

DEMO RAIN GARDEN

SMRT Center, Michigan City IN

PURDUE EXTENSION
**RAINSCAPING
EDUCATION
PROGRAM**

Background Information

Illinois Indiana Sea Grant and the SMRT Center worked together to create a rain garden and irrigation system on the property of the SMRT Center. This rain garden is intended to reduce flooding in subterranean levels of the building and increase interest in the site. The irrigation system uses captured rainwater and existing utilities to water the garden beds.



The site is an old fire station with four raised garden beds, some trees and two driveways that intersect the property.

The fire station has been converted into a community center that provides senior meals, daycare programs and fresh fruits and vegetables. The site is situated on a triangle-shaped lot in a neighborhood, perfectly placed to engage with the surrounding community.

The project was led by Purdue Extension and Illinois-Indiana Sea Grant in conjunction with Brian Thomas, the lead director of the SMRT Center. This community center operates a garden on the property. An irrigation system designed by Purdue's Agricultural and Biological Engineering department was installed on the property. This system uses both rainwater and potable water to irrigate the garden beds. The maintenance of the site will be upheld by the SMRT Center and the surrounding community.



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Garden Design: Plantings and Information

Plant Scientific Name	Common Name	Number Used
<i>Lobelia cardinalis</i>	Cardinal Flower	10
<i>Iris versicolor</i>	Blue Flag Iris	5
<i>Asclepias incarnata</i>	Marsh Milkweed	3
<i>Zizia aurea</i>	Golden Alexander	3
<i>Solidago riddellii</i>	Riddell's Goldenrod	3
<i>Schizachyrium scoparium</i>	Little Bluestem	3
<i>Sporobolus heterolepis</i>	Prairie Dropseed	3
<i>Symphyotrichum novae-angliae</i>	New England Aster	3
<i>Liatris spicata</i>	Dense Blazing Star	3
<i>Citrus bergamia</i>	Bergamot	3



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Maintenance Plan: Establishment Period

- Water every week- about 1 inch per week for first growing season until plants are established
- Weed the rain garden every 2-4 weeks for the first six months

Maintenance Plan: General Maintenance

- General Maintenance
 - Remove debris from garden, inlet and outlet- every 2 weeks
 - Check mulch monthly and add mulch as needed to maintain 3" depth
 - Weeding, once a month or as needed
 - Watering - as needed during dry periods 1+ week

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Maintenance Plan: Seasonal Maintenance

- Spring (within first 3 days of installation)
 - Flush pipelines and laterals
 - Backwash filters
 - Check for leaks
 - Check emitters for even flow
- Fall
 - Flush the system with pressurized water and chlorine to clean and kill algae
 - Remove train plugs and use compressed air to drain any remaining water
 - Store tubing, control valves, filters and timers inside

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Resource Contact

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About the Purdue Rainscaping Education Program

The Purdue Rainscaping Education Program offers state-wide training for Purdue Master Gardeners, conservation agencies and organizations, stormwater professionals, and landscape companies and consultants.

The two day workshop sessions cover an introduction to rainscaping and rain gardens with specific modules for rain garden site selection, plant selection and garden design, installation, maintenance, and community engagement.

Workshops include hands-on activities, interactive discussions, and field trips to community rainscaping projects. Participants also gain experience through creation of a demonstration rain garden with community partners in a public space.

