

**RUTGERS**

THE STATE UNIVERSITY  
OF NEW JERSEY

# Green Infrastructure Municipal Outreach and Technical Assistance Program

Jeremiah Bergstrom, LLA, ASLA

[jbergstrom@envsci.rutgers.edu](mailto:jbergstrom@envsci.rutgers.edu)

Rosana Da Silva

[rdasilva@envsci.rutgers.edu](mailto:rdasilva@envsci.rutgers.edu)

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*"Protecting Public Health and the Environment"*



# 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 community water resources issues using sustainable and practical science-based solutions.

The Water Resources Program serves all of New Jersey, working closely with the County Extension Offices.

# Green Infrastructure Municipal Outreach and Technical Assistance Program

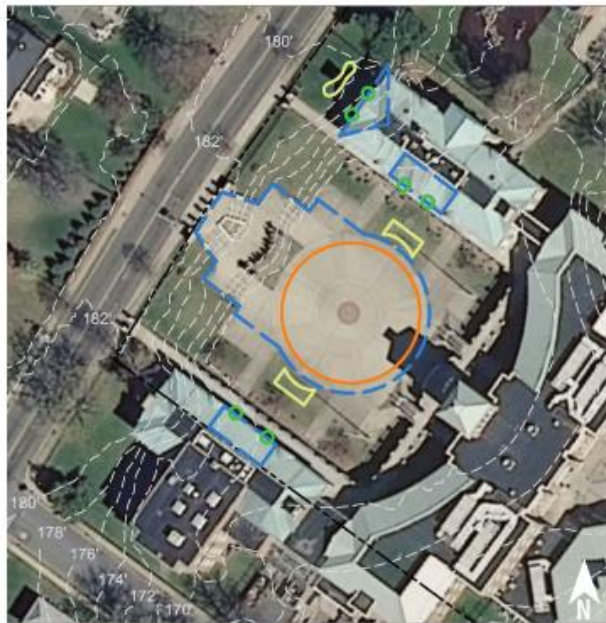
- Program goals and objectives:
  - Provide cost-share funding to assist municipalities in evaluating needs and preparing plans for green infrastructure opportunities
  - Install demonstration green infrastructure projects
  - Provide outreach and education about green infrastructure strategies
- PVSC has entered into a partnership with Rutgers Cooperative Extension (RCE) Water Resources Program to achieve these goals

# 1) Assist Municipalities in Evaluating and Preparing Plans for Green Infrastructure

- City of Bayonne
- Township of Belleville
- Township of Bloomfield
- Township of Cedar Grove
- City of Clifton
- City of East Orange
- Borough of East Newark
- Borough of East Rutherford
- Borough of Elmwood Park
- Borough of Fair Lawn
- City of Garfield
- Borough of Glen Ridge
- Borough of Glen Rock
- Borough of Haledon
- Town of Harrison
- Borough of Hawthorne
- City of Jersey City
- Town of Kearny
- Township of Little Falls
- Borough of Lodi
- Township of Lyndhurst
- Township of Montclair
- City of Newark
- Borough of North Arlington
- Township of North Bergen
- Borough of North Caldwell
- Borough of North Haledon
- Township of Nutley
- City of Orange
- City of Passaic
- City of Paterson
- Borough of Prospect Park
- Borough of Rutherford
- Township of Saddle Brook
- Borough of Totowa
- City of Union City
- Borough of Wallington
- Township of West Orange
- Borough of Woodland Park

# 1) Assist Municipalities in Evaluating and Preparing Plans for Green Infrastructure

- Development of municipal-wide Green Infrastructure Feasibility Studies
- Potential Project Site - Example



- disconnected downspouts
- pervious pavement
- ▭ rain gardens
- - - drainage area
- property line
- 2012 Aerial: NJOIT, OGIS

0' 30' 60'



Stormwater is currently draining from west to east across the site. The center courtyard can be converted to porous asphalt to capture and treat stormwater runoff. Building downspouts can be directed into rain gardens to capture, treat, and infiltrate runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	From the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
44	283,294	13.7	143.1	1,300.7	0.221	7.77
Recommended Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Rain gardens	0.060	10	4,540	0.17	660	\$3,300
Disconnections	-	-	-	-	-	\$1,500
Pervious pavement	0.384	64	29,067	1.09	7,200	\$180,150

EAST ORANGE HIGH SCHOOL

344 Prospect Street  
East Orange, NJ 07017

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# 1) Assist Municipalities in Evaluating and Preparing Plans for Green Infrastructure

- Meet with the PVSC/RCE team to discuss opportunities identified in your community
- Tell us about upcoming capital improvement projects where we can provide recommendations
- Provide us with data that can enhance your plan – topography, sewer systems, etc.
- Put your plan into action – leverage the plan to apply for funding opportunities

# 2) Installing Demonstration Green Infrastructure Projects



Elysan Fields Community Garden and Public School #5, Paterson



## 2) Installing Demonstration Green Infrastructure Projects



Greater Newark Conservancy, Newark

# 2) Installing Demonstration Green Infrastructure Projects



Horace Mann School, Bayonne

# 2) Installing Demonstration Green Infrastructure Projects



Lincoln Middle School, Kearny

# 2) Installing Demonstration Green Infrastructure Projects



Watsessing Elementary School, Bloomfield

# 2) Installing Demonstration Green Infrastructure Projects

- Demonstration Projects to be installed at PVSC
  - Administrative Building Plaza
  - Green Vehicle Car Wash



# 3) Provide Outreach and Education Opportunities

- Annually host green infrastructure training programs and workshops
- **Feedback/Testimonials from past workshops: *What did you like most about today's workshop?***
  - “Information presented in a manner that is very useful and understandable.”
  - “Becoming aware of unknown responsibilities.”
  - “Learned what are the responsibilities of the municipalities.”
  - “...[M]unicipality’s role in Stormwater Management BMP maintenance plan [and] implementation.”



**SAVE THE DATE: JUNE 15**  
**Workshop hosted at PVSC**  
**5 CEUs**



# GREEN INFRASTRUCTURE GUIDANCE MANUAL

FOR NEW JERSEY

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## Questions?

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