



RainReady Oak Park

Creating + Caring for Smart Landscaping

Marcella Bondie Keenan | Center for Neighborhood Technology

Margaret O'Dell Master Gardeners of Illinois

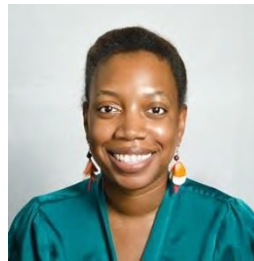
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Overview

Keeping Water Where You Want It

RainReady Oak Park Grant Program

Caring for Rain Gardens

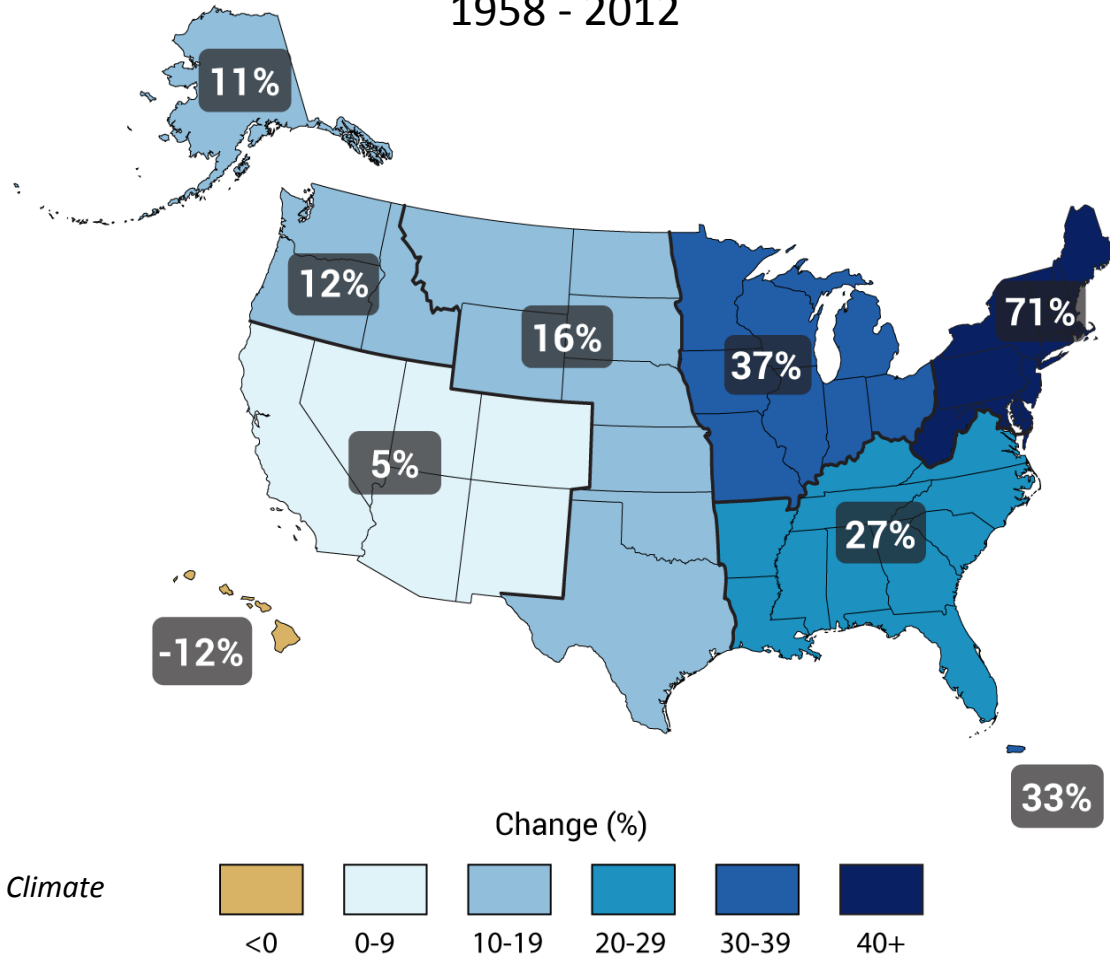
Q & A

A photograph of a flooded residential street. The water is calm, reflecting the surrounding environment. In the background, there are houses, bare trees, and utility poles with power lines. A person is standing in the water on the right side. The sky is clear and blue. The text "Keeping Water Where You Want It" is overlaid in white on a dark horizontal band across the middle of the image.

Keeping Water Where You Want It

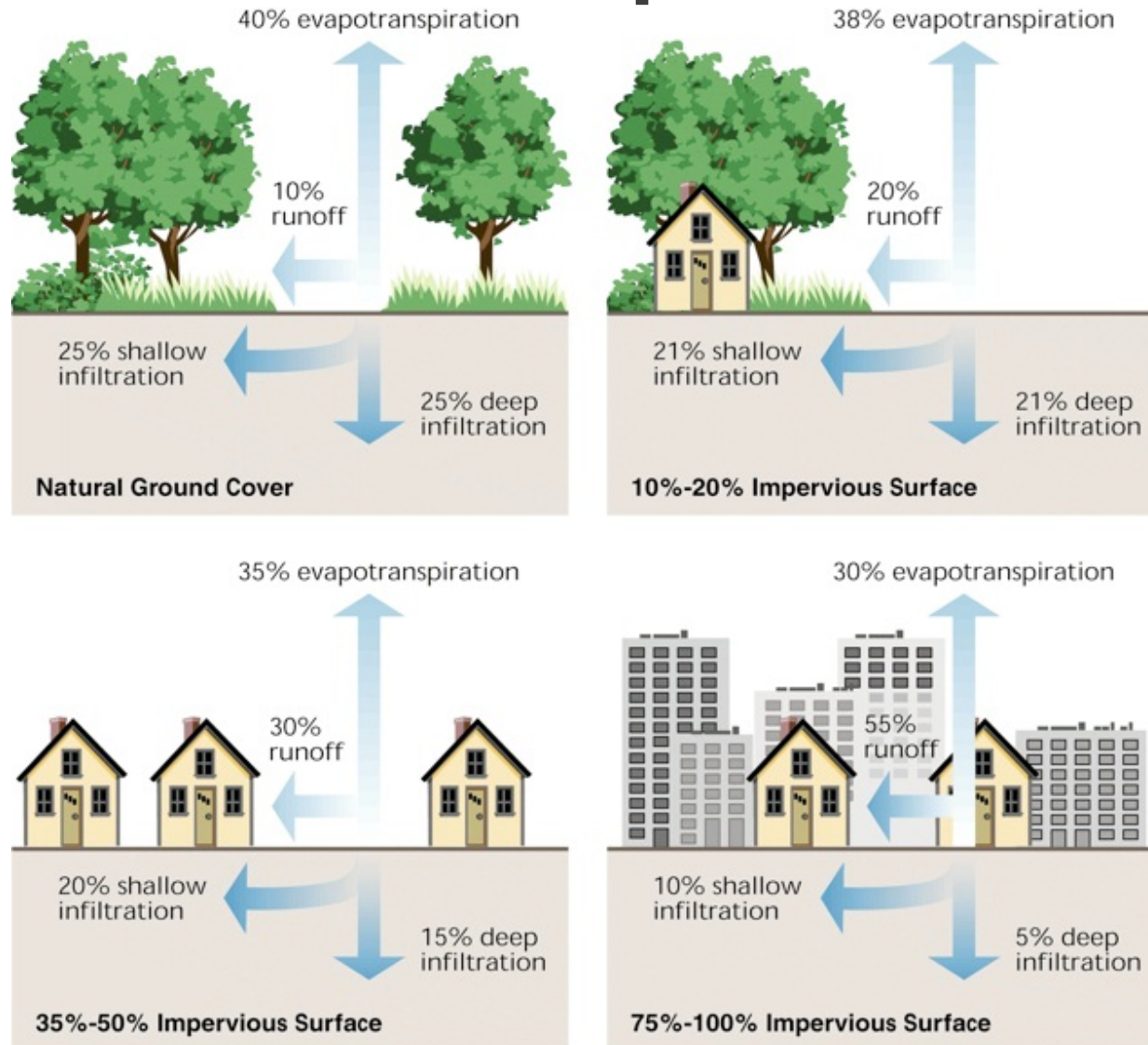
1: More Rain

Observed Change in Very Heavy Precipitation
1958 - 2012



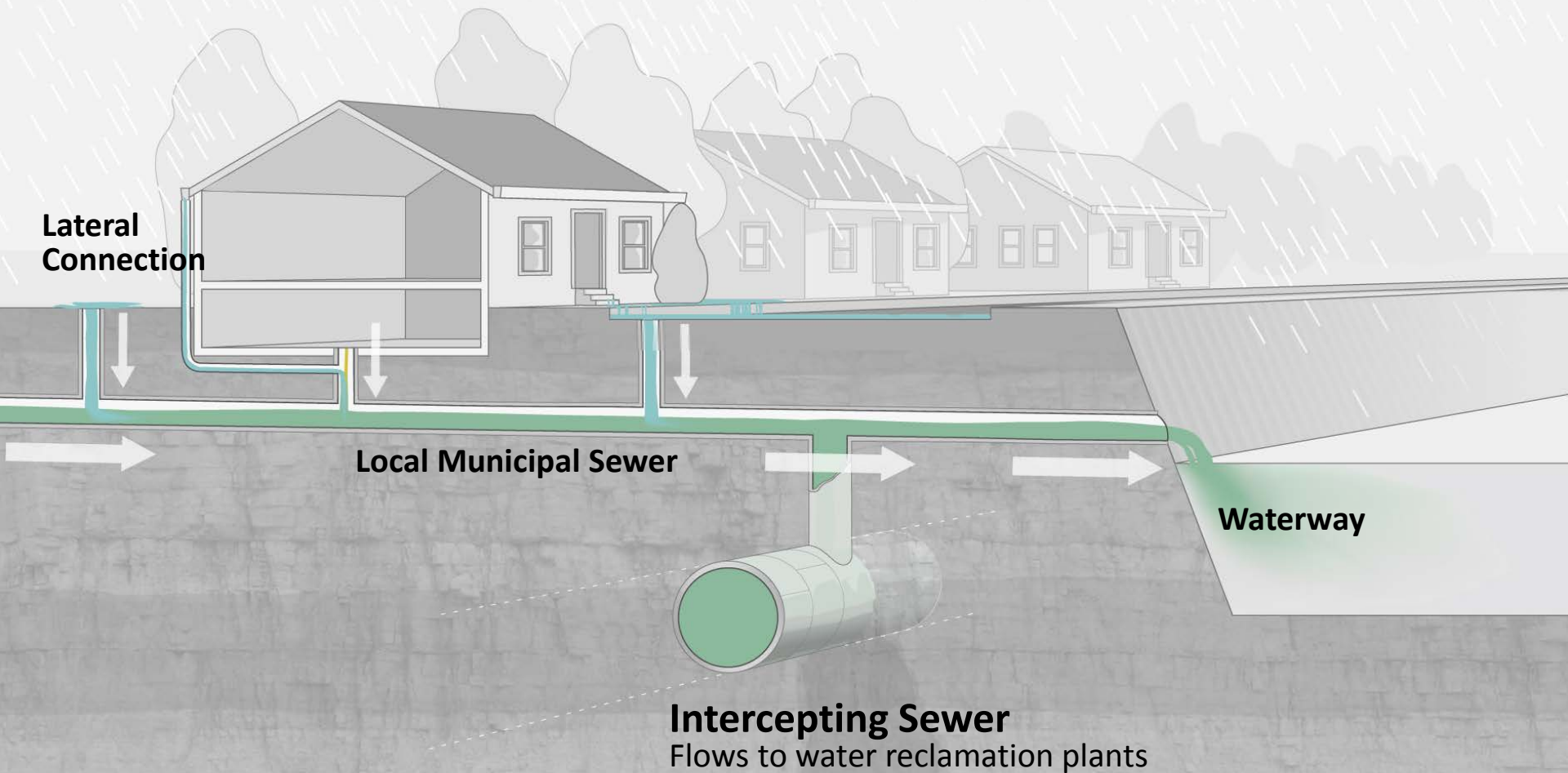
Source: 2014 National Climate Assessment (Fig. 2.18)

2: Less Green Space



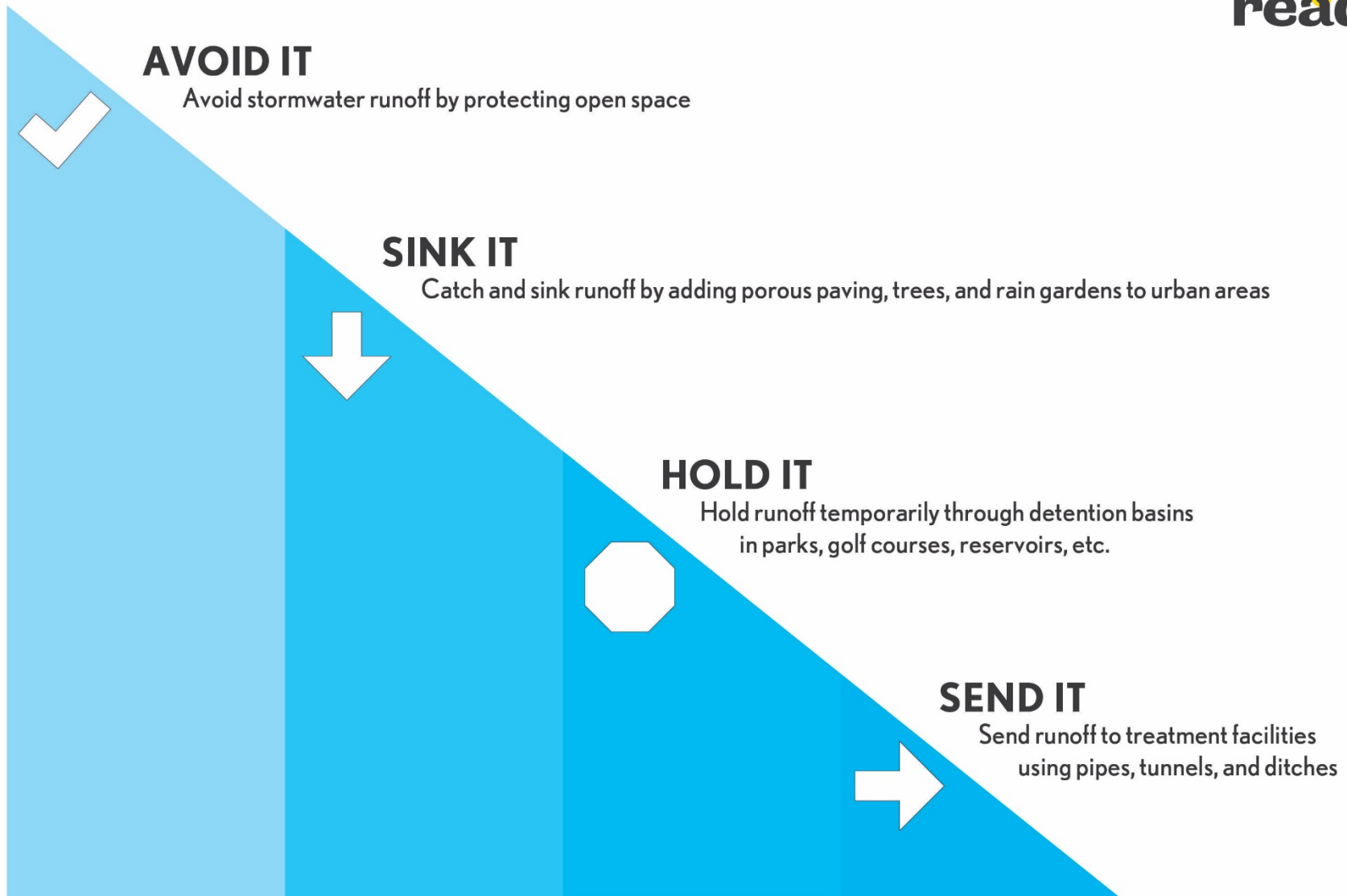
Source: Stream Corridor Restoration: Principles, Processes, and Practices (FISRG)

3. Sewers + Suburbs + Rain



*Source: Metropolitan Water
Reclamation District of Greater
Chicago*

Hierarchy for Stormwater Management



Benefits of Smart Landscaping

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



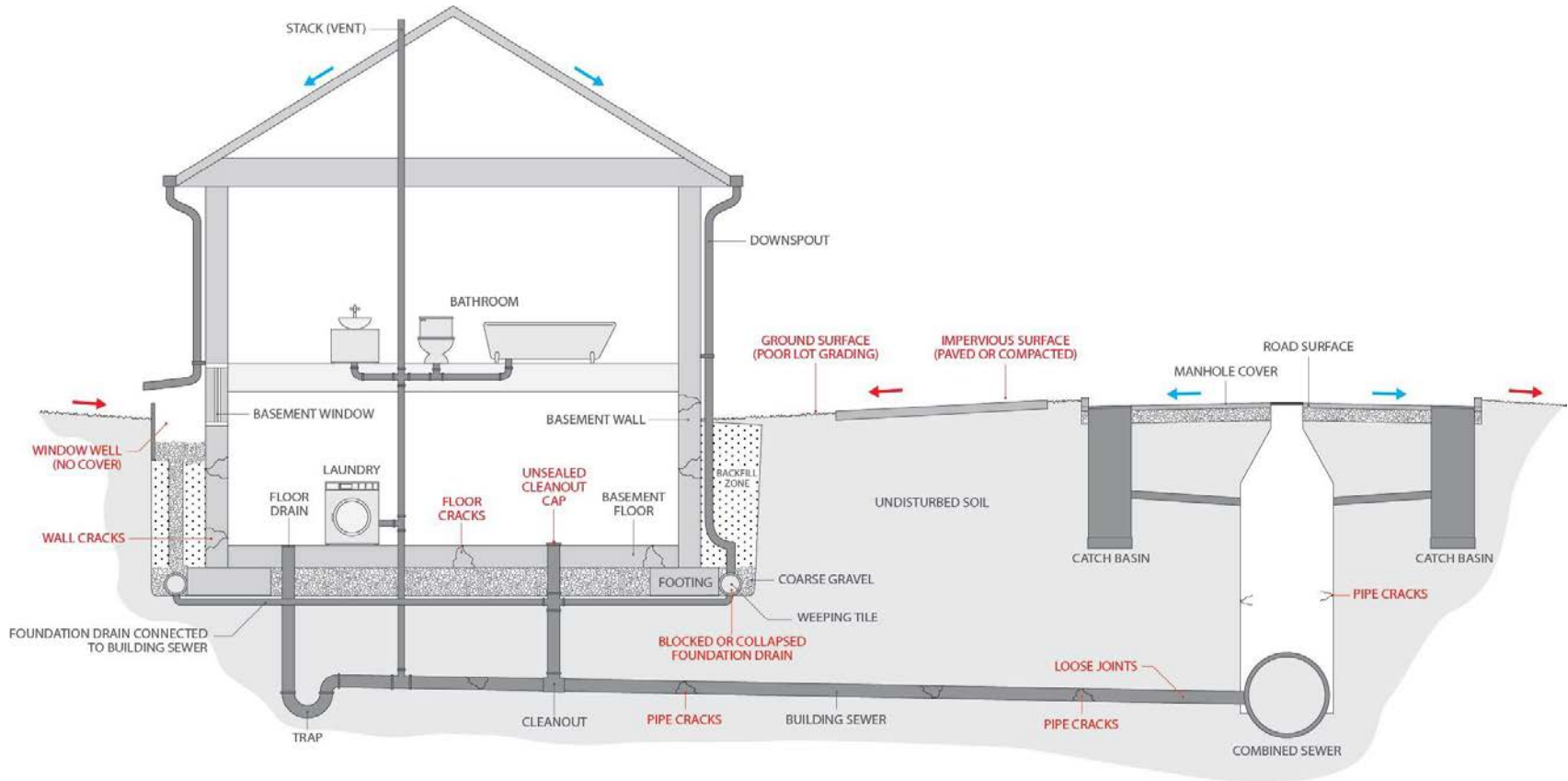
Maybe



No

Source: The Value of Green Infrastructure: A Guide (CNT)

How Water Enters Your Home



Source: Institute for Catastrophic Loss Reduction

Yard Ponding + Overland Flow

Telltale Signs

- Standing water outdoors
- Always soggy soils
- Water damage at basement windows + doors



Image: CNT

Foundation Seepage

Telltale Signs

- Water at interior walls
- Water stains
- Mold
- Peeling paint
- Powdery brick



Image: CNT

Sewage Backup

Telltale Signs

- Standing water inside
- Stains on walls and floors
- Sediment near floor drains or bathroom plumbing



Resources

Grants + Technical Assistance

RainReady Oak Park Landscaping Grant

<http://rainready.org/projects/rainready-oak-park>

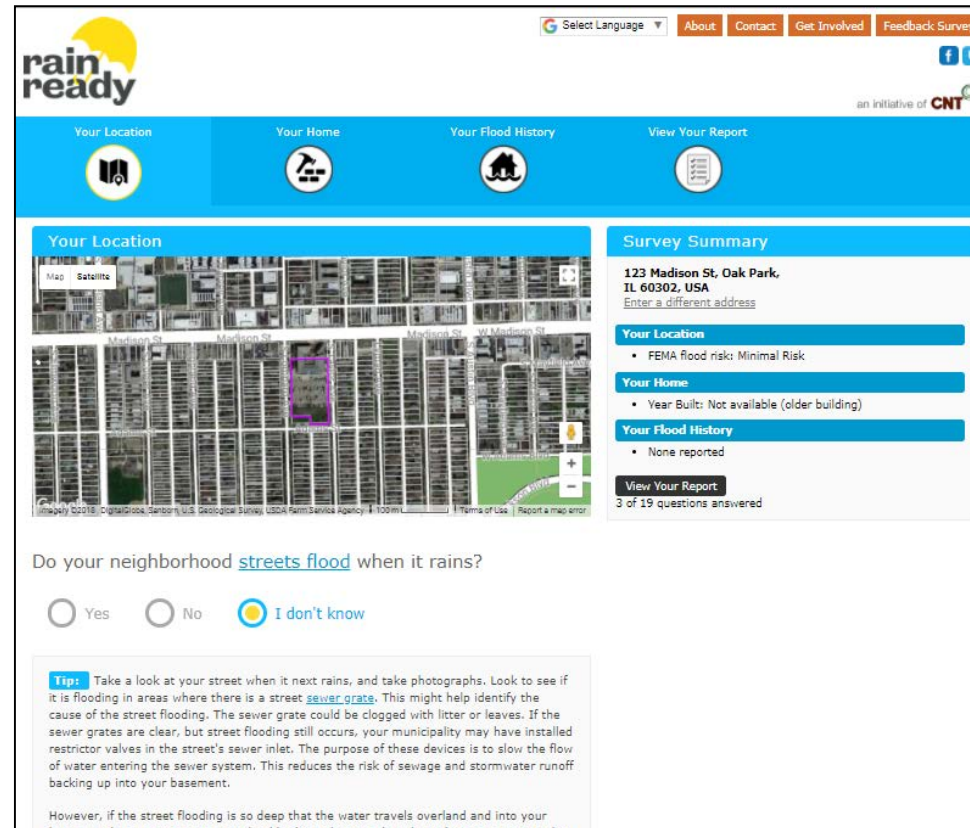
Village of Oak Park Sewer Backup Protection Grant

<https://www.oak-park.us/village-services/housing-programs/sewer-backup-protection-grant>

RainReady Socials

<http://rainready.org/our-services/rainready-home>

Guidance



The screenshot shows the RainReady.org website interface. At the top, there's a navigation bar with links: Select Language, About, Contact, Get Involved, and Feedback Survey. Below this is a blue header with four main sections: Your Location, Your Home, Your Flood History, and View Your Report. The 'Your Location' section is active, displaying a map of the user's location in Oak Park, IL. To the right of the map is a 'Survey Summary' box showing the user's address: 123 Madison St, Oak Park, IL 60302, USA. Below the summary, there are three sections: 'Your Location' (FEMA flood risk: Minimal Risk), 'Your Home' (Year Built: Not available (older building)), and 'Your Flood History' (None reported). At the bottom, there's a question: 'Do your neighborhood streets flood when it rains?' with three radio button options: Yes, No, and I don't know (which is selected). Below the question is a 'Tip' box with advice on how to identify the cause of street flooding. At the very bottom, there's a note about deep flooding.

rain ready

Select Language About Contact Get Involved Feedback Survey

an initiative of CNT

Your Location Your Home Your Flood History View Your Report

Your Location

Map Satellite

Madison St Madison St Madison St Madison St

Survey Summary

123 Madison St, Oak Park, IL 60302, USA
Enter a different address

Your Location

- FEMA flood risk: Minimal Risk

Your Home

- Year Built: Not available (older building)

Your Flood History

- None reported

View Your Report

3 of 19 questions answered

Do your neighborhood streets flood when it rains?

☐ Yes ☐ No ☒ I don't know

Tip: Take a look at your street when it next rains, and take photographs. Look to see if it is flooding in areas where there is a street sewer grate. This might help identify the cause of the street flooding. The sewer grate could be clogged with litter or leaves. If the sewer grates are clear, but street flooding still occurs, your municipality may have installed restrictor valves in the street's sewer inlet. The purpose of these devices is to slow the flow of water entering the sewer system. This reduces the risk of sewage and stormwater runoff backing up into your basement.

However, if the street flooding is so deep that the water travels overland and into your

My.RainReady.org



RainReady Oak Park

Program Goals

- Reduce runoff to sewer system
- Reduce home drainage problems
- Provide public health and environmental benefits

Program Application

- Oak Park homeowner
- Disconnected downspouts & yard space
- No outstanding Village obligations or building violations

Grants

- 50% match up to \$1,300

Eligible Landscaping

Rain Gardens + Bioswales

Cisterns

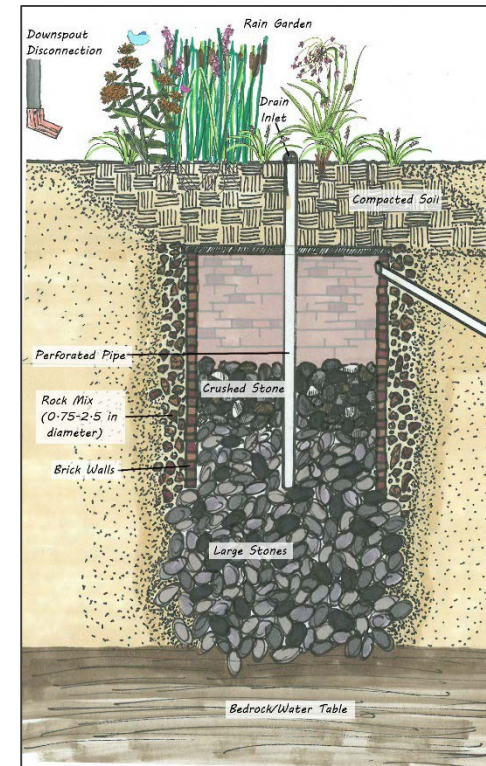
Dry Wells



Image: CNT



Image: Experiments in Sustainable Urban Living



Depaving + Permeable Pavement

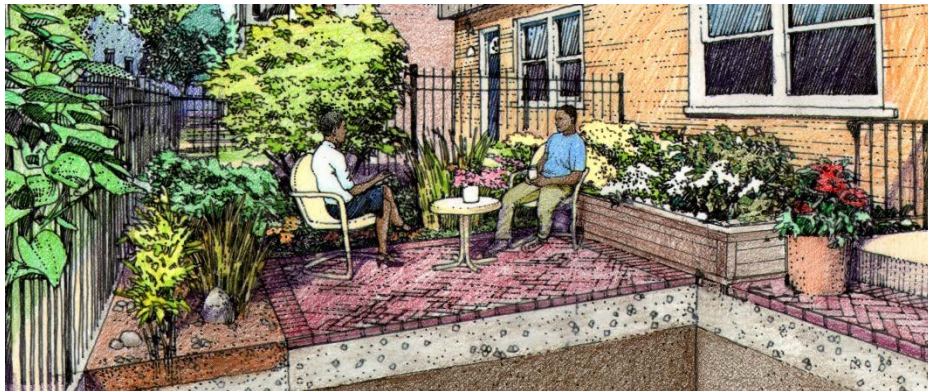


Image: CNT

How It Works



1. Apply for a grant
2. Sign the grant agreement
3. Schedule your home assessment
4. Review your flood prevention recommendations and suggested landscaping design
5. Choose your preferred landscaper
6. Complete landscaping no later than October 31st

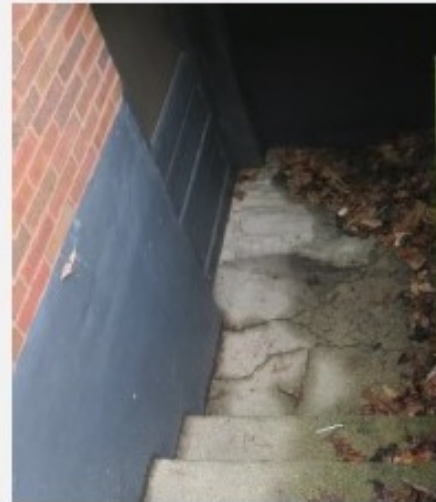
Table 1. Assessment Results

Landscape and Building Exterior Observations

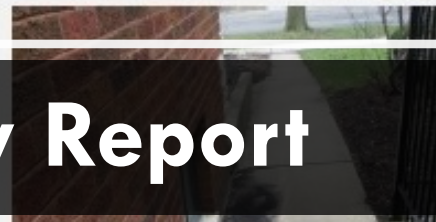
- The south yard is unevenly graded.
- The downspouts are discharging into low spots that can trap and hold water against the south foundation wall.
- The soil texture is a clay loam.



- Some gutters and downspouts and the exterior drain appear to be partially clogged with leaf litter.

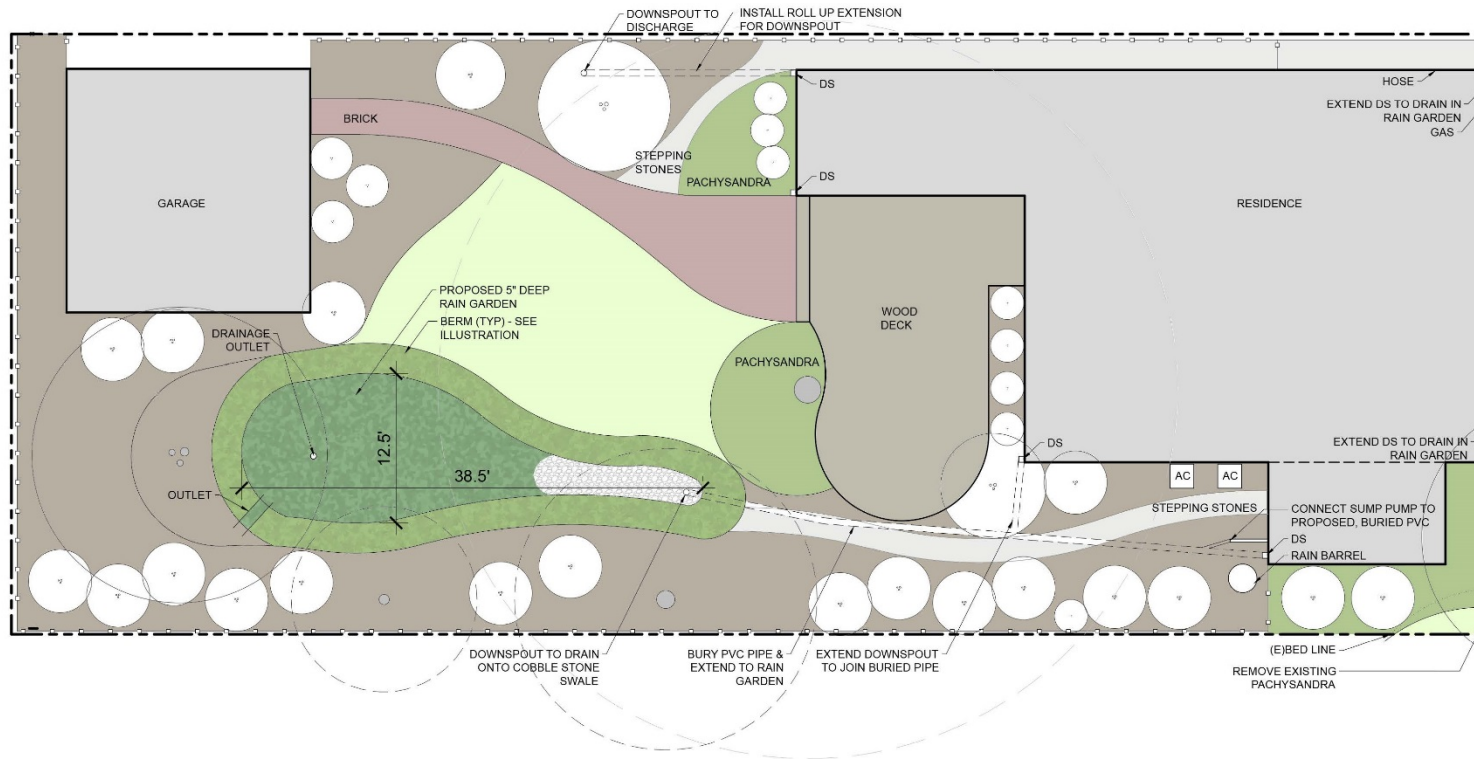


- The downspout from the north adjacent home is discharging into a low spot against the foundation wall.
- The north concrete sidewalk is pitched toward your home, which can trap water against the foundation.
- The sealant at the joint between the concrete sidewalk and the home is weathered.



RainReady Report

Recommended Landscaping Design



PLANT LIST:

Celandine poppy (<i>Stylophorum diphyllum</i>)	Gray's sedge (<i>Carex grayii</i>)
Cardinal flower (<i>Lobelia cardinalis</i>)	Small yellow fox sedge (<i>Carex annectans</i>)
Columbine (<i>Aquilegia Canadensis</i>)	Maidenhair fern (<i>Adiantum pedatum</i>)
Crested iris (<i>Iris cristata</i>)	Wild ginger (<i>Asarum canadensis</i>)
Golden Alexanders (<i>Zizia aurea</i>)	Curly-styled Wood Sedge (<i>Carex rosea</i>)
Big-leaved Aster (<i>Aster macrophyllus</i>)	

Construction

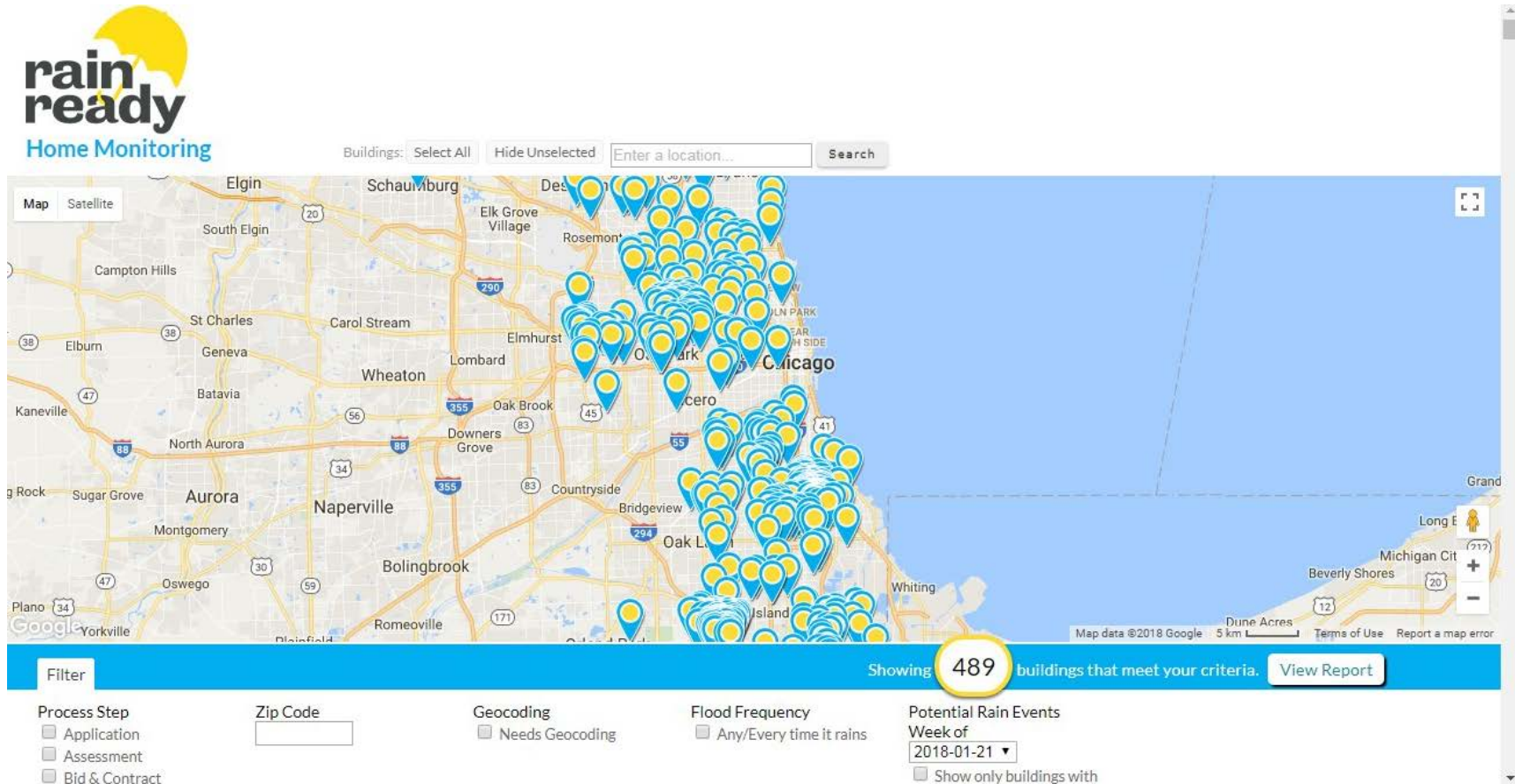
Before



After



Inspection + Evaluation



FAQ

Will smart landscaping stop my flooding?

Smart landscaping will help with yard ponding. Addressing severe yard ponding due to runoff from the alley, street, or neighbors may require an expensive installation that exceeds the maximum grant provided by RainReady Oak Park. Smart landscaping can help lessen seepage by fixing the grading around your home, but building foundation repairs or other work may be necessary too. If you have sewage backup, please apply instead for a Sewer Backup Protection Grant.

Do I have the right kind of yard for smart landscaping?

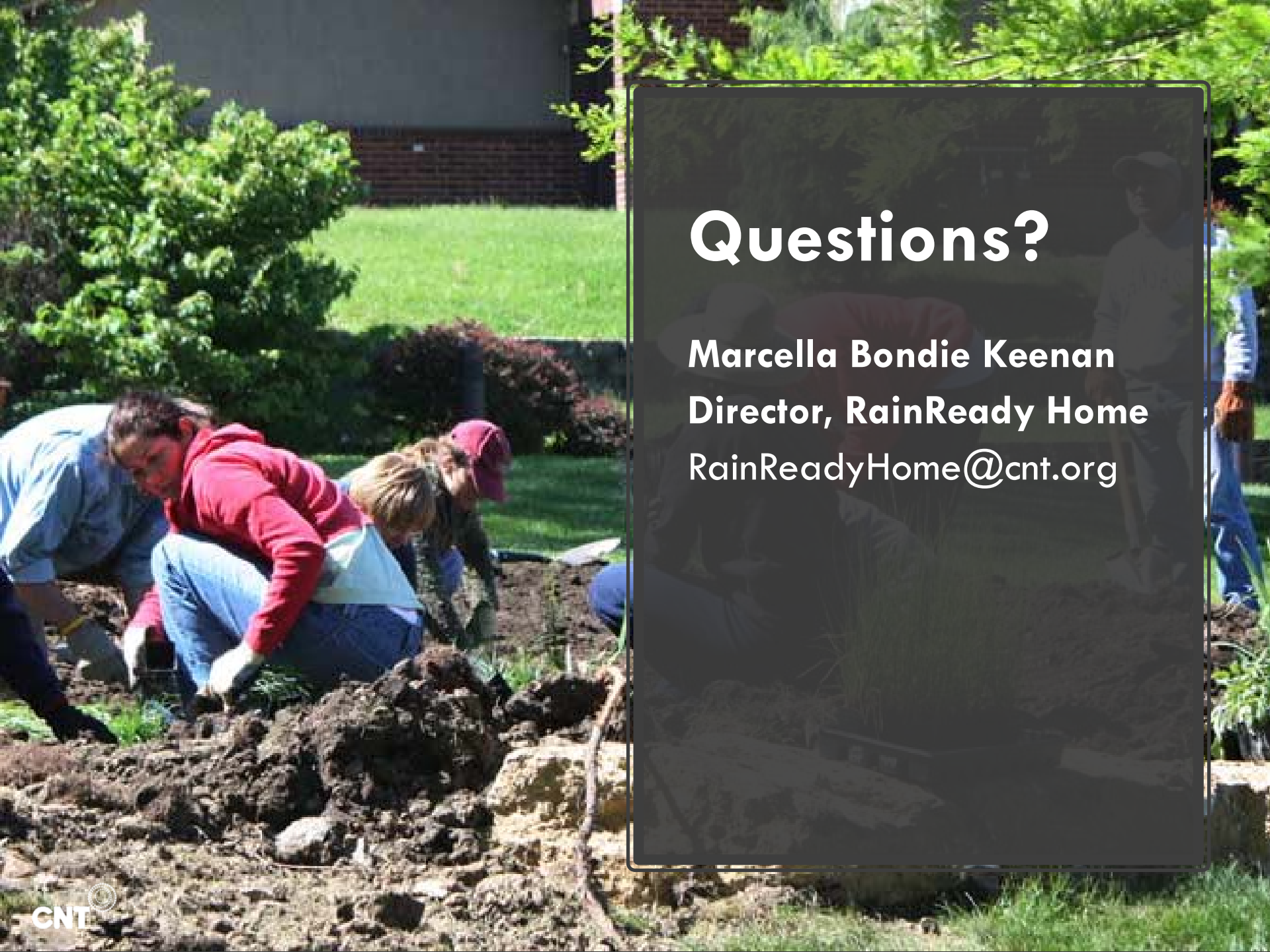
All smart landscaping should be connected to at least one downspout. The downspout(s) should take the rain from at least one-fourth of your roof. Above ground cisterns can be located right next to your home. Cisterns should be emptied between storms, and discharged on your property, at least ten feet away from any building foundation. Rain gardens, bioswales, dry wells, and permeable pavement should be located at least ten feet away from any building foundation. Permeable pavement should only be installed in an area where you currently have regular concrete or asphalt.

How big should my smart landscaping installation be?

The answer depends on the size and shape of your roof and yard, your soil, and how much rain you want to capture. All rain gardens will provide some benefits, like keeping water out of the sewer, providing habitat for butterflies, and adding beauty to your home. In the RainReady pilot program, the average rain garden installation was between 300 and 400 square feet. You can try out a rain garden calculator here: <http://raingardenalliance.org/right/calculator>

What if I have a connected downspout?

Downspout disconnection is required to receive a RainReady Oak Park grant. If you have connected downspouts but you are willing to disconnect all of them, please include that information in your application. If you believe one or more of your downspouts needs to remain connected, you can submit a Downspout Disconnection Waiver to the Village for review (see website). Email RainReadyHome@cnt.org if you have already applied, or for more information.



Questions?

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