TESTIMONY OF
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BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

HEARING ENTITLED
"BUILDING A 21ST CENTURY INFRASTRUCTURE FOR AMERICA:
IMPROVING WATER QUALITY THROUGH INTEGRATED PLANNING"

MAY 18, 2017

Good morning Chairman Graves, Ranking Member Napolitano, and members of the 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.

Summary of Testimony

The title of today's hearing focuses on "integrated planning" as a tool to address our nation's undisputed need to improve our municipal water infrastructure. In my testimony today, I would like to emphasize the proper role of integrated planning to prioritize investments in municipal wastewater and stormwater infrastructure, and distinguish it clearly from approaches that would roll back our bedrock laws that protect public health and the environment. Further, I would like to call the Subcommittee's attention to the broader context in which discussions of integrated planning must occur – the need for increased water infrastructure investment at all levels of government to ensure municipal Clean Water Act (CWA) compliance, and the need to fund that investment in ways that ensure affordable access for all to safe and sufficient water, wastewater, and stormwater services.

Specifically, NRDC recommends:

- Integrated planning under the Environmental Protection Agency's (EPA) 2012 Integrated Planning Framework should be used appropriately, as an important tool for achieving cost-effective municipal compliance with essential Clean Water Act requirements. This will facilitate consideration of all of a municipal CWA permittee's obligations in an integrated fashion to prioritize and sequence investments in ways that maximize public health and environmental benefits.
- Integrated planning must be used in service of meeting clean water goals as expeditiously as possible. The concept of integrated planning and improved assessment of communities' "financial capability" must not be distorted to undermine our bedrock laws that protect public health and the environment. We strongly oppose H.R. 465, the Water Quality Improvement Act of 2017, which violates these principles.
- Financial capability assessments, when used to inform the development of compliance schedules, must ensure that permittees take advantage of opportunities to improve the affordability of compliance for ratepayers, and especially for low-income households, before cost concerns are considered as grounds for extending compliance schedules. Such assessments must also account for the benefits of clean water and green infrastructure, not only the costs of compliance.
- Federal actions to promote integrated planning should be accompanied by local, state, and federal actions to ensure: (i) equitable generation of sufficient local revenues to sustain adequate capital and operating budgets for municipal water, wastewater, and stormwater utilities; and (ii) vastly increased – and vastly more effective – federal and state investment in municipal water infrastructure.
- Specific federal actions that should accompany integrated planning include:
    - establishing a federal Low Income Water and Sewer Assistance Program, similar to the existing Low Income Home and Energy Assistance Program, to help low-income households pay for essential water, wastewater, and stormwater services, and supporting the creation and expansion of complementary programs at the state and local levels;
    - promoting local rate structures that equitably generate local revenues;
    - promoting best practices for asset management, as well as cost-effective solutions like green infrastructure and water efficiency, which reduce costs for all customers;
    - changing the cap that Congress places on the amount of State Revolving Fund (SRF) assistance states can distribute as grants, known as "additional subsidization," in a way that provides incentives to states to invest more in water infrastructure and direct more financial support to meet low-income communities' water infrastructure needs, to increase investments in environmentally innovative projects, and to prepare our water systems for the uncertainties of operating in a future defined by the impacts of climate change; and
    - tripling the current annual appropriations to the Clean Water and Drinking Water State Revolving Funds (the SRFs) and directing the additional funds to hardship communities, lead service line replacement (notoriously highlighted by the tragedy in

Flint, Michigan), water efficiency, green infrastructure, source water protection, nutrient reduction, water loss control, and climate resilience.

The United States Must Significantly Increase Investment in Municipal Water Infrastructure to Protect Public Health and the Environment

First-class infrastructure to protect clean water and public health is among our most important – and most basic – needs as a nation. Across the country, America'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 Clean Water Act 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. 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 infrastructure is the estimated 240,000 water main breaks per year.[1] 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.[2] Further, there are an estimated 6-10 million lead service lines in the U.S. that need to be replaced.

Based on data from the states, which was self-reported in 2011-2012 by local governments and utilities responding to a voluntary survey, the Environmental Protection Agency identified more than $660 billion that must be invested in water, wastewater, and stormwater infrastructure over

[1] American Society of Civil Engineers, *2013 Report Card for America's Infrastructure*, http://www.infrastructurereportcard.org.

[2] 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.

the next 20 years to meet current environmental protection and public health needs ($271 billion for sewage systems and stormwater and $384 billion for drinking water).[3] EPA's reports acknowledge these are under-estimates, due to incomplete survey responses and limitations in the survey methodology. The Value of Water Coalition – which includes drinking water and wastewater utilities and their national associations – estimates a far greater need: at least $123 billion per year over the next decade to achieve a good state of repair.[4] Yet aggregate capital spending on water infrastructure at the local, state, and federal level currently falls far short of this need, at just $41 billion per year.[5] These numbers do not include the $30 to $40 billion that the American Society of Civil Engineers has estimated it would take to replace lead service lines around the country.[6]

Moreover, this shortfall does not account for additional improvements needed to make the nation's drinking water, wastewater and stormwater systems more resilient to the challenges posed by the impacts of climate change. The national associations representing wastewater and drinking water utilities estimate that impacts of climate change could add between $448-$944 billion to the nation's water infrastructure needs through 2050.[7] These impacts include disruption of water supplies from drought; potential for damage to treatment facilities and collection and distribution systems from floods, hurricanes, and coastal storms; and the growing threat of inundation and resulting loss of facilities attributable to rising sea levels.

As the need for investment has grown, the share of federal contribution to water infrastructure spending has fallen significantly over the past 30 years.[8]

We must increase our investment now to address this enormous outstanding need – by expanding existing State Revolving Funds, leveraging additional investment by states and local governments, and exploring new and innovative funding sources, and. This additional funding should encourage natural and nature-based infrastructure solutions for water system needs, including source water protection, floodplain restoration, water use efficiency, and stormwater retention and infiltration – all of which offer wide-ranging benefits to communities. It should also support infrastructure projects that are designed, sited, and built with the full consideration of the future impacts of climate change.

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[3] EPA, *Drinking Water Infrastructure Needs Survey and Assessment, Fifth Report to Congress* (Apr. 2013), available at https://www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf; EPA, *Clean Watersheds Needs Survey, Report to Congress* (Jan. 2016), available at https://www.epa.gov/sites/production/files/2015-12/documents/cwns_2012_report_to_congress-508-opt.pdf.

[4] Value of Water Campaign, *The Economic Benefits of Investing in Water Infrastructure* (2017), available at http://thevalueofwater.org/sites/default/files/Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure_VOW_FINAL_pages.pdf.

[5] *Id.*

[6] American Society of Civil Engineers, *Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future* (2016), available at http://www.infrastructurereportcard.org/wp-content/uploads/2016/05/ASCE-Failure-to-Act-Report-for-Web-5.23.16.pdf.

[7] National Association of Clean Water Agencies (NACWA) and Association of Metropolitan Water Agencies (AMWA), *Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs* (2009), available at http://www.amwa.net/galleries/climate-change/ConfrontingClimateChangeOct09.pdf.

[8] Value of Water Campaign, *The Economic Benefits of Investing in Water Infrastructure* (2017).

Increasing our infrastructure investments will yield both environmental and economic benefits for our communities. It is estimated that $188.4 billion spent on water infrastructure investments over a 5-year period would yield $265 billion in economic activity and create 1.9 million jobs.[9] EPA found similar results for economic stimulation and job creation, determining in 2010 that the Clean Water State Revolving Fund had leveraged more than $74 billion in water infrastructure investment, creating 1.4 to 2 million jobs for the U.S. economy since 1988.[10] And a more recent analysis found that investing the estimated $82 billion per year in water infrastructure needed to fix the nation's pipes and water treatment plants could create $220 billion in annual economic activity and result in 1.3 million jobs annually.[11]

Integrated Planning, When Used Properly, Can Be a Valuable Tool for Compliance with Existing Clean Water Act Requirements

Integrated Planning, as set forth in EPA's 2012 Integrated Municipal Wastewater and Stormwater Planning Approach Framework ("Framework"), encourages communities to look at all of their CWA compliance requirements holistically and identify ways to sequence investments to attain the greatest health and environmental benefits, in the least amount of time, and use approaches like green infrastructure that save both money and time by addressing more than one regulatory requirement simultaneously. A central principle of the Framework is that integrated plans must ensure compliance with existing (and any new) Clean Water Act requirements.

When used properly, this is a smart approach for communities willing to invest in innovative solutions while maintaining fundamental protections for clean water and public health. For example, many cities are already using green infrastructure, to address sewer overflows and stormwater pollution at lower cost if they were to rely exclusively on traditional, "gray" infrastructure solutions. Green infrastructure solutions – such as green streets, roadside plantings, rain gardens, green roofs, and permeable pavement – serve both water quality goals and broader urban sustainability goals, such as cleaner air and healthier communities, creating opportunities to tap into non-traditional funding sources to support water infrastructure investment. Green infrastructure, as a form of distributed infrastructure, also allows communities to leverage private investment, on private property, to manage runoff on-site before it ever enters public sewer systems.

Further, where water scarcity is – or will in the foreseeable future become – a fact of life, green infrastructure can augment local water supplies by infiltrating rainwater to replenish aquifers, or by harvesting it for reuse, often (as with landscape irrigation) in place of expensive municipal supplies treated to drinking water standards. Indoor water efficiency provides another example of an integrated approach that helps meet a community's wastewater and drinking water infrastructure needs. Reduced indoor water use means reduced source water, treatment, and

[9] Rockefeller Foundation, American Rivers, and Economic Policy Institute, *Water Works* (2011) at 24, available at https://www.epi.org/publication/water-works-infrastructure-report/.

[10] EPA, *Clean Water State Revolving Fund Programs Annual Report* (June 2010), available at http://water.epa.gov/grants_funding/cwsrf/upload/2009_CWSRF_AR.pdf.

[11] Value of Water Campaign, *The Economic Benefits of Investing in Water Infrastructure*, supra.

conveyance costs for drinking water utilities and their customers. It also means reduced flow into wastewater collection and treatment systems, providing opportunity for cost savings to wastewater utilities and their customers and, in some cases, reducing sewage overflows during wet weather.

When considering an appropriate schedule of compliance for a municipal permittee – whether under an integrated plan or in any other context when immediate compliance with water quality standards is not possible – a community's financial capability to implement water infrastructure improvements is one among several relevant factors. Under the Clean Water Act, a compliance schedule must, among other things, ensure ultimate compliance with water quality standards "as soon as possible" and provide enforceable interim milestones to ensure accountability for steady progress.[12] Thus, while the cost of compliance is a relevant consideration, it must not be used as an excuse either to defer real progress in meeting Clean Water Act requirements or to avoid accountability for meeting them at all. Likewise, the "flexibility" promoted by the Framework is not flexibility to weaken Clean Water Act requirements, but rather to prioritize and sequence a permittee's compliance efforts within the boundaries of a lawful compliance schedule.

Legislation to Promote Integrated Planning Must Not Roll Back Existing Clean Water Act Protections

One of the bills pending before this Subcommittee, H.R. 465, the Water Quality Improvement Act of 2017, would distort the integrated planning concept by using cost as an excuse to roll back Clean Water Act protections. Despite its title, the bill does not address how to improve the water quality of America's rivers, bays, beaches, estuaries, and other inland and coastal waters. Instead of helping municipalities secure the funds they need to meet Clean Water Act standards, H.R. 465 would excuse non-compliance – or actually lower the bar to compliance. This would perpetuate, not solve, the deficiencies in our municipal clean water infrastructure.

H.R. 465 allows utilities to claim that the cost of cleaning up pollution is too great and, therefore, that they need not do what is necessary to meet Clean Water Act standards for fishable, swimmable, drinkable waters. Under H.R. 465, the perceived cost of cleaning up pollution trumps the value of human health and the economic costs that pollution imposes upon our communities. The bill ignores the value of the health, environmental, and economic benefits of clean water, while failing to provide solutions that make achieving those benefits more affordable to ratepayers. It also makes it more likely that wealthy neighborhoods will have clean water, while poor neighborhoods are left behind.

H.R. 465 goes far beyond authorizing or promoting integrated planning, as described in EPA's Framework, in several ways that undercut Clean Water Act protections. First, the bill identifies "reasonable progress...towards meeting permit requirements" as a guiding principle for compliance schedules, appearing to eliminate the existing legal requirement to achieve compliance as soon as possible. Second, once an integrated plan and compliance schedule are approved, the bill allows for compliance obligations to be "modified or removed" – *i.e.*, allows the plan to be weakened – in order to "help the municipality" comply. This weakens existing law in many ways, not the least of which is to undercut the CWA's anti-backsliding requirement.

[12] *See* 40 C.F.R. §§ 122.2, 122.47.

Third, the bill allows such modifications based on a skewed analysis of "economic affordability." The bill's affordability criteria address only factors that the permittees believe will portray compliance as unaffordable, with no consideration either of factors that can make compliance less costly and more affordable or of the benefits of investing in clean water infrastructure. Fourth, the bill would require EPA to incorporate the same "economic affordability" criteria in revisions to EPA's 1997 Financial Capability Assessment guidance, thereby making them broadly applicable to municipal CWA compliance, beyond the context of integrated planning. Fifth, the bill also appears to create an end-run around compliance with existing water quality standards, which protect fishable, swimmable, drinkable waters. Specifically, it creates a new concept of "technical feasibility," which limits permittees' water quality obligations, using a process that evades the stringent procedures in existing law designed to guard against inappropriate relaxation of water quality standards.

NRDC strongly opposes H.R. 465 and likewise will oppose any bill that weakens existing clean water protections, or undermines core Clean Water Act principles, under the guise of "integrated planning." Any legislation to promote integrated planning must provide a roadmap for expeditious compliance with Clean Water Act requirements, not a license to evade those requirements.

Revisions to EPA's Financial Capability Assessment Guidance Must Take an Integrated Approach to Affordability

EPA's 1997 Financial Capability Guidance provides a methodology to assess a permittee's financial capability to achieve compliance within a given time frame. These assessments inform the development of compliance schedules for municipal CWA permittees. Any revisions to EPA's guidance – and, indeed, EPA's implementation of the existing guidance – must not focus exclusively on the costs of compliance. Rather, EPA's financial capability methodology must address actions that permittees can take to make compliance more affordable, without extending the length of a compliance schedule. It must also account for benefits of compliance – *i.e.*, the return on the community's investment in clean water.

First, EPA and state permitting and enforcement authorities should insist that municipal CWA permittees take advantage of opportunities to improve affordability for low-income households, and for all ratepayers generally, before considering cost "burdens" as grounds for extending compliance schedules. This includes the use of more equitable rate structures and customer assistance programs to reduce the water, sewer, and stormwater bill paid by (or passed along through rent to) low-income households. This also includes opportunities to reduce capital and operating costs through water efficiency programs, policies and incentives that increase the use of green infrastructure on private property, improved asset management, and other appropriate measures.

Second, any financial capability assessment must account for benefits, not only costs. Compliance obligations are not punitive, and should not to be viewed as liabilities. Rather, Clean Water Act compliance is for the benefit of communities, supporting our national goals of fishable, swimmable, drinkable water for all. Therefore, EPA's methodology must account for

the economic, public health, and environmental benefits associated with improved water quality, as well as the broader benefits associated with green infrastructure solutions.

Congress, State and Local Governments, and Utilities Should Address Affordability Concerns Through Customer Assistance to Low-Income Households, Equitable Generation of Local Revenue, and Other Strategies That Reduce Costs for All Ratepayers Without Sacrificing Clean Water Protections

We do not want to have in this country 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. At bottom, the question is not how do we make water, sewer, and stormwater services cheap, but how do we make it so that everyone has affordable access to clean, safe, and sufficient water and sanitation for their families and their communities.

Water and wastewater utility rates have been increasing at about twice the rate of inflation for approximately the last 15 years.[13] It is anticipated that rates will continue to increase as the bill for overdue investment in our water infrastructure comes due. Legitimate and growing concerns have been raised about the "affordability" of water/sewer bills for low-income households, both now and into the future.

The issue of affordability must be tackled directly, and must not be used as an excuse to defer progress toward meeting Clean Water Act and Safe Drinking Water Act standards. As stated above, the answer to cost concerns must not be to move the goalposts for protecting human health and the environment. Rather, we must make the necessary investments to achieve fishable, swimmable, drinkable water for all communities, while *simultaneously* ensuring that the costs of the infrastructure improvements are allocated fairly and without undue burden on residents least able to afford it. We must act to ensure that the local share of these costs is affordable to communities and that the necessary local revenues are generated without undue burdens on low-income households.

Presently, neither the federal government, the states, nor most utilities have addressed affordability of water and sewer service through any type of customer assistance programs. This situation differs markedly from the energy utility context, where such programs are commonplace (albeit not always adequately funded).

In a recent review of 795 water and wastewater utilities,[14] EPA found that 29 percent of them offered at least one type of customer assistance program. But 71 percent of the utilities surveyed offered no customer assistance program whatsoever, sidestepping responsibility to provide a

[13] American Water Works Ass'n and Raftelis Financial Consultants, *2016 Water and Wastewater Rate Survey* (2017), p.89, available online at https://www.awwa.org/store/productdetail.aspx?productId=61841567.

[14] 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.

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.

NRDC believes that more widespread use of customer assistance programs, as well as new approaches, are needed to maintain affordability for the most disadvantaged members of our communities. A combination of federal, state, and local actions are needed to reconcile the utilities' need to raise sufficient revenue with the need to maintain the affordability of essential levels of water and wastewater service.

Several policy mechanisms, described briefly below, hold promise for improving water and sewer affordability. NRDC's State Revolving Fund proposal, discussed in the final section of this testimony, could be used to support most or all of these approaches. We also strongly support pending legislation, H.R. 2328, which would create a pilot Low Income Water and Sewer Assistance Program, similar to the existing Low Income Home and Energy Assistance Program, to help low-income households pay for essential water, wastewater, and stormwater services. We recommend that such a program be nationwide, not only a pilot, consistent with the long-standing recommendation of EPA's National Drinking Water Advisory Council's Affordability Work Group, comprised of representatives of utilities, cities, state water agencies, tribes, academia, and consumer, public health, and environmental organizations.[15] There is now growing support for such a program among these constituencies and others.

Our specific, additional recommendations are as follows:

1. *Infrastructure grant programs:* The federal government and the states should significantly increase state and federal grants for water and wastewater infrastructure – and help utilities with limited capacity more easily access existing financial assistance programs. Grant programs 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.
2. *Customer assistance programs:* At the local, state, and federal levels, there is a need for increased use of (and dollar amounts dedicated to) customer assistance programs. These programs subsidize or cap water and sewer bills for low-income homeowners and affordable multi-family housing owners, and provide other forms of targeted assistance, such as direct installation of appliances and fixtures that save water and lower customer

[15] National Drinking Water Advisory Council, Affordability Work Group, Recommendations of the National Drinking Water Advisory Council to the U.S. EPA on its National Small Systems Affordability Criteria (July 2003), available online at https://www.nclc.org/images/pdf/energy_utility_telecom/water/recommendations_july2003.pdf.

bills. As noted above, H.R. 2328 provides a good start for the federal government to jump-start these programs, but state and/or local programs are also necessary.

3. *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. Investor-owned drinking water utilities are subject to rate regulation by state public utility or public service commissions or boards, which can use their authority to drive the use of these equitable rate structures. The majority of drinking water utilities, and nearly all wastewater and stormwater utilities, are not subject to rate regulation by the states. Federal and state policies should promote and provide incentives to adopt these equitable rate structures, which allow communities to generate revenues needed for water infrastructure investment without unduly burdening low-income households.
4. *Improved approach to evaluating "financial capability":* As described above, Clean Water Act permitting and enforcement authorities should insist that municipal CWA permittees take advantage of opportunities to improve affordability for low-income households before EPA and states will consider cost "burdens" on low-income residents as grounds for extending compliance schedules.
5. *Improved asset management generally:* Some Clean Water Act permits and enforcement orders, or state regulations, require utilities to develop and implement asset management programs. Sound asset management practices hold costs down for everyone in the long run, since preventive maintenance/repair on a regular cycle is far cheaper than reactive maintenance/repair when something breaks or greatly exceeds its useful life. Federal and state policy should do more to promote or require these asset management programs.
6. *Increased adoption of cost-effective solutions like green infrastructure and water efficiency:* Water, wastewater, and stormwater utilities and local governments should expand the use of green infrastructure and water efficiency strategies to more cost-effectively meet their needs, mitigating costs for all customers.

Congress Should Increase the Size and Improve the Deployment of State Revolving Fund Appropriations, While Providing Incentives Larger State Investments in Water Infrastructure

NRDC recommends a combination of new federal funding and changes in federal policies that would provide incentives for states to invest more in water infrastructure while providing more financial support to meet low-income communities' water infrastructure needs, increasing investments in environmentally innovative projects, and preparing our water systems for the uncertainties of operating in a future defined by the impacts of climate change.

The federal government provides critical support to help communities meet their water infrastructure needs through the Clean Water and Drinking Water State Revolving Funds (hereafter "CWSRF" and "DWSRF," or collectively "the SRFs"). Since their inception, the

SRFs have provided $138.9 billion to local communities, almost all of which has been in the form of low-interest loans.[16,17]

Congress appropriates funding each year, which is distributed by USEPA to states according to a needs-based formula. States are required to provide a minimum 20 percent match to the annual federal contribution. Many states only invest the minimum match each year, relying on their share of annual federal appropriations to incrementally grow their SRFs' financial capacity. This approach is insufficient to meet the growing water infrastructure needs of communities in those states. But some states do much more to leverage their existing SRF programs and provide more assistance to communities, simply by making use of the full range of financing mechanisms the SRFs are authorized to support under state and federal law. As shown below, these states include Ohio, Indiana, Texas, New York, and Massachusetts, among others.

The SRFs can provide financial support through a variety of mechanisms including:[18]

- low-interest or no-interest loans,[19]
- the purchase of debt,
- loan guarantees or municipal bond insurance if this would improve the credit for the local obligation,
- revenue or security for state issued bonds that are deposited back into the SRF,
- loan guarantees to establish local revolving funds that are used for purposes identical to the state's CWSRF,[20] and
- loans where the principal and interest can be forgiven, effectively allowing the SRFs to issue grants, also known as "additional subsidization" or "subsidized assistance."[21]

If existing SRF financing mechanisms that are currently authorized in statute, like the ability to issue bonds and provide loan guarantees, were more widely deployed by the states, new capital could be mobilized to meet the nation's water infrastructure needs.

NRDC has developed the proposals below to spur states and communities to take advantage of the full range of financial assistance that the SRFs are able to provide. We also propose a major increase in annual SRF appropriations, with a priority on important categories of projects that have typically received insufficient attention from state SRF programs. Both increased funding

[16] Since 1987 the CWSRF has provided $111 billion to communities, https://www.epa.gov/cwsrf.

[17] Since 1996 the DWSRF has provided $27.9 billion to communities, https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-1.

[18] For CWSRF see 33 U.S.C. 1383(d) and for DWSRF see 42 U.S.C. 300(j)-12(f).

[19] Loan terms can be for up to 30 years under the CWSRF and 20 years under the DWSRF.

[20] Local revolving loan funds are not eligible for support from DWSRFs.

[21] States are allowed to provide "additional subsidization" to SRF applicants in the form of forgiveness of the principal and interest on SRF loans, grants, or negative interest rate loans. The amount that states can provide in additional subsidization is capped at 30 percent of a state's annual share of Congressional SRF appropriations.

and better deployment by states of available funds are necessary to meet our water infrastructure investment needs.

First, Congress should create incentives for more states to contribute additional resources to their SRFs, beyond the money given to them by the federal government and their minimum 20 percent state match. NRDC wants to see states use their SRFs more creatively, by investing more of their own resources, by providing assistance in the form of loan guarantees, and by distributing more funding as grants to low-income communities and for environmentally innovative projects, like green infrastructure and water efficiency.

This could be accomplished by changing the cap that Congress places on the amount of assistance that states can distribute as grants, known in SRF circles as "additional subsidization." Under the Drinking Water SRF, hardship communities are eligible for additional subsidization.[22] Under the Clean Water SRF, those communities, as well as communities that will use SRF funds to promote green infrastructure, water efficiency and reuse, and climate resiliency, are eligible for additional subsidization.[23] Under current law, states can only provide subsidized assistance (*e.g.*, grants) up to an amount that equals 30 percent of their annual federal SRF funding and they are barred from providing more, even if they have the financial capacity to do so.[24] In some states, the cap effectively may keep SRF programs from deploying 100 percent of their available funds, whether by grants or loans; funds available for loans can go unclaimed when municipalities lack the credit to borrow even at SRF-subsidized interest rates.

NRDC recommends amending the SRF statutes to base the cap on additional subsidization on a 10-year rolling average of how much states have invested in their SRF above and beyond their minimum (20 percent) federal match requirements. This reform would provide incentives for states to contribute more funding to their SRFs and allow them to distribute most of those dollars to hardship communities and communities that want to promote green infrastructure, water efficiency and reuse, and climate resiliency. We also recommend that eligibility criteria for additional subsidization under the DWSRF be amended to reflect similar project-specific criteria as currently exist in the CWSRF.[25]

Twenty states could immediately benefit from changing the cap, including Ohio, Indiana, Texas, New York, and Massachusetts. These twenty states have contributed, on average, nearly $70 million per year over the last ten years, on top of the minimum 20 percent SRF match required to receive new federal funding. Currently those states can, on average, only provide $11.2 million of grant assistance each year. Under our proposal, these states would be able to distribute, on average, an additional $69.3 million per year as grants or other forms of subsidized assistance for eligible projects.

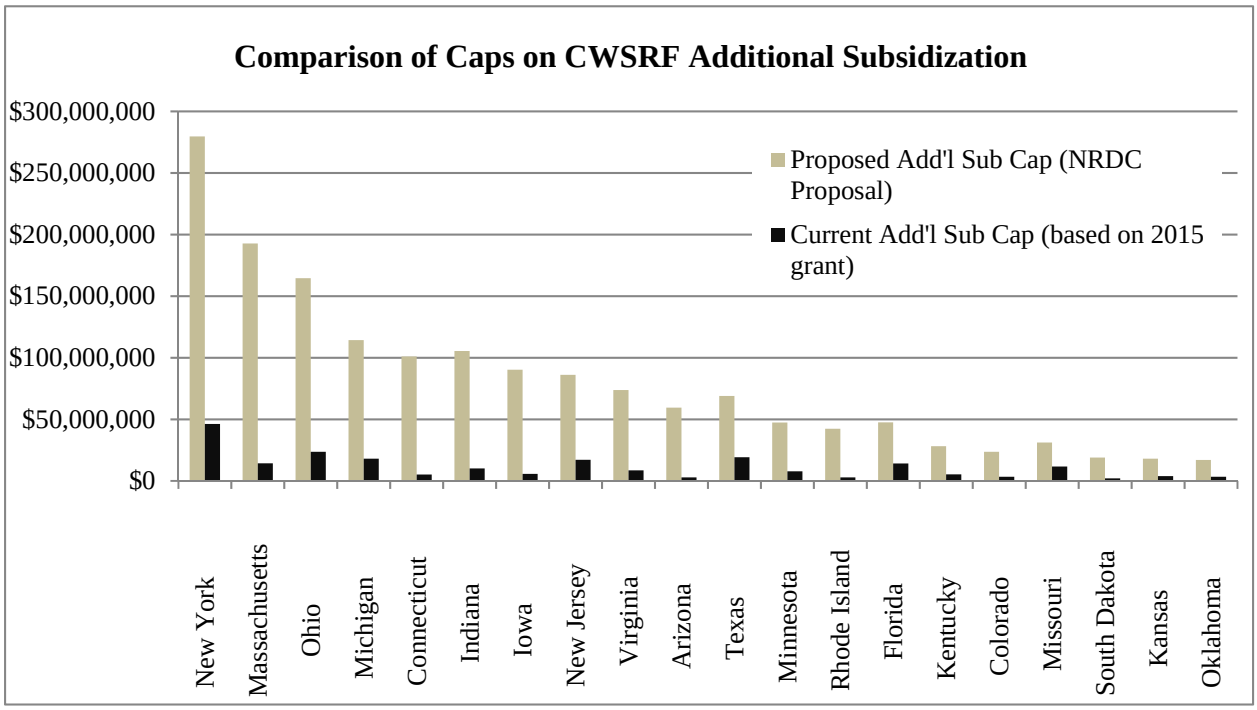
[22] 42 USC 300j-12(d).

[23] 33 USC 1383(i)(1).

[24] 42 USC 300j-12(d)(2) and 33 USC 1383(i)(3).

[25] 33 USC 1383(i)(1)(B).

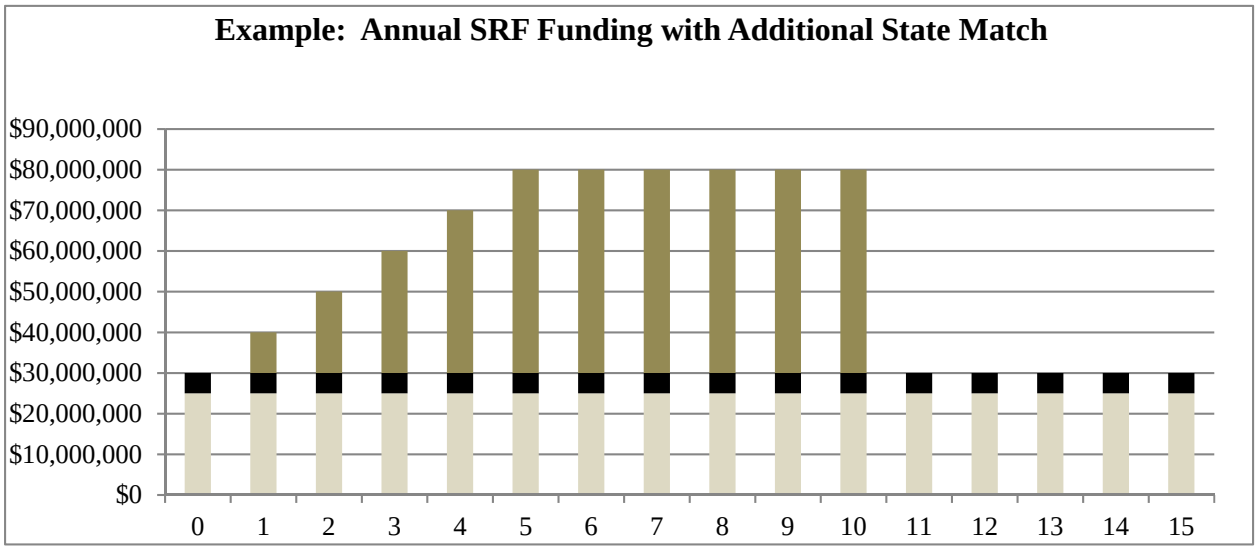
The graph below shows how states that have a history of contributing more than the minimum 20 percent match to their CWSRF could benefit from a statutory change in the definition of "additional subsidization" envisioned by NRDC.



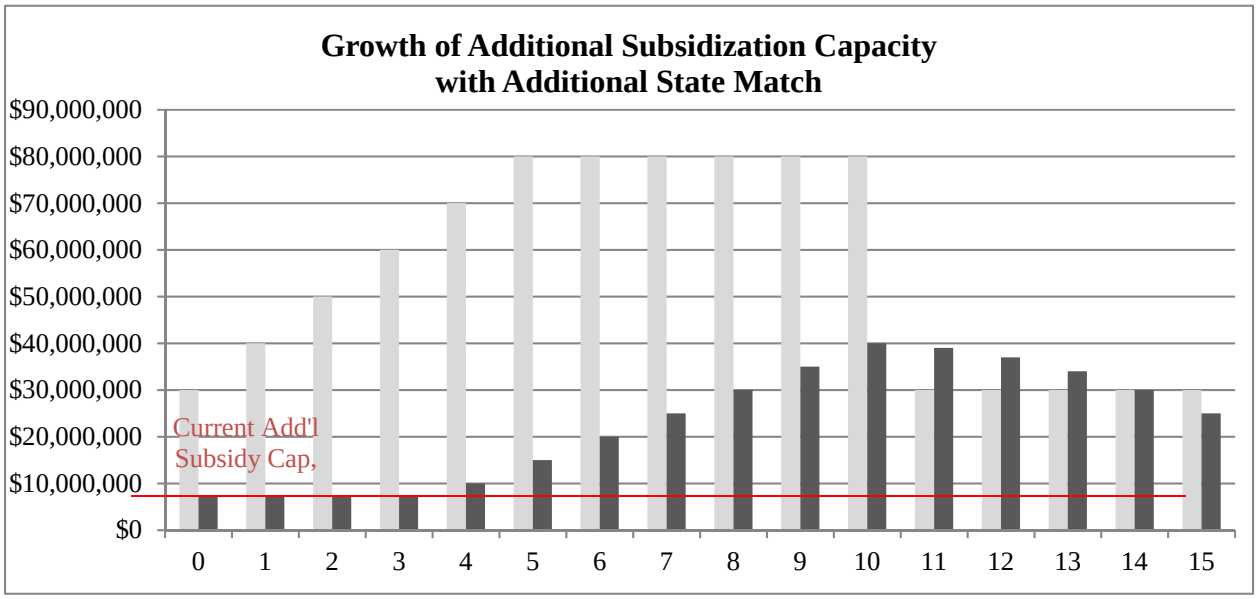
Graph 1: Many states routinely deposit more than the minimum 20 percent match to their CWSRF. The states above have deposited revenues from bond sales, growing their CWSRF's financial capacity. These states could immediately be able to provide more in subsidized assistance to eligible SRF projects.

Even states that have not regularly made increased SRF contributions would be able to benefit in short order. A theoretical state that received a $25 million capitalization grant each year from USEPA would provide a minimum $5 million match. If that state contributed an additional $400 million over ten years (the dark gray bars in the graph below) through bonding or direct appropriations, it would not only grow its SRF's overall financial capacity, but under NRDC's proposal, would be able to provide more grant funding to eligible recipients.

Significantly, this ability to provide more grants to communities – not just loans – can provide a valuable incentive for states to use their SRFs as a source of revenue or security for state-issued bonds, the proceeds of which would be deposited back into the SRF to support water infrastructure projects. A state's SRF has a credit rating that is independent of (and may often be higher than) the state's own bond rating, which means that bonds issued against the SRF can be a low-cost way for the state to raise funds for water infrastructure investment. With an increased cap on additional subsidization, states would be able to borrow against the SRF at low cost and use the proceeds for grants to eligible projects – not only for loans. The ability to offer grants makes such bonding a more politically attractive proposition, while enabling states to provide more assistance to communities that have limited financial capacity to take on new SRF loans.



Graph 2: A simple model of how a state might add $400 million over ten years to an SRF. Light grey represents the annual USEPA capitalization grant, black is the state's minimum 20 percent match, and the dark grey represents additional state investments.



Graph 3: How that $400 million (light grey bars) could increase the amount of subsidized assistance under NRDC's proposal, which would base the cap on a 10-yr rolling average of state contributions that exceed the 20 percent minimum SRF match. The cap on subsidized assistance would be based on either the existing cap (30 percent of the USEPA capitalization grant) or the proposed cap based on the 10-year rolling average, whichever is higher.

Second, the federal government should increase its long-term commitment to water infrastructure funding through the SRFs. However, NRDC is recommending that appropriations not simply be increased, but that those increases be targeted to a growing list of priorities that are currently under-represented in the states' portfolios of SRF assistance.

The financial support SRFs provide typically goes towards routine repair and upgrades of our nation's aging water systems, leaving very little for more innovative practices like green infrastructure, water efficiency and reuse, or climate resilient resiliency, not to mention the need to remove lead water lines that endanger the health of 18 million Americans.[26] If new federal funding is forthcoming, it should be targeted toward these kinds of projects, which currently do not get their fair share of the water infrastructure pie. NRDC recommends that Congress triple funding for the SRFs and dedicate the approximately $4 billion in new federal funding to the following kinds of projects:

- Removing lead service lines that are used by millions of Americans;
- Water efficiency, water reuse, and water recycling;
- Green infrastructure;
- Source water protection;
- Reducing nitrogen and phosphorus pollution from wastewater and stormwater;
- Reducing the amount of water that is wasted due to old, leaky water mains;
- Fixing deteriorating outdated drinking water infrastructure, especially in disadvantaged communities that cannot ensure that safe water is provided to their residents; and
- Ensuring that our water infrastructure is designed with the increased risk of droughts, floods, and other impacts of climate change.

* * * * *

Thank you for the opportunity to testify today. NRDC looks forward to working with the Subcommittee on bold and effective solutions to our nation's water infrastructure challenges.

[26] NRDC, *What's In Your Water: Flint and Beyond* (2016), available at https://www.nrdc.org/media/2016/160628.