



# OVERCOMING BARRIERS TO MUNICIPAL GREEN INFRASTRUCTURE IMPLEMENTATION

delta institute 

Photo by Tom Smith

Delta Institute is examining the barriers preventing Green Infrastructure from being installed across the Great Lakes at the scale needed to address climate change. Delta's research will inform the development of potential support services that will help municipalities overcome these barriers and improve local water quality, reduce flooding, and improve quality-of-life for their residents.

## Why our work is needed today

Small and mid-sized municipalities throughout the Great Lakes are experiencing chronic flooding events—often made worse by more frequent climate-impacted precipitation and inadequate stormwater infrastructure. Urban populations are expected to grow by 70% in Great Lakes states by 2050, taxing aging stormwater infrastructure during the accelerating climate crisis. In many communities, municipal governments and sewer districts are seeking to make necessary upgrades—or to explore more comprehensive approaches. For example, nature-based climate solutions like bioswales and stormwater trees can help reduce runoff, mitigate flooding impacts, improve water quality, and provide other important community benefits. Implementing these solutions, however, often presents new challenges for communities, such

as how to finance, design, procure, maintain, and engage community members.

Delta Institute's experience has illustrated the key need for robust research that uncovers the financial, political, environmental, and other barriers to widespread municipal green infrastructure (GI) implementation.

## Brief Overview of What We're Doing

Delta Institute (Delta), with funding from the Great Lakes Protection Fund, is partnering with municipalities throughout our region to identify the barriers to implementing GI in Great Lakes communities. We are engaging specifically with mid-sized municipalities in Illinois, Indiana, Michigan, and Wisconsin that are disproportionately impacted by flooding and have above-average Social Vulnerability Index scores (per US CDC/ASTDR assessment).

Our project team is engaging a cohort of approximately 10+ municipalities in a focused user research process to understand existing municipal approaches to GI implementation while uncovering the barriers that impede expanding and implementing GI. We'll then identify possible solutions to help municipalities overcome these barriers so that more communities are able to mitigate flooding, improve water quality, and create green spaces for residents through GI.

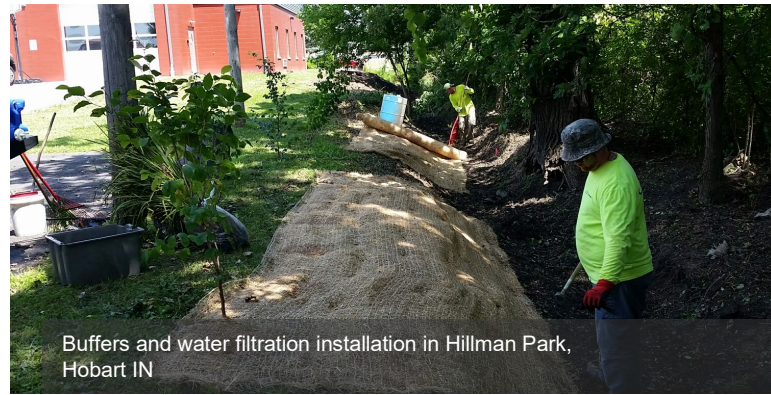
### Our partners and collaborators

We at Delta Institute thank those at the Great Lakes Protection Fund for selecting us to manage this important project. We would also like to thank our project partners for contributing their thoughts and acumen to our work, and our many prospective municipal partners.

### More about who we are

Delta Institute collaborates with communities to solve complex environmental challenges throughout the Midwest. We address Midwestern environmental, economic, and climate challenges today, so that our home and region are more resilient, equitable, and innovative tomorrow.

This project is part of Delta's Nature-Based Climate Solutions program, which assists municipalities by integrating natural climate solutions and GI to reduce climate change impacts by capturing 100 million stormwater



gallons and leveraging \$100 million in municipal GI investment. We focus on communities that are disproportionately affected by flooding and climate change, so that together we collaboratively improve environmental indicators, mitigate local climate impacts, and strengthen their neighborhoods' resilience.

By standardizing GI, creating innovative financing mechanisms for municipalities, and using natural solutions to water management, we will help our community partners attain improved water quality, canopy cover, and address equity issues through the benefits that healthier water and trees bring.

Please learn more about this project by visiting [delta-institute.org/project/gi-barriers](https://delta-institute.org/project/gi-barriers).

**We work every day to create a more resilient region for all our Midwestern family, friends, and neighbors.**

**Please join our efforts and help us today.**



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