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Institute

nmsa
National
Municipal
Stormwater
Alliance

RECOMMENDATIONS TO
**IMPROVE THE
STORMWATER
PROGRAM
IN THE U.S.**

APRIL 2020

SUMMARY

Municipalities need federal assistance to fix aging stormwater infrastructure, reduce flood risk, and comply with the Clean Water Act requirements. This fact sheet outlines the federal assistance local communities and utilities require to protect surface water sources in the US and ensure public safety. Addressing long-term issues of funding, providing effective tools, environmental data and pollution source control are reasonable and practical for Congress and the Executive Branch to enact in water resources and infrastructure stimulus bills.

STORMWATER PROGRAM RECOMMENDATIONS

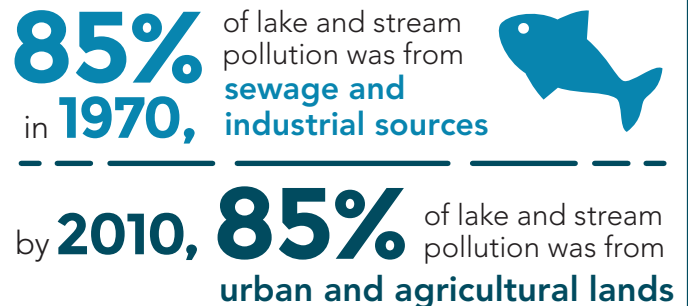
1. Stormwater Infrastructure Funding Tools

Request: Establish a technical assistance grant program (at regional or federal level) to assist communities and non-traditional MS4s such as DOTs and institutions with the creation of sustainable funding sources for stormwater infrastructure. This grant program should integrate and streamline existing technical assistance grant programs in EPA and other federal agencies.

In early 2020 the EPA will be providing Congress with a report evaluating funding options for the 'construction, rehabilitation, and operation and maintenance of stormwater infrastructure'. The Report will be produced by a congressionally authorized Stormwater Infrastructure Funding and Financing Task Force. Local communities, non-traditional MS4s and utilities need stormwater infrastructure investment in the next decade to ensure public safety and meet the requirements of the Clean Water Act. Funding tools for local communities and non-traditional MS4s can help them identify approaches to finance the required infrastructure using general funds, grants, fees, and utilities in combination with public and private financing such as state revolving funds, bonds, private loans, and equity investments. These funding sources can be combined with emerging Community-Based Public-Private Partnership approaches that can efficiently deliver public improvements.

The available funding streams and project delivery options are complex and varied. Communities and non-traditional MS4s need assistance in developing successful financing mechanisms and reducing finance risk. We recommend that Congress give close consideration to the recommendations of the congressionally authorized Stormwater Infrastructure Funding and Financing Task Force, and, expand existing federal infrastructure funding programs and/or establish new federal programs that will address our nation's stormwater infrastructure funding and operation and maintenance needs. Additionally, Congress should continue the federal Stormwater Infrastructure Funding and Financing Task Force for a second year to develop funding, financing and project delivery templates for local communities and non-traditional MS4s.

DID YOU KNOW?



A recent study suggests that **over 100,000 jobs** can be created when meeting the \$7.5 billion funding gap in the stormwater sector.

2. Stormwater Treatment System Verification Program Funding

Request: Provide funding to EPA Regions to develop a national performance verification program for stormwater control measures (SCMs).

Stormwater pollution is a recognized problem in urban watersheds throughout the United States. To ensure that engineered stormwater management systems are achieving their intended benefits, better information is needed linking the performance of specific treatment system designs to their ability to remove stormwater pollutants. While research focusing on the performance of stormwater treatment systems has occurred, a systematic framework to measure the efficacy of these systems does not exist at the national level. As a result, the understanding of, and confidence in, the performance of stormwater systems is imprecise and limited.

In addition, over 50 different modular stormwater management systems have been developed in recent years by private industry for use in urban environments. There are several successful regional stormwater treatment system verification and certification programs for these systems, but adoption of results from these programs outside of their immediate jurisdictions has been limited. A national performance verification program, drawing on the success of

these programs, is being developed by local, regional and national stakeholders to:

- inform and guide significant local investments in stormwater infrastructure,
- accelerate the implementation and adoption of innovative stormwater management technologies,
- create regulatory confidence and provide accurate “crediting”,
- to minimize duplicative performance evaluation efforts, and
- establish a common framework for testing and evaluation of both public domain and proprietary stormwater control measures.

Significant progress has been made in partnership with the EPA, Water Environment Federation, American Society of Civil Engineers, Interstate Technology and Regulatory Council and others. However, funding for EPA regions is needed to bring the program to the point of launch, where it can be adopted by the more than 7550 local and state entities subject to municipal stormwater permit regulation.

3. Improved Stormwater Infrastructure Needs Data Collection

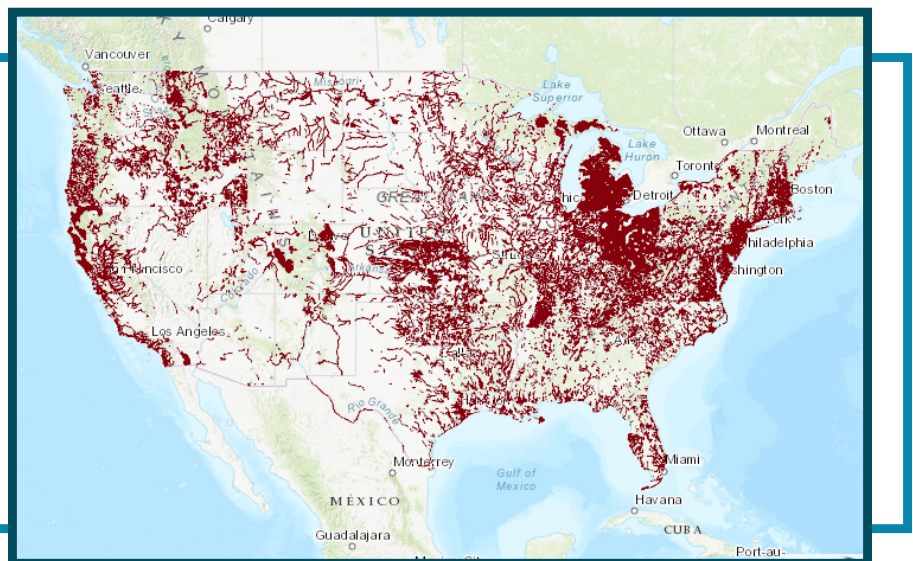
Request: Provide funding to NOAA to fully support the application and update of the Atlas 14 (precipitation frequency estimates) country-wide every decade.

The frequency and intensity of precipitation patterns is shifting in many regions across the U.S. To capture these dynamics, the National Oceanic and Atmospheric Administration (NOAA) has developed an updated program that uses enhanced statistical analysis for prediction of precipitation frequency, storm event depths and durations. This program, known as Atlas 14, has been employed throughout most of the nation since its inception in 2004, and has provided an improved level of confidence in predicting the impacts of storm events. NOAA Atlas 14 rainfall information are used for infrastructure design and

planning activities under federal, state, and local regulations. They also help delineate flood risk and manage development in floodplains.

Funding is needed to support nation-wide efforts to update all precipitation data every 10 years using Atlas 14 and ensure that designers and modelers can develop the most accurate predictions related to storm-driven impacts. These predictions will also ensure the safe design and construction of public works infrastructure.

588,000 miles of streams and **13 million acres of lakes** have been identified as impaired (polluted) by the EPA.



4. Enable Comprehensive Source Control for Stormwater Pollution

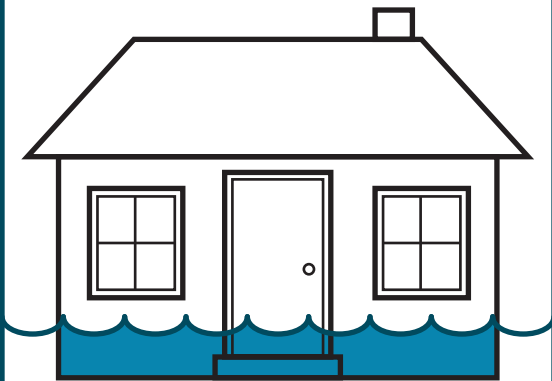
Request: Direct the US EPA, US DoT, and USGS to examine the authority under the Clean Water Act and Toxic Substances Control Act and other statutes as appropriate, to control pollutants in stormwater at the source, and assist states developing pollutant source control programs. We recommend that Congress direct federal agencies to identify a preferred regulatory pathway for source control and develop tools to support source control implementation by NPDES permit holders.

It is technically infeasible to remove many pollutants once they become entrained in stormwater. It is also costly to treat or remove pollutants once they are in the environment. Source control is by far the most effective and cost-efficient approach for control of pollutants such as pesticides, nutrients, many metals, chlorides and a vast number of emerging pollutants. EPA's use restriction of several organophosphate pesticides is a successful example of the application of source control. New emerging pollutants in the environment include PFAS (per- and polyfluoroalkyl substances and variants) and microplastics. Especially problematic are chemicals such as PFAS that accumulate in the human body.

The problem is that there are too many chemicals for municipalities to track, test for and regulate. Local communities need help from the private sector to accomplish this task or we will not break the cycle of continually discovering 'new' emerging pollutants. There are more than 85,000 chemicals listed as falling under the Toxic Substances Control Act, and there are over 55 million organic and inorganic compounds registered with the Chemical Abstract Service. A united federal effort to examine the existing regulatory framework will facilitate control of stormwater pollutants at the source while reducing overall treatment costs and enhancing quality of life.




The most common pollutant in the U.S. is **pathogens**, compromising the sanitary quality of surface waters.



On average, the annual cost of damage from inland and coastal floods is higher than any other natural disaster event.

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Municipal Separate Storm Sewer System

The EPA estimates that more than 8,500 MS4 permittees (cities, towns and agencies) must comply with the MS4 stormwater provisions of the Clean Water Act.