilities Generate Additional Local Revenue to Meet Clean Water Needs

We do not want to have in this state a two-tiered system where the wealthy get water that is clean and safe for their families, and the less well-to-do get second-class water, wastewater, and stormwater systems that pose risks to their health and environment. Rather, we need to create a system that ensures that all communities can afford to upgrade their water infrastructure and that everyone has affordable access to clean, safe, and sufficient water and sanitation for their families.

WIIA is a tremendous down payment towards achieving that goal. Now, to complement the state’s direct investments in water infrastructure – and to ensure the success of the WIIA grant program itself – the Legislature should create a water and sewer affordability program providing assistance to low-income customers, drawing lessons from the state’s energy affordability and energy efficiency programs. A successful affordability program would achieve at least three goals:

- address the important equity concern that those least able to pay (e.g., low-income homeowners and tenants of affordable housing) will be hardest hit by rate increases that are necessary to support water infrastructure investments;
- respond directly to utilities’ expressed concern that they cannot raise water and sewer charges because of the adverse impacts on low-income households and therefore cannot meet clean water standards; and

⁵ *Id.*

⁶ V. Chang, “Upgrading Our Water Systems: A national Overview of State-Level Funding Initiatives for Water Infrastructure”, prepared for Jersey Water Works (June 2017) <http://www.njfuture.org/wp-content/uploads/2017/06/Jersey-Water-Works-Water-Infrastructre-Funding-Report-6-2017.pdf>.

- make it possible for utilities and municipalities to raise local revenue that is needed to complement state investments in water infrastructure and accelerate Clean Water Act and Safe Drinking Water Act compliance.

This section of my testimony explains the need for a state water and sewer affordability program and the elements such a program should include.

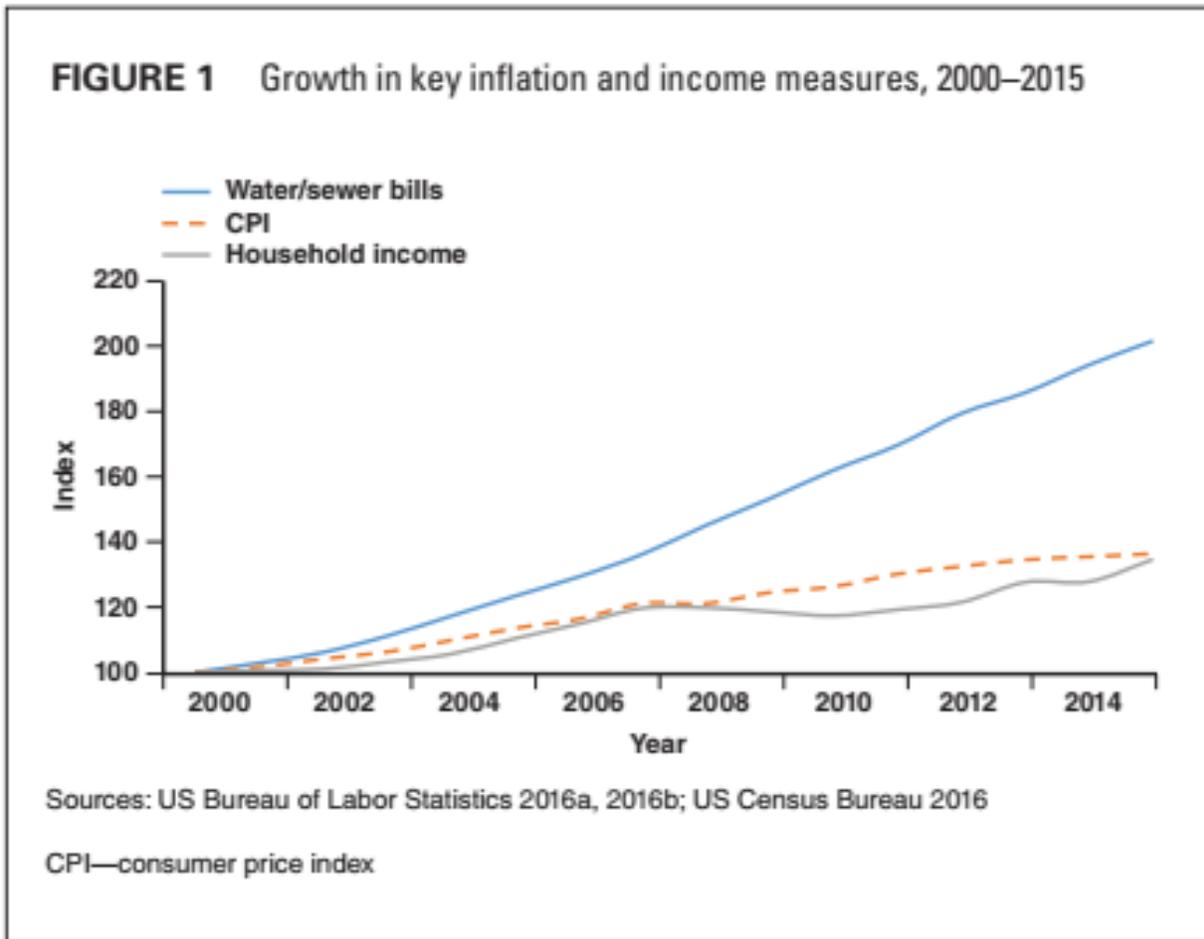
Capital investments in water and wastewater systems require local revenue streams – typically in the form of increased water and sewer rate rates.⁷ When communities believe they are unable to raise rates without imposing undue burdens on those least able to pay, they will often seek to avoid or defer necessary investments. Conversely, when communities raise rates to pay for infrastructure improvements but do not have programs available to mitigate the effects on those least able to pay, low-, moderate-, and fixed-income customers can face unaffordable bills.

To sustainably generate the local rate revenues needed to provide 21st century water infrastructure, New York must ensure that water and sewer service remains affordable for those least able to pay, even when a utility raises its rates.

Already, capital investment needs (and decreased federal financial assistance) have caused water and wastewater utility rates to increase nationally at about twice the rate of both inflation and income growth, for approximately the last 15 years. (See Figures 1 and 2 below.) In New York, the limited available data on water and sewer rates generally is consistent with these national trends, as described further in an appendix to this testimony.

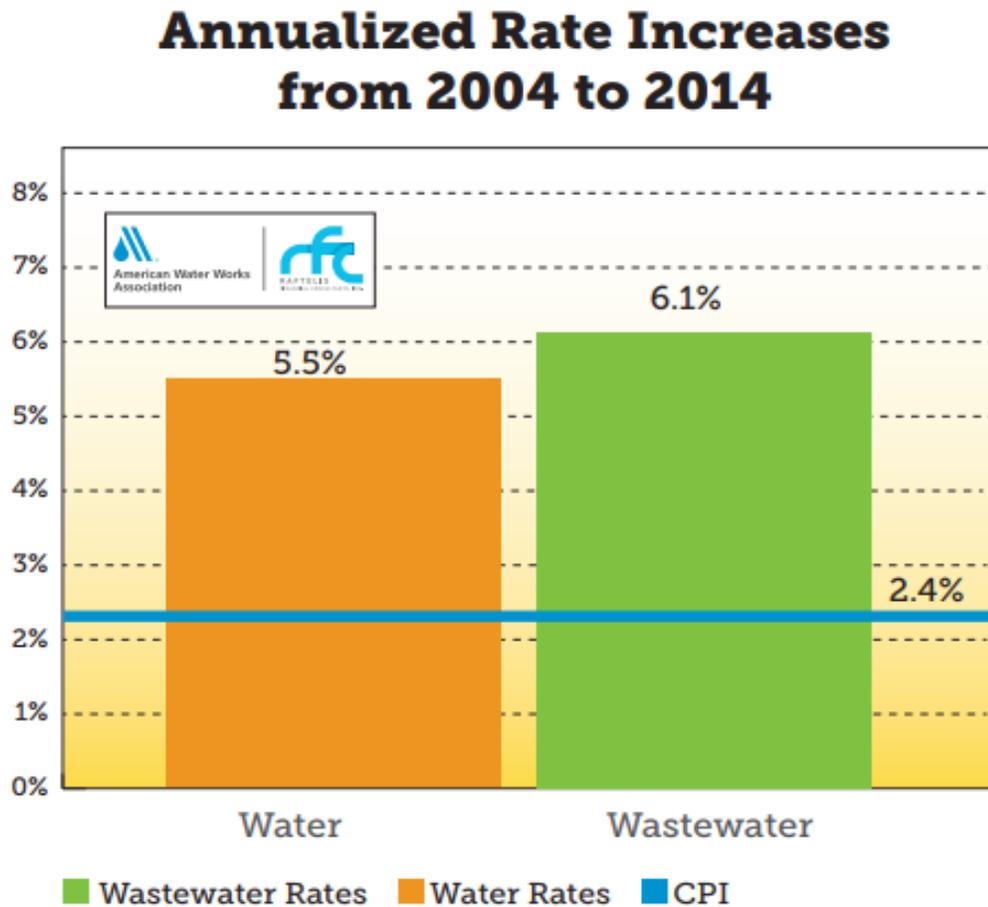
⁷ In some cases, infrastructure investments can yield net savings for a utility by substantially reducing operating costs of outdated system components. However, on the whole, major new investment requires increased local revenues.

Figure 1. Growth in Water and Sewer Bills, CPI, and Household Income, 2000-2015.⁸



⁸ J. Mumm and J. Ciaccia, “Improving the Narrative on Affordability and the Measurements We Need to Take Us There” *Journal - American Water Works Association*, May 2017, <https://www.awwa.org/publications/journal-awwa/abstract/articleid/65274626.aspx>.

Figure 2. The Average Annual % Change in Cost of Drinking Water and Wastewater Charges vs. Consumer Price Index.
⁹



For more information, see the Water and Wastewater Rates webpage at awwa.org

As we continue reinvesting in water infrastructure to protect public health and the environment, rates will continue to rise. The WIIA grant program is a cornerstone of the state’s efforts to ensure safe and sufficient water and sewer services for all New Yorkers, and it helps make infrastructure investments much more affordable for participating communities. But WIIA and other existing state financial assistance programs (such as the SRFs) cannot entirely obviate the need for rate increases. In fact, to participate in WIIA, many communities will need to increase water and sewer charges to pay for the required local funding match.¹⁰ And for critical water infrastructure projects that do not receive WIIA grant funds, the costs to local ratepayers will be even greater.

⁹ American Water Works Association, “Water and Wastewater Rate Summary Figures,” <https://www.awwa.org/resources-tools/water-and-wastewater-utility-management/water-wastewater-rates.aspx>, last visited 12/3/2017.

¹⁰ Although low-interest loans from the State Revolving Fund will help finance the local cost share, local governments and utilities still need a revenue stream to pay back those loans.

Rapidly rising rates, in combination with slower income growth and rising income inequality, are making water and sewer costs increasingly expensive – as a share of household income – for many New Yorkers. And the harms of unaffordable water bills are not only financial. Consequences include water shutoffs, which can lead to loss of housing and even temporary loss of custody of children, as well as liens for unpaid bills that ultimately lead to property foreclosure.

“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. 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.¹¹ 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 low-income customer assistance programs. In a review last year of 795 water and wastewater utilities,¹² EPA found that 29 percent of them offered at least one type of low-income assistance program. But 71 percent of the utilities surveyed offered no customer assistance program whatsoever, sidestepping responsibility to provide a basic safety net to ensure that the most vulnerable populations continue to receive an essential service. Moreover, of the customer assistance programs identified, about half offered only short-term relief for customers facing temporary financial hardship, or “flexible” payment terms to customers in arrears or customers wishing to adjust the timing of future bills. Other programs offered “bill discounts” or “lifeline rates,” which provide a long-term reduction in low-income customers’ bills, similar to programs that are commonplace among energy utilities. A small number provided targeted water efficiency assistance to help customers reduce bills by using less water.

Additionally, since EPA published that report, Philadelphia’s municipal water and sewer utility this year became the first in the nation to adopt another type of low-income assistance program, known as a “percentage-of-income payment plan.” For customers with household income up to 150% of the federal poverty line (or higher in some cases), the city will offer 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.¹³

¹¹ 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>.

¹² 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.

¹³ 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>.

In New York, low-income water and sewer customer assistance programs remain the exception, not the norm. EPA’s nationwide review identified only two utilities in New York that provide ongoing assistance to low-income customers to reduce their water bills: New York City and Buffalo. Both cities provide bill discounts to certain categories of ratepayers, and New York City also provides water efficiency assistance. Additionally, New York City this year adopted an innovative water affordability program for multi-family housing, which provides bill credits to building owners who make long-term, binding commitments to maintain affordable rents and meet certain water efficiency requirements.¹⁴ EPA’s compendium lists three other low-income assistance programs in New York, all in Nassau County, but they provide only temporary assistance in case of temporary individual hardship.

More recently, SUEZ Water, in Rockland County, this year became the first PSC-regulated water utility in New York to include a customer assistance program in its approved rates. The specifics of that program are in development, but are expected to include a monthly bill discount and water efficiency assistance.¹⁵

With the Legislature’s and the Governor’s focus now squarely on the need for water infrastructure investment, the time has come for New York State to create a water and sewer affordability program providing assistance to low-income households, drawing lessons from the State’s energy affordability and energy efficiency programs.

Along with a coalition of environmental, environmental justice, affordable and healthy housing, low/fixed-income, and economic justice advocacy groups, NRDC this summer circulated a water affordability proposal to the Governor and to the Assembly and Senate leadership, including Chairman Englebright. Our letter and a detailed outline of our proposal is attached to this testimony. As a first step, the proposal links a water affordability program specifically to the WIIA program. But we believe that a more comprehensive approach, reaching customers of all utilities statewide, is ultimately necessary to fully meet the state’s water affordability challenges, and we would welcome the opportunity to explore with your committees – and with committees that have jurisdiction over other relevant agencies – options for designing such a broader program.¹⁶

Our proposal includes the following core elements:

- WIIA grant eligibility criteria that drive utilities to offer lifeline rates or a means-tested residential customer bill discount (“Affordability”);

¹⁴ New York City Department of Environmental Protection, Multi-Family Water Assistance Program, http://www.nyc.gov/html/dep/html/customer_assistance/multifamily_water_assistance_program.shtml.

¹⁵ The PSC’s press release on the SUEZ rate case is available here: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={0EF384C1-204E-4D2F-AD1D-7D0B16BB7183}>.

¹⁶ For example, the Legislature could establish a statewide (and state-funded) program analogous to the Low-Income Home Energy Assistance Program, the stated-administered federal block grant that subsidizes energy bills for low-income households.

- Targeted replacement of inefficient plumbing fixtures and appliances to significantly lower bills for low-income households in owner-occupied and rental housing (“Conservation”); and
- Funds in WIIA grants to help defray the local costs of establishing or implementing a low-income assistance program (“Local Mandate and Tax Relief”).

Further, because PSC-regulated, privately-owned water utilities are not eligible for WIIA grants, our proposal calls for PSC to create a water affordability and conservation program to assist low-income customers of those utilities, which serve over one million New Yorkers. This would complement the energy affordability program PSC adopted last year, as well as existing efficiency programs applicable to PSC-regulated energy utilities.

Finally, we urge the Legislature and executive agencies to take the following additional steps to promote water affordability:

- *Prioritize disadvantaged communities in water infrastructure grant programs:* Grant programs such as WIIA should emphasize aid to communities with low median household incomes, as well as communities with high income inequality and large numbers of low-income households. In addition, the state should use SRF technical assistance funds to help such communities more easily access existing grant and loan programs.
- *Promote more equitable rate structures:* Utilities should adopt rate structures that raise revenue with greater equity among users, such as seasonal or tiered rates for water, volume-based pricing for wastewater, and stormwater charges based on the burden a customer places on the public storm sewer system. The PSC can use its authority to drive the use of these equitable rate structures by regulated, investor-owned water and wastewater utilities. However, the vast majority of water and wastewater utilities are publicly-owned and not subject to rate regulation by PSC. The state should find ways to promote and provide incentives to use these equitable rate structures, which allow communities to generate revenues needed for water infrastructure investment without unduly burdening low-income households.
- *Increase utilities’ use of asset management, green infrastructure, and water efficiency strategies that reduce costs for all customers:* Sound asset management practices hold costs down for everyone in the long run, since preventive maintenance and repair on a regular cycle is far cheaper than reacting in emergency mode when something breaks or greatly exceeds its useful life. Likewise, maximizing the use of cost-effective water efficiency and green infrastructure strategies, rather than relying exclusively on costly “gray” infrastructure investments to meet water supply and water quality needs, helps to mitigate costs for all customers. Specific recommendations below address these topics, but it is important to recognize them as part of a comprehensive strategy to keep water and sewer services affordable for all.

Set an Enforceable Standard for PFOA and PFOS Levels in Drinking Water and Establish Clear, Effective Requirements for Public Notification When Contamination is Discovered

As the Assembly has recognized, PFOA and PFOS contamination has become a serious public health crisis in New York and across the country. Blood serum concentrations of PFOA and PFOS have been found to be about ten times the national average in Hoosick Falls.¹⁷ In addition, elevated levels of PFOA and PFOS have been discovered in New Windsor,¹⁸ Fort Drum,¹⁹ Hempstead,²⁰ Petersburg,²¹ Newburgh,²² Hampton Bays,²³ Cambridge,²⁴ and Yaphank,²⁵ and likely occur in other communities across the state.

The human health impacts of exposure to PFOA and PFOS cannot be questioned.²⁶ PFOA and PFOS have profound effects on the young, are extremely persistent, are highly bioaccumulative, and are likely carcinogens.²⁷ Studies of people working with and exposed to PFOA at high levels have shown associations between PFOA and prostate cancer,²⁸ bladder cancer,²⁹ kidney

¹⁷ EPA, Hoosick Falls Water Contamination, <https://www.epa.gov/ny/hoosick-falls-water-contamination> (last visited Oct. 1, 2017).

¹⁸ U.S. Evtl. Prot. Agency, Occurrence Data for the Third Unregulated Contaminant Monitoring Rule (Jul. 2017), <https://www.epa.gov/sites/production/files/2017-02/ucmr-3-occurrence-data.zip> (last visited Oct. 1, 2017) [hereinafter Occurrence Data for UCMR 3]; *see also* Teflon Chemical Harmful at Smallest Doses: PFOA Found in 94 Public Water Systems in 27 States, Evtl. Working Grp. (Aug. 20, 2015.), <http://www.ewg.org/research/teflon-chemical-harmful-smallest-doses/pfoa-found-94-public-water-systems-27-states> [hereinafter PFOA Found in 94 Public Water Systems in 27 States].

¹⁹ Occurrence Data for UCMR 3, *supra* note 18; *see also* PFOA Found in 94 Public Water Systems in 27 States, *supra* note 18.

²⁰ PFOA Found in 94 Public Water Systems in 27 States, *supra* note 18; Brendan J. Lyons, EPA Sets New Level for Chemical PFOA in Drinking Water, Times Union (May 20, 2016), <http://www.timesunion.com/local/article/EPA-sets-new-level-for-chemical-in-local-water-7716825.php> [hereinafter Lyons, *EPA Sets New Level*].

²¹ Kenneth C. Crowe II & Lindsay Ellis, *Petersburgh Water Tainted with PFOA, Tests Show*, Times Union (Feb. 20, 2016), <http://www.timesunion.com/local/article/Petersburgh-water-tainted-with-PFOA-tests-show-6844326.php> (noting the existence of PFOA levels of 93.3 and 95.9 ppt); *see also* Lyons, *EPA Sets New Level*, *supra* note 20.

²² Occurrence Data for UCMR 3, *supra* note 18.

²³ Joan Leary Matthews, *Undrinkable Water—Hampton Bays, NY Edition*, Nat'l Res. Def. Council (Sept. 29, 2017), <https://www.nrdc.org/experts/joan-leary-matthews/undrinkable-water-hampton-bays-ny-edition>.

²⁴ *New York State's Water Quality Rapid Response Team Announces New Actions to Address Water Contamination in Washington County*, N.Y. State Dep't of Health (Mar. 13, 2017), https://www.health.ny.gov/press/releases/2017/2017-03-13_water_contamination_in_washington_county.htm [hereinafter *Water Contamination in Washington County*]; Jorja Roman, *PFOA, PFOS Discovered at Paper Composting Facility in Washington County*, Spectrum News (Mar. 13, 2017, 7:34 PM), <http://www.twcnews.com/nys/capital-region/news/2017/03/13/washington-county-water-contamination-pfos-pfoa-agri-cycle.html>.

²⁵ *Id.*

²⁶ *Id.* at 2.

²⁷ *Id.*

²⁸ Kyle Steenland et al., *Ulcerative Colitis and Perfluorooctanoic Acid (PFOA) in a Highly Exposed Population of Community Residents and Workers in the Mid-Ohio Valley*, 121 Evtl. Health Perspectives 8, 900-905 (Aug. 2013).

cancer,³⁰ and testicular cancer.³¹ In addition to several types of cancers, PFOA and PFOS have been linked to an array of other serious health effects, including:

- developmental effects to fetuses during pregnancy;
- developmental effects to babies during the neonatal period (from birth to one month of age) (e.g., low birthweight, skeletal variations);
- developmental effects during puberty (e.g., accelerated puberty, delayed mammary gland development);
- immune system effects (e.g., antibody production and immunity);
- neurobehavioral effects;
- liver effects (e.g., tissue damage);
- thyroid effects;
- metabolic toxicity;
- increases in cholesterol;
- increases in uric acid levels;
- endometriosis; and
- lower sperm quality.³²

These findings are undisputed by EPA and other states. Notably, delayed mammary gland development has been found to occur at low levels of PFOA and PFOS, which may indicate that other hormonally-related effects may also occur at these low levels.³³

In the absence of federal safeguards, New York State must act to protect drinking water, reduce risks to the public, and remediate the contaminated drinking water sources. The current situation requires swift adoption of a stringent combined MCL for PFOA and PFOS, due to the profound effects related to exposure, the very long periods that PFOA and PFOS are present in water absent filtration, and the very long half-lives that result in continued elevated blood serum levels even after exposure ceases.

Over the course of the past year, NRDC has conducted a detailed review of PFOA and PFOS contamination. As part of this effort, we have retained an expert consultant, Judith Schreiber, Ph.D., to make recommendations regarding the appropriate MCL and actions that the state may take to safeguard public health. We will release a letter and accompanying report within the next

²⁹ Katherine K. Raleigh et al., *Mortality and Cancer Incidence in Ammonium Perfluorooctanoate Production Workers*, 71 *Occupational & Env'tl. Med.* 7, 500-506 (May 15, 2014).

³⁰ U.S. Env'tl. Prot. Agency, Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA), EPA Doc. No. 822-R-16-005, at 46 (May 2016), available at https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_health_advisory_final_508.pdf [hereinafter Drinking Water Health Advisory for PFOA]; Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), EPA Doc. No. 822-R-16-004, at 42 (May 2016), available at https://www.epa.gov/sites/production/files/2016-05/documents/pfos_health_advisory_final_508.pdf [hereinafter Drinking Water Health Advisory for PFOS].

³¹ Drinking Water Health Advisory for PFOA, *supra* note 30, at 9-10.

³² *Id.*

³³ *Id.*

several weeks detailing our recommendations. But in light of the urgency of the situation and the work already done by many states on this issue, including New Jersey, we urge New York State to act as swiftly as possible to regulate this dangerous suite of contaminants.

Further, the State should establish clear, effective requirements for public notification when the PFOA/PFOS levels exceeding the health standard are detected. EPA's health advisory recommendations rely on a health standard that is far too weak, but those recommendations appropriately urge that:

Drinking water systems and public health officials should also promptly provide consumers with information about the levels of PFOA and PFOS in their drinking water. This notice should include specific information on the risks to fetuses during pregnancy and breastfed and formula-fed infants from exposure to drinking water with an individual or combined concentration of PFOA and PFOS above [the health protection standard]. In addition, the notification should include actions they are taking and identify options that consumers may consider to reduce risk such as seeking an alternative drinking water source, or in the case of parents of formula-fed infants, using formula that does not require adding water.

New York State should likewise require such notifications. Without clear state requirements for public notification, local utilities are not consistently informing the public of when and how to protect themselves from significant health risks.³⁴

Protect Drinking Water Sources by Ensuring a Full Ban on Fracking in the Delaware River Basin

New York should protect against one of the greatest threats to the safety of its water supply sources by using its seat on the Delaware River Basin Commission to secure a full ban on fracking, including a ban on the treatment, disposal, and storage of fracking wastewater. The Legislature should pass a resolution calling on the Governor to do so. (Other recommendations in this testimony, including stormwater recommendations below, will also serve to protect our drinking water sources from a significant pollution source.)

The Delaware River Basin is the catchment area of the United States' longest free-flowing river east of the Mississippi. It is remarkable for its pristine character, geographic scope, and singular utility to the Nation's most densely populated region, the Mid-Atlantic. From headwaters in the Catskill Mountains to mouth in the Delaware Bay, the Delaware River spans 330 miles, draws from 216 tributaries, and drains surface water from approximately 13,000 square miles across 42 counties in five U.S. states, including 2,363 square miles in New York. The Marcellus shale formation underlies about 36 percent of the Delaware River Basin. Thus far, this reach of the shale has remained untouched by fracking.

³⁴ See, e.g., J. Matthews, "Undrinkable Water – Hampton Bays, NY Edition," Sept. 29, 2017, <https://www.nrdc.org/experts/joan-leary-matthews/undrinkable-water-hampton-bays-ny-edition>.

Last week, the Delaware River Basin Commission, an interstate agency responsible for regulating water quality in the Delaware River, released draft regulations related to high volume hydraulic fracturing (“fracking”) activity within the Delaware River watershed.³⁵ These regulations propose banning fracking in the watershed, but permitting the treatment, storage, and disposal of fracking wastewater and the use of water for fracking outside of the watershed. A fracking ban in the watershed would help secure safe drinking water for the 15 million of Americans who rely on the watershed for their water source, including residents of New York City. But the drinking water source cannot be truly safe if the Commission permits the treatment, disposal, and storage of fracking wastewater within the watershed. To be truly protective, a ban on fracking in the watershed must include a ban on all aspects of this dangerous practice, including a ban on the storage, treatment and disposal of fracking wastewater.

The fracking process yields wastewater containing over 1,000 contaminants that can cause significant harms to human health and the environment. They can be toxic to humans and aquatic life, radioactive, and corrosive. They can damage ecosystem health by depleting oxygen or causing algal blooms, or they can interact with disinfectants at drinking water plants to form cancer-causing chemicals. Indeed, there is no completely safe method for handling fracking wastewater.

Use of watershed water resources for fracking can also be harmful, as it deprives basin states from using the water for other purposes, including use for drinking water, agriculture, and other beneficial uses.

New York State is one of five voting members of the Delaware River Basin. To protect one of the most important drinking water sources for New York State, the Assembly should pass a resolution calling on the Governor to vote for a full fracking ban in the River Basin that includes a ban both on fracking and on the treatment, disposal, and storage of fracking wastewater.

Require Annual Water Loss Audits and Comprehensive Asset Management Programs

To achieve the maximum benefit from the state and local water infrastructure investments – and to reduce costs for local ratepayers – the Legislature should adopt two requirements that are essential to prioritize spending on maintaining, upgrading, and replacing aging water and sewer infrastructure. First, the Legislature should adopt NRDC’s model legislation requiring annual water loss audits by drinking water utilities. Second, the Legislature should follow the lead of – and improve upon – a landmark law passed this year in New Jersey, which requires drinking water utilities to develop and adequately fund systemwide asset management programs; this requirement should also be extended to wastewater utilities.

1. Adopt model legislation requiring annual water loss audits

Old, deteriorated pipes, sometimes in combination with excessive water pressure within a distribution system, result in “water loss,” the technical term for leakage from a drinking water system. Some of this water loss is highly visible above ground. Still more is chronic below-

³⁵ http://www.state.nj.us/drbc/meetings/proposed/notice_hydraulic-fracturing.html

ground leakage, which remains out of sight and out of mind. These water main breaks and leaks can cost utilities, their ratepayers, and taxpayers millions of dollars – money spent pumping and treating water that is never used, and money spent to repair roads, businesses, homes, and other property damaged by main breaks. They can also allow pathogens to penetrate the system or multiply in areas of decay. And, of course, they waste huge volumes of water, which threatened the availability of sufficient water for both people and the environment in water-stressed regions or during times of drought.

Water loss also includes “apparent loss,” which is a failure to recover revenue from some of the water that is actually delivered to customers who should be paying for it. This, too, is a cost passed on to ratepayers in their bills. Apparent loss results from inaccurate meters, unauthorized consumption, and systematic errors in billing systems.

In New York, the State Comptroller has conducted dozens of audits of municipal water systems showing massive water losses – and resulting financial losses. In an October 2017 report, which was spurred in part by discussions with NRDC, the Office of the State Comptroller concluded that “Water leaks, broken pipes and aging infrastructure are costing local governments millions of dollars annually.”³⁶ As the Albany Times Union reported, “Audits of 161 local government and seven public authority water systems statewide between 2012 and May of this year conducted by Comptroller Tom DiNapoli's office show that in some cases, water loss between the source and customers exceeded 50 percent of the water produced.”³⁷

Similarly, in 2014, NRDC identified more than two dozen municipal utility audits by the Comptroller, over the preceding five years, that addressed water losses. These audits also found a consistent pattern of very high rates of water loss. Three-quarters of utilities had losses over 20%, and half or more had losses over 40%. The Comptroller's recommendations in these audits have consistently included the need for utilities to maintain better water loss data and improve auditing methods.³⁸ Likewise, a 2002 report from the Comptroller found significant water loss from leaky pipes at six municipal water utilities, and very poor controls on measuring that or fixing it. The report's top recommendation was “Municipal officials [should] perform water audits at least annually to strengthen accountability over their water resources and to assist in identifying cost-effective methods to reduce waste, minimize unaccounted-for water and decrease system demand.”³⁹

³⁶ Office of the State Comptroller, “DiNapoli: Audits Reveal Millions in Lost Revenue for Local Water Systems, Oct. 19, 2017,” <https://www.osc.state.ny.us/press/releases/oct17/101917.htm>. (It is important to note, however, that this OSC report, and the others discussed below, appear to rely on the outdated and rudimentary “unaccounted for water” metric for water loss, rather than the modern water loss audit methodology discussed below. The audit findings are still very significant, but are much less valuable as a guide to prioritizing solutions than a modern audit would be.)

³⁷ Hamilton, Drew, *Albany Times Union*, “DiNapoli report: Busted pipes lead to leaking municipal revenues,” Oct. 19, 2017, <http://www.timesunion.com/news/article/DiNapoli-report-Busted-pipes-lead-to-leaking-12291388.php>

³⁸ https://www.nrdc.org/sites/default/files/NYS_Comptroller_Water_Loss_Reports.pdf

³⁹ https://www.nrdc.org/sites/default/files/wat_14012801a.pdf

Despite these problems, New York State requires only rudimentary water loss auditing and reporting for most utilities. Only the small number of utilities under the jurisdiction of the Delaware River Basin Commission (DRBC) are required to perform and report the results of annual water loss audits using a standard methodology, developed by the American Water Works Association (AWWA), that reflects current best practice in the industry.⁴⁰ In the rest of the state, neither DEC,⁴¹ nor DOH,⁴² nor the Public Service Commission (which regulates investor-owned utilities)⁴³ requires such audits, instead requiring only rudimentary reporting of the difference between water withdrawals and water deliveries, or the amount of “unaccounted for” water.⁴⁴

New York can take a necessary step towards reducing water loss by requiring utilities to perform, obtain independent validation of, and report the results of annual water loss audits using the AWWA methodology. Most drinking water utilities do not even know how much water they are losing, what the causes are in their systems, or how costly these losses are, because they do not effectively audit their water losses. Effective audits would provide the information necessary to reduce water losses and prioritize investments.

As shown on NRDC’s website that tracks water loss policies around the country, many states are now requiring all utilities to perform and report the results of annual water loss audits using the AWWA methodology. Some of these states are also requiring independent validation of the self-reported audit data, and some are setting performance benchmarks to reduce losses over time.⁴⁵

⁴⁰ <http://www.nj.gov/drbc/programs/supply/water-audit-program.html>.

⁴¹ Under DEC’s public water supply program, utilities must include in an annual report data on the amount of water “lost to distribution system leakage,” without specifying any methodology (http://www.dec.ny.gov/docs/water_pdf/wwrnonag1215.pdf). Additionally, NYSDEC’s “water conservation program form,” which applicants for new or modified public water supply permits must submit, requests information on unaccounted-for water and directs applicants to a nearly 30-year-old guidance manual for recommended “water measurement and auditing techniques” (http://www.dec.ny.gov/docs/water_pdf/wcpf.pdf). Earlier this year, DEC missed an opportunity to modernize the water loss audit requirements for public water supply permit applications; the agency issued a new permit application guidance, which states that any utilities that voluntarily perform audits using the AWWA methodology “should be encouraged to submit” the results, but fails to require the use of this industry standard audit methodology (TOGS 3.2.1, www.dec.ny.gov/docs/water_pdf/togs321.pdf).

⁴² Under DOH regulations, public water suppliers are required to provide customers with an Annual Water Quality Report. For systems with customer metering, the annual report must include “an accounting of the total annual amount of water withdrawn, delivered, and lost from the system.” 10 NYCRR § 5-1.72(f)(7). DOH guidance on the content of these annual reports simply repeats the language from the regulation. See https://www.health.ny.gov/environmental/water/drinking/annual_water_quality_report/docs/guidance.pdf.

⁴³ The Public Service Commission regulates 277 private water companies serving approximately eight hundred thirty thousand people. Department of Public Service rules require regulated utilities to “maintain records on an annual basis of non-revenue producing water use and shall use prudent means to minimize lost and unaccounted-for water.” The rules define non-revenue water to include “lost and unaccounted-for water as well as other nonmetered uses of water.” 16 NYCRR § 503.8.

⁴⁴ The following AWWA fact sheet highlights some of the key differences between the outdated “unaccounted for water” method, and the modern, best practice audit method. AWWA fact sheet shows why M36 is better than outdated UAW:
https://www.awwa.org/Portals/0/files/resources/water%20knowledge/water%20loss%20control/Final_Water%20Loss%20Control%20Flyer.pdf

⁴⁵ See NRDC, “Cutting Our Losses,” <https://www.nrdc.org/resources/cutting-our-losses>, last visited 12/3/2017.

Any water utility can readily perform a water loss audit using the standardized AWWA methodology at minimal cost (i.e., \$100 plus one to three days of staff time or less), and can obtain independent validation, which is critical to improve the reliability of the underlying audit data, at a modest additional cost (which some states have used SRF technical assistance funds to subsidize).⁴⁶

The Legislature should adopt model state legislation that NRDC drafted, which is posted on our water loss website. It draws from the best state water audit laws and policies around the country, and which in turn has been introduced or adopted in several other states. The model bill would require drinking water utilities to perform, and report in a standardized format, the results of, annual water loss audits using the industry's best practice audit methodology. It would also require the Department of Environmental Conservation (DEC) to post audit results publicly, develop performance benchmarks for utilities to reduce water loss, and provide technical assistance to utilities regarding both the audit process and the implementation of strategies to reduce losses.⁴⁷

Notably, in 2015, the Democratic caucus in the State Senate called for use of AWWA water loss audits as a way to both reduce consumers' water bills and to create jobs by identifying priority infrastructure investments.⁴⁸ The Legislature should act on this recommendation now, by adopting NRDC's model water loss legislation.

2. Adopt legislation requiring utilities to develop and adequately fund systemwide asset management programs.

Water loss audits are one essential element of a comprehensive – and common sense – strategy known as asset management. In simple terms, as DEC has explained, asset management is “the practice of managing a ... system's critical components, or assets, in a way that minimizes the total cost of owning and operating those assets while delivering the desired service levels.”⁴⁹

This approach would be an invaluable complement to the Water Infrastructure Improvement Act grant program. By prioritizing investments in, and optimizing operations and maintenance of, each utility's water and wastewater system, asset management would help ensure that the state taxpayer and local ratepayers get the most “bang for their buck.”

⁴⁶ NRDC, “Water Audits & Water Loss Control for Drinking Water Utilities: Costs and Benefits,” Dec. 1, 2015, https://www.nrdc.org/sites/default/files/wat_15040301a.pdf.

⁴⁷ See NRDC, “Cutting Our Losses,” <https://www.nrdc.org/resources/cutting-our-losses>, last visited 12/3/2017.

⁴⁸ New York State Senate, Democratic Policy Group, “New York State Left Behind: Job Loss, Policy Challenges, and a New Path to Create Jobs Across New York State,” Dec. 16, 2015, pp. 19-20. <https://www.scribd.com/document/293359176/Upstate-Left-Behind-Job-Loss-Policy-Challenges-and-a-New-Path-to-Create-Jobs-Across-New-York-State>.

⁴⁹ NYS DEC, “Municipal Sewage System Asset Management,” <http://www.dec.ny.gov/chemical/101412.html>, last visited 12/3/2017.

Effective asset management means that a utility (1) knows what infrastructure it has, where it is, what condition it is in, and how much useful life it has remaining; (2) identifies the most critical assets, prioritizes components for repair and replacement, and performs preventative maintenance to avoid untimely failure and avoid the high costs of emergency repair; and (3) utilizes long-range financial planning to adequately fund system upkeep and capital improvement.

In the last several years, DEC has started promoting asset management by wastewater utilities. It has issued an asset management “guide” and created a pilot program working with several utilities to test and improve the guide. New York should go further and make asset management a legal obligation of water and wastewater utilities.⁵⁰

The Legislature can draw inspiration from New Jersey, which earlier this year unanimously adopted the Water Quality Accountability Act, which Governor Christie signed, requiring all but the smallest drinking water utilities in the state to develop and adequately fund asset management programs.⁵¹ In New York, the Legislature should adopt a similar approach, and extend it to include wastewater utilities as well.

Update Water Efficiency Standards for Bathroom Fixtures and Use the SRF Program to Spur Water Conservation, in Order to Reduce Water and Wastewater Infrastructure Costs.

Water efficiency measures (e.g., water-efficient fixtures and appliances, installation and upgrades of meters, volumetric water and wastewater pricing) not only save water, they also help to reduce both capital and operating costs associated with drinking water and wastewater systems by helping to avoid, minimize, or defer the need for expanded conveyance, collection, and treatment capacity, and by reducing energy needs for pumping and treatment.⁵² Likewise, stormwater capture and reuse methods are often more cost-effective than relying exclusively on expanding “gray” infrastructure capacity, as cities across the country are demonstrating through their use of green infrastructure techniques (such as porous pavement, green roofs, parks, roadside plantings, rain gardens, and cisterns) to prevent the discharge of polluted runoff and sewage overflows and mitigate flood risk. These techniques keep rainwater out of overburdened sewers and treat it as a resource, rather than a waste, allowing it to infiltrate into the soil for groundwater recharge or be harvested and used as an alternative water source for onsite purposes.

By adopting policies that improve water use efficiency, New York can further reduce infrastructure costs and protect water resources. Specifically, in addition to the recommendation

⁵⁰ Id.

⁵¹ New Jersey Legislature, S. 2834, enacted 7/21/2017 as P.L. 2017,c. 133, <http://www.njleg.state.nj.us/bills/BillView.asp?BillNumber=S2834>. Additional background on New Jersey’s approach, and the widespread political support for the law, can be found in these articles: http://www.nj.com/politics/index.ssf/2017/06/bill_requiring_upgrades_to_drinking_water_systems.html, <http://www.njspotlight.com/stories/17/09/06/the-time-is-now-for-drinking-water-utilities-to-improve-their-systems/>.

⁵² See NRDC, *Waste Less, Pollute Less: Using Urban Water Conservation to Advance Clean Water Act Compliance* (2014), <https://www.nrdc.org/sites/default/files/clean-water-act-urban-conservation-IB.pdf>

discussed above concerning annual water loss audits, the state should update existing legislation that sets water efficiency standards for bathroom fixtures sold and installed in the state; and improve implementation of SRF policies that are intended to encourage wastewater utilities to invest in water conservation that reduces burdens on sewage systems.

1. Adopt legislation updating water efficiency standards for bathroom fixtures.

One of the most important, and most cost-effective, ways to reduce domestic water usage is to use more efficient plumbing fixtures. Earlier this year, New York joined several other states – which together encompass one-third of the U.S. population – to require toilets and urinals in new construction to be at least as efficient as the specifications set by the U.S. EPA’s WaterSense Program, a voluntary labeling program identifying efficient products similar to the Energy Star program. Acting on an NRDC proposal, the State Code Council approved revisions to the state Residential Code and Plumbing Code that codify this requirement, as well as requirements that showerheads and bathroom faucets must also meet or exceed WaterSense efficiency standards.⁵³

The water savings resulting from these standards will have a wide range of monetary and environmental benefits without imposing any new costs. These water-efficiency standards will:

- save money for residents, homeowners, commercial building owners, and all other water, sewer, and electric/natural gas ratepayers (including state and municipal facilities);
- reduce energy demand for hot water heating and the associated greenhouse gas emissions;
- help address the state’s urgent water infrastructure investment needs; and
- help conserve the state’s water resources for municipal water supply, economic growth, and healthy rivers, streams, and lakes.

Legislation pending in the Assembly and Senate would further expand these benefits, by extending the new standards to all toilets, urinals, showerheads, and bathroom faucets sold or installed in New York, regardless of whether they are installed as part of a construction project that triggers application of the state building codes. S. 4591 / A. 5699 would amend a statute that regulates the distribution, sale, import, and installation of these plumbing fixtures, to match the WaterSense standards that are now in the state codes. The Legislature should pass this bill and send it to the Governor for signature.

2. Improve implementation of water conservation requirements in the Clean Water State Revolving Fund.

In the Water Resources Reform and Development Act of 2014 (WRRDA), Congress made several changes to the law governing the Clean Water SRF, including a new provision to spur

⁵³ See E. Osann, “Two Milestones on the Road to Smarter Water Use,” July 13, 2017, <https://www.nrdc.org/experts/ed-osann/two-milestones-road-smarter-water-use>.

greater use of water efficiency, recapture, and reuse strategies that provide communities with an array of benefits and cost savings. By making the best use of these approaches, utilities can achieve clean water goals at lower cost, thereby allowing Congress to achieve more “bang for the buck” with federal water infrastructure investments. However, over the last several years, EPA has not provided effective guidance to the states to implement these provisions. We urge the Legislature, DEC, and the Environmental Facilities Corporation to ensure that that the new provision is implemented effectively, and we call the Subcommittee’s attention to a technical resource that NRDC developed specifically to support that goal.

In particular, WRRDA added a new Section 602(b)(13) to the Clean Water Act, which requires all CWSRF applicants to certify that they have “studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the project or activity for which [SRF] assistance is sought,” and have “selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation.” EPA, in its guidance on the WRRDA changes to the SRF, failed to develop specific criteria and/or guidance for an analysis that would meet these minimum statutory requirements. Instead, EPA recommended that each state CWSRF program develop such criteria and/or guidance for applicants in conducting this analysis.⁵⁴

To help fill this gap and assist states and program applicants, NRDC worked with Stratus Consulting to develop guidelines for conducting the kind of assessment that Congress required.⁵⁵ These guidelines provide a general framework and methodology that states and utilities can easily adopt to evaluate the benefits and costs associated with different project options, and that states can use to confirm the consideration of such options by all CWSRF applicants. The guidelines’ overall objective is to help applicants develop and analyze a range of project alternatives when evaluating potential CWSRF projects, including both traditional and non-traditional infrastructure alternatives (i.e., efficiency, reuse, and recapture project elements), and select the option or mix of options that best meets the needs of the utility and the community it serves. DEC and EFC should adopt this approach in administering the state’s Clean Water SRF.

Improve Stormwater Infrastructure by Strengthening DEC’s Statewide Permits and Adopting Legislation that Empowers Local Governments to Fund Effective Implementation.

Polluted runoff from cities and towns continues to be a leading source of water pollution, fouling waters used both for recreation and drinking water supply. That same runoff – from roads, parking lots, rooftops, and other impervious surfaces – also contributes to local flooding when drainage systems are unable, in many cases, to handle even ordinary storms. These challenges will increase as climate change continues to bring more frequent and intense rainfall to much of the state.

⁵⁴ EPA, “Interpretive Guidance for Certain Amendments in the Water Resources Development Act to Titles I, II, V, and VI of the Federal Water Pollution Control Act” (Jan. 6, 2015), https://www.epa.gov/sites/production/files/2015-04/documents/water_resources_reform_and_development_act_guidance.pdf.

⁵⁵ *Guidelines for Assessing the Cost and Effectiveness of Efficiency, Reuse, and Recapture Projects for the Clean Water State Revolving Loan Fund*, Prepared for NRDC by Stratus Consulting (December 2015). Available at https://www.nrdc.org/sites/default/files/wat_16012504a.pdf.

There are two priority actions the state can take to improve stormwater management – and to get New York on par with best practices in other states. DEC should set clear expectations for localities to effectively manage runoff and hold them accountable for meeting those expectations, through improvements to the statewide permit for municipal stormwater systems. Equally important, the Legislature should empower those local governments to generate the funds necessary to invest in and maintain upgraded stormwater infrastructure, by explicitly authorizing local stormwater utilities and stormwater utility fees.

First, virtually all municipalities in the state’s metropolitan areas – from Long Island and the Hudson Valley to Buffalo, Syracuse, Albany, Ithaca, Utica, and Binghamton – are regulated under a single DEC “general permit” for municipal separate storm sewer systems.⁵⁶ Over the last decade, DEC has made some improvements to that permit, most notably requiring that new development in these areas, over one acre in size, must manage runoff onsite using green infrastructure practices, such as rain gardens, green roofs, and permeable pavement. The most recent round of updates to the permit was proposed in October 2016 and, although the current permit expired in April 2017, the new one has not yet been finalized.⁵⁷ The proposed new permit includes several improvements, which DEC should adopt as soon as possible. However, it also fails to address many of the shortcomings that have impeded progress on stormwater management.⁵⁸

Specifically, DEC should finalize improvements in the draft permit that include the following:

- requiring that municipal capital projects (such as street improvements and new and upgraded public facilities) must incorporate green infrastructure practices where technically feasible;
- requiring regular inspections and maintenance of green infrastructure and other stormwater management practices;
- requiring some enhanced stormwater management practices in communities that discharge to waters where existing levels of polluted runoff contribute to water quality standards violations; and
- encourage communities to pool their resources to enable cost-effective, reliable, and consistent implementation of their stormwater obligations.

DEC should also make several key improvements to the permit, including:

⁵⁶ See NYS DEC, “MS4 Maps,” <http://www.dec.ny.gov/chemical/92258.html>; NYS DEC, “Stormwater Interactive Map,” <http://www.dec.ny.gov/imsmaps/stormwater/viewer.htm>; and NYS DEC, “Stormwater MS4 Permit and Forms,” <http://www.dec.ny.gov/chemical/43150.html>. Last visited 12/3/2017. New York City is the only “municipal separate storm sewer system” in New York that is regulated under its own permit.

⁵⁷ NYS DEC, Public Review Documents, Draft SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-17-002), <http://www.dec.ny.gov/chemical/41392.html>. Last visited 12/3/2017.

⁵⁸ NRDC’s comments on the draft permit, submitted jointly with Citizens Campaign for the Environment, Riverkeeper, and the Storm Water Infrastructure Matters Coalition, are available here: <https://drive.google.com/open?id=1AMbkEIYwNzo4iu0Mv7FLwrqEPUGsOcVG>.

- strengthening the green infrastructure standards for development, especially for redevelopment projects that provide the most cost-effective opportunity to reduce existing levels of polluted runoff in developed areas;
- creating effective, phased-in schedules to achieve “waste load allocations” that DEC has established in total maximum daily loads (i.e., TMDLs, which are effectively, pollution budgets to restore water quality in impaired waterways; and
- requiring water quality monitoring to ensure that stormwater management efforts are actually making the progress we need, so that implementation strategies can be improved as needed along the way.

Second, local governments need a steady source of local revenue to implement effective stormwater management programs, and the Legislature can provide help empower them to meet this need by explicitly authorizing stormwater fees and stormwater utilities.

Currently, virtually all municipalities in New York fund their stormwater programs principally through general tax revenues. This places stormwater management in a position of competing with other local budget needs every year -- a poor choice for funding long-life infrastructure that requires initial capital as well as ongoing operational expenditures.

A dedicated funding source is needed to ensure effective stormwater management. One of the best funding mechanisms is a “stormwater utility fee,” which charges property owners based on the amount of impervious surface on their land, or on some other surrogate for the volume of stormwater runoff released from the site. Stormwater fees are typically collected by stormwater utilities, which operate much like water and wastewater utilities that are also funded by user fees.⁵⁹ Also like water and wastewater utilities, stormwater utilities can be regional in scope, providing major cost savings through economies of scale, and allowing cooperation across multiple cities and towns within a watershed. They can be stand-alone utilities or can be combined with wastewater utilities or public works departments.

Critically, stormwater utility fees provide an equitable way to allocate the costs of stormwater management. Whereas property taxes are charged based on property value (and have exemptions for various types of property), stormwater charges correspond to the burden that each customer places on the public sewer system. Cities have found that, as compared to other means of generating sufficient revenue for stormwater management, a stormwater fee would actually result in lower charges to residential customers.⁶⁰

⁵⁹ See, e.g., Black & Veatch Management Consulting, LLC, *2016 Stormwater*

Utility Survey, at 6, <https://pages.bv.com/rs/916-IZV-611/images/2016-Stormwater-Utility-Survey.pdf>; U.S. Environmental Protection Agency, *Funding Stormwater Programs* (2009), <https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/FundingStormwater.pdf>.

⁶⁰ For example, in Alexandria, VA, single-family homes account for only 26% of impervious area, but were contributing 40% of the total property taxes collected by the city and thereby paying far beyond their fair share for stormwater management. To correct this inequity, the city decided in 2017 to switch to an imperviousness-based fee system. City of Alexandria, “Proposed Stormwater Management Fee: Staff Recommended Framework” at 19 (Nov. 1, 2016), https://www.alexandriava.gov/uploadedFiles/tes/Stormwater/Proposed%20Stormwater%20Management%20Fee_11

In sum, the stormwater utility approach provides a revenue stream earmarked exclusively for stormwater management; creates a structure for spending that money effectively; allocates costs fairly; and creates financial incentives for property owners to reduce runoff, by providing reduced fees when property owners minimize impervious surfaces or use green infrastructure techniques to capture runoff onsite before it reaches the public sewer system.

In light of these benefits, stormwater utilities and stormwater fees have become an essential stormwater funding mechanism in at least 1,600 communities nationwide.⁶¹ Yet, the Northeastern states lag behind.⁶²

New York State has only a single municipal stormwater fee. Ithaca recently implemented a stormwater fee, which charges properties depending on impervious area and provides credits for customers who reduce their polluted runoff.⁶³

Beyond Ithaca, other New York municipalities have been reluctant to do so, likely because of the legal uncertainty that arises from the lack of explicit statutory authorization in state law. For example, in 2010, Erie and Niagara Counties commissioned a study to examine the feasibility of establishing a regional stormwater utility. While the study concluded that such a utility would be feasible and desirable, it flagged legal uncertainty about the authority to charge a stormwater fee as a major concern.⁶⁴ Neither of those counties, nor any of their individual municipalities, has established a stormwater fee.

There are good arguments to be made that various home rule authorities in existing law allow municipalities to establish stormwater utilities.⁶⁵ Yet, given the reluctance of municipalities to do so, and the fact that such fees in other states have often been challenged in court (through usually unsuccessfully), it would be very valuable for the Legislature to provide explicit authorization.

Adopt Recreational Water Quality Standards that Meet EPA Requirements and Ensure that Waters in and Around New York Harbor Achieve Those Standards.

[.01.2016.pdf](#); City of Alexandria, “Stormwater Management Fee,” <https://www.alexandriava.gov/tes/stormwater/info/default.aspx?id=93591>.

⁶¹ Id.; C. Campbell, et al., *2016 Western Kentucky University Stormwater Utility Survey*, <https://www.wku.edu/engineering/civil/fpm/swusurvey/>.

⁶² Id.

⁶³ City of Ithaca, Establishing the Stormwater User Fee, FAQs, <http://cityofithaca.org/faq.aspx?TID=35>; and City of Ithaca, Stormwater User Fees, FAQs, <http://cityofithaca.org/faq.aspx?TID=37>.

⁶⁴ Western New York Stormwater Coalition, *Feasibility of a Regional Stormwater Utility District in Erie and Niagara Counties*, http://www.stormwateralbanycounty.org/wp-content/uploads/2011/12/NYS_SWUtilityDist_FeasStudy_Erie-NiagCnty_April2010_IncluAppA_B_C_E.pdf.

⁶⁵ For example, the Municipal Home Rule Law generally authorizes “[t]he fixing, levy, collection and administration of local government rentals, charges, rates or fees” by a county, city, town or village. Mun. Home Rule Law § 10(1)(a)(9-a).

The Assembly should use its oversight authority to ensure that DEC adopts – and enforces – recreational water quality standards that protect human health. DEC is basing major decisions about water pollution limits (including long-term sewer overflow control plans in New York City) on current standards, which are decades out of date and do not protect human health. By DEC’s own admission, the standards must be updated, but DEC has failed to do so.

In 2015, DEC adopted revised its water quality standards to provide that all of the waterways around New York City must be clean enough for recreational activities, such as swimming, wading, and kayaking, that put people in direct contact with the water. However, in defining “clean enough,” DEC relied on decades-old, outdated criteria for pathogen levels, which fail to meet the U.S. Environmental Protection Agency’s health-based standards. DEC was on notice for years prior that it would need to update those criteria for the entire state, and said that it would do so. Yet, to this day, the outdated, non-protective standards remain on the books for New York City waters and for the rest of the state.

Earlier this year, NRDC and a coalition of New York City-area groups filed suit against EPA, under the federal Clean Water Act, to force an update of the state standards. That case remains pending, and neither DEC nor EPA have been willing to make any firm commitments about when they will act. NRDC and our co-plaintiffs have asked the court to impose a binding deadline for EPA or the state to update the standards.⁶⁶

Meanwhile, DEC has approved a series of Combined Sewer Overflow (CSO) Long Term Control Plans (LTCPs) developed by New York City, which are aimed at meeting the outdated pathogen standards, but which do not even come close to meeting EPA’s health standards. Among other things, these plans would leave around 18 billion gallons of sewage overflowing annually around the city, on scores of occasions each year. In some places, the only pollution reductions would come from dumping chlorine “bleach” into the sewers or redirecting overflows from one place to another. In other places, reductions in overflows are delayed until the mid-2030s and, in one waterbody-specific plan that remains under DEC review, the city has proposed waiting until the 2040s to complete its CSO reduction projects.⁶⁷

Community and environmental organizations have loudly and publicly voiced their objections to this approach. Yet, over the last several years, the city has repeatedly submitted detailed plans for state approval without any prior opportunity for public review of, or feedback on, the complete plans. DEC, in turn, has been approving those plans without any process for inviting and considering public input. At a recent public meeting, a DEC representative explicitly stated that the agency takes no responsibility for inviting or responding to public comments before it decides whether to approve the city’s plans over public objections.⁶⁸

⁶⁶ See L. Levine, “We’re in Court, as EPA, NY State, NYC Fail on Clean Water,” June 29, 2017 <https://www.nrdc.org/experts/larry-levine/were-court-epa-state-nyc-fail-clean-water>.

⁶⁷ Id.; see also L. Levine, “Tell the Mayor: Get Raw Sewage Out of NYC Waterways!,” Nov. 9, 2017, <https://www.nrdc.org/experts/larry-levine/tell-mayor-get-raw-sewage-out-nyc-waterways>.

⁶⁸ L. Levine, “NYC Gets an Earful on Sewage Overflows,” Nov. 17, 2017, <https://www.nrdc.org/experts/larry-levine/nyc-gets-earful-solving-sewage-overflows>.

DEC's failure to hear out and respond to serious public concerns violates fundamental tenets of the Clean Water Act and, more fundamentally, of democratic governance. DEC must solicit, evaluate, and provide substantive response to, public comments on significant proposed decisions. A meaningful public participation process not only gives people a venue to raise concerns – but also improves the quality of the ultimate decisions, because the public often raises valid concerns that cannot simply be ignored.

Last month, more than 2,500 NRDC members and online activists sent messages to the DEC Commissioner asking him to hear their concerns and hold New York City accountable for cleaning up its waterways. They still have received no response.

We urge the Assembly to use its oversight authority to ensure that DEC not only does its job in New York City, but also updates and enforces water quality standards statewide to protect human health and ensure our state's waters are clean enough to be safe for recreation.

* * * * *

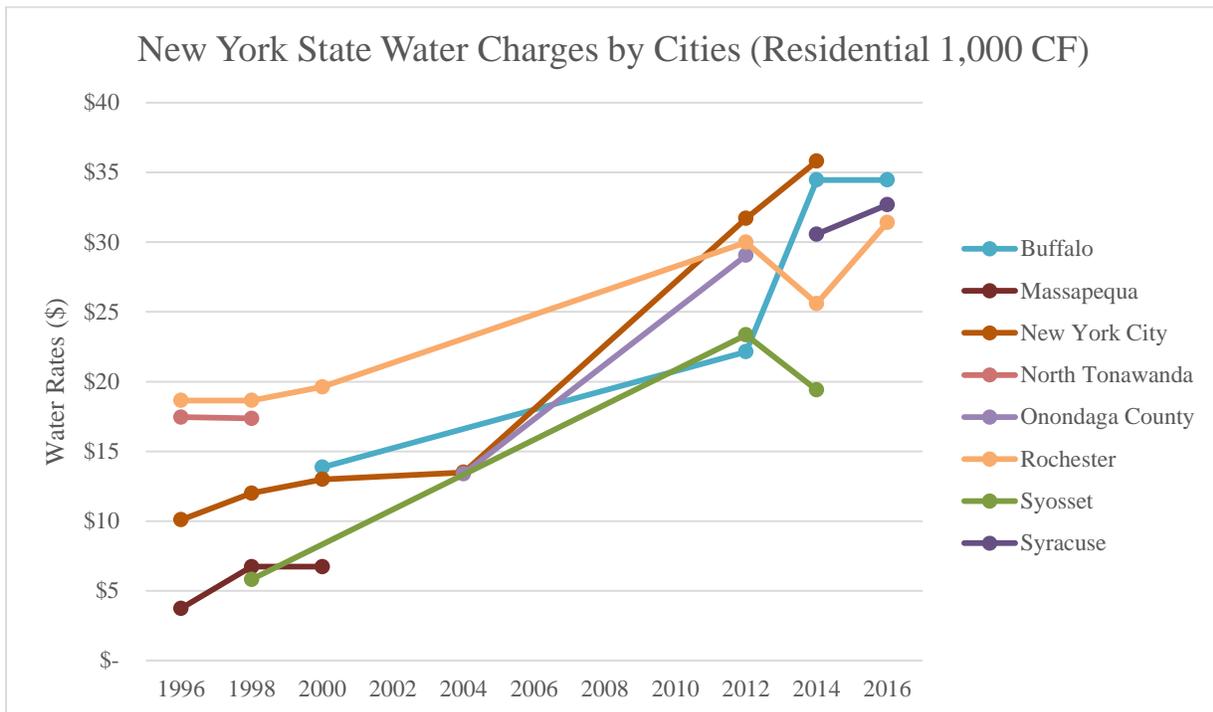
Thank you for the opportunity to testify today. NRDC looks forward to working with the Assembly to ensure all New Yorkers have access to safe, affordable, clean water and sewer services that protect public health and the environment.

APPENDIX – Water rate trends in New York State

Available historic data on water and sewer rates in New York is very limited. However, the available data generally is consistent with the national trends described in the testimony above.

The best source for New York data is the bi-annual, nationwide utility rate survey published by the American Water Works Association. NRDC extracted the data on New York utilities from each of those reports from 1996-2016. The figure below shows the increase in water bills over time for the eight water utilities that reported more than once over that period.ⁱ

The graph shows a trend of consistent and significant increases from the 2000 report (which reflects 1998 rates) to the 2016 report (which reflects 2014 rates). A doubling in water rates, or more, over that 16-year period is not uncommon for the utilities shown here. (A 100% increase over 16 years would be an average annual increase of 4.7%.) By contrast, during that same period (1998-2014), median household income in New York increased by only about 45% (equal to an average annual increase of 2.5%).ⁱⁱ



Source: American Water Works Association & Raftelis Financial Consultants, *Water and Wastewater Rate Survey* – biannual editions from 1996 to 2016. Each year's report reflects rates from 2 years prior. (Current edition available here: <https://www.awwa.org/resources-tools/water-and-wastewater-utility-management/water-wastewater-rates.aspx>.)

ⁱ We did not include wastewater data because only one wastewater utility, NYC, reported more than once since 2000.

ⁱⁱ U.S. Bureau of the Census, Median Household Income in New York [MEHOINUSNYA646N], retrieved from FRED, Federal Reserve Bank of St. Louis, December 3, 2017, <https://fred.stlouisfed.org/graph/?g=gc98>.

**Adirondack Council • Citizens Campaign for the Environment
Enterprise Community Partners • Green and Healthy Homes Initiative
Local Initiatives Support Corporation NYC • Natural Resources Defense Council
New York Working Families Project • Public Utility Law Project of N.Y.
WE-ACT for Environmental Justice**

June 13, 2017

Honorable Steve Englebright
Chair, Environmental Conservation Committee
New York State Assembly
Legislative Office Building 621
Albany, NY 12248

Re: Proposal to Establish a Low-Income Assistance Program for Water and Sewer Service

Dear Assemblyman Englebright,

We are writing to thank you for your leadership in bringing about the passage into law of New York State's Water Infrastructure Improvement Act (WIIA) in the 2017-18 Executive Budget, and to ask that you introduce legislation to create a program to help ensure that water and sewer services remain affordable for low-income/fixed-income New Yorkers. As you know, water and sewer charges will undoubtedly need to be raised to effectuate the State's goals of safe and sufficient water and sewer service for all New Yorkers, and to bring New York's water infrastructure into the 21st Century, while satisfying the local match requirement for grants under WIIA. A New York State water and sewer affordability program providing assistance to low-income/fixed-income households – modeled after the State's energy efficiency programs and recently created energy affordability program in the Reforming the Energy Vision (REV) proceeding – would help to ensure successful implementation of the recently adopted \$2.5 billion expansion of WIIA by:

- addressing the important equity concern that those least able to pay (e.g., low-income homeowners and tenants of affordable housing, seniors and disabled New Yorkers on fixed-incomes, and returning veterans) will be hardest hit by increased water and sewer charges;
- responding directly to water and sewer utilities' expressed concern that they cannot raise water and sewer charges because of the adverse impacts on low-income households and therefore cannot meet clean water standards; and, thereby
- making it possible for utilities and municipalities to raise local revenue that is needed to complement state investments in water infrastructure and accelerate Clean Water Act and Safe Drinking Water Act compliance.

These goals are high priorities for the constituencies of our organizations, which include environmental, environmental justice, affordable and healthy housing, low/fixed-income, and economic justice advocacy groups. Many of our groups are also members of the New York Energy Efficiency for All coalition.

We urge you to introduce legislation that either establishes a low-income/fixed-income assistance program or provides the EFC with the authority to establish one by administrative rules.

In the attachment to this letter, we provide one model for a low-income/fixed-income assistance program, about which NRDC has had several constructive conversations with your staff. In brief, the program could include the following elements:

- WIIA grant eligibility criteria that drive utilities to offer lifeline rates or a means-tested residential customer bill discount (“Affordability”);
- Targeted replacement of inefficient plumbing fixtures and appliances to significantly lower bills for low-income households in owner-occupied and rental housing (“Conservation”); and
- Funds in WIIA grants to help defray the local costs of establishing or implementing a low-income assistance program (“Local Mandate and Tax Relief”).

We would very much like to discuss with you these and other ideas for establishing an assistance program to ensure that low-income/fixed-income consumers have affordable access to clean drinking water and municipal sewer services that protect public health and the environment. As the state acknowledged with its strong steps in 2015-17 toward achieving low-income/fixed-income programs in all of New York’s public utility industries (including energy, cable, and investor-owned water utilities), the increasing costs of vital services are rising out of reach of New York’s working poor. We respectfully request that you develop and implement a program to help ensure that water and sewer services remain affordable for low-income/fixed-income New Yorkers.

Joan Leary Matthews of Natural Resources Defense Council can serve as an initial point of contact for our organizations regarding this request. She can be reached at (212) 727-4571 or jmatthews@nrdc.org.

Respectfully yours,

Kevin Chlad
Director of Government Relations
Adirondack Council

David Hepinstall
Executive Director
Association for Energy Affordability, Inc.*

Brian Smith
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Esther Toporovsky
Senior Program Director
Enterprise Community Partners*

Ruth Ann Norton
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Green and Healthy Homes Initiative*

Edward Ubiera
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Local Initiatives Support Corporation New York City*

Joan Leary Matthews
Senior Attorney
Natural Resources Defense Council*

Stephan Edel
Director
New York Working Families Project*

Richard Berkley, Esq.
Executive Director
Public Utility Law Project of N.Y.

Cecil Corbin-Mark
Deputy Director
WE-ACT for Environmental Justice*

Organizations labeled with an asterisk () are members of the NY Energy Efficiency for All coalition.*

Encl.

**New York State Water Infrastructure Affordability Initiative:
Creating a Low-Income Assistance Program for Water and Sewer Services**

JUSTIFICATION

Water and sewer charges will undoubtedly need to be raised to bring New York's water infrastructure into the 21st Century and satisfy the local match requirement for grants under New York State's Water Infrastructure Improvement Act (WIIA). A New York State water and sewer affordability program providing assistance to low-income households – modeled after the State's energy affordability and energy efficiency programs – would help to ensure successful implementation of the recently adopted \$2.5 billion expansion of WIIA by:

- (1) addressing the important equity concern that those least able to pay (e.g., low-income homeowners and tenants of affordable housing) will be hardest hit by increased water and sewer charges;
- (2) responding directly to water and sewer utilities' expressed concern that they cannot raise water and sewer charges because of the adverse impacts on low-income households and therefore cannot meet clean water standards; and thereby
- (3) making it possible for utilities and municipalities to raise local revenue that is needed to complement state investments in water infrastructure and accelerate Clean Water Act and Safe Drinking Water Act compliance.

OUTLINE OF PROPOSAL

1. Establishment of customer assistance programs. The Environmental Facilities Corporation (EFC) would, in consultation with the Public Services Commission (which regulates energy utility customer assistance programs), Office of Temporary and Disability Assistance (which administers the statewide energy bill assistance program), and the Division of Homes and Community Renewal, adopt regulations within 6 months that establish requirements concerning the establishment by each grantee of a customer assistance program for its low-income customers in which direct assistance is accompanied by support for water conservation and efficiency measures .

2. Goal of state program. The program regulations would have the express goal of ensuring that essential levels of water and sewer service are affordable for all customers.

3. Elements of local programs. The program regulations would require EFC to incorporate the following requirements as enforceable terms in any grant agreement with any municipality regarding the disbursement of water and wastewater infrastructure funds under the Water Infrastructure Improvement Act (WIIA) grant program:

- (a) Grantee agrees to establish not later than one year after the execution of the grant agreement a customer assistance program for its low-income customers,¹ and to maintain such program for not less than five years, or until the exhaustion of the funds, or the retirement of all bonds issued to fund such grants, whichever is later in time;
- (b) Customer assistance programs shall incorporate:
 - (1) One of the following:
 - (i) **Lifeline rates.**² An inclining rate structure for residential customers with the lowest commodity charge assigned to metered volumes representative of essential levels of indoor water use per dwelling unit. [Suggested default value: 6,000 gallons per month (based on 50 gal/month/person for a 4-person household); with a proportionally larger

amount for larger households, provided the utility can obtain household size data from the customer or another source (e.g., from the agency administering another benefits program)]; or

- (ii) **Means-tested residential customer bill discount.** Minimum discounts per dwelling unit of \$20 per month for water service, \$10 per month for sanitary sewer service, or \$30 per month for combined water and sewer service. EFC would have the option to set a higher amount, via rulemaking, with the goal of ensuring that essential levels of water and sewer service are affordable for all customers;
- (2) **Means-tested residential water conservation and efficiency assistance.** Direct installation of, or incentives for, water-efficient replacements for toilets, showerheads, and kitchen faucets on customer premises.³ Water conservation and efficiency assistance shall be provided to multifamily affordable housing in a manner to ensure that increased water and sewer rates do not place undue upward pressure on rents. To effectuate entry into the premises where the proposed recipient of the direct installations is not the owner, EFC regulations would include “building access” requirements similar to those under sec. 228 of the Public Service Law (which concerns cable TV installation); and
- (3) Such other feature or features as may be described in guidance (or regulations) published by EFC following public notice and comment.

3. Customer eligibility criteria. For means-tested programs, customer eligibility would match the eligibility criteria of the New York Telephone Lifeline program, which is triggered by eligibility for any of several other benefits programs (including, but not limited to, HEAP).⁴

4. Administrative requirements for customer assistance programs. EFC regulations would:

- (a) address the provision of assistance under this program to households that are not direct customers of a water or sewer utility (i.e., households that pay water/sewer indirectly through their rent, or through condominium or co-op fees), including assistance to providers of affordable rental housing to ensure that housing affordability is maintained;⁵
- (b) define additional requirements for the administration of local customer assistance programs. (This could include, for example, automatic enrollment of those who are already receiving other benefits.)

5. Existing customer assistance programs. EFC may allow grantees to use an existing customer assistance program to satisfy the requirements, upon a determination that such program provides a level of assistance that meets or exceeds the above requirements.⁶

6. Grant support for customer assistance programs. EFC may include in WIAA grants for municipal water and wastewater infrastructure:

- (a) funds to cover reasonable one-time administrative costs to establish the customer assistance and efficiency program;⁷ and
- (b) for grantees that meet the eligibility criteria for “hardship financing” under the Clean Water State Revolving Fund, funds to defray a portion of the non-administrative cost of their customer assistance programs, up to a maximum of [to be determined].

7. Stakeholder process. EFC would convene a stakeholder process and subsequent rulemaking (or recommendations for additional legislative authority if needed) to further enhance or expand the coverage of the state program to more customers and more communities.

8. Coordination with other means-tested state programs. EFC would coordinate with the Office of Temporary and Disability Assistance (which administers the Home Energy Assistance Program and other means-tested benefits programs) to consider opportunities for ODTA to assist in the implementation of any means-tested customer bill discounts adopted under this program. EFC, ODTA, and other relevant agencies would also coordinate to ensure that participation in the program will not exclude grantees from participating in any other benefits program, nor will benefits granted from the program be considered in the calculation of other means-tested program benefits.

9. Investor-owned drinking water utilities. Separately, PSC would create an affordability program for all investor-owned utilities, analogous to the energy affordability program PSC adopted last year, as well as water conservation and efficiency programs.

EXPLANATORY NOTES:

¹ See also point 4(a) below. Some provision should be made for low-income households that are not direct customers of the water/sewer utility, but rather pay these utilities indirectly through rent or through condominium or co-op fees.

² This general approach was adopted in the PSC’s “Low-Income Affordability Proceeding” (Case 14-M-0565) last year; it is referred to there as an “affordability block” rate. See pp. 23-24 of the PSC Order: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={BC2F31C9-B563-4DD6-B1EA-81A830B77276}>. The proceeding established a state goal of a 6% ceiling on household energy costs.

³ The 2016 PSC order creating an energy affordability program noted that “a need for better coordination of rate discounts with energy efficiency and weatherization services was the most widely given, and least opposed, comment.” See pp. 42-43 of the PSC Order (linked above).

⁴ This eligibility criterion was recommended by many commenters in the PSC energy affordability proceeding.

⁵ For example, HEAP has a mechanism for doing this. However, under HEAP, the payment comes directly from the state agency to the eligible household, not from the utility (which does not have a direct customer relationship with these households). Another model is found in some multifamily programs that have the effect of lowering the owner and resident utility bills, reduce building operating expenses and the upward pressure on rent, thus helping to preserve affordable housing. EFC, PSC and HCR should also consider in rulemaking how renters can receive benefits from the reduced water costs paid by the building owner as a result of affordability assistance under this program.

⁶ As an example of an existing program in NY – which does not necessarily provide an equivalent level of assistance (because fewer customers may be covered) – NYC has a program run by the city utility (DEP) and Dept. of Finance that provides an automatic \$115 credit for HEAP recipients and seniors and disabled homeowners. (Note, however, that not all HEAP-eligible customers actually receive HEAP benefits. Statewide, according to the Public Utilities Law Project, only about one-third of eligible households receive HEAP.) There are two other very recent examples of programs for by PSC-regulated water utilities. See <http://efc.web.unc.edu/2017/05/25/two-private-water-companies-changing-new-york-water-affordability/>. First, the PSC’s Final Order for Suez (in Rockland County and a bit of Orange County) requires the utility to create a low-income program. Here is a link to the PSC’s Jan. 2017 press release:

<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={0EF384C1-204E-4D2F-AD1D-7D0B16BB7183}>. A link to the PSC’s Final Order in the Suez proceeding (Case No. 16-W-0130) is here, see pp. 25-26: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={ECCAD35D-B853-47EA-B97E-5F6BB1020CFC}>.

Second, in the New York American Water Nassau County and 6 communities extending up the Hudson Valley from Lake Waccabuc to Kingston) rate case in late 2016, a proposed settlement would have provided rebates to a percentage of income-eligible residential customers the equivalent of their “basic service charge”/“minimum customer charge.” (See pp. 21-22 here: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={3CA51993-523B-46F9-AA28-5A499895538E}>). Unfortunately, the latter program was hindered by a last-minute reversal by the PSC.

⁷ We expect this would be most important for smaller systems. It could be left to EFC in consultation with the PSC to determine in what circumstances, and in what amounts, such assistance is necessary.