



# South Jersey Landscape Makeover

*Presented at the Sustainable South Jersey Meet Up  
Pennsauken, NJ  
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# Rutgers Cooperative Extension

Rutgers Cooperative Extension (RCE) helps the diverse population of New Jersey adapt to a rapidly changing society and improves their lives through an educational process that uses science-based knowledge.





# Water Resources Program

*Our mission is to identify and address water resources issues by engaging and empowering communities to employ practical science-based solutions to help create a more equitable and sustainable New Jersey.*



# New Jersey

- Most densely populated state
- 21 Counties, 565 municipalities
- 95% of our waterways are impaired
- Harmful Algal Blooms (HABS) in many of our lakes
- Hammered by Ida, Henri, Sandy, and a bunch of Nor'easters
- Climate change is real – more severe storms and sea level rise



# Can we do stormwater management better?



**YES,  
with Green  
Infrastructure (GI)**



# Green Infrastructure is ...

...an approach to stormwater management that is cost-effective, sustainable, and environmentally friendly.

Green Infrastructure projects:

- capture,
- filter,
- absorb, and
- reuse

stormwater to restore the natural water cycle.



# Green Infrastructure Practices

## Bioretention Systems

- Rain Gardens
- Bioswales
- Stormwater Planters
- Curb Extensions
- Tree Filter Boxes



## Permeable Pavements

## Rainwater Harvesting

- Rain barrels
- Cisterns



## Dry Wells

## Rooftop Systems

- Green Roofs
- Blue Roofs



Parker Urban Greenscapes, 2009.



# Partnering to bring green infrastructure to the people

**RUTGERS**

New Jersey Agricultural  
Experiment Station



*William Penn*  
W I L L I A M P E N N  
F O U N D A T I O N



Partnership for the  
**DELAWARE  
ESTUARY**



**NEW JERSEY  
AUDUBON**



**NFWF**

# Landscaping Makeover Program

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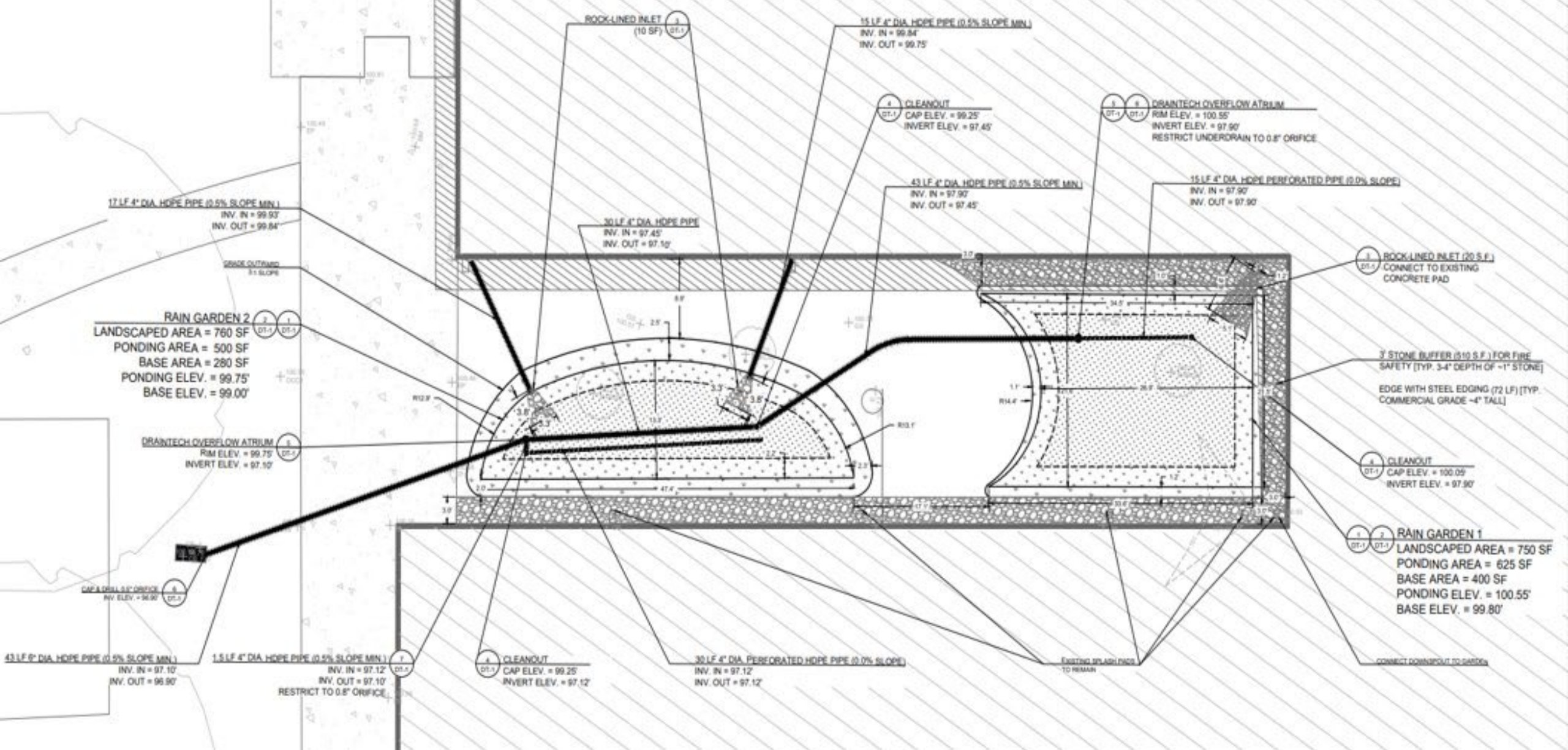
1. Design and build municipal projects
2. Offer homeowner education and outreach program



# The Process

1. Identify a project
2. Identify possible partners and create a team
3. Identify and secure funding
4. Develop design
5. Implement design
6. Maintenance, maintenance, maintenance





**ENGINEERING DESIGN**

# Responsible Parties

- Project coordinator – NGO or Local Champion
- Design – Rutgers
- Implementation
  - Municipality (Public Works or Parks Department)
  - School (Board of Ed Grounds Facilities)
  - Local Contractor
  - Partners and volunteers
- Maintenance – ???



A Good Contractor





Or a Good Public Works Department



# Or Great Students





... and a hard-working Professor



# **RAIN GARDEN REBATE EDUCATIONAL PROGRAM**

*September 20, 2023 at noon and 7 pm*

*Christopher C. Obropta, Ph.D., P.E.,  
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*and*

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Stephen Elliott



Chris Obropta (Rutgers)



Doug Cowan, Landscape Architect



Cheryl Reardon, ANJEC

**Kathy Manetas**

**iPhone**

**Ellen Haggerty**

**Christine**

Kathy Manetas

iPhone

Ellen Haggerty

Christine

**Amy**

**Jill Aquino**

Amy

Jill Aquino

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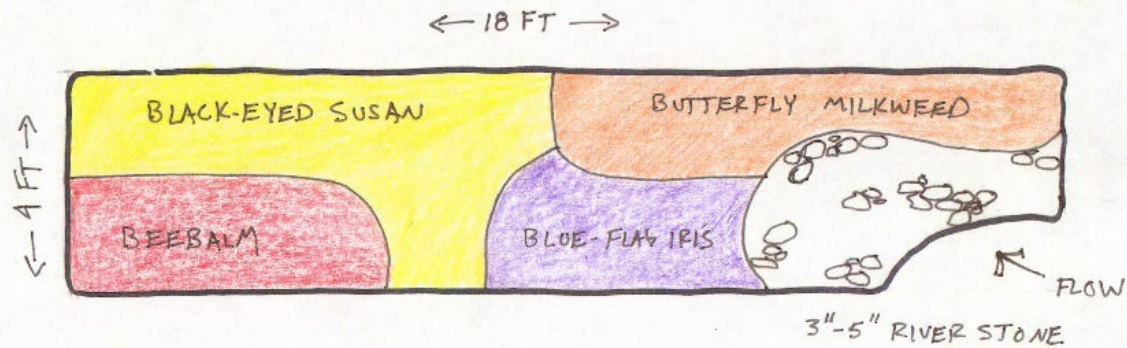
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# Roof, Sump Pump and Driveway Runoff

## Design



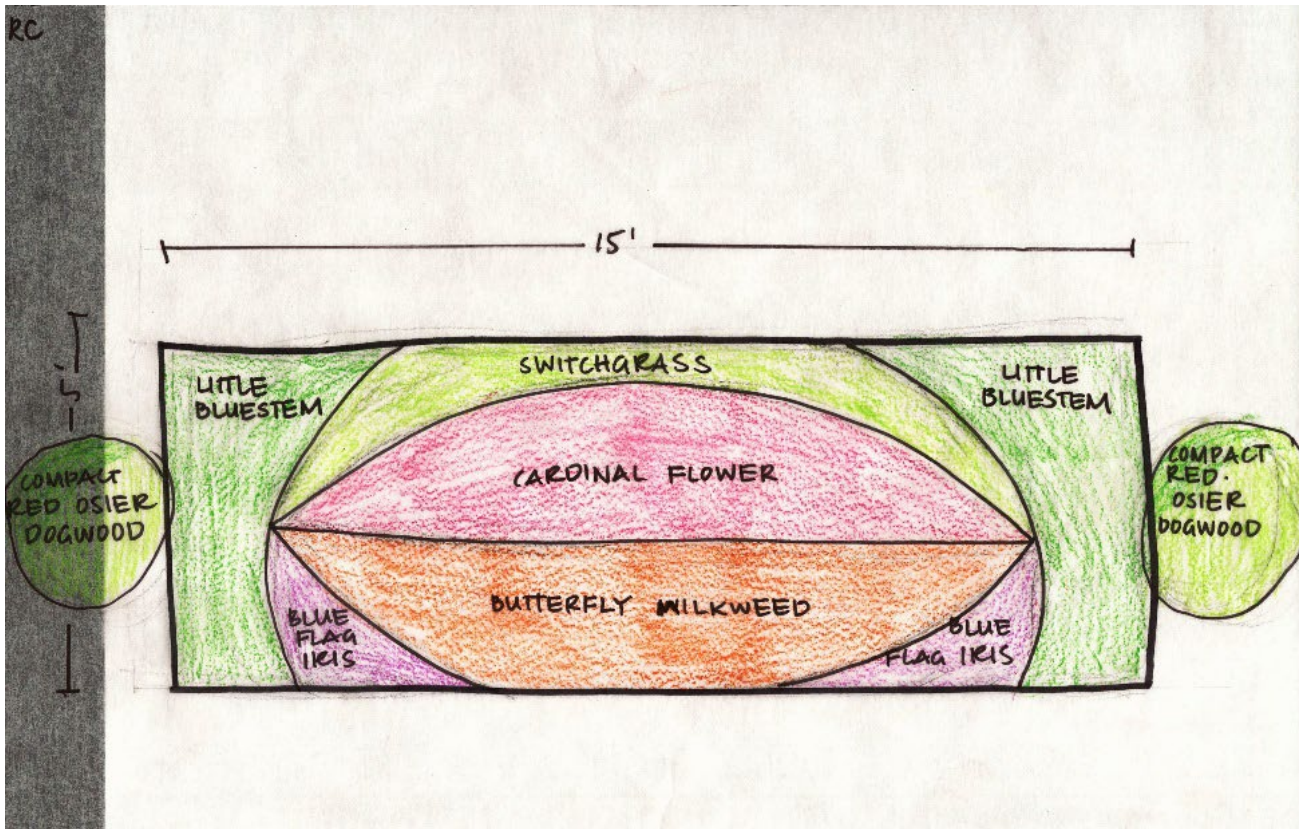
- 5 - BLACK-EYED SUSAN
- 5 - BUTTERFLY MILKWEED
- 4 - BEE BALM
- 4 - BLUE-FLAG IRIS



Installed Rain Garden

# Roof Runoff from Rain Barrel Overflow

## Design



## Installed Rain Garden







# Make a Difference

## Become a Green Infrastructure Champion

Green Infrastructure Champions are trained leaders who can advocate for green infrastructure in their own communities!

The Green Infrastructure Champions Program can offer:

- Training on green infrastructure planning and implementation
- Technical support to develop a design for a green infrastructure demonstration project
- Networking opportunities with other Green Infrastructure Champions for mutual support
- Assistance with grant writing and submission



**Join us for the next Green Infrastructure  
Champions Training Program  
January 2024 (Registration Starts in November 2023)**

Attend at least five two-hour workshops,  
and become a certified  
Green Infrastructure Champion!

**FOR MORE INFORMATION CONTACT:**

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## **Rutgers Cooperative Extension Water Resources Program**

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