

March 1, 2022

The Honorable Mikie Sherrill  
Chairman  
Subcommittee on Environment  
Committee on Science, Space and Technology  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Stephanie Bice  
Ranking Member  
Subcommittee on Environment  
Committee on Science, Space and Technology  
U.S. House of Representatives  
Washington, DC 20515

Dear Chairman Sherrill and Ranking Member Bice:

I am writing on behalf of the American Society of Civil Engineers to thank the Subcommittee and to commend your leadership in conducting the hearing: *From Grey to Green: Advancing the Science of Nature-Based Infrastructure*. ASCE believes that a well-designed and maintained infrastructure, be it for stormwater or any form of water management, is critical for protecting communities from costly flooding and protecting water quality in our waterways. Stormwater systems should be a combination of gray, green, and natural infrastructure. Congress has an opportunity to create and expand programs that would support nature-based infrastructure.

Natural systems often offer the most cost effective and efficient solutions. However, right now the cost of construction and maintenance is the only thing quantifiable. The other benefits are not easy to quantify and that needs to be addressed. This is an area where the federal government could help. Gathering and sharing data, creating standard guidebooks of practice to use in local settings, and fully funding and disseminating information from the Environmental Protection Agency's (EPA) Clean Watersheds Needs Survey on a routine basis is a critical role for the federal government. Such efforts could assist local governments better understand the benefits of using natural systems as part of infrastructure design and operations.

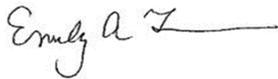
ASCE's [2021 Report Card for America's Infrastructure](#) rated the overall condition of the nation's infrastructure a "C-" across 17 categories, with the nation's stormwater systems graded for the first time and receiving a "D". Stormwater systems range from large concrete storm sewers, roadside ditches, and flood control reservoirs to rain gardens and natural riverine systems. While stormwater utilities are on the rise, with more than 40 states having at least one, the impervious surfaces in cities and suburbs are also expanding, exacerbating urban flooding, which results in \$9 billion in damages annually. Stormwater also affects water quality as polluted runoff from pavement enters water bodies. Nearly 600,000 miles of rivers and streams and more than 13 million acres of lakes, reservoirs, and ponds are considered impaired.

To address these issues, stormwater infrastructure must increasingly be implemented with a context-sensitive approach, that leverages a localized understanding of flood risk, land use practices and regulatory expectations. This approach informs the types, designs, locations, and long-term sustainability of stormwater systems. Resilience for stormwater infrastructure is reflected by a mix of optimized green, gray, and natural infrastructure, land planning and urban growth, updated asset management and, in water-scarce areas, the productive reuse of stormwater.

ASCE believes that there is much the federal government can do to assist state and local governments as they confront an upward trajectory of urban flooding impacts that will likely continue as our older stormwater assets cannot accommodate the changing rainfall patterns and intensity. Assistance in terms of research, data, and technical guidance could help local government address a growing risk.

Once again, thank you for your leadership in examining this growing problem. ASCE stands ready to work with the Subcommittee in moving forward. If you need more information or ASCE can be of further assistance, please do not hesitate to contact me at [efeenstra@asce.org](mailto:efeenstra@asce.org).

Sincerely,

A handwritten signature in cursive script, appearing to read "Emily A. Feenstra", followed by a horizontal line extending to the right.

Emily Feenstra  
Chief Policy and External Affairs Officer  
American Society of Civil Engineers