



GREEN STREETS | GREEN JOBS | GREEN TOWNS INITIATIVE

The Green Streets, Green Jobs, Green Towns Partnership (G3) aims to stimulate the green jobs market and enable families to work where they live and play. Small to mid-sized communities can boost their local economies and protect water resources through the use of watershed planning, design and construction of stormwater best management practices.

NATIONAL MUNICIPAL STORMWATER ALLIANCE

Support for Innovations in MS4 Sector

This project extended efforts by the National Municipal Stormwater Alliance (NMSA) to support a variety of innovations in the MS4 sector including the Community-Based Public-Private Partnership (CBP3) program approaches, smart green corridors, stormwater pond performance, encouragement in the development of a national-level report card for stormwater, and public outreach and messaging for stormwater programs. NMSA has worked on critical issues related to enhancing MS4 programs across the country by providing peer-to-peer learning and engagement opportunities, webinars, and technical information through the NMSA website. NMSA represents both large and mid-sized Phase I as well as small Phase II MS4s, all of whom have unique challenges.

receive input from the NMSA network on these critical issues. The organization hosted online and in-person meetings and workshops that gathered MS4 leaders from across the country to share information from the project areas as well as receive input/feedback on the challenges and opportunities to engage in implementation of project area elements. In addition, NMSA engaged in sector research to develop white papers to describe sector challenges in grant element areas as well as coordinate with other organizations to share information related to grant element areas.

Workshops included:

- Green Infrastructure Certificate Courses Delivery
- Stormwater Pond Summits
- Digital Innovations in Agriculture and Potential Benefits in the Stormwater Sector
- MS4 Sector Support – National Level Report Card for Stormwater
- Public Outreach, Engagement and Messaging to MS4 Sector
- Community-Based Public-Private Partnership Support

In this project, NMSA leveraged its membership network that includes state-level MS4 organizations within the Chesapeake Bay watershed and outside of the Bay watershed to develop and support vehicles and venues for information dissemination as well as



30 volunteers with 300 hours volunteered

5 workshops with 2,500 attendees

8 publications created



PROJECT ELEMENTS

- **Green Infrastructure Course Delivery**— NMSA partnered with University of Maryland Eastern Shore to provide the technical support to enhance the recently created courses and deliver the material
- **Stormwater Pond Summits** – It is estimated that between one and two million ponds currently exist in the US for stormwater control. Many of these ponds are now reaching the end of their design life and there is growing research that suggests that ponds in some circumstances have evolved to become sources, not sinks of pollution. Technology and innovation have developed to address these challenges and to optimize the capacity of these passive practices to drive enhanced treatment potential overall. NMSA held 4 webinars surrounding this topic
- **MS4 Sector Support – National Level Report Card for Stormwater**— NMSA worked with partners such as ASCE and the Water Environment Federation (WEF) to gather the data needed to make the case to support the integration of stormwater into the Report Card. A significant element of this effort was the WEF MS4 Needs Assessment Survey, which was initiated in 2018 and repeated in 2020. Grant funds provided support to analyze data from this survey needed to develop outputs critical for the successful inclusion of stormwater into the next (2021) Report Card. Based upon this information, ASCE’s Committee on America’s Infrastructure (CAI) officially agreed to this inclusion
- **Public Outreach, Engagement and Messaging to MS4 Sector** – NMSA worked with EPA staff and support to develop and host the National MS4 Online Resource. The purpose of this resource is to provide a central hub of basic information on MS4 programs and technical issues as well as providing a repository for links to documents (reports, studies, etc.) pertinent to MS4 program managers

STORMWATER POND SUMMITS

The 4 webinars were as follows:

- September 15, 2020: Research on the problems with ponds, including the build up of toxic material, the exporting of pollutants due to pond stratification, and the stationarity of design in the face of shifting precipitation patterns associated with climate change.
- September 17, 2020: Common problems with ponds due to aging and lack of O&M support and a view of stormwater ponds as assets in the context of asset management
- September 22, 2020: The highlighting of technologists and innovators who have brought to bear products and ideas to address the issues associated with stormwater ponds
- September 24, 2020: A showcase of MS4s who have developed and implemented programs to evaluate, analyze, prioritize, and address pond problems

Year Awarded: 2018

Award Amount: \$100,000

1. Asset Inventory & Data Gathering

of ponds total

ID types of problems

○ Physical

○ Performance/Functional

of ponds with problems with each problem identified

ID types of enhancements opportunities

of ponds with enhancement opportunities with each enhancement identified