

DEMO RAIN GARDEN

Marion County

PURDUE EXTENSION
**RAINSCAPING
 EDUCATION
 PROGRAM**

Background Information

Indy Urban Acres (IUA) is an 8-acre urban farm located on the eastside of Indianapolis and funded by a local foundation that supplies primarily lower income Hoosiers with healthy fruits and vegetables and services one of the area's largest food deserts. The site is also green space to local neighbors and a learning space. In 2014 the farm constructed a small 300 square foot rain garden to handle drainage from a nearby greenhouse as well as the field area to the north. Several mature native stands of Blue Flag Iris and Flat - Topped White Aster as well as Grey Dogwood shrubs have survived from the garden's original planting but over time due to local weed pressure from the nearby highway and surrounding area the garden became dominated by invasive species.



In addition to the invasives, the limited infiltrative capacity of the native Crosby soil was compromised by dumped potting soil and other sources of contributing sediment from adjacent farmed areas. After performing a simple 24 hour infiltration test which determined the saturated soils could infiltrate at least 4.5" in a 24 hour period, areas were identified for new plantings that included graminoids (grasses and sedges) since the rain garden was dominated by forbs and invasives and needed greater diversity to meet the 70% forbs/30% graminoid planting goal recommended for rain gardens.

The Rainscaping workshop demonstration project work restored the functionality of the garden and included removal of the various invasives and newly cleared areas were planted with approximately the following native species: Obedient Plant, Prairie Dropseed, Palm Sedge, Bee Balm and Joe Pye Weed. Obedient Plant and Bee Balm were selected for their aggressive growth habits and Joe Pye Weed was intentionally planted in the center of the garden due to its height. The graminoids were interspersed in drifts to meet the goal of 30% grasses/sedges in the planting mix due to their root structure and ability of these low statured plants to reduce weed pressure. Mulch was also added to the new plantings with an in kind value of approximately \$20 for mulch and \$350 for the plant material. All participants were able to select 24 native plugs from the greenhouse for their individual plantings as well.

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Garden Design: Plantings and Information

Plant Scientific Name	Common Name
<i>Physostegia virginiana</i>	Obedient Plant
<i>Sporobolus heterolepis</i>	Prarie Dropseed
<i>Carex muskingumensis</i>	Palm Sedge
<i>Monarda</i>	Bee Balm
<i>Eutrochium purpureum</i>	Joe Pye Weed



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Maintenance Plan: Establishment Period

Being a native planting with amended soil and mulch, the first year is the most crucial for plant establishment.

- Watering: Water weekly during dry spells. As much as possible water the soil and not the foliage.
- Weeding: Scout every 2 weeks for weeds and remove when present. Identify a staging area (such as a hidden pile) for the weeds.

Maintenance Plan: General Maintenance

- Watering: As needed during dry spells, particularly first 2 years.
- Weeding: As necessary, scout regularly, at least monthly during the growing season. Two week intervals preferred for first 6 months.
- Mulch: As necessary. Check annually.
- Meet with volunteer leadership quarterly.

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Maintenance Plan: Establishment Period

Spring and fall—

- Check inlet and outlet for debris and potential failures. Clean out and adjust as necessary.
- Scout for plant failures and note replacements necessary. Indy Urban Acres can provide native species in the spring for replacement. Be sure to maintain biodiversity, with at least 8 distinct native species populating the garden fairly equally in population.
- Over time the plants will fill in and become crowded. Divide plants in the spring or fall as needed. Project partners can provide receiving sites for any plant starts generated. Mulching is necessary after plant division.
- Reach out to project contacts in Purdue Extension Marion County and Marion County SWCD with any questions, or to schedule a site visit for consultation.

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Resource Contact

Brooke Alford – Marion County Purdue Extension: 206-380-1267

John Hazlett – Marion County Soil and Water Conservation District: 317-786-1776

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.

