

Community Engagement in Stormwater Planning

May 19, 10am PT, 1pm ET



Community Engagement in Stormwater Planning

Q&A

You ask: 13:05
How do I use these awesome tools?

Joshua Jones answered: 13:06
You are already using one of the most awesome tools. We'll discuss the rest right away.

Please input your question

☐ Send Anonymously Send

May 19, 10am PT, 1pm ET



Mute



Chat



Raise Hand



Q&A

Leave Meeting

Certificate of Completion

This session has **NOT** been submitted for pre-approval of Continuing Education Credits, but eligible attendees will receive a certificate of attendance for their personal record.

To receive a certificate:

- You must attend the entire session
- You must register and attend using your real name and unique email address - group viewing credit will not be acceptable
- You must participate in polls
- Certificates will be sent via email within 30 days

If you have questions or need assistance, please contact smallsystems@syr.edu.

About EFCN

The **Environmental Finance Center Network (EFCN)** is a university- and non-profit-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and water infrastructure.

The EFCN works collectively and as individual centers to address these issues across the entire U.S, including the 5 territories and the Navajo Nation. The EFCN aims to assist public and private sectors through training, direct professional assistance, production of durable resources, and innovative policy ideas.





WaterNow works to advance transformation in the urban water sector to accelerate the widespread adoption of resilient and environmentally sustainable strategies.

We do this as a national network for local water leaders and decision makers, empowering them with the technical assistance, resources, and tools they need to implement innovative One Water drinking water, stormwater, and wastewater solutions in their communities.



Today's Speakers



**Barbara L. Hopkins
Esq, ASLA**

Executive Director

Green Infrastructure Leadership Exchange



Claire Maulhardt
Stormwater Utility Director
Capital Region Water
Harrisburg, PA



Amy Weinfurter
Director of Strategic Projects
WaterNow

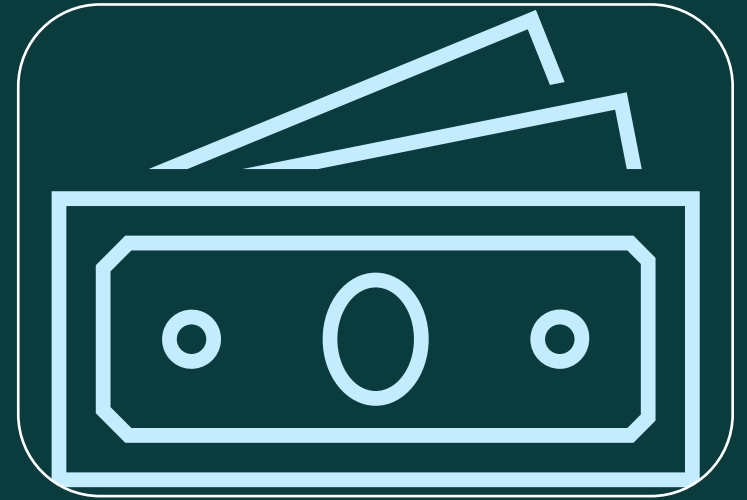
Webinar Objectives



Explore the role of
community engagement in
stormwater planning efforts



Share resources to
incorporate community
engagement into
stormwater planning efforts



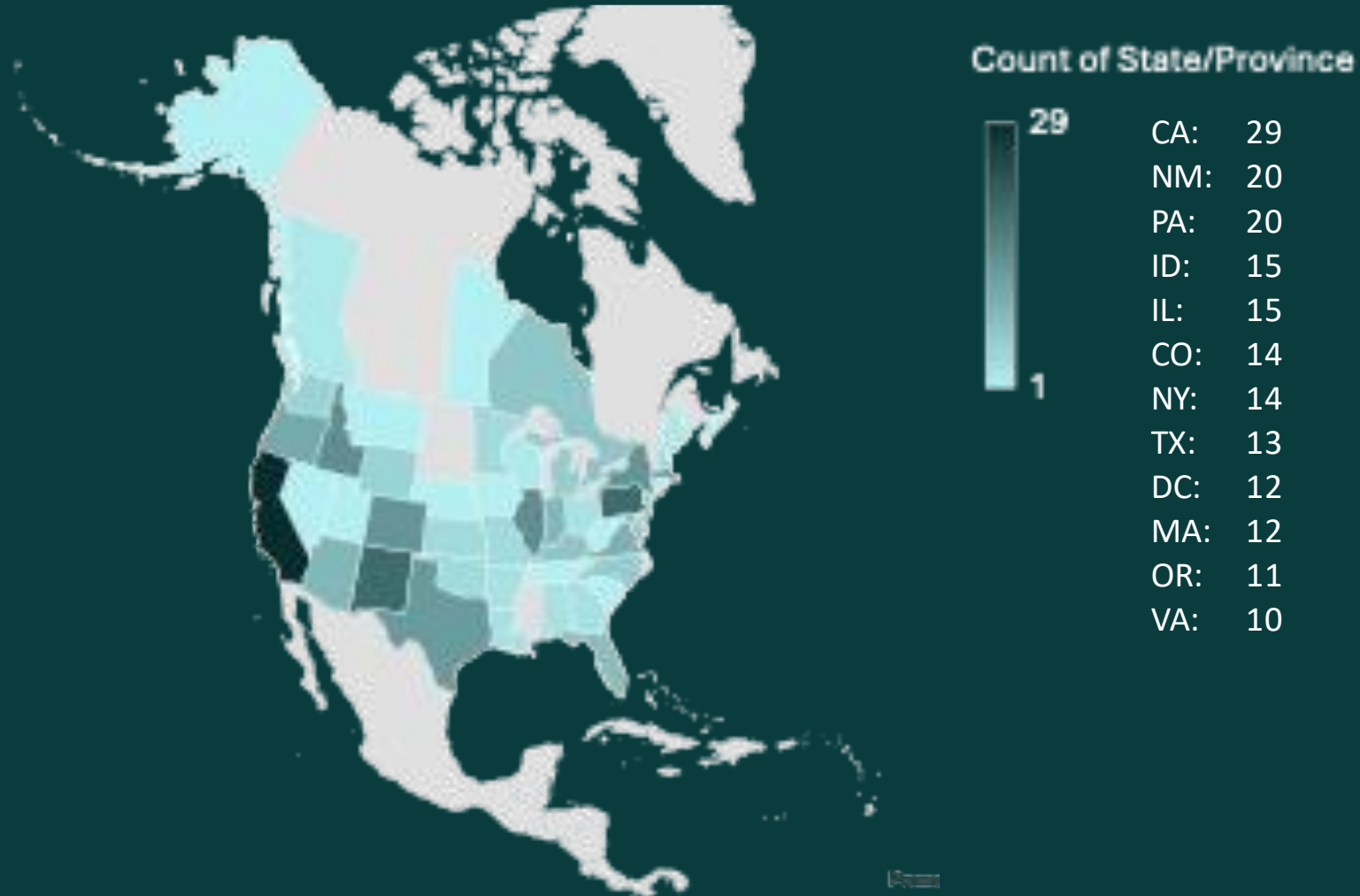
Highlight funding and
technical assistance
opportunities for
stormwater planning

Today's Agenda

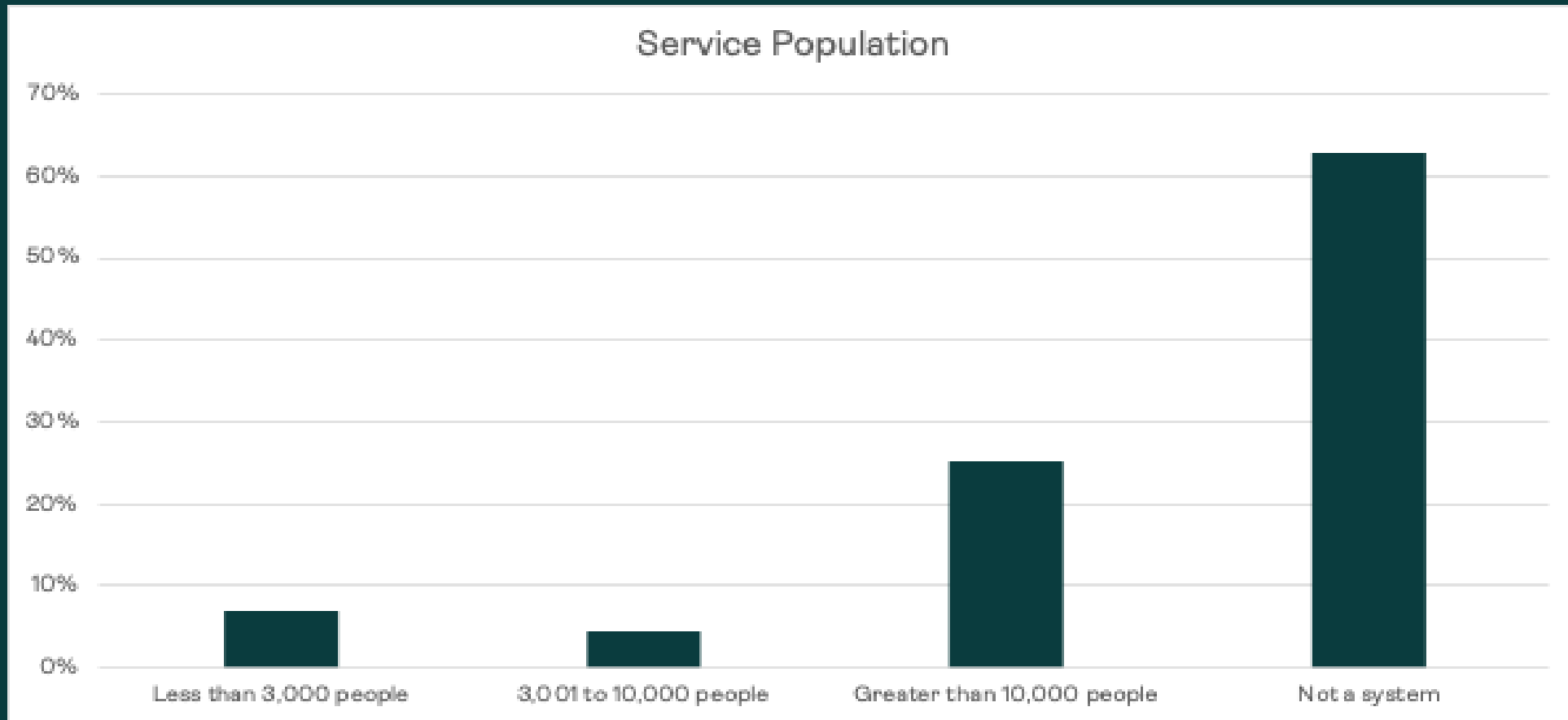
- Welcome & Introductions
- Who's in the Room
- Stormwater Planning & Community Engagement
- Community Insights
- Moderated Discussion and Q & A
- Technical Assistance Opportunities



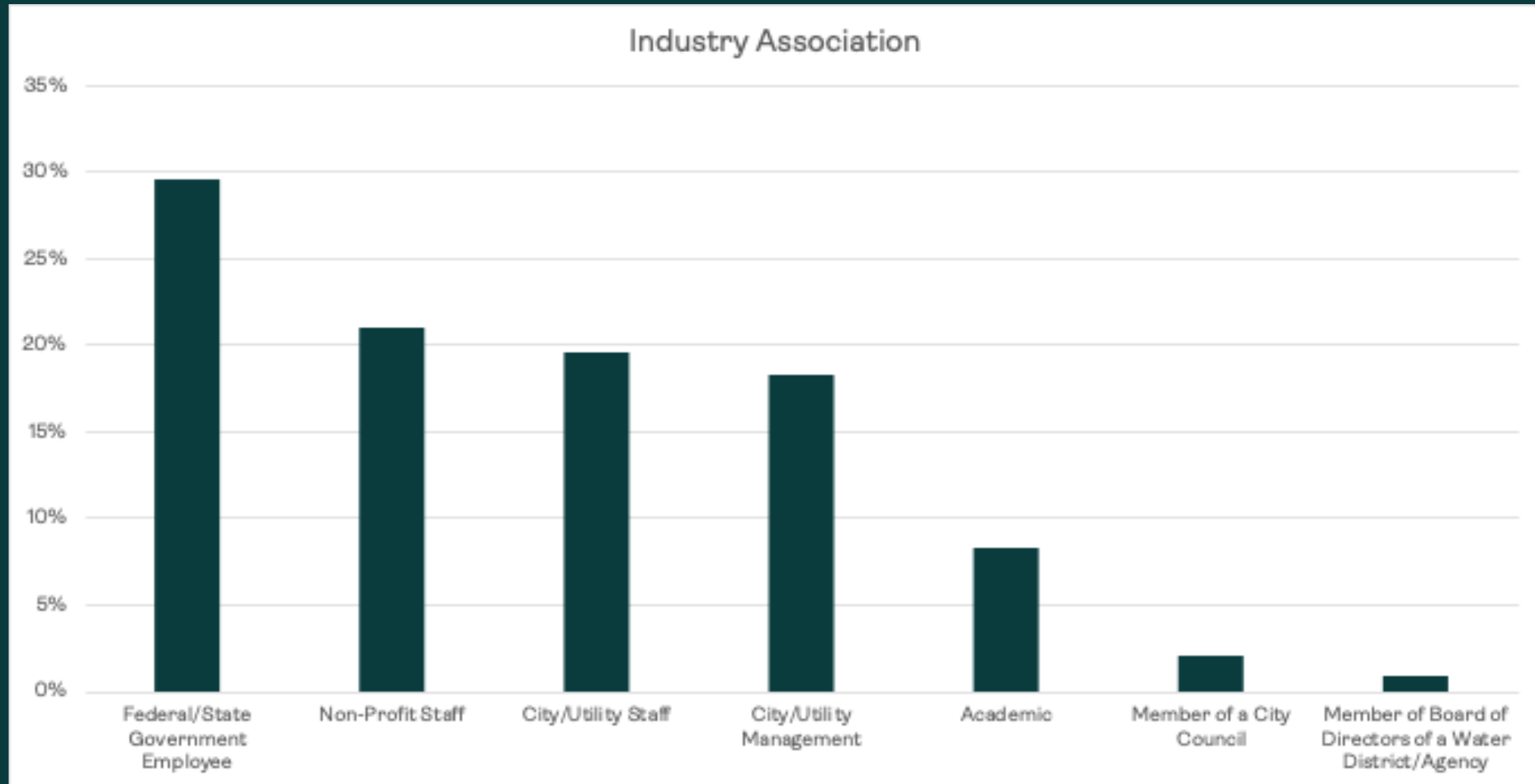
Who's in the room?



Who's in the room?



Who's in the room?



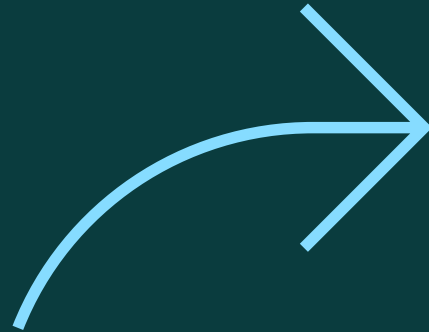
Time for a Poll!

Participate with Mentimeter

Go to: menti.com

Enter Code: 3778-2148

Or scan the QR code



Time for a Poll!

What is the status of your community or utility's stormwater plan?

- a) Developed and being implemented
- b) Currently in development
- c) Planned for the future
- d) No plan to develop
- e) Unsure

Time for a Poll!

How would you describe your community or utility's stormwater engagement efforts?

- a. Robust and well established
- b. Some efforts underway, but room to grow
- c. Just getting started
- d. No formal approach currently
- e. Unsure

Community Engagement in Stormwater Planning

Presentation to

Environmental Finance Center Network

May 19, 2026



GREEN
INFRASTRUCTURE
LEADERSHIP
EXCHANGE

Barbara L. Hopkins, Esq., ASLA

Executive Director

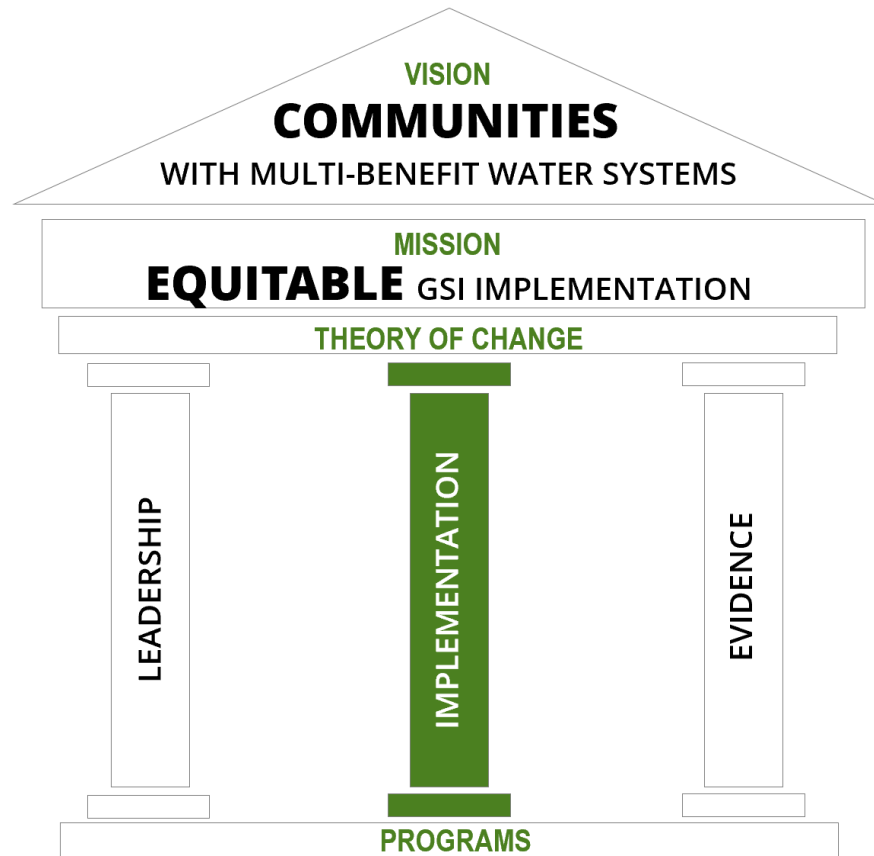
Email: barbara@giexchange.org



The Exchange ...

... is a cross-sector, social impact network and community of practice that seeks to activate local governments in the U.S. & Canada to implement green stormwater infrastructure (GSI) equitably.





Framing:

- Framework of GSI Practice
- Peer Learning
- Educ. Res. & Needs Survey
- Re-grant Program
- Partnership Projects

Training:

- Training Courses
- Webinars
- Annual Meeting
- Catalyst Program

Making the Evidentiary Case

- GI Library
- The State of Public Sector GSI
- GSI Impact Hub

Theory of Change

The Framework of GSI Practice

Why? Establish a Shared Vision

1 (Completed)

Center Equity

This topic explores preparing teams for equitable GSI delivery; centering community; ensuring project selection, siting, and investments enhance equity; designing projects and programs for lasting community benefits; fostering economic stability and wealth building; mitigating displacement risks; identifying equitable policies and programs; addressing racial equity; combatting biases in urban planning; and promoting equitable distribution of assets and benefits.

2 (In progress)

Advance Sustainability

This topic centers on advancing GSI as part of overarching sustainability goals, enhancing urban environments for cooler, safer and more biodiverse cities, and seamlessly integrating GSI strategies with other sustainability and resilience efforts. Key considerations include addressing climate resilience and implementing designs that are sustainable and adaptable to climate change.

3 (Completed)

Build Buy-in

This topic addresses making a compelling case for GSI; positioning green and gray solutions; securing leadership buy-in; fostering partnerships and intergovernmental coordination; employing effective narrative strategies; conducting cost-benefit analyses; engaging elected officials and senior champions; implementing public outreach; utilizing demonstration projects; sharing case-making research; fostering cross-pollination; and providing education and training.

What? Craft a Strategy

4

Align Policy, Procurement + Program

This topic focuses on understanding the regulatory environment at federal, state, and local levels; leveraging existing conditions to inform policies and programs; exploring program and procurement models; and coordinating across departments and agencies.

5

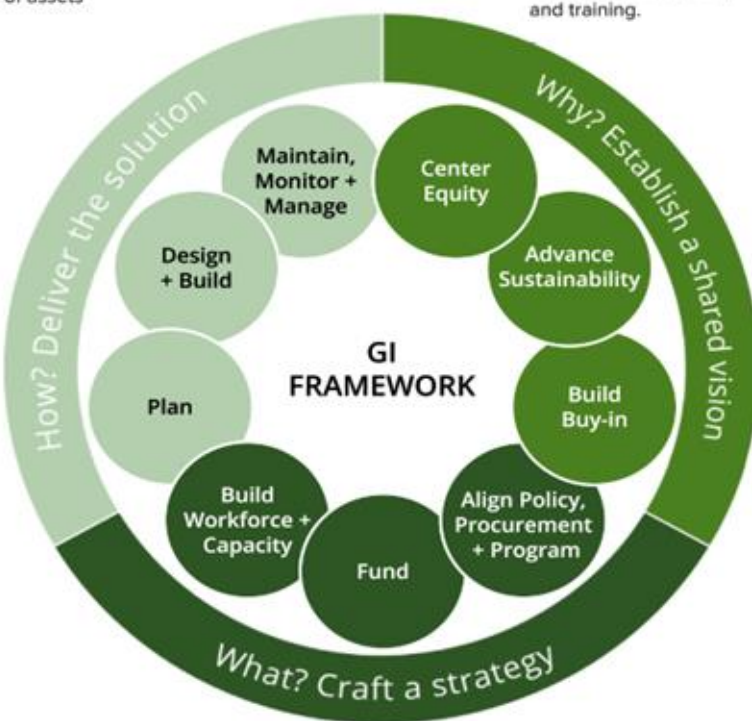
Fund

This topic covers determining how to pay for GSI; building public support for stormwater fees; identifying funding and financing tools aligned with program models; exploring funding accelerators; evaluating new financing approaches; obtaining loans and grants; securing funding for ongoing maintenance and asset management; and ensuring funding accessibility and equitable distribution.

6 (In progress)

Build Workforce + Capacity

This topic explores avenues for workforce training; ensuring confidence in knowledge and skills; assessing the potential need for mentor/protege, internship or apprenticeship programs; increasing opportunities in disadvantaged communities; forging partnerships; and program models for workforce development.



How? Deliver the Solution

7

Plan

This topic is dedicated to strategically planning GSI. It involves determining optimal locations; assessing quantity and types of GSI; integrating equity considerations; planning for lasting community benefits; mitigating displacement risks; defining design considerations; and aligning GSI with broader planning efforts.

8 (Completed)

Design + Build

This topic revolves around the design and construction of GSI. It includes national and local design standards; designing for lasting community benefits; reducing the chances of community displacement; involving communities in the design process; implementing best practices for GSI construction; addressing design barriers; fostering innovation; and designing with maintenance in mind.

9 (In progress)

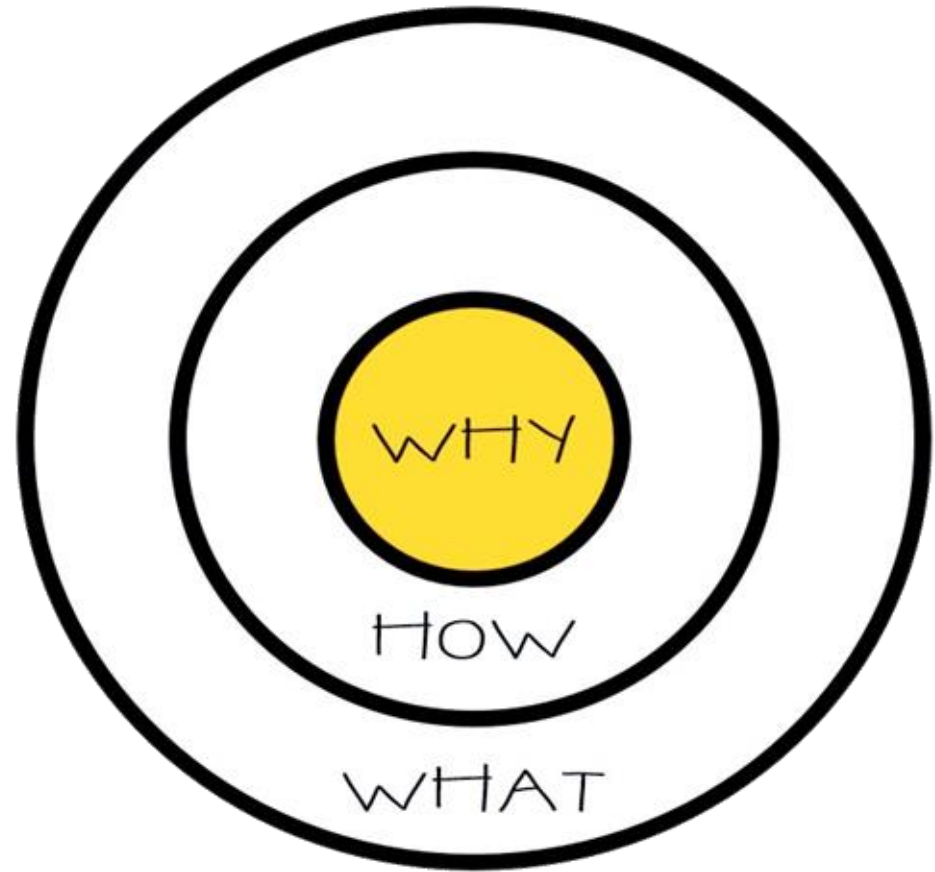
Maintain, Monitor + Manage

This topic includes understanding asset management systems and their benefits; planning and executing maintenance strategies; addressing funding for monitoring and maintenance; considering data standardization; and delving into various elements such as lifecycle costs, criticality, levels of service, capital project rehabilitation, public and private inspections, and ongoing monitoring efforts.



The Game Plan

1. The **“WHY”** behind our Framework of GSI Practice
2. **HOW** is it organized?
3. **WHAT** lessons does it offer?



~ Simon Sinek. *Start With Why.*



A framework is a best practice for organizing a profession's principles.

- “Innovators should precisely define the field they have targeted for change or emergence, starting with its basic conceptual frameworks and existing practices.”
- “With such a framework in place, innovators are then able to develop roadmaps for how they will influence the field over the long term.”

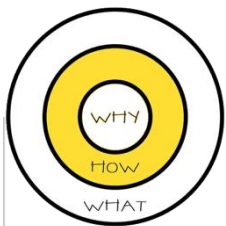
~ P. Plastrik, et. al. *Connect, Innovate, Scale-Up: How Networks Create Systems Change.*, p. 140 (2022).



Survey data reveals a pressing need for information on GSI principles, best practices and case studies.

A 2024 survey of 578 MS4 permittees across the U.S. revealed green infrastructure as one of the greatest areas of need for informational/technical resources – **for the 4th year in a row.**

~ Water Environment Federation,
2024 MS4 Needs Assessment Survey



EFFECTIVENESS OF USED LEVERS TO SCALE GSI

■ Ineffective ■ Somewhat effective ■ Very effective

Count of Responses

0 5 10 15 20 25 30 35 40

1

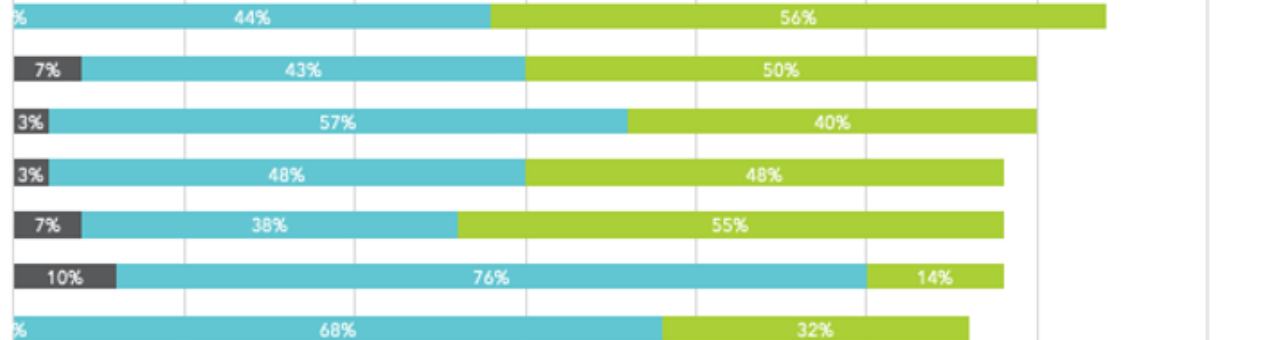
- Supportive elected official(s)
- Strong senior champions for GSI
- Public outreach and/or education about GSI
- GSI demonstration projects
- Cross pollination: departments, agencies, and/or sectors



PEOPLE

2

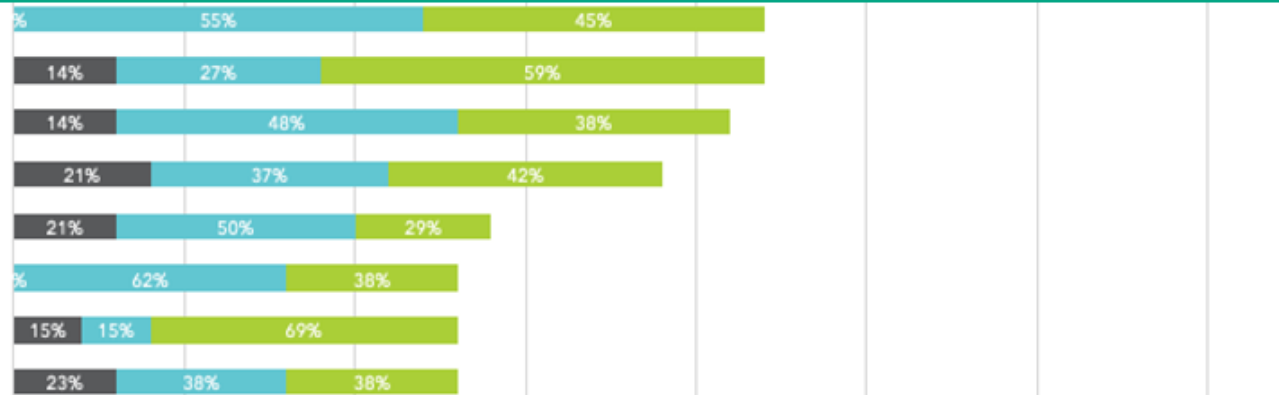
- Requiring GSI on new development / redevelopment
- Funding or supporting short-term maintenance (i.e., vegetative establishment)
- Classifying GSI as capital investments (vs. operating cost)
- Funding or supporting long-term maintenance (i.e., post-establishment)
- Enforcement of local GSI regulations
- Sharing GSI case-making research with decision-makers
- Education and training for internal and contracted staff



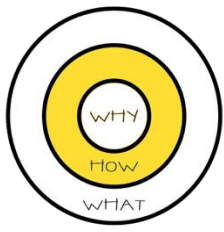
POLICIES

3

- Using an asset management system to manage GSI
- Collecting stormwater/drainage fees
- Implementing lower-maintenance design standards
- Residential GSI retrofit incentive program
- Securing federal grants for GSI (e.g., FEMA Building Resilient Infrastructure and Communities - BRIC)
- Workforce development
- Securing State Revolving Fund (SRF) loans for GSI
- Non-residential GSI retrofit incentive program

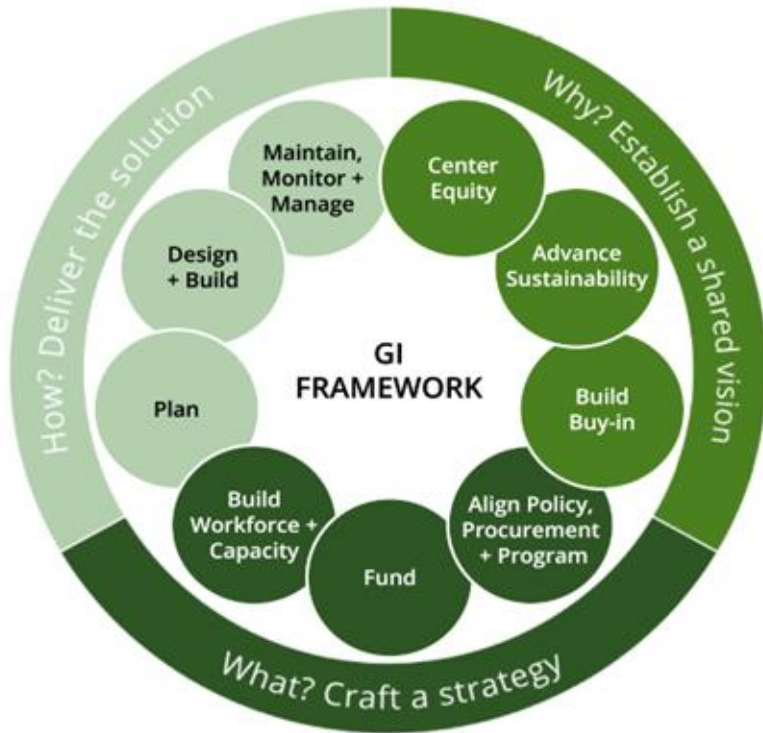


PRACTICES



The Framework of GSI Practice

ORGANIZATION



Each chapter is organized as follows:

1. Principles: What are the overarching principles?

2. Best Practices: What are the best implementation practices associated with each principle?

3. Case Studies: Who can we learn from, i.e., who across the U.S. and Canada is doing these things really well?

(Source: GI Exchange, *Framework of GSI Practice*. Available at: <https://giexchange.org/framework-of-gsi-practice/>)



Establish a Shared Vision: Center Equity

PRINCIPLES & BEST PRACTICES

- 1. Prepare to Center Community:** Get leadership commitment.
- 2. Center Community:**
 - Listen first.
 - Develop & implement a community collaboration strategy.
- 3. Deliver Benefits:**
 - Site GSI w/an equity lens.
 - Prioritize community benefits in design.
- 4. Build Wealth:**
 - Promote economic stability by creating an anti-displacement plan.
 - Develop workforce programs where possible.



Establish a Shared Vision: Advance Sustainability

PRINCIPLES & BEST PRACTICES

1. Integrate:

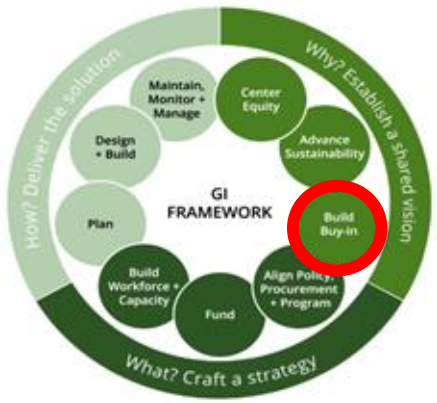
- Incorporate resilience into policies and regulations.

2. Engage the Public:

- Involve the public in planning, siting & design.
- Frame resilience goals around aesthetics & community pride.

3. Plan, Design, Operate & Maintain for Climate Resilience:

- Identify, prioritize, formalize and implement climate objectives for GSI;
- Select sites that relate to resilience objectives;
- Consider design improvements to manage increased stormwater flows, retain more stormwater, increase vegetation & evaporative cooling & improve subsurface conditions.
- Examine historic O&M effort, identify trends & use trends to adjust O&M resources.



Establish a Shared Vision: Build Buy-in

PRINCIPLES & BEST PRACTICES

1. Envision:

- Understand audiences, tailor strategies to their needs & equip them to engage.
- Co-create a strategic vision that integrates audiences' interests.

2. Partner & Demonstrate:

- Find, foster & elevate champions.
- Implement demonstration projects.
- Celebrate wins & organize site visits.

3. Broadcast:

- Activate community & public relations.
- Leverage diverse coalitions.

4. Advance Effective Regulation:

- Identify regulatory gaps, build coalitions to support effective regulation and leverage relationships to ensure effective implementation.

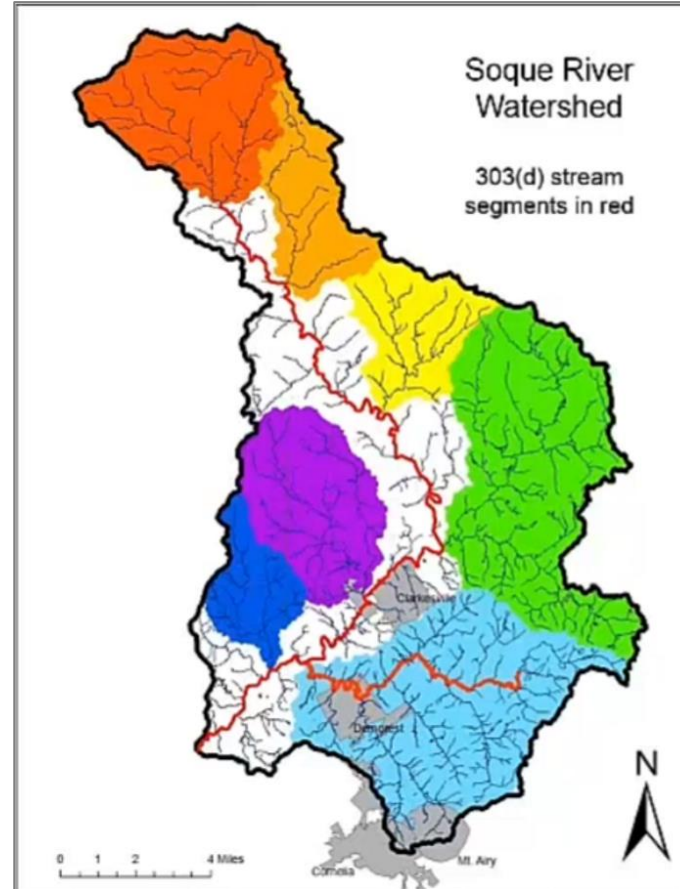
Establish a Shared Vision: Case Study

HOW THE CITY OF CLARKSVILLE, GA (Population 1,750) BEGAN ITS GSI PROGRAM THROUGH A WATERSHED PARTNERSHIP.



OVERVIEW:

- Town grappling with river polluted by pathogens and sedimentation.
- Led effort to form a watershed partnership consisting of the local watershed association, a community college, and other municipalities in the same county.
- Used underutilized city land to create a GSI demonstration project to re-route stormwater from grey infrastructure to a newly created stormwater wetland.
- Project has created new habitat, provided recreational opportunities, and helped to improve water quality in the Soque River.



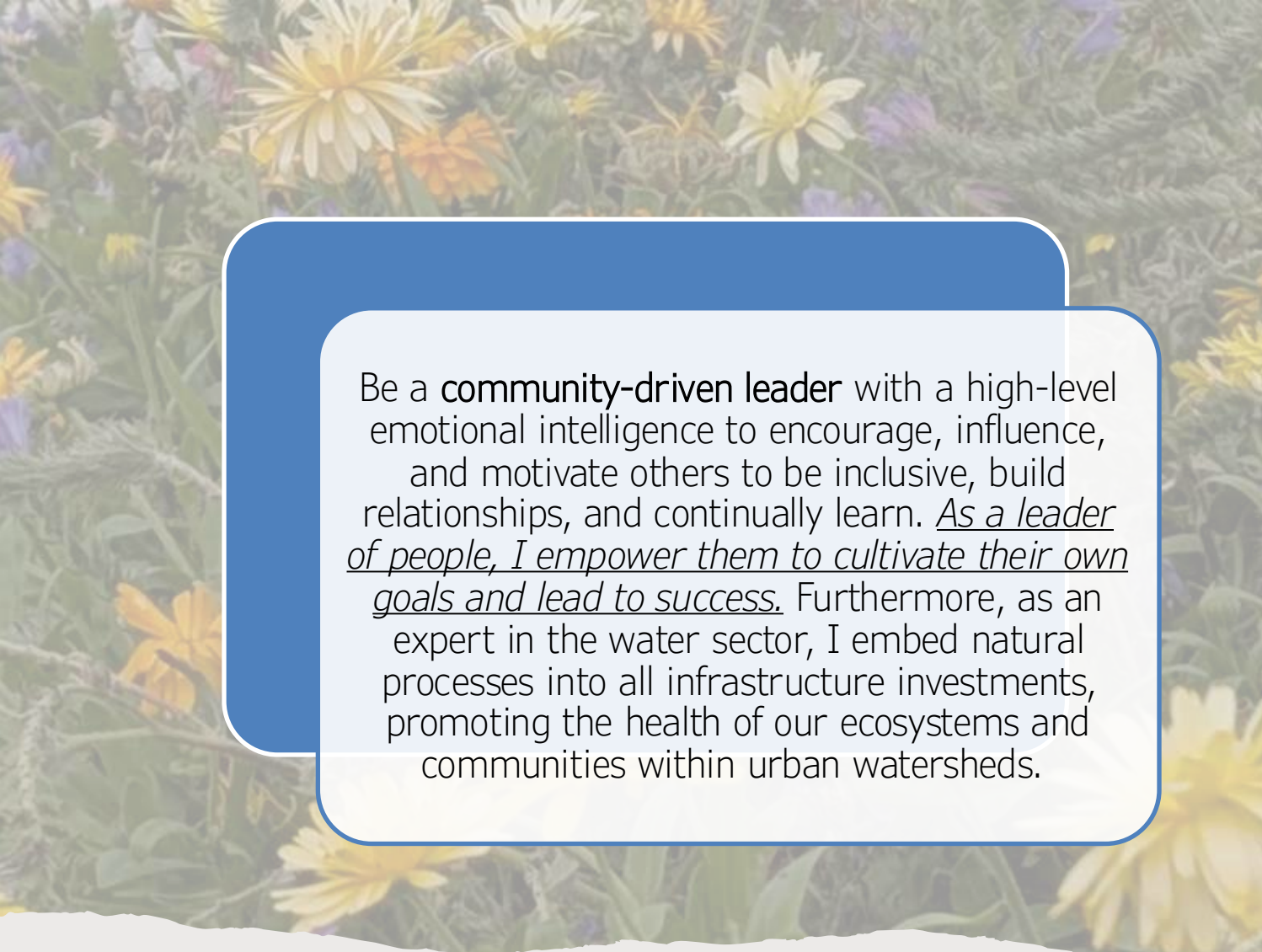
CLARKSVILLE GREENWAY GSI DEMONSTRATION PROJECT



Community Engagement in Stormwater Planning

Effective Communication and Idea Sharing Strategies

WaterNow Webinar
May 19th, 2026



Be a **community-driven leader** with a high-level emotional intelligence to encourage, influence, and motivate others to be inclusive, build relationships, and continually learn. *As a leader of people, I empower them to cultivate their own goals and lead to success.* Furthermore, as an expert in the water sector, I embed natural processes into all infrastructure investments, promoting the health of our ecosystems and communities within urban watersheds.

MY STORY



Claire Maulhardt, PLA
Stormwater Utility Director
Capital Region Water

The background of the image shows a multi-story brick building. On the left, there is a bright blue door. To the right of the door, a rooftop garden is visible, featuring several green planters with various plants. A metal framework, possibly for a balcony or walkway, is visible on the right side of the building. A large, semi-transparent blue teardrop shape is overlaid in the center of the image, containing the text.

**Community
Through
Communication
AT
Scale**



THE WALL STREET JOURNAL.

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Home World U.S. Politics Economy Business Tech Markets Opinion Books & Arts Real Estate Life & Work Style Sports

Bottom Falls Out of Pennsylvania's Debt-Ridden Capital

By Michael Corkery
Feb. 1, 2013 3:08 pm ET



News never stops. Neither do we. Support PennLive.

Harrisburg sinkhole repairs to cost \$1.7M; another sinkhole developing at Third & Woodbine

Updated: Feb. 11, 2013, 6:25 p.m. | Published: Feb. 11, 2013, 5:25 p.m.



By [Donald Gilliland](#) | dgilliland@pennlive.com

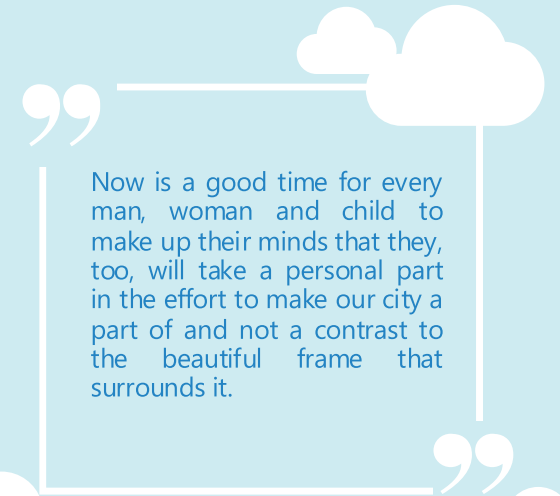
HARRISBURG — The [North Fourth Street sinkholes](#), which recently became the symbol of the city's crumbling infrastructure and finances [among national media](#), will cost up to \$1.7 million to repair, according to documents the city recently submitted to the [Pennsylvania Infrastructure Investment Authority](#).



A COMMUNITY-BASED CAMPAIGN FOR CLEAN
WATER AND NEIGHBORHOOD IMPROVEMENTS

Then & Now

- The City Beautiful movement was an early 20th-century campaign that modernized, beautified, and cleaned up cities nationwide. In Harrisburg, the movement lasted from **1900 to 1930** and included significant improvements in sanitation, paving, and architecture.
- A key component of the movement in Harrisburg was the creation of parks for recreation and, of course, beauty. Riverfront and Wildwood parks are two examples that you can see today.



Mira Lloyd Dock
Harrisburg City Beautiful Movement Leader



PUBLIC IMPROVEMENTS.

Headquarters - Information Bureau.
VOTE FOR CLEANLINESS, HEALTH and PROSPERITY.

CARPETS FURNITURE

E.H. STENTZ
REMOVED TO
1210 SOUTH - HOWARD ST.

WAGONS, BUGGIES, FARM IMPLEMENTS, PLOWS, TWINE.

MUNICIPAL IMPROVEMENTS
INFORMATION BUREAU

MOCK YUEN

LAU

115

GREENWOOD 107

EMPOWER

COMMUNITY AMBASSADORS

EMPOWERING RESIDENTS

Providing interested residents with knowledge about stormwater issues and green infrastructure.

CREATING ADVOCATES

Encouraging ambassadors to reach out to neighbors, share information and gather feedback.

BUILDING CAPACITY

Creating a strong network of community leaders to generate project ideas and facilitate implementation.



GREEN & GREY IN ACTION!

PERVIOUS SURFACES

Pervious surfaces (green roofs, rain barrels, rain gardens, etc.) decrease the volume and speed of stormwater runoff.



Trees, gardens, and other technologies are designed to help reduce stormwater runoff by absorbing or storing it for slow release. The vegetation and soil also act like a filter, trapping oils, heavy metals, dirt/road grime, and trash - preventing it from entering our waterways.

IMPERVIOUS SURFACES

Impervious surfaces (roofs, pavement, asphalt, etc) increase the volume and speed of stormwater runoff.



Parking lots, roads, and other hard surfaces generate a lot of stormwater and contribute to sewer overflows.

GRADIENT RATE OF INFILTRATION:

Green infrastructure mimics nature and captures rainwater where it falls. What natural features absorbs the most rainwater?



Wetlands/ Rain Gardens



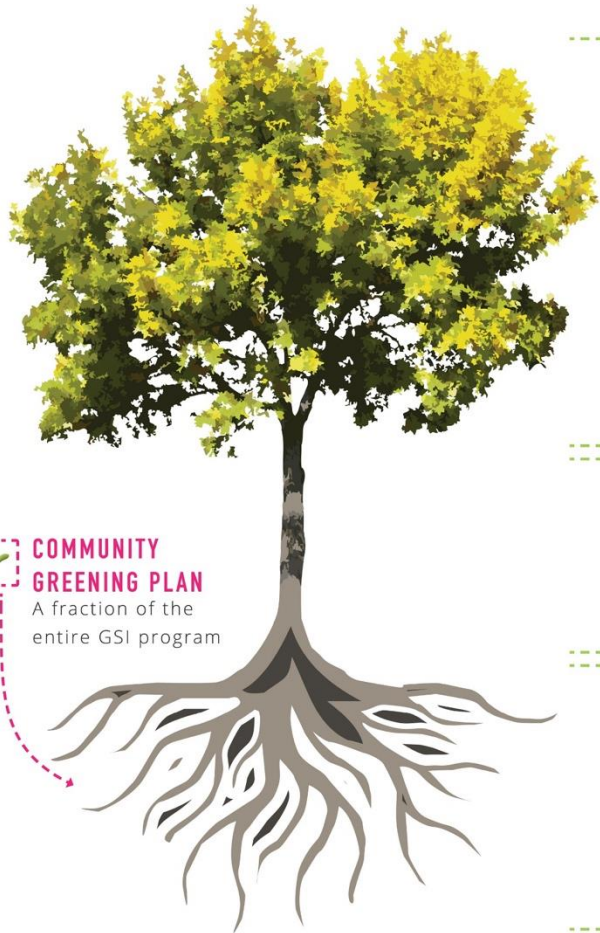
Forest



what **DOES THIS MEAN** for your community, your economy?

THIS IS JUST THE BEGINNING...

GSI BUDGET



COMMUNITY GREENING PLAN

A fraction of the entire GSI program

IMPLEMENTATION & MAINTENANCE
WORKFORCE DEV.
GSI PLANNING/DESIGN

CREATE JOBS!

IMPLEMENTATION

- Landscape Constructors
- Landscape Laborers
- Road/Building Contractors
- Engineers
- Architects
- Environmental Scientists
- Landscape Architects

OPERATION & MAINTENANCE

- Landscape Laborers
- Landscape Foremen
- Landscape Supervisors
- Sewer Cleaning Technicians
- Pipe Inspection & Utility Locating Technicians
- Field Inspectors
- Sewer Inspection & Maintenance Supervisor
- Vacuum Sweeper Operator
- Pervious Pavement Snow Removal Technician
- Engineers
- Architects
- Environmental Scientists
- Landscape Architects

WORKFORCE DEVELOPMENT

- Educators
- Community Outreach Coordinators
- Landscape Supervisors
- Engineers
- Architects
- Environmental Scientists
- Landscape Architects

PLANNING & DESIGN

- Educators
- Community Outreach Coordinators
- Landscape Constructors
- Landscape Supervisors
- Engineers
- Architects
- Environmental Scientists
- Landscape Architects

EDUCATE **PUBLIC EDUCATION**

UNDERSTANDING THE BASICS

What is the problem? How does green infrastructure work?

WHAT IS THE IMPACT?

How this fits into a larger GSI program, what GSI means for workforce growth and job opportunities.

WE NEED YOUR HELP



COMMUNITY GREENING PLAN

CELEBRATE

COMMUNITY GREENING PARTIES

JOIN EXISTING EVENTS

Partnered with local organizations to join existing festivals/events (National Night Out, Block Parties).

MAKE IT ACCESSIBLE

Open house format allows community members to drop by when it's convenient.

MAKE IT EXCITING!

Prizes, food, facepainting, music, and activities for kids can boost turnout.

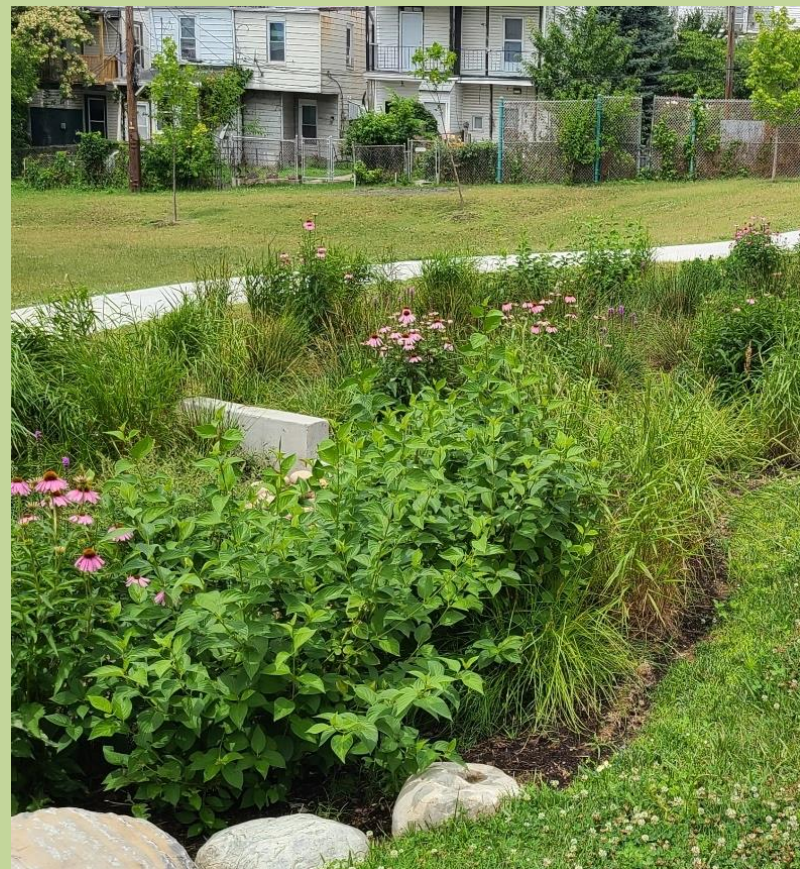


The background of the image shows a multi-story brick building. On the left, there is a bright blue door. The roof of the building is a green roof, featuring a metal framework and several rectangular planters filled with green plants. A large, semi-transparent blue teardrop shape is centered over the image, containing the text.

**Partnerships
Built IN
Community**



NEIGHBORHOOD
BEAUTIFICATION
Summit Terrace GSI



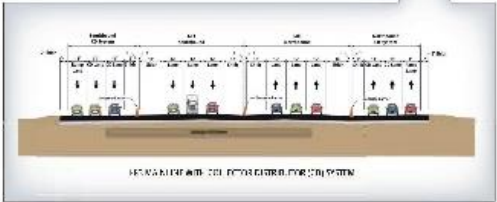
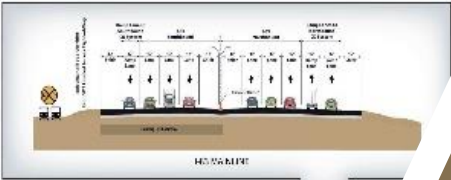
COLLABORATIVE IMPACTS

City Parks Revitalization

Restoring Paxton Creek

Innovating to Tackle MS4 Pollutants

Harrisburg, Pennsylvania



Legend

Symbols

- Barrier
- Sidewalk
- Municipal Boundary
- To Be Removed
- Lane Count/Direction
- Lane Designation
- Traffic Signal

Elevation Index

- Bridge - 1'
- Bridge - 2'
- Road

LEVERAGING LARGE
INFRASTRUCTURE
PennDOT Projects



HISTORIC PRESERVATION

Bellevue Park SW Ponds Retrofit

The background of the slide is a photograph of a modern building. It features a light-colored brick wall. On the left, there is a bright blue door. To the right of the door, there is a vertical green wall made of stacked planters with various green plants. A black metal frame structure is visible over the green wall. A large, solid blue teardrop shape is overlaid in the center of the image, containing the text.

Idea Sharing Strategies



EDUCATIONAL HUB

Camp Curtin YMCA GSI

25/10/2023, 3:00:12 PM



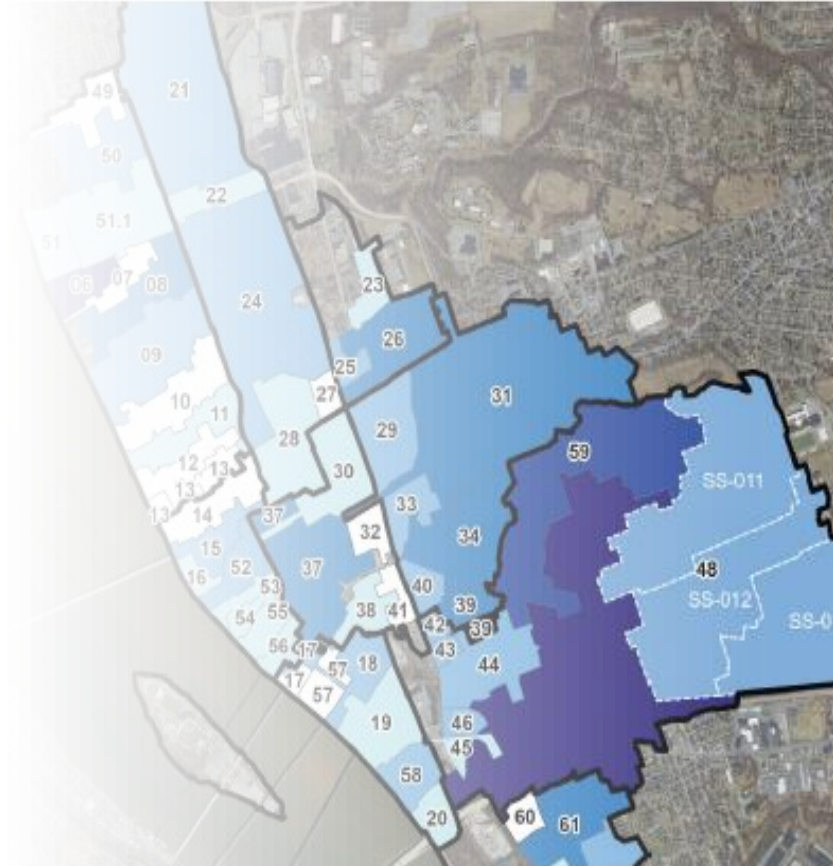
EQUITABLE RESILIENT COMMUNITIES

Boys & Girls Club GSI





PROGRAM PLAN



**COMMUNICATE
PROGRESS**



THE PATRIOT-NEWS THURSDAY, JULY 3, 2025 A7

FROM THE COVER

HARRISBURG

Utility offers \$1.4B plan to cut sewage overflows into river

Continues from A1

The bulk of the most mission-critical projects will be completed in the first 10 years, with projections showing the sewage overflows reduced to an average of about 30 instances per year by 2031.

That's also when the system hopes to achieve an overall 85% reduction in the total amount of flow escaping untreated into the river and Paxton Creek.

The plan, which can be seen in its entirety on Capital Region Water's website, is the company's response to a 2023 court-approved consent decree requiring action.

It now faces review by the federal Environmental Protection Agency and other parties to the case, including the Lower Susquehanna Riverkeepers.

That could lead to a fresh round of negotiations before EPA issues a final approval of the plan.

Here's the core problem.

Harrisburg's sewer system is largely combined, meaning both sanitary sewage — the stuff that's flushed down toilets and washed down sinks and bathtubs — and stormwater from rain landing on streets, roofs and parking lots, pass through the same pipes and treatment facility.

The combined system — which covers about 60% of the city — can handle only so much water and waste, so during periods of even moderate rainfall some pipes become filled to capacity.

That's when a process called "combined sewer overflow" kicks in, activating outfalls from which the full pipes can spew sewage-contaminated runoff directly into the Susquehanna River and nearby Paxton Creek.

The weakest spots in the system overflow about 100 times a year.

All told, Capital Region Water discharges about 800 million gallons of untreated sewage and stormwater into the Susquehanna annually on average, according to the public utility's reports.

Lab testing of water samples by the Lower Susquehanna Riverkeepers — an intervenor in the case — shows average bacteria concen-



Capital Region Water discharges about 800 million gallons of untreated sewage and stormwater into the Susquehanna River annually on average, according to the public utility's reports. Sean Simmers, PennLive, 2024

trations in the river along the city's waterfront are consistently far higher than what is safe for swimming or other "water contact recreation."

That's what the EPA's action — which actually dates to 2015 — is designed to change.

In 2021, CRW's overflows represented 57% of all flow entering the combined system. EPA wants the system to get that rate down to a maximum of 15%.

CRW's corrective plan is a combination of "gray" — think pipes and storage tanks that deal with the water in the system — and "green" measures, designed to keep stormwater runoff from entering the system in the first place.

One long-term plan under consideration by Capital Region Water is construction of several underground holding tanks at locations scattered around the city.

Such a "satellite storage" system would temporarily hold sewage and stormwater overflows during rainstorms, and as the levels in the pipes recede, it could then be pumped directly to the city's sewage treatment plant.

Other projects, Katzenmoyer said, include decoupling of the two systems as certain parts of the sewer system get scheduled replacements.

CRW is also taking advantage of the state's rebuild of Interstate 83 in Harrisburg to bridge a gap in the lines that, at present, forces some neighborhoods that already have separate stormwater and wastewater lines into the combined system.

"I-83 was a barrier to getting that (flow) to the treatment plant," Katzenmoyer said. "So you have this beautifully separated sewer area of the city and then it dumps into our

combined sewer system, which contributes to a lot of the overflows."

That's getting fixed as part of the ongoing highway project.

One thing CRW cannot do, Katzenmoyer said, is bill the neighboring municipalities it serves for the Harrisburg projects.

"They don't have a combined sewer system and they're not going to shoulder the cost for projects that they're not benefitting from," the CEO said.

Attempts to reach the EPA Wednesday were not successful.

Lower Susquehanna Riverkeepers spokesman Ted Evgeniadis said he has yet to see the final plan, and wanted to reserve most comment for the time being.

But, he said, he does have some preliminary concerns, including CRW's admission that they — even after improvements — likely will not be able to meet current clean water standards in Paxton Creek.

"We definitely have capacity to submit comments. We definitely have capacity to work with the EPA. And we definitely have capacity to take further, further legal action if we need to," Evgeniadis said.

A recent report by his organization found large swaths of the Susquehanna and its tributaries contaminated with high levels of dangerous bacteria.

Many of the worst numbers were associated with the city's shoreline.

"If you're on the western side of the river, it could be clear as day," Evgeniadis said about that May report. "You can see crystal clear to the bottom. And then if you go to the Harrisburg side, it could be muddy, brown, poopy water, and a completely different environment."

The Riverkeepers have noted in the past there is an environmental justice element to all this, too, given that Harrisburg's 49,000 residents are predominantly Black or Latino, and a significant percentage of them live in poverty.

"These people can't afford to go to the Caribbean or even the Chesapeake Bay," Evgeniadis told PennLive in 2021. "The Susquehanna River is in their backyard. They have a right to clean recreation water."

THE SUNDAY PATRIOT-NEWS SUNDAY, JULY 13, 2025 3

OPINION

AS WE SEE IT

Capital Region Water is working to reduce waste flowing into Susquehanna River



Capital Region Water has a plan to reduce sewer overflows into the Susquehanna River over the next 40 years. Dan Gleiter, PennLive, 2024

Harrisburg-area residents

will see a significant drop in

sewage going into the waterway

under the utility's new plan.

Charlotte Katzenmoyer and Marc Kurowski

Since Capital Region Water became the operating authority in 2013, it has been and remains committed to transparency and progress in addressing the challenges of a 120-plus-year-old combined sewer system.

We are not trying to hide the problem: During heavy rainfall, the authority's combined sewer system (CSS) becomes overwhelmed and releases an untreated mixture of sewage from buildings and stormwater from pavements through a series of outfalls into the Susquehanna River and Paxton Creek. The system is permitted by the Pennsylvania Department of Environmental Protection to operate in this manner, as are more than 120 community systems around the commonwealth.

CRW staff have been forthcoming in publicly communicating this issue through newsletters, social media, neighborhood meetings and community events, and has presented our proposed solution: the City Beautiful H2O Program Plan, CRW's pollution reduction plan.

Through water quality monitoring and modeling that meets industry standards led by expert staff, CRW has a detailed understanding of the hydrology of the watershed and the impacts the combined sewer overflows (CSOs) have on the river and creek. The plan aims to drastically reduce CSOs over the next few decades, proposing a suite of projects designed to better capture and manage the pollution we discharge.

The plan will align CRW with clean

water obligations from state and federal regulators and also improve flood controls throughout the city by increasing sewer capacity and beautifying our neighborhoods through the installation of green stormwater infrastructure. Our stormwater work will continue to be highly visible in the city and have a lasting, transformative impact for future generations.

Our plan is projected to reduce overflows along the Susquehanna River from approximately 90 events in a typical year to only 12, and Paxton Creek overflow events will decrease from 95 to only 16. Overflow volumes across the entire system will be reduced by 82%.

A financial analysis was conducted as part of the planning process to assess the impact on low-income customers. The plan proposes a total capital investment of

approximately \$1.43 billion over 40 years. Extending the implementation period over 40 years will help minimize undue financial strain on customers.

However, the vast majority of the pollution reduction benefits, which are substantial, are achieved within the first 20 years.

Just as hundreds of CSO communities around the country have been given decades to address their legacy systems to meet water quality standards, we are seeking the same consideration from the regulatory agencies for the plan we have submitted to the regulatory agencies for approval.

CRW acknowledges the economic limitations faced by our community and understands that immediately achieving a more stringent solution would be financially burdensome for many customers, limiting our ability to collect the revenue necessary to

implement the plan. Therefore, our plan must not overlook the human element and instead take a balanced approach, aiming to minimize the impact on customers while creating a less polluted and healthier environment.

Our customers have shouldered a majority of that financial burden with more than \$200 million CRW has invested since 2013 to achieve cleaner streams. Whenever possible, CRW has pursued and secured low-interest loans and grant funding. That has not always been easy, as grant application processes can be incredibly competitive and time-consuming, without guaranteed results.

As stewards of Harrisburg's water systems, it is our duty to ensure that our work best serves our community's needs while meeting and achieving regulatory compliance. To that end, we have diligently invited and encouraged the community and environmental groups to review our plans and offer feedback, support, critiques or concerns. All related documents, including the plan and our financial capability assessment, are available for review on CRW's website, capitalregionwater.com.

CRW staff care deeply about our water systems and want to do all we can to improve and protect them, and we are equally committed to protecting our customers from undue financial burdens. We understand the financial constraints facing the Harrisburg community, and our proposed plan represents our best efforts to address those constraints while also reducing pollution.

We look forward to working with community residents and stakeholders as we continue our efforts to reduce pollution in our local waterways.

Charlotte Katzenmoyer is CEO of Capital Region Water. Marc Kurowski is chairman of the Capital Region Water board of directors.

The background of the image shows a brick building with a green wall. The green wall is made of vertical metal frames filled with green plants. A blue door is visible on the left side of the building. A large blue teardrop shape is overlaid on the center of the image, containing the text.

**Network
the
Communication
of
Ideas**



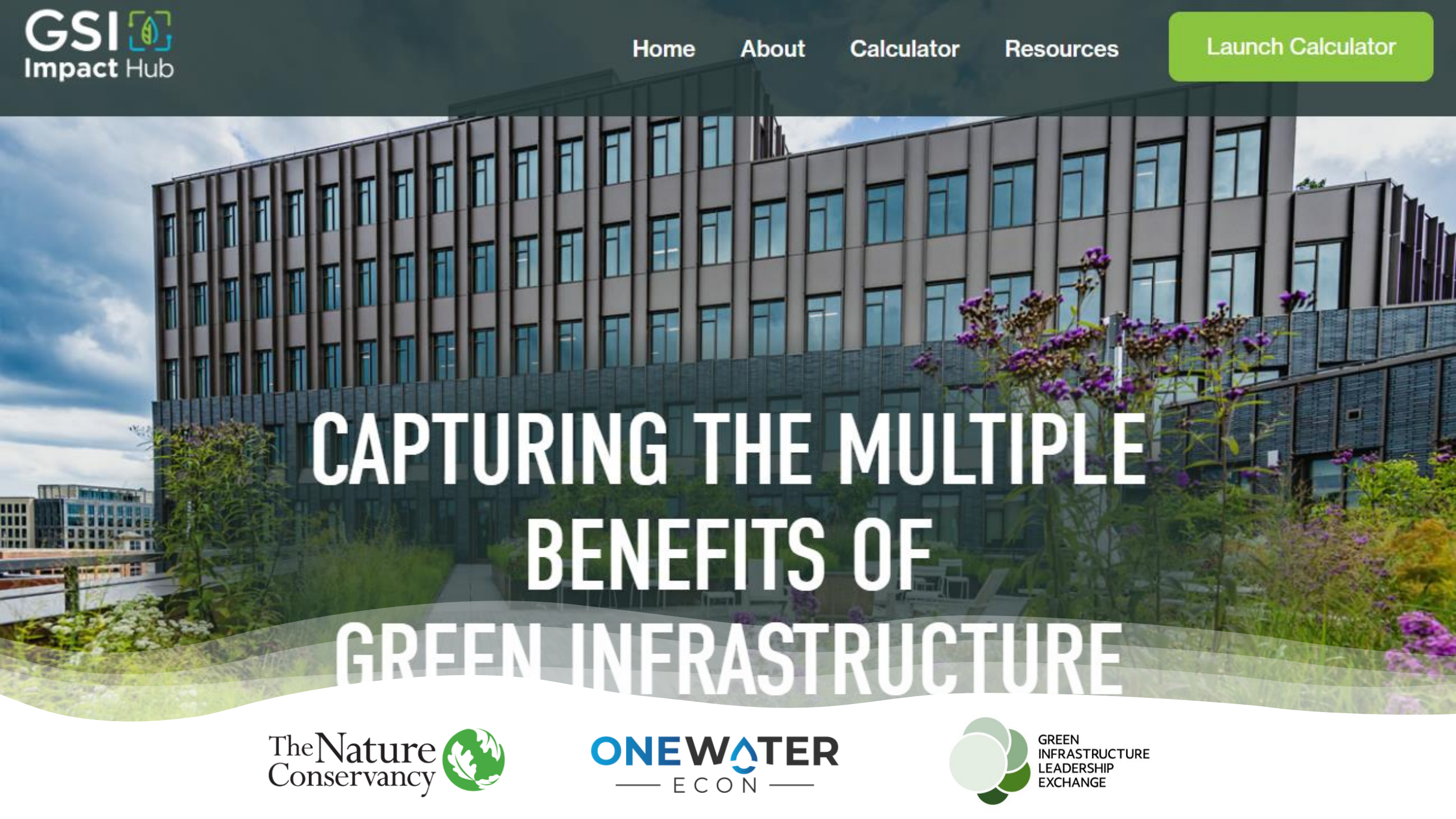
GREEN
INFRASTRUCTURE
LEADERSHIP
EXCHANGE

“THE EXCHANGE”



The background of the slide is a photograph of a building's exterior. It features a brick wall, a blue door on the left, and a green roof with various plants and white pipes. A large blue teardrop-shaped graphic is centered over the image, containing the text.

Technical Tools AS Communication



CAPTURING THE MULTIPLE BENEFITS OF GREEN INFRASTRUCTURE

 Welcome

 Define Scenario

 Refine GSI Portfolio

 Evaluate Benefits

 Review Costs

 Explore Results

Reference Materials

Welcome to the GSI Impact Calculator!

This calculator allows you to quantify and monetize the multiple benefits, or co-benefits, associated with green stormwater infrastructure (GSI) projects. It is designed for use early in the GSI planning process to evaluate projects at a city block level (or multiple block) scale. The Calculator includes co-benefits that extend beyond typical water quality and quantity outcomes. It incorporates the following benefit categories:



Avoided Infrastructure Costs



Avoided Replacement Costs



Energy Savings



Water Supply



Air Quality



Property Values



Ecosystem



Heat Stress



Recreation



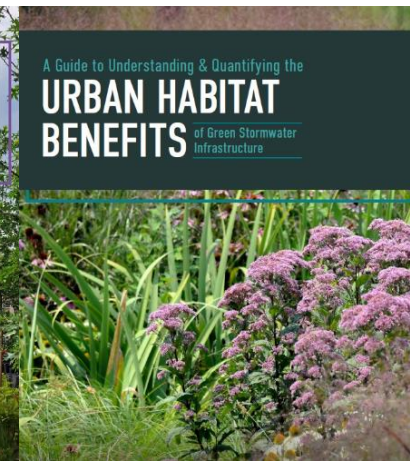
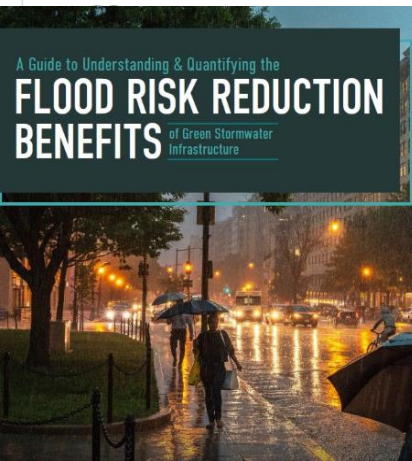
Water Quality



Green Jobs



Carbon Sequestration





Moderated Discussion

A close-up photograph of a maple seed pod (samarra) with reddish-brown wings, set against a blurred background of green foliage and bright light. A dark teal horizontal band is superimposed over the middle of the image.

Questions?

Accessing Technical Assistance for Small, Rural & Tribal Systems



What support is available?

WaterNow can provide technical assistance for rural, small and tribal systems in a variety of ways:

- Support for **planning and assessing system needs**
- Building **technical, financial, and managerial capacity**
- Support for engaging the community to **map challenges and assets**
- Identifying **funding and financing opportunities**
- Navigating **grant and loan application processes**



Specialized Technical Assistance: Rural, Small, & Tribal Systems

Pro bono support for **wastewater and stormwater systems** across the U.S., serving communities of **10,000 people or fewer**.



The screenshot shows the EFCN (Environmental Finance Center Network) website. The header includes the EFCN logo, navigation links for 'About Us', 'Training & Events', 'Resources', 'Our Initiatives', 'Contact', and a 'Get Help' button. The main content area features a large blue banner with the text 'Get Help'. Below this, a section titled 'Tackle Your Technical, Managerial, and Financial Challenges: Services from the EFCN' describes the organization's services. A blue arrow points to a 'Request Help Now' button, which is next to a text box containing the URL <https://efcnetwork.org/get-help/>.

EFCN
environmental finance center network

About Us ▾ Training & Events Resources ▾ Our Initiatives Contact **Get Help** 🔍

Get Help

Tackle Your Technical, Managerial, and Financial Challenges: Services from the EFCN

We offer free, customized support services to water and wastewater systems, decentralized systems, local governments, and others seeking technical, managerial, and financial (TMF) solutions to environmental infrastructure challenges. Our team of experts work hand-in-hand with operators, elected officials, utility directors, and other utility staff to identify barriers and address challenges head-on.

Request Help Now <https://efcnetwork.org/get-help/>

What to expect?

- 1 Dedicated team of **subject matter experts** to help answer your questions
- 2 **Step-by-step assistance** to help rural, small, and tribal water systems address storm and wastewater challenges
- 3 **Resources & guidance** to ensure compliance with all applicable federal, state, and local regulations

The **technical assistance process** includes:



Additional technical assistance programs and resources can be found at the [WaterTA website](#)

Project Accelerator

- 250 hours of **pro bono technical assistance**
- Over a **6-12 month** period
- City/Agency identified project, driven by **local priorities**
- **Jump start** innovative water management initiatives

FEATURED PROJECTS



Learn more and apply!



Hands-on support to accelerate
innovative water projects and programs

Learn more and apply:
<http://bit.ly/Project-Accelerator>

Applications are
open through Friday,
May 29!



TiR Pilot Communities: Accelerating Investments in Sustainable Projects

Become a TiR Pilot Community

Ready to bring your localized water infrastructure strategies to scale? Become a TiR Pilot Community!

WaterNow and our TiR Experts are available to provide up to **300 hours of hands-on technical support** to cities and utilities interested in activating and scaling-up innovative water strategies in their communities to address water security challenges. TiR communities have access to legal, policy, finance, and accounting expertise over a **6-12 month period, free of charge**, to help them strategize the full scale financing of their particular localized infrastructure project.

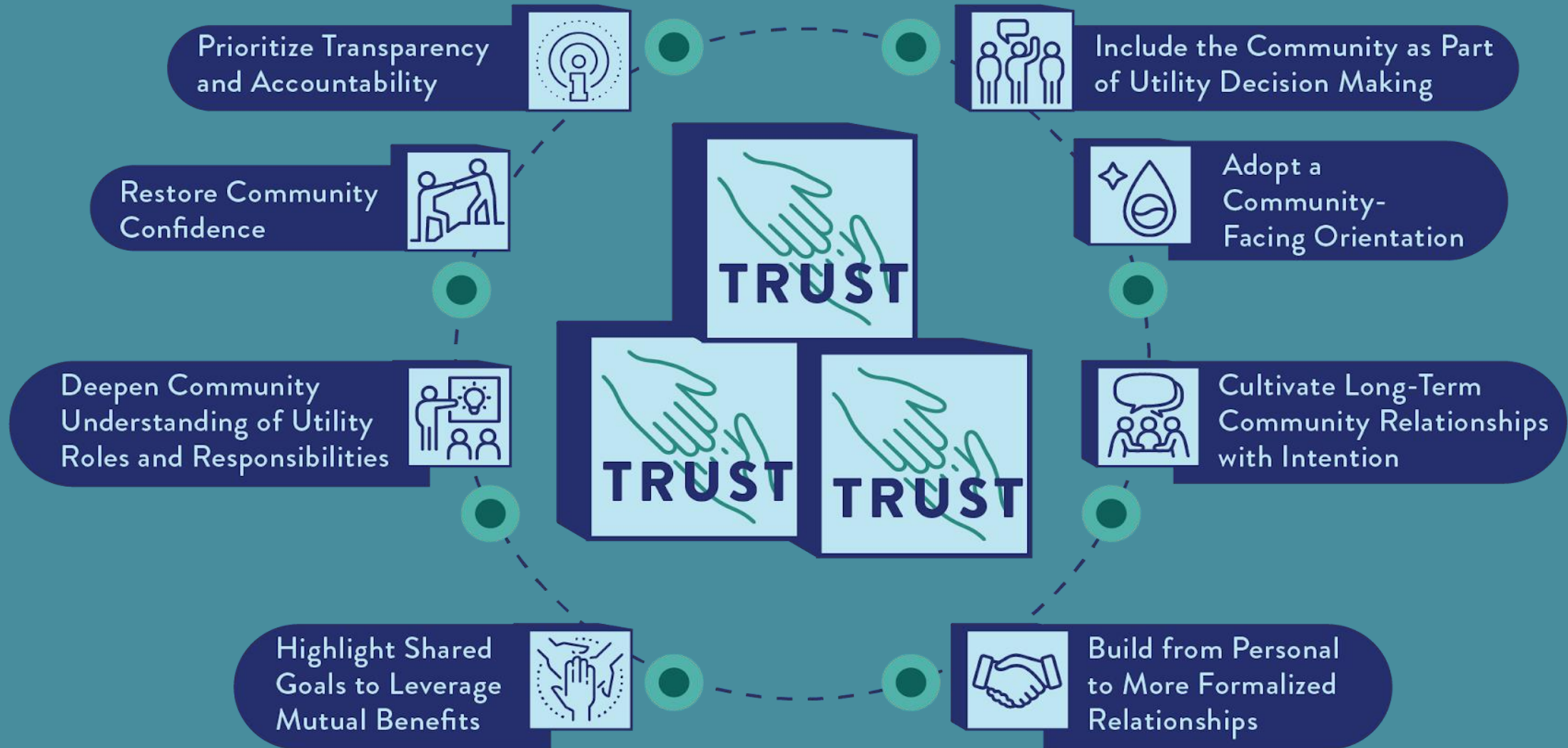
Benefits include:

- Access to a team of financing, bond, tax, and accounting experts to identify and execute on financing options.
- Tailored research and analysis on using debt financing mechanisms to pay for localized infrastructure.
- Facilitation of stakeholder meetings to build consensus on localized infrastructure financing options.
- Support on developing bond packets, capital improvement plans, city council resolutions, ordinances, or other materials to advance full scale localized infrastructure financing.
- Guidance on best practices for communicating with customers about localized infrastructure.
- Become a national leader on sustainable water management.

To find out more about becoming a TiR Pilot Community fill out this short form, and WaterNow staff will be in touch.

<https://tapin.waternow.org/start-implementing/#pilot>

Building Blocks of Trust: Best Practices for Authentic Partnerships & Community Engagement



Building Blocks of Trust Training Series

Building Blocks of Trust Training Series

Based on the Building Blocks of Trust report, this online, self-paced training series covers the 8 "Foundations of Trust." Created to support community groups and water utilities in building strong relationships for clean and safe water, this training aims to uplift long-term partnerships with mutual benefits.

Sign Up Now



bit.ly/BBoTTraining



Building Capacity through Partnerships

Water utilities across the country are increasingly, and successfully, turning to partnerships with community groups, NGOs, and other cities and utilities to build capacity and advance greater water resiliency in their communities.

Click through the sub-sections below to learn how to **identify main capacity challenges** facing utilities serving frontline communities, how to **identify local partners** who can help overcome those challenges, and what **best practices** to follow when building capacity through partnerships. Partnerships can also include "public-private partnerships," and the precise meaning of "public-private partnership" is often a source of confusion. This term is used to describe a variety of arrangements between governments and private sector organizations from full privatization of formerly public municipal water providers, to outsourcing, grants, leases, asset sales, and others. Check out the Partnership vs. Privatization sections of the Toolkit to explore the **most common types of public-private partnerships** formed in the water sector and several **key considerations** for determining whether to enter into any of these arrangements.

Identifying Internal Utility Capacity Challenges >

Identifying Partners Who Can Add Value >

Best Practices for Building Trusting Partnerships >

Hosting a Community Water Academy >



tapin.waternow.org/toolkit



bit.ly/3REGj4b

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Thank You!



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Resources:

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