



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

 **wef** | Stormwater
Institute


National
Municipal
Stormwater
Alliance

DID YOU KNOW?

There are

7,550 MS4 stormwater permittees

in the United States, including more than **6,500 MS4 cities.**

Communities with MS4 stormwater permits include **more than 80% of the U.S. population.** (EPA)

National Map of Regulated MS4s



STORMWATER is not currently included in the **ASCE Infrastructure Report Card** due to a lack of sector data.

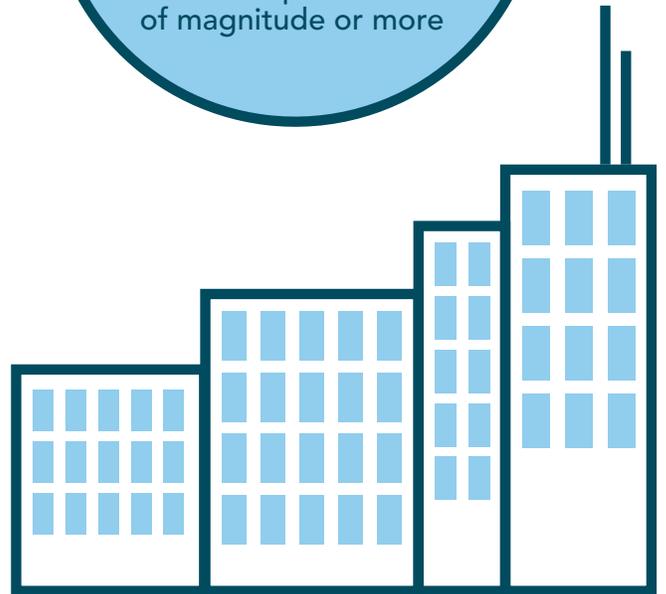
Only approximately

1,500
OF THE
7,550

permitted entities in the U.S. have a dedicated revenue source.

EPA estimates that **\$150 BILLION IS NEEDED** for MS4 and CSO investments over the next 20 years across the country.

While only 2% of the continental U.S. is covered by impervious surfaces (about the size of the state of Ohio), the impact on lakes, rivers and estuaries is several factors larger than this - up to an order of magnitude or more



EPA has identified urban runoff as the only major growing source of water pollution across much of the country

As of August 2005, over **26,000,000 organic & inorganic substances**

have been documented,

9,000,000

of these are commercially available.

Of these, fewer than 240,000 are inventoried or regulated (3%). These chemicals make their way into surface waters across the country.

SUMMARY

The introductory text to the Clean Water Act (CWA) noted, “It is the national goal that the discharge of pollutants into navigable waters be eliminated by 1985.” This goal has yet to be achieved, and new tools are needed to help make this goal a reality. This fact sheet outlines a long-term strategy to guide the stormwater program through the next 20 years. These strategies are reasonable and practical actions for Congress to enact. These recommendations address the fundamental issues of: reliable funding, infrastructure retrofit and maintenance and pollution source control as the next steps to achieve the goals of the Clean Water Act.

STORMWATER PROGRAM RECOMMENDATIONS

1. Stormwater Infrastructure Funding.

Request: Convene a Task Force to study funding for stormwater infrastructure (and green infrastructure) through existing federal funding and financing programs, such as the Clean Water State Revolving Fund, USDA Rural Development, and Economic Development Administration.

Stormwater gray and green infrastructure are widely viewed as a key part of the solution to surface water quality issues, local flooding problems, and improved infrastructure resiliency. Green infrastructure is being introduced in many states in the urbanizing fringe but is largely absent in the built urban environment due to lack of funding. To improve surface water conditions (protect beneficial uses and reduce urban flooding) green infrastructure and/or other stormwater control measures will need to be retrofit into the existing urban landscape to achieve watershed-specific goals.

The challenges related to funding in the stormwater sector are daunting. The U.S. Environmental Protection Agency’s (EPA) estimates costs for stormwater retrofits in the Chesapeake Bay alone at about \$7.9 billion per year. Municipalities need state and federal assistance in defining funding sources. The funding must be available in all states, be affordable per the EPA’s integrated planning guidelines, and sufficient to support both the capital expenditures as well as long-term operation and maintenance costs. We recommend the creation of a federal task force to study this problem and provide workable solutions, with participation by the permittees and other program stakeholders.

2. Improved Stormwater Infrastructure Needs Data Collection

Request: Insert “municipal stormwater” in to the required data collected through the Clean Watersheds Needs Survey, CWA SEC. 516 (b)(1).

Under the Clean Water Act stormwater is regulated through the National Pollutant Discharge Elimination System (NPDES), which requires permit holders, such as communities, business and industry, and state transportation departments, to meet federal regulatory water quality standards. The infrastructure needs to meet those requirements account for a substantial investment by communities, which is primarily paid for by local taxes and utility rates. While these investments are required under the CWA, there is limited and inconsistent data about the amount of infrastructure investments needed for communities to meet the requirements of their NPDES Permits.

A solution to this lack of data is to insert “municipal stormwater” into CWA § 516 (b)(1). This would add to the Clean Watershed Needs Survey data collection process the requirement that States request Municipal Separate Storm Sewer System (MS4) entities to submit data about their future infrastructure investment needs to meet the requirements of their NPDES Permit. That data will then be reported to the EPA and Congress to help guide national policy and infrastructure funding decisions. We recommend the creation of a federal task force to study this process change and provide workable solutions, with participation by the affected communities.

3. Provide New Program Tools.

Request: Direct EPA to work with permit holders to develop model permit language and incentives to develop integrated water plans.

Stormwater NPDES permits should be written to encourage the use of EPA's integrated planning framework as an optional voluntary program framework, which would include the development of a master plan describing infrastructure improvement needs, asset management, modeling to demonstrate compliance with water quality goals and standards, a schedule and a cost estimate. This approach would likely transcend the current 5-year permit cycle. Permits could include reductions in other program requirements to provide incentives for MS4s to choose the optional framework and create integrated plans. Additionally, EPA should be directed to provide technical assistance and grant funding to MS4s willing to adopt stormwater NPDES permits through a voluntary integrated planning framework.

4. Create a Basis for the Implementation of Source Control for Stormwater Pollution.

Request: Direct EPA to examine the authority under the Clean Water Act and Toxic Substances Control Act as appropriate, to better control pollutants in stormwater at the source, and assist states developing pollutant source control programs.

It is technically infeasible to remove many common pollutants once they become entrained in stormwater. We need to keep them from being introduced in the environment in ways that allow contact with stormwater. Source control is by far the most effective and cost-efficient approach for pollutants such as pesticides, nutrients and many metals. An example of source control is the reduction of copper in automotive brake pads, instituted in California and Washington. Copper in vehicle brakes was found to represent up to half of the pollutant load in urban stormwater. Substituting other materials in brake pads is estimated to save over \$1 billion in California at the municipal level for urban copper control programs. EPA's use restriction of several organophosphate pesticides is another successful example of the application of source control.

- We recommend that EPA identify pollutants in stormwater that are amenable to source control, and develop tools to support source control implementation by permit holders for the identified pollutants.

We urge support of the following for better stormwater management:

- Improve federal and state stakeholder processes to engage the wider population of MS4 permittees in community solutions.
- Improve information exchange among MS4 permittees and promote the "one water" concept among water agencies (see: www.uswateralliance.org/one-water)
- Increase funding and emphasis on urban stormwater research and technology transfer at the federal and state levels. Provide national coordination.

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