### This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



# The Financing Fix to Scale Water Efficiency Across the U.S.

WaterSmart Innovations 2019 **October 3rd, 2019** Lindsay Rogers, CO Basin Program Manager, WaterNow Alliance





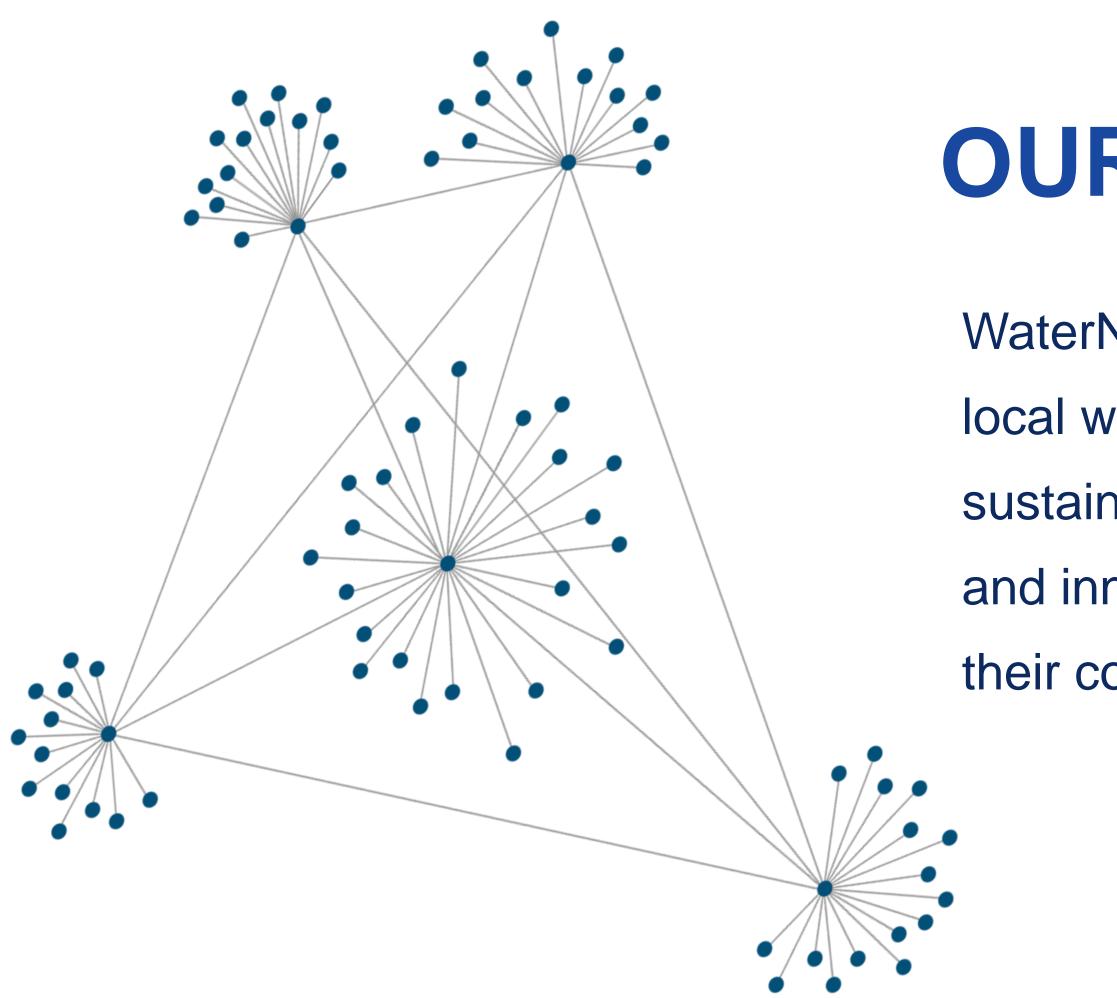


### AGENDA

- Overview of WaterNow Alliance
- Introduction to Tap into Resilience
- Financing Localized Efficiency Strategies
- Using the TiR Toolkit
- Q&A







### **OUR MISSION**

- WaterNow is a nonprofit network of
- local water leaders supporting
- sustainable, equitable, affordable,
- and innovative water solutions in
- their communities



### WHY LOCAL LEADERS?



Rand, Not Everything Is Broken The Future of U.S. Transportation and Water Infrastructure Funding and Finance, 2017

95%

### 95%

### LOCAL AGENCIES ACCOUNT FOR 95% OF WATER SPENDING ON DRINKING, WASTEWATER, **STORMWATER – NATIONWIDE**



### What do we mean by sustainable?



generations

### Providing safe, healthy, and affordable water services for people while preserving the integrity of water resources and the environment for future



### **Sustainable Water Solutions**

Water Conservation & Water Use Efficiency Source Water & Watershed Protection

Green Infrastructure Reuse & Recycling



### Groundwater Management

Water Trading: Market Mechanisms

### INTRODUCING **TAP INTO** RESILIENCE resilience



- WaterNow's new initiative to
- advance investment in
- localized, onsite and
- distributed water strategies

### tapin.waternow.org



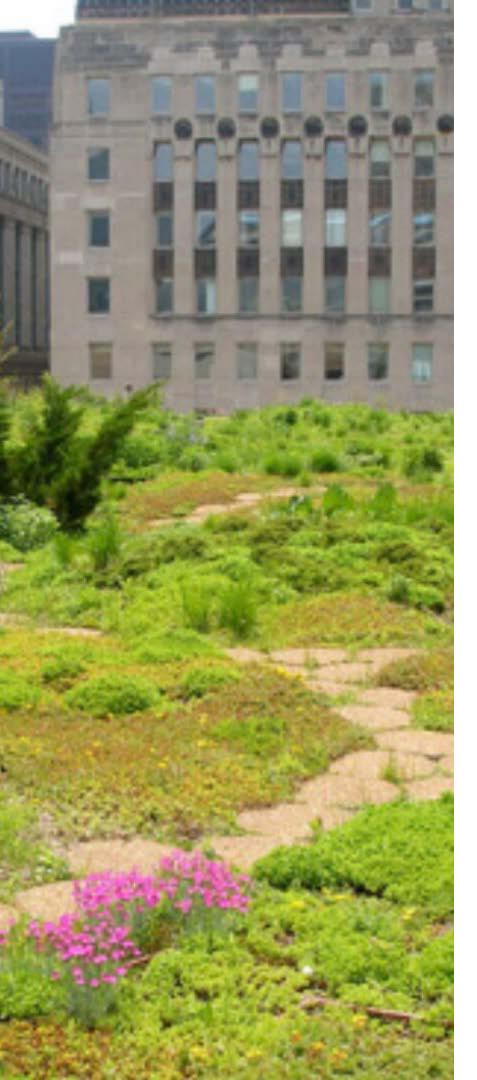
Do you know enough about decentralized strategies, and their associated benefits, to invest in these options in your community?





Has your utility/city already made a significant investment to scale up a localized infrastructure program?





### WHAT IS LOCALIZED WATER INFRASTRUCTURE?

- Decentralized water management strategies and technologies distributed over many properties
- Not owned and operated by city/utility/water agency
- Operate in concert with built infrastructure
- Often paid for, or incentivized, by the utility



### NATIVE LANDSCAPING & TURF REPLACEMENT





## HIGH EFFICIENCY APPLIANCES & FIXTURES





### **SMART IRRIGATION CONTROLLERS**





### LEAK DETECTION DEVICES

7:17I ♀ =			
System OK			
Valve	Open Closed		
PROTECT SENSORS			
Hot Water Heater	🔲 ail 🖻		
Kids Bathroom	🔲 atl >		
Master Bathroom	🔲 atl >		
DETECT-ONLY SENSORS			





### ON-SITE, NON-POTABLE REUSE SYSTEMS





### BUT ARE THESE STRATEGIES... **INFRASTRUCTURE?**

Decentralized onsite systems can serve the same functions as traditional infrastructure: Reliable water supply > Manage stormwater runoff > Water treatment

Represents long term investments in system functionality and resilience





### **Big picture benefits of localized strategies**



More affordable than rebuilding or repairing centralized infrastructure Less time-intensive to install than centralized infrastructure Work with the natural environment to enhance water supply resilience and health



Provide visibility, access, and direct economic benefits to ratepayers



### SCALING INVESTMENT IN LOCALIZED INFRASTRUCTURE

Conventional thinking is that you can only pay for these things out of annual operating cash

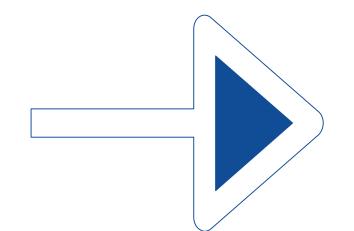




### But annual rate revenue is not sufficient to cover large scale investments

### SCALING INVESTMENT IN LOCALIZED INFRASTRUCTURE

### **GOOD NEWS!**



New GASB guidance clarifies that public water resource agencies can now access municipal bond proceeds to finance consumer rebates and direct installations for onsite water systems.





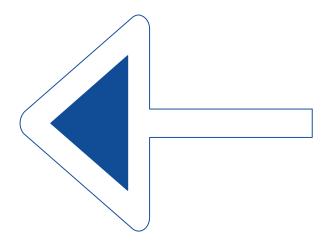


### USING MUNI BONDS TO FINANCE LOCALIZED INFRASTRUCTURE

GASB 62 says an entity with rate setting ability can capitalize 'business-type activity costs' that could otherwise be expensed

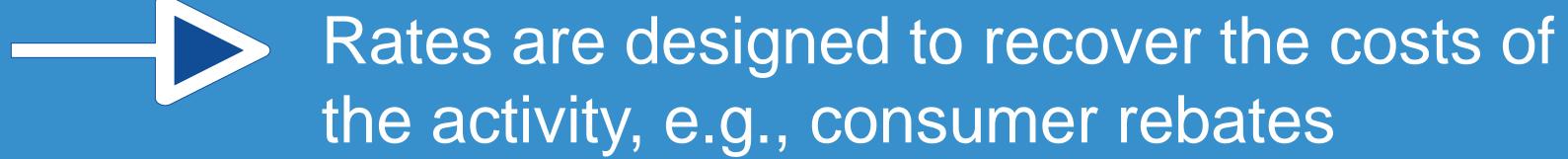


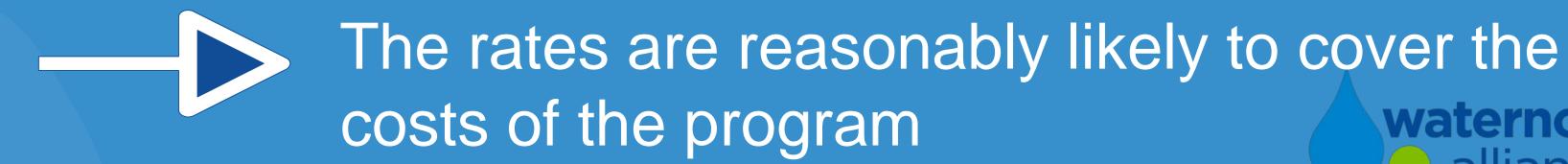






### **3 CRITERIA FOR REGULATED ASSETS APPROACH** The utility is governed by a board empowered to establish customer rates





### waternow

### HOW WOULD THIS WORK IN PRACTICE?

**Example:** Your utility has a \$70 million budget. They'd like to invest in a major turf rebate program that will cost \$10 million.

### **Using Annual Operating Cash**

- Raise rates in Year 1 by ~ 14%
- Implement program in Year 1
- Benefits over 20 years

### **Using Debt**

• Raise rates in Year 1 by ~1% Pay back over 20 years • Implement program in Year 1 Benefits over 20 years



Communities using municipal bonds to pay for localized infrastructure:

 Central Arkansas Water – Conservation easements for source water protection

 Seattle Public Utilities – Water efficiency & green stormwater infrastructure programs

 Los Angeles Dept. of Water & Power – Water efficiency & green stormwater infrastructure programs



### **Central Arkansas Water**

- Drinking water supply from Lake Maumelle and Winona
- Purchase conservation easements for source water protection
- ~\$500,000 per year on property acquisition



 Bond repaid through a watershed protection fee





### **Seattle Public Utilities**

- Water conservation rebates & direct installations for low-income customers have reduced GPCD by 44%
- RainWise Program for greenstormwater infrastructure rebates control 23 million gallons of stormwater per year
- \$2.2 million spent on water efficiency & \$1.2 million on RainWise Program in 2018
- Program costs incorporated into rate setting process







### Los Angeles Department of Water & Power

- Conservation-focused programs: appliances, fixtures, and turf replacement rebates
- Green stormwater infrastructure for groundwater recharge
- **>\$140 million** in distributed water conservation and stormwater assets on balance sheet
- Rates include water conservation and stormwater capture program charges







### **TAP INTO RESILIENCE TOOLKIT**

### Do you have a sustainability vision for your city? Our toolkit is here to help.



erNow TIR Too

Are you a water leader interested in learning more about investing in localized infrastructure? What is localized infrastructure? Is it green infrastructure? is it distributed infrastructure? Water conservation? YES, localized water strategies are all of these and much more, and you've found a resource with answers to your financing, tax, accounting, and legal implementing questions

### What are my financing options?

This map is a reference guide to the financing sections of the TIR Toolkit.

Click through the following sections to learn about financing decentralized infrastructure through operating budgets, municipal and other types of bonds, and state, federal, and philanthropic funding options. The materials are revealed as you move through the Toolkit. In each section you'll find an overview of that topic including legal, tax, and accounting information, in-depth resources for download and further reading, explanatory videos, a searchable database, example ordinances and agreements, and much more. Sort the All Resources library by "TIR Toolkit" if you're looking for quick access to a specific resource.

Explore for yourself to start implementing

**Operating Budget** 

**Debt Financing** 

A WaterNow **Alliance Initiative** 

resilience

Visit tanin waternow oraltoolkit to view full toolkit

>

### Welcome to the Tap into Resilience Toolkit

tap into résilience A WaterNow Alliance Initiative







EXPERT PANEL





### **ONLINE MODULES**

### What are my **financing** options?





### Localized water infrastructure implementation strategies

**Public Non-Utility Property Localized Infrastructure** 

**Private Property Localized Infrastructure** 

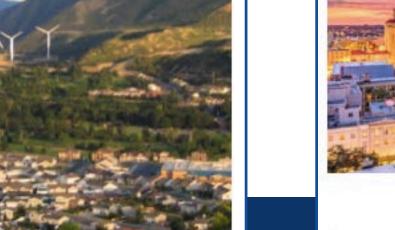
### **SUCCESS STORIES**



**Case studies** 

### **Spanish Fork**

Innovative water conservation program to install free smart irrigation controllers for residential customers already reducing outdoor irrigation by 17%.





**Case studies** 

### San Antonio Water System

By treating conservation as a source of supply San Antonio Water System reduced water consumption in its service area by 50%.

Read more

**Read more** 











**TIR Toolkit** 

### **Tucson Water: Water Conservation Program** Annual Report







### **Download the Report Today**

**Click here** 

### VIDEOS

Environmental Impact Bonds

♥ ★ Watch later Share

Exploring Environmental Impact Bonds Eric Lesinger Quantified Ventures

Video with Quantified Venture's Eric Letsinger explain how EIBs work available online

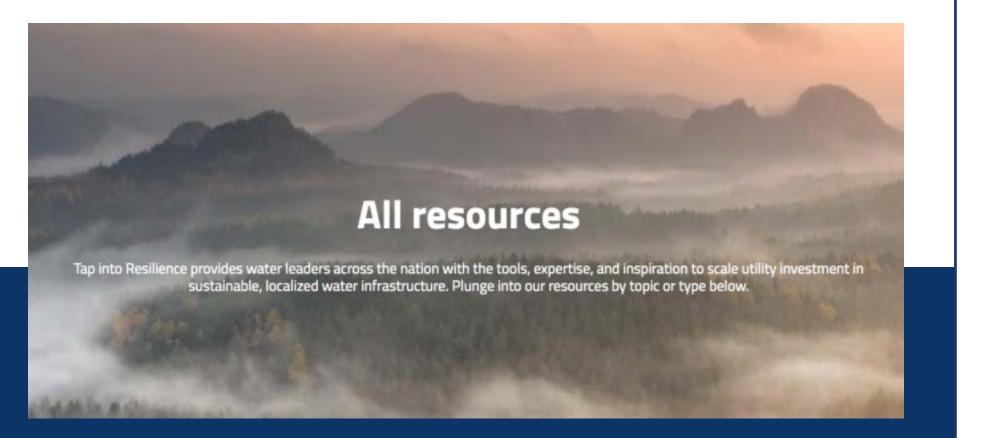
### Watch the Video Today

**Click here** 





### **RESOURCE LIBRARY**



### Explore resources by topic, region, or type



**Case studies** 

All Topics

### **Philadelphia Water Department**

green infrastructure on private property and bring multiple benefits to vulnerable communities.

Read more



**TIR Toolkit** 

### **NEORSD: Green Infrastructure** Grants

NEORSD grant program to strategically implement and ensure the long-term maintenance of green infrastructure.

All Regions

All Types

Participation in PWD's grants program to install



**Case studies** 

### Metropolitan St. Louis Sewer District

Participation in MSD's grants program to install green infrastructure on private property and bring multiple benefits to vulnerable communities.

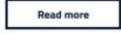
Read more



Technical guides

### Municipal Handbook: Green Streets

A handbook to help local officials implement green infrastructure on public streets in their communities.





**TIR Toolkit** 

### **Taxability of Rebates: Federal Tax** Issues

Overview of taxability of consumer rebates and other financial incentives at the federal level



**TIR Toolkit** 

### Stormwater Retention Credit Trading Systems: Local Tax Issues

Overview of taxability of financial incentives for localized water infrastructure at a local level



### **EXPERT PAN**

Have a project that needs support? Our team of experts is here to help

**O** Ask an expert



Whether you have a project that needs support or are just dipping your toe in, our team of experts is here to help.

First Nam

Email

Phone

### I'm lookin

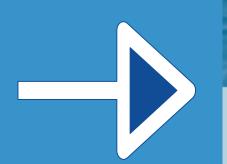
- General
- Bond but
- Auditor
- Success

### Message

### Ask an expert

e	Last Name	
	Organization	
g for (choose all that apply)		
	<ul> <li>Bond council</li> <li>CPA</li> <li>Impact Investing</li> <li>Other</li> </ul>	
Sub	mit	

### TAP INTO THE TIR TOOLKIT



### Share your feedback



### Tap into Resilience Toolkit Feedback

Share Feedback

Your email address (cak@waternow.org) will be recorded when you submit this form. Not you? Switch account

Do you want to learn more about Tap into Resilience implementation strategies? Please describe your areas of interest below.

Your answer

Is the Tap into Resilience Toolkit missing information you were looking for? Please describe below.

Your answer

Is the Tap into Resilience Toolkit missing a tax, accounting, or financing issue you were looking for? Please describe below.

Your answer

Do you have other comments to share with WaterNow about the Tap into Resilience Toolkit? Please describe below.

Your answer

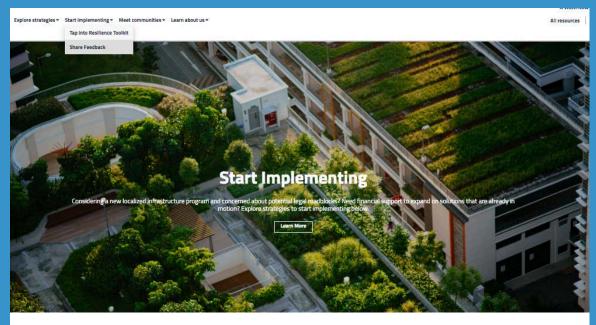
Send me a copy of my responses.

### SUBMIT

Never submit passwords through Google Forms.

### Share your story





### Share your water infrastructure story

Is your community already deploying localized infrastructure? Have experience implementing or expanding a program that'd be helpful for others to hear? Fill out the form below and share your story to be part of the water transformation.

Name and Professional Title

City or Water Agency

Email

Does your city deploy water distributed infrastructure (DI) to reach your water quantity, water quality, wastewater/stormwater management goals? Please describe the projects or programs your city or entity has deployed, for example, do you provide grant or rebate programs to property owners who replace turf, install water-efficient appliances, or manage stormwater onsite?

If your city does not have a DI program, but would like to implement one, what have been the barriers?

Is your city interested in expanding your DI Program?

Yes

No
 Other

Have there been specific tax or legal issues that have come up as your city creates or looks to expand its DI programs?

Yes, my city has encountered tax issues

Yes, my city has encountered legal issues

Please provide more detail on the challenges your city encountered and whether they were resolved

### tapin.waternow.org/start-implementing/#shareyourstory

### SAVE THE DATE

### APRIL 15-16, 2020

### tap into resilience WaterNow 5th Annual Summit

### PHILADELPHIA, PA



### REGISTER TODAY!

### WaterNowSummit.org

# THANK YOU & QUESTIONS

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