rain ready Hr. 1.54 **RainReady Oak Park**

2017 + 2018

Marcella Bondie Keenan | Center for Neighborhood Technology

Hierarchy for Stormwater Management



AVOID IT

Avoid stormwater runoff by protecting open space

SINK IT

Catch and sink runoff by adding porous paving, trees, and rain gardens to urban areas

HOLD IT

Hold runoff temporarily through detention basins in parks, golf courses, reservoirs, etc.

SEND IT

Send runoff to treatment facilities using pipes, tunnels, and ditches



Community Benefits of Green Infrastructure

	Reduces Stormwater Runoff											Improves Community Livability						
Benefit	Reduces Water Treatment Needs	Improves Water Quality	Reduces Grey Infrastructure Needs	Reduces Flooding	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 Aesthetics	Increases Recreational Opportunity	Reduces Noise Pollution	Improves Community Cohesion	Urban Agriculture	Improves Habitat	Cultivates Public Education Opportunities
Practice	CC				A.					CO2			Ż		iii	¥		
Green Roofs					0	0	0								\bigcirc	\bigcirc		
Tree Planting					0		0									\bigcirc		
Bioretention & Infiltration							0	0								\bigcirc		
Permeable Pavement					0			\bigcirc				0	0		0	0	0	
Water Harvesting						\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	0	0	\bigcirc	0	0	0	0	







○ No

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

RainReady Oak Park Program









Program Design

Program Objectives

- Reduce runoff to sewer system
- Reduce residential drainage problems

Eligible Measures

- Rain gardens + Bioswales
- Depaving + Permeable pavement
- Cisterns + Dry wells
- Other approved green infrastructure

Program Financing

• 50% match up to \$1,300

Participant Selection

- Scofflaw review
- Applicant prioritization







Outreach + Education

- Village newsletter + social media
- CNT social media + website
- Community meeting hosted at Oak Park Conservatory
 - 40 Attendees
 - Informational handouts
 - Grant program presentation from Village and RainReady
 - Stormwater management presentation from RainReady
 - Rain garden maintenance presentation from Illinois Master Gardeners



Photo credits: CNT, 2018

Outreach + Education



Online Flood Education

My RainReady

- Parcel-specific data
- Guided flood risk questionnaire
- Flood protection tips for homeowners
- Customized recommendations report based on questionnaire answers
- Freely available to all
- Web: myrainready.cnt.org





runoff backing up into your basement.

Applicant Profile



- Top reasons for applying
 - Reduce runoff into sewers / Sustainability
 - Reduce flooding at home
- 82% experience flooding
 - 76% Yard ponding
 - 55% Seepage
 - Note: multiple types of flooding are possible for one home
- 90% have disconnected downspouts
- 84% clean gutters annually
- 31% clean sewer lines annually
- 27% check grading around home annually
- 19% purchase flood or sewer backup insurance





Program Results

Number of Applicants

• 195 Applications Completed

Completed Installations

- 18 Rain Gardens/Bioswales
- 8 Dry Wells
- 4 Depavings

Estimated **500,000 gallons of rain** diverted from Oak Park's sewer system





Investment

LEVERAGE ACHIEVED 1:2.1

Average Project Cost: \$3,950

Average Grant: \$1,260

Average Private Investment: \$2,630

Total Private Investment: \$60,450



2,600-gal. dry well + yard drain

Before



Construction



After







350-s.f. rain garden + bioswale

Before



After







Participant Feedback

8/9 "Not likely to make improvements without the program" "There were several huge rainstorms since installation and our yard and basement has been dry- in fact - our neighbor two doors down contacted me to say that he expected to walk out of his house and see ponding and there wasn't any so he is even thinking that we may have alleviated his water issues!"





Recommendations

- Limit additional resident outreach activities until existing waiting list is reduced.
- Conduct contractor outreach + create a public database of landscape installers interested in bidding on RainReady Oak Park work.
- Review grant agreement and reimbursement forms for consistency with program processes. Add questions regarding approximate budget and construction schedule to application. Add deadline for grant reimbursement forms to FAQ.
- Enhance application review activities, including contacting applicants for a verbal review of grant requirements and interview with RainReady assessor.
- Conduct scofflaw review after invited applicants submit all grant agreement documents. Conduct scofflaw review on a rolling basis (as applicants submit agreements) and continue to streamline review period. Continue to streamline RainReady report approval process.
- Provide option for Village to refund deposit if RainReady assessment indicates green infrastructure is not feasible, and the participant does not receive a report and landscape design.



THANK YOU

Marcella Bondie Keenan | mbkeenan@cnt.org

For more information, please visit https://www.cnt.org/projects/rainready-oak-park



About CNT

Innovations laboratory for urban sustainability

Our goal is to advance urban sustainability and shared prosperity through initiatives in water, transportation, and climate. We are a "think and do tank" that offers programs, policy, and research.

