

Building Stormwater-Resilient Communities: Encouraging Community Involvement to Soak Up the Rain

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soak up the rain

created by U.S. EPA

“People can use rain barrels to catch the runoff, then use it to water their lawns,” she says. “There are lots of great low-tech solutions...”

Alexandra Dunn





















CommonWealth -
POLITICS, IDEAS & CIVIC LIFE IN MASSACHUSETTS

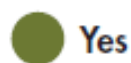
April 10, 2018

<https://commonwealthmagazine.org/environment/tax-that-dirty-water/>

Green Infrastructure Benefits and Practices

This section, while not providing a comprehensive list of green infrastructure practices, describes the five GI practices that are the focus of this guide and examines the breadth of benefits this type of infrastructure can offer. The following matrix is an illustrative summary of how these practices can produce different combinations of benefits. Please note that these benefits accrue at varying scales according to local factors such as climate and population.

Benefit	Reduces Stormwater Runoff				Increases Available Water Supply	Increases Groundwater Recharge	Reduces Salt Use	Reduces Energy Use	Improves Air Quality	Reduces Atmospheric CO ₂	Reduces Urban Heat Island	Improves Community Livability					Improves Habitat	Cultivates Public Education Opportunities
	Reduces Water Treatment Needs	Improves Water Quality	Reduces Grey Infrastructure Needs	Reduces Flooding								Improves Aesthetics	Increases Recreational Opportunity	Reduces Noise Pollution	Improves Community Cohesion	Urban Agriculture		
Practice																		
Green Roofs	●	●	●	●	○	○	○	●	●	●	●	●	◐	●	◐	◐	●	●
Tree Planting	●	●	●	●	○	◐	○	●	●	●	●	●	●	●	●	◐	●	●
Bioretention & Infiltration	●	●	●	●	◐	◐	○	○	●	●	●	●	●	◐	◐	○	●	●
Permeable Pavement	●	●	●	●	○	◐	●	◐	●	●	●	○	○	●	○	○	○	○
Water Harvesting	●	●	●	●	●	◐	○	◐	◐	◐	○	○	○	○	○	○	○	○



Yes



Maybe



No

Green Infrastructure Builds Resiliency

1 Vegetation-based green infrastructure practices can mitigate carbon pollution.

2 Build green infrastructure like rain gardens and permeable pavement to manage flooding.



3 Reduce dependence on imported water and save money. Let water soak into the ground to recharge local groundwater supplies.

4 Keep water local. Capture runoff in cisterns and rain barrels to reduce municipal water use.

5 Plant trees and green roofs to mitigate the urban heat island effect.

6 Use living shorelines, buffers, dunes and marsh restoration to reduce the impact of storm surges.



- Create a stormwater brand**
- Support/promote local efforts**
- Raise awareness/encourage action**
- Connect to resources and tools**
- Showcase projects**



- **Website**
- **Outreach Tools**
- **Social media**
- **Webinars**



- **Events**
- **Training**
- **Collaborations**
- **Workshops**

Soak Up the Rain

Soak Up the Rain is a stormwater public outreach campaign to raise awareness about the problem of polluted stormwater runoff and to encourage citizens, municipalities and others to take action to help reduce runoff and its costly impacts. We can all be part of the solution. Check out the website for outreach tools, how-to guides, and many other resources to learn more and get started.

Why Soak Up the Rain?



- [What's the Problem?](#)
- [The Benefits of Green Infrastructure](#)

Outreach Tools



- [Ready-to-Use Tools](#)
 - [Banner](#)
 - [Business-Sized Card](#)
 - [Rain Garden Poster](#)
 - [Green Roof Posters](#)
 - [Green Infrastructure Poster](#)
 - [Faces of Soak Up the Rain Video](#) EXIT
- [Customizable Tools](#)

Sharing Stories



- [See Who's Soaking Up the Rain](#)
- [Share Your Story \(use #soakuptherain\)](#)

How to Soak Up the Rain



- [What You Can Do](#)
- [Disconnect](#)
- [Downspouts](#)
- [Rain Barrels](#)
- [Rain Gardens](#)
- [Trees](#)
- [Permeable Pavement](#)
- [Green Roofs](#)

Municipal and Community Resources



- [Resource Index](#)
 - [Get Updates & Join the Conversation](#)
- [Local Organizations](#)
- [New England Webinar Series](#)



What's New

[Soak Up the Rain New England Webinars](#)

NEW Upcoming Webinar Getting Ready for Rain! Integrating Green Infrastructure and Nature-Based Solutions into State and Local Hazard Mitigation Plans. Wednesday, April 25, 2018, 1:00-2:30 pm EST

NEW [Storm Smart Cities: Integrating Green Infrastructure into Local Hazard Mitigation Plans, 2018, US EPA](#)

[Holistically Realizing the Benefits of Green Infrastructure, Guidance for Local Governments, The University of Maryland Environmental Finance Center \(PDF\)](#)

(87 pp, 5.7 MB, [About PDF](#)) EXIT

[Healthy Benefits of Green Infrastructure in Communities \(PDF\)](#) (2 pp, 542 K, [About PDF](#))

[Water Infrastructure Financial Leadership, 2017, U.S. EPA \(PDF\)](#) (20 pp, 1.4 MB, [About PDF](#))

To help local decision makers identify what is needed for financial planning, determine how to fund and finance a project, and consider which strategic approaches can be used to protect local investments.

Website



Soak Up the Rain
epa.gov/soakuptherain

EPA National Green Infrastructure
epa.gov/green-infrastructure

Website: Ready-to-use Outreach Tools

Soak Up the Rain Ready-to-Use Outreach Tools

Soak Up the Rain is a stormwater public outreach campaign to raise awareness about the problem of polluted stormwater runoff and to encourage action by citizens, municipalities, and others to help soak up the rain to reduce runoff. A suite of ready-to-use Soak Up the Rain tools is available for download and use in outreach efforts, and additional tools are under development.

If you would like to customize a Soak Up the Rain tool by adding your organization's name, website URL, logo and other contact information, you can do this with the [Soak Up the Rain Customizable Tools](#).

Business-Sized Card



Soak Up the Rain Banner



Green Infrastructure Poster



Rain Garden Poster



Green Roof – Good Investment Poster



Green Roof – Living Roof Poster



Website: Customizable Outreach Tools

Add your own info



This Soak Up the Rain effort is brought to you by:

Your logo/seal here

organization name
website url
email address
phone number
contact name

Soak Up the Rain with Green Infrastructure

soak up the rain
inspired by U.S. EPA

Tree Canopy

Rain Barrel

Rain Garden

Green Roof

Tree Planter Box

Pervious Concrete

Learn more. Take Action.

Poster created by U.S. EPA Office of Wetlands, Oceans and Watersheds.
EPA does not oversee independent Soak Up the Rain programs.

Green infrastructure poster

Website: News & Updates

Get Updates & Join the Conversation

Greenstream - emails about green infrastructure. Email join-greenstream@lists.epa.gov.

[G3 Digest: Green Streets, Green Jobs and Green Towns](#)

[Water Headlines](#)

[Water Finance Newsletter](#)

[NPSINFO](#) - public forum for runoff pollution issues

[Access the Nonpoint Source News-Notes Library](#)

[Freshwater Hazardous Algal Blooms Newsletter](#)



EPA Webinar Series

- [Soak Up the Rain New England Webinar Series](#)
- [Green Infrastructure](#)
- [Leading-Edge Stormwater Financing Webinars](#)
- [Safe and Sustainable Water Resources Research Program](#)
- [NPDES Stormwater Webcasts](#)
- [Watershed Academy](#)

Events



Boston Flower & Garden Show

Collaborations

Stormwater Benefits of Urban Trees

October 19, 2015
4:00-5:00pm

**Tree Giveaway
& Training**

Trees Soak Up the Rain!

**Autumn Woods Apartments
17 Upland Gardens Rd, Worcester**

Refreshments Served

treeworcester.org • staff@treeworcester.org
508.752.1980



Workshops/Training



**Rain garden installation
Hartford, CT**

Soak Up the Rain Webinar Series

Soak Up the Rain New England Webinar Series



Join us as we highlight innovative approaches to addressing stormwater in New England.

- Hear about stormwater public outreach resources and programs.
- See who's soaking up the rain with green infrastructure.
- Learn about the latest tools and resources from EPA and others.
- Share successes, barriers, and lessons learned while implementing green infrastructure in our New England communities.

Getting Ready for Rain
Integrating Green Infrastructure and Nature Based Solutions into
State and Local Hazard Mitigation Plans

EPA New England Soak Up the Rain Webinar Series- April 25, 2018



Provincetown Stormwater Program Revitalizes Downtown and Improves Beach Water Quality using Porous Asphalt

Soak Up the Rain New England Webinar Series
January 24, 2018

Engaging Urban Residents
~
Soak Up the Rain New England Webinar
May 25, 2016

Designing for the Future
New Haven's Infrastructure for Rising (and Falling!) Water

Giovanni Zinn, PE
City Engineer
City of New Haven, CT

**Contact: Myra Schwartz at 617-918-1696 or schwartz.myra@epa.gov
www.epa.gov/soakuptherain/soak-rain-new-england-webinar-series**

Looking forward



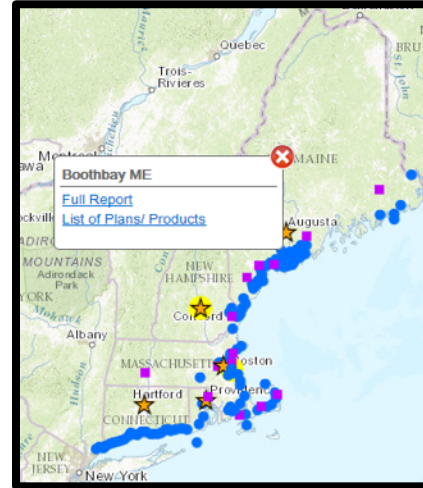
Advancing the green infrastructure message:

- Operation and Maintenance
- Climate Resiliency

Supporting local efforts
Ideas?

Wondering what other communities are doing? Resilience and Adaptation in New England: RAINE Database

- **Over 220 communities with unique reports: towns, waterbodies, regions and states**
- **Reports include access to more than 300 plans and products**
- **On-line “searchable” database using over 90 key words**



Spotlights

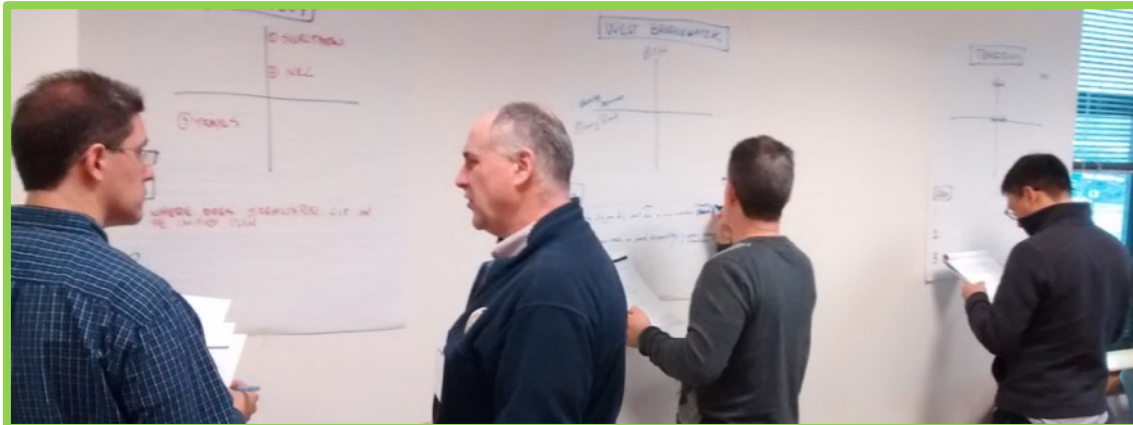


These [examples highlight unique practices](#) including the use of incentives, collaborations, ordinances, etc.

Resilience Related Tools and Resources

- **Flood Resilience: A Basic Guide for Water and Wastewater Utilities** <https://www.epa.gov/waterutilityresponse/flood-resilience-basic-guide-water-and-wastewater-utilities>
- **Creating Climate Ready Water Utilities** <https://www.epa.gov/crwu>
- **Flood Resilience Checklist** <https://www.epa.gov/smartgrowth/flood-resilience-checklist>
- **Adaptation Resource Center** <https://www.epa.gov/arc-x>
- **US Climate Resilience Toolkit** <https://toolkit.climate.gov/>

REACHING COMMUNITY CONSENSUS ON STORMWATER FUNDING SOLUTIONS



Josh Secunda at Secunda.Joshua@epa.gov or 617-918-1736

Evaluation of the Role of Public Outreach and Stakeholder Engagement in Stormwater Funding Decisions in New England: Lessons from Communities

<https://www.epa.gov/sites/production/files/2015-09/documents/eval-sw-funding-new-england.pdf>

Contact us

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Soak Up the Rain website: www.epa.gov/soakuptherain

Soak Up the Rain

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New Hampshire DES Soak Up the Rain Team 2017 EPA Environmental Merit Award Winner