

Sustainable Wastewater Infrastructure: Measures to Promote Resiliency and Climate Adaptation and Mitigation U.S. House of Representatives Transportation and Infrastructure Committee April 21, 2021

Testimony of Kim Colson, Director, Division of Water Infrastructure North Carolina Department of Environmental Quality On behalf of the Council of Infrastructure Financing Authorities (CIFA)

On behalf of the Clean Water State Revolving Funds (SRFs) across the nation, thank you for the opportunity to share the thoughts of the SRF community on measures to promote sustainable and resilient water, wastewater and stormwater infrastructure. My name is Kim Colson and I am the Director of the Division of Water Infrastructure for the North Carolina Department of Environmental Quality, which manages both the Clean Water and Drinking Water SRFs. Today, I am speaking on behalf of the Council of Infrastructure Financing Authorities (CIFA) whose members manage the Clean Water and Drinking Water SRFs in 48 states.

The Clean Water SRFs are the nation's premier programs for funding water infrastructure that protects public health and the environment. Since they were established by Congress more than 30 years ago, the Clean Water SRFs have funded more than 40,000 water infrastructure projects in communities around the country, providing clean water to support healthy ecosystems, livable communities and robust economies.

Although these proven programs have been around for more than three decades, the SRFs have evolved significantly during that time. Our portfolio of infrastructure has grown well beyond traditional brick-and-mortar wastewater treatment plants and sewer pipes to an array of innovative projects that are solving the most complex water challenges of our day. To help communities build water infrastructure that is sustainable and resilient, our programs offer a range of assistance, including engineering, environmental, project planning and accounting services.

The SRFs have also matured into sophisticated financial organizations. Each SRF develops their below-market interest rate, their criteria for affordability and additional subsidy, and their loan conditions based on the needs and priorities of their state. Each SRF employs a variety of tools to fund water infrastructure projects, including direct loans, purchase of debt, linked deposits, and additional subsidy in the form of grants and principal forgiveness. Several SRFs leverage their programs in the bond market, which requires additional finance expertise.

Today, SRFs are dynamic organizations that are responsive to the needs of their communities in a fast-paced, ever-changing world. Because they are state-run programs, SRFs can – and must – adapt quickly to meet multiple challenges, including natural disasters such as drought or hurricanes, health crises like the coronavirus pandemic, emerging contaminants such as PFAS, economic downturns that impact affordability and capital investment, and competition from incredibly low interest rates in the public finance market.

SRFs fund an array of projects that promote sustainable and resilient water systems. Under current law, Clean Water SRFs can fund a range of water infrastructure projects that build sustainability and resiliency, including wastewater treatment, water reuse and recycling, stormwater management, decentralized wastewater treatment, green infrastructure, energy efficiency, water conservation, agricultural best management practices, climate mitigation and adaptation measures, increased security and cybersecurity, environmental restoration and pollution prevention. The ability to fund this wide array of projects allows SRFs to support new initiatives, such as integrated planning.

A top priority for many SRFs is ensuring wastewater is treated to stringent water quality standards so it can be safely reused or returned to nature. Replacing leaky sewer pipes and rehabilitating old or outdated treatment facilities remain the most effective ways to maintain adequate levels of protection and prevent catastrophic crises that endanger public health or cause lasting, costly damage to the environment. However, more and more grey infrastructure projects are incorporating green technologies and approaches, either in whole or in part, to increase resiliency of water systems, water quality and water supply.

Here are a few pioneering projects recently funded by Clean Water SRFs to strengthen water sustainability and resiliency.

- The California Clean Water SRF funded expansion of 30 million gallons per day for the Orange County Water District Groundwater Replenishment System to be used as a new source of replenishment for the Orange County groundwater basin.
- The Rhode Island Clean Water SRF conducted a statewide climate vulnerability study to determine infrastructure projects that wastewater treatment facilities need to undertake to mitigate the impact of flooding from rain and rising sea levels.
- The Arizona Clean Water SRF funded a forest management project in Flagstaff to protect against catastrophic wildfires that create the conditions for dangerous mudslides during monsoon season which cause significant impacts to water quality.
- The Minnesota Clean Water SRF, in partnership with the Barataria-Terrebonne National Estuary in Louisiana, funded implementation of pollution prevention practices to reduce nutrient runoff that flows down the Mississippi River to the sensitive coastal ecosystem.
- The Missouri Clean Water SRF funded construction of wastewater bio solids handling equipment in Webb City that produces fertilizer from nutrients in wastewater, which is applied mine-scarred land as part of a stabilization and habitat restoration project.
- The Kansas Clean Water SRF funded the purchase of equipment to plant cover crops to reduce nutrients in Wetmore.

- The Florida Clean Water SRF funded installation of solar facilities in Marianna, which
 reduced energy consumption by more than 90%. Loan repayments are funded with just
 two months of savings with the remaining ten months of savings available to maintain
 affordable rates.
- The Virginia Clean Water SRF, in partnership with The Nature Conservancy, funded the purchase of a conservation easement for 60,000 acres of forests, increasing protection for drinking water supplies as well as the natural habitat for more than 150 species of fish and mussels.

The SRFs provide a sustainable, renewable, protected source of funding for clean water infrastructure – forever. Since the program was created, federal funding of \$47 billion has generated a total investment of \$145 billion for clean water infrastructure. Because the SRFs are subsidized loan programs, nearly \$60 billion of state and federal funding remains revolving in the program today – \$13 billion more than the total amount provided over three decades of federal funding. All funds revolving in the SRFs are state funds.

Today, Americans are realizing the real-world benefits of establishing the Clean Water SRFs as revolving loan programs more than 30 years ago. In 2020, Congress appropriated \$1.6 billion in funding to the Clean Water SRFs but the SRFs were able to provide nearly \$7.5 billion in funding to communities – nearly five times the amount of annual federal funding. Thanks to Congress' foresight, water infrastructure projects are being built today that may never have been built if the SRFs were established as a federal grant program.

SRF subsidize loans save money and keep utility rates affordable. Savings from SRF subsidized loans allow utilities to improve wastewater and stormwater service while keeping rates affordable for consumers. While additional subsidy (grants and principal forgiveness) tends to be the focus of financial assistance provided by the SRFs, significant savings are already being generated through the SRF's below-market, subsidized interest rates.

In 2020, the average interest rate for a Clean Water SRF loan was 1.5% or about 50% of market rates. SRF subsidized loans, on average, cut interest payments in half and reduce the cost of infrastructure by \$180 million for every \$1 billion in loans. Additionally, investments in wastewater infrastructure can reduce the cost of operations. These combined savings can be passed onto consumers with more affordable utility rates.

While SRFs provide a permanent, perpetual source of funding, more federal funding is needed to meet the growing need for clean water infrastructure. According to the American Society of Civil Engineers (ASCE), the need for capital investment for water infrastructure was \$129 billion for 2019, while actual total spending on capital investment in water infrastructure was \$48 billion, leaving a gap of \$81 billion or nearly twice the amount of actual spending. If this trend continues, this gap is expected to grow to \$434 billion by 2029.

CIFA's members fully support increased authorizations and appropriations for the Clean Water SRF. However, some SRFs have expressed concern about their ability to meet the 20% state

match requirement if funding is increased five-fold within the near future. Other SRFs have expressed concern about the ability to ensure the high-priority projects are funded if timelines remain the same or are shortened, as they were under the American Recovery and Reinvestment Act of 2009.

Greater flexibility for the SRFs is also needed. The Clean Water SRFs are effective because Congress allowed states to customize their program within a broad federal framework. This flexibility, which is a hallmark of the SRF state-federal partnership, has allowed SRFs to meet the diverse, and often unique, needs of communities across the nation – from urban centers, such as Los Angeles, California, with a population of nearly four million, to small communities like Tabor City, North Carolina, with a population of 4,000.

However, continued federalization of the Clean Water SRFs diminishes our ability to efficiently and effectively respond to the needs of our communities. Federal mandates, while incredibly well-intentioned, have had the unintended consequence of complicating the program, which discourages and slows the pace of investment in clean water infrastructure.

Increased federal mandates add complexity to program management. Unlike the bond market which provides financing only, SRFs shepherd projects through the project pipeline - from predevelopment to planning and design through engineering and environmental reviews to procurement to construction. Hiring, training and retaining staff to implement, monitor and enforce compliance with the growing number of federal mandates is a challenge.

The federal mandate for additional subsidy reduces the leveraging power of SRFs immediately and permanently reduces the source of recurring revenue for water infrastructure projects in the future. Since 2010, Congress has required the Clean Water SRFs to use a percent of the annual capitalization grant for additional subsidy in the form of grants, principal forgiveness or negative interest loans. While additional subsidy is an important tool, SRFs believe it should only be used when absolutely necessary because it permanently reduces funding for water infrastructure in the future.

Additionally, there is an inverse relationship between additional subsidy and leveraging. SRFs can use the capitalization grant as security for a bond or pledge loan repayments to repay a bond. The more funding used for additional subsidy, the less funding that is available to leverage the program. Less leveraging results in fewer water infrastructure projects.

Current law allows SRFs to use up to 30% of the capitalization grant for additional subsidy for communities that meet affordability criteria and for certain projects, such as stormwater mitigation. Allowing each SRF to determine how much additional subsidy is necessary, up to this cap, ensures states are balancing the need to invest in water infrastructure today with the ability to meet future needs for water infrastructure. It also recognizes that many states provide significant funding for water infrastructure grant programs which are used to supplement projects funded by the SRFs.

The federal mandate for green projects can displace other water infrastructure projects that provide greater protection for public health and the environment. The current mandate, called the Green Project Reserve, requires SRFs to use at least 10% of the capitalization grant for water and energy efficiency projects, green infrastructure projects and other environmentally innovative activities. To meet the mandate, SRFs are encouraged by the U.S. Environmental Protection Agency to change their scoring, interest rates and additional subsidy criteria, which impacts the ranking and funding of projects that might be higher state priorities.

All SRFs fund green projects but not all green projects can qualify for loan. Utilities that implement water and energy efficiency projects have a revenue stream to qualify and repay a loan, and the energy efficiency projects often pay for themselves in lower operating costs. However, green infrastructure projects, such as installing permeable pavements or green roofs, often don't have a revenue stream to qualify and repay a loan.

Even with robust and concerted efforts to identify and fund green projects, SRFs may not be able to achieve the mandate, year-in-and-year-out. Take the recent experience of Oregon, which is at the forefront of funding innovative, sustainable green projects. In State Fiscal Year 2020, the Oregon Clean Water SRF executed a record number of loans and had more than \$6.8 million in green projects on their Intended Use Plan. However, none of those projects were ready to proceed to construction and, as a result, Oregon couldn't meet federal mandate for green projects in that fiscal year.

Additionally, transformational green infrastructure projects can take more time to develop and build than other projects, including both conventional wastewater projects and smaller green projects. Given the need to meet the green mandate annually and the urgency to disburse federal funding expeditiously, there is no incentive to pursue these large-scale, environmentally significant projects. When they are funded, credit toward the mandate is only allowed in the year when the loan was executed, not when funding is disbursed. For example, Oregon is financing a multi-year, multi-phased riparian restoration project along eight miles of creek near the City of Ashland. Funding for the project will be disbursed over 15 years but Oregon will only get credit for the project in the year the loan is executed.

Allowing SRFs to earn credit for green projects over multiple years or measuring funding for green projects over a rolling three-year average would ensure investment in green projects is recognized and transformational green projects are realized.

Fewer federal mandates on SRF loan recipients can promote investment in sustainable and resilient water infrastructure. According to a recent survey of the SRFs, the number one challenge to increasing investment in water infrastructure is the <u>cumulative impact</u> of all federal mandates. Today, federal mandates dictate the way communities select their engineer, the wages paid to mechanics and laborers on their construction project, and the materials and technologies used in construction of their project. None of these requirements existed a decade ago.

Too often, these one-size-fits-all federal mandates increase paperwork and process without providing additional protection for public health, the environment or taxpayer funds. Many federal mandates are duplicative of state requirements, creating twice the work without any significant additional benefit. Many federal requirements apply to projects funded by state funds.

Compliance with federal mandates increases the cost of water infrastructure, particularly for small communities who can least afford it. Many small and even some medium-sized communities don't have the professional staff to comply with the myriad of federal rules and requirements. As a result, communities are hesitant, even reluctant, to undertake investment in water infrastructure.

The federal mandate requiring SRFs loan applicants to demonstrate compliance with federal prevailing wage laws is very prescriptive. Paying the prevailing government wage for SRF funding water infrastructure is not an issue. Often, workers are paid <u>more</u> than the prevailing federal wage to be competitive with other construction projects, particularly in growing communities with robust economies. The problem is the prescriptive paperwork and process required to demonstrate compliance, even when workers are paid more than the federal prevailing wage.

The compliance burden is particularly onerous in states with a state prevailing wage law. In the 26 states and the District of Columbia that have a state prevailing wage law, SRFs, loan recipients and contractors must comply with two sets of compliance procedures, doubling the workload without providing any additional financial benefit for workers.

Adopting state prevailing wage laws for water infrastructure (which is routine for highway construction projects) and allowing compliance with state prevailing wage laws to be accepted in lieu of federal compliance procedures would alleviate the burden while maintaining fair wages for workers.

The federal mandate requiring SRF loan recipients to use the federal procurement process for engineering services has a significant impact in some, but not all, states. The Water Resources Development Act of 2014 requires SRF loan recipients that receive federal funding from the capitalization grant to use of the federal procurement process for selecting engineering services. Under the federal procurement process, engineers must be selected based solely on qualifications.

This federal mandate has little impact in about two-thirds of states that have a procurement process similar to the federal procurement process; these state laws are often referred to as a "mini" Brooks Act. However, this federal mandate has had a significant impact on SRF loan applicants in other states whose state procurement laws conflict with the federal requirements. For example, the Massachusetts SRF no longer funds engineering services with federal funds; two separate loan agreements are executed for the same project – one for engineering services funded by state funds and one for construction funded by federal funds.

The federal mandate requiring SRF loan recipients to make specific certifications increases the cost of water infrastructure, especially for small and rural communities. The Water Resources Development Act of 2014 mandates that all SRF loan recipients certify that they conducted a cost-and-effectiveness analysis and have selected the activity that maximizes the potential for water and energy efficiency. The law also mandates that all SRF loan recipients certify that they have developed a funding plan to maintain assets built using SRF funds and will implement water and energy conservation efforts as part of the plan.

While many large utilities can comply with these requirements using in-house staff, smaller communities must hire an outside consultant to meet these requirements which increases the cost of water infrastructure. Additionally, many small communities, particularly those with shrinking populations and limited revenue, lack the professional capacity to ensure continued compliance with the certifications. As a result, plans are often shelved shortly after construction is completed.

States need a reliable source of funding to ensure robust participation in the Clean Watershed Needs Survey. States, including many SRFs, are responsible for collecting data and documentation for the Clean Watershed Needs Survey but many don't have adequate financial resources or staff to dedicate to the effort. Allowing states to use ½% of their capitalization grant would guarantee funding for participation in the survey.

Small, rural, disadvantaged and underserved communities need technical assistance. The Drinking Water SRF has the ability to use 2% of their annual capitalization grant to provide technical assistance to communities that serve a population of 10,000 or fewer. Providing the same financial resources for projects funded by the Clean Water SRF would provide significant assistance to communities that lack the professional resources to plan and build these important projects.

Thank you again for the opportunity to share these thoughts with you. The SRF community looks forward to working with you to strengthen the state-federal partnership that has proven its effectiveness in funding water infrastructure that protects public health and the environment.

If you would like more information about the SRFs or our policy recommendations, please visit. www.MoreProtectionLessProcess.org, or contact our Executive Director, Deirdre Finn, at dfinn@cifanet.org.