RECOMMENDATIONS TO
IMPROVE THE STORMWATER
PROGRAM IN THE U.S.
2023
1. Advance Stormwater Provisions in the Infrastructure Investment and Jobs Act (IIJA)

Request: In the FY24 Budget fully fund the recently authorized stormwater programs for the construction, rehabilitation, and advancement of stormwater infrastructure and technologies.

The Infrastructure Investment and Jobs Act (IIJA) included the establishment of new programs for stormwater infrastructure and innovative technologies. This is the federal government’s most significant commitment yet to assist communities nationwide with their stormwater management challenges. The authorization of these new programs now necessitates Congress to provide appropriations. Specifically, Congress should include in the Fiscal Year 2024 budget:

- $5 million for the Centers of Excellence for Stormwater Control Infrastructure Technologies (CESCITs). FY23 provided $3 million of the $5 million authorized. (IIJA Sect. 50217(b))
- $10 million for community planning and implementation grants for stormwater or watershed-based planning investments. (IIJA Sect. 50217(c))
- $280 million for Sewer Overflow and Stormwater Reuse Municipal Grants (OSG) program. FY23 provided $50 million of the authorized $280 million. (IIJA Sect. 50204)
- $25 million for Clean Water Infrastructure Resiliency and Sustainability Program. (IIJA Sect. 50205)
- $25 million for the Alternative Source Water Pilot program, including stormwater capture. (IIJA Sect. 50203)
- At least, $50 million for WIFIA. FY23 provided $68 million. (IIJA Sect. 50215)
- $10 million for the Small & Medium POTW Circuit Riders Technical Assistance, including stormwater management. (IIJA Sect. 50206)
- $3 billion for the Clean Water State Revolving Fund, as it is authorized to receive in FY24 (IIJA Sec. 50210)

We ask that Congress fully fund these provisions due to their positive impact on the stormwater sector. An example of particular significance is the $3M in the FY23 Omnibus which establishes and supports up to five national Centers of Excellence for Stormwater Control Infrastructure Technologies. This funding allows for research focused on the performance of new and emerging technologies. Additionally, it supports the investigation of stormwater control infrastructure technologies and innovative models for funding, finance, planning, and implementation of stormwater infrastructure. To fully realize the expertise the new Centers of Excellence for Stormwater Control Infrastructure Technologies will be providing to communities, full funding for the community planning and implementation grants which were also authorized in IIJA Section 50217 is needed in FY24.

While stormwater infrastructure funding is eligible for Clean Water SRF funding, very few MS4 and green infrastructure projects receive funding annually. EPA data estimates only about 1.8 percent of Clean Water SRF funding has gone toward stormwater infrastructure. There are a variety of reasons for this deficit in funding, including the Clean Water SRF application process disfavors stormwater projects or no local loan repayment authority. Congress should request a Government Accountability Office report analyzing the reasons for limited stormwater infrastructure funding the Clean Water SRF, and how the program can be improved to address local stormwater infrastructure investment needs.

A recent study suggests that over 100,000 jobs can be created when meeting the estimated, annual funding gap in the stormwater sector.

CWSRF Funding 1988-2020 – Project Types

- 92.6% Wastewater: Secondary Treatment, Advanced Treatment, I/I & Sewer System Rehab, New Sewers & Interceptors, CSO Collection.
- 3.6% Stormwater
- 2.0% Nonpoint Source
- 1.8% Other

“Other” mostly includes Water Conservation, Energy Conservation, Desalination, and Planning & Assessment projects.
588,000 miles of streams and 13 million acres of lakes have been identified by the EPA as impaired (polluted).

2. Support Stormwater Infrastructure Funding Tools

Request: Develop new and improve existing funding programs to drive needed stormwater infrastructure investment across the country.

The 2018, 2020 and 2022 Water Environment Federation MS4 Needs Assessment Surveys identified funding as the priority for stormwater programs across the country. For instance, only approximately 25% of regulated stormwater communities have a dedicated revenue source (i.e., stormwater utility), and only 1.8% of Clean Water State Revolving Fund (SRF) loans have gone to stormwater infrastructure investments over the 30-year duration of the Clean Water SRF program. These facts underpin the urgency for recommended actions Congress should consider, which are described below.

Establish a Regional Pilot Stormwater Construction Grant Program (SCGP) that would transition into a Stormwater State Revolving Fund (SSRF) program

The concept of an SCGP regional pilot is based off the history of funding assistance that helped kick-start the level of investment in the drinking water and wastewater sectors. Initial funding would be primarily grant-based with a transition to loan-based assistance over the time (15-20 years) needed for this transition to occur. Roughly $9B annually over 20 years would be needed to bring a level of parity in funding between the wastewater and stormwater sectors.

Adjust the recently established Overflow and Stormwater Grants (OSG) program state allocation formula

The current state allocation formula for the OSG program relies most significantly on needs identified in the Clean Watershed Needs Survey (CWNS) administered by EPA as well as other factors such as local annual average precipitation, total population and urban area population. This approach creates a disparity between relatively high rainfall states with high numbers of combined sewer overflows (CSOs) and arid states with no/ few CSOs (states with combined sewers tend to be located east of the Mississippi River). Congress should increase funding for the OSG program as well as direct the EPA to revisit and update the allocation formula for a more equitable distribution of funds across the states and in historically underserved areas.

Revise the CWA Section 319 program to allow projects by MS4 permittees – create a separate stormwater sub-program with-in the Section 319 program

The CWA Section 319 program does not allow for funds to be used by communities to meet NPDES regulatory requirements. In 2004, a change was made to enable the use of Section 319 funds by Phase II MS4 programs, but this change was eliminated shortly thereafter. Congress should expand Section 319 activities to include those of regulated communities.

3. Federal Response to Intense Rainstorms and Localized Flooding

Request: Modify statutory authorities to allow and promote interagency (FEMA, EPA, NOAA, USDA, USACE) collaboration to address intense rainstorms. Create a grant program to help local communities and utilities to develop full-system computer models of their stormwater systems and real-time rainfall tracking and forecasting platforms.

In most regions of the United States, more of our rainfall is coming in intense storms. We are seeing the impacts of this change in increased localized flooding, resulting in immense property losses and threats to human health and life. The federal response to this change has been muted, largely because of existing statutory authorities that do not recognize the impacts of precipitation alterations due to climate change.

In an interview on CNN’s State of the Union on 9/4/2022, FEMA Administrator Deanne Criswell said: “FEMA’s maps, right now, are really focused on riverine and coastal flooding….I think the part that’s really difficult, right now, is that our flood maps don’t take into account excessive rain….We are going to continue to work with all of our local jurisdictions to help them better identify what their needs are and help them create better predictive models.”

Moreover, projects that focus solely on water quantity control are not eligible for CWSRF assistance as these funds are only to be invested to meet Clean Water Act goals, which are based upon water quality parameters. The same restrictions exist for project data associated with the Clean Watersheds Needs Survey.

The average annual cost of flood damage in the United States is more than $2 billion. Each year about 100 people lose their lives to floods.

Municipal stormwater programs play important roles in managing the runoff and impacts from rainstorms. Local jurisdictions use hydrologic and hydraulic (H&H) computer models to predict the movement of water. These models are frequently used for project sites and problem areas within cities. Very few (there are no accurate estimates) cities have “full system H&H models” – models that include the entire city, all the major pipes and stormwater system components, and all local receiving waters like constructed ponds, lakes, wetlands, and streams.

Once created, full-system H&H models can be run with various rainfall amounts to identify the points where the local stormwater systems will fail. The models can then be used to design and test the most cost-effective mitigation measures to strengthen the local system and avoid potentially catastrophic impacts.

We urge Congress to:

- Modify statutory authorities to enable and direct FEMA, EPA, NOAA, USDA, and USACE to work together to address intense rainstorms and localized flooding
- Create a grant program to assist and incentivize municipalities to develop computer models of their stormwater systems and real-time rainfall tracking platforms.

4. Support Source Control of Stormwater Pollution

Request: Direct the US EPA to establish a permanent program within the appropriate Office and provide dedicated funding for a source control program for stormwater pollutants.

After over 30 years of experience implementing the provisions of the Clean Water Act, stormwater professionals have determined that it is not practicable to remove many pollutants from stormwater such as fertilizers and salt from road deicing at the end of the pipe. These pollutants must be controlled at the source using product substitution, green chemistry, and discontinuing the use of some chemicals. Source control is by far the most cost-effective and efficient way to ensure a safe water supply in the US.

Source control of stormwater pollution has documented success: EPA’s use restriction of several organophosphate pesticides is an example of the application of source control. Discontinued pesticides that previously degraded rivers and streams are no longer being found in monitoring programs. Source control will be the only viable control method for newly discovered toxic pollutants such as PFAS (per-and poly-fluoroalkyl substances and variants), microplastics, and tire wear derivatives, such as 6PPD.

Ultimately, we must evaluate which chemicals can only be removed through source control and modify stormwater programs accordingly. This information will also allow stormwater permit holders to develop incentives for private companies to adopt environmentally friendly products and practices, working in concert with requirements to track chemical fate and impacts in the environment and restrictions on use. Local stormwater programs have identified chemicals and compounds best mitigated through source control. A dedicated source control program at EPA can develop best practices for these chemicals and compounds for programs to implement on a national basis.

There are more than 85,000 chemicals listed under the Toxic Substances Control Act, and there are over 175,000,000 organic and inorganic substances commercially available in the marketplace. Given the scale of this problem, developing a source control program for stormwater is an ongoing investment that requires federal leadership to be successful.

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National Map of Regulated MS4s

There are 7,550 MS4 permittees (cities, towns, and agencies) that must comply with the MS4 stormwater provisions of the Clean Water Act.