Green Infrastructure Education, Implementation, and Outreach in New Jersey Municipalities

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Education, Training and Outreach Technical Session 1-6
Houston, Texas
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Our Mission... 

...is to identify and address community water resources issues using sustainable and practical science-based solutions.
The Issue
The Issue
RUTGERS

About the Project

- Funded in 2013; two grants from NJDEP, part of Clean Water NJ Fund
- ~$185,000 total

![Pie chart]

- Implementation (Contractor/Supplies) 49%
- Education & Outreach 21%
- Other (Travel, Fringe, etc) 17%
- Indirect Cost 9%
- Operating Cost 4%
Community Groups

Outreach

Anyone who will listen

Schools

Implementation

Municipal Officials

Education

Youth

Municipal Property
• **Three (3) state-wide educational programs**
  
  – “Asking the Right Questions in Stormwater Review”
    Stormwater Management and Regulation: Municipal Official Training (2014)
  
  
  – Stormwater permit regulation compliance for stormwater coordinators (2015)
“Asking the Right Questions in Stormwater Review”

4 workshops; defining the role of the municipal official

- 21% increase in average rating for knowledge of stormwater management
- 25% increase in average rating of understanding the municipality’s role in reviewing stormwater management applications
All (100%) responses demonstrated an understanding that regardless if a developer receives a permit from NJDEP the municipality is responsible for approving the stormwater management plan.
Municipal Official Training: e-Tool

Ensuring the approval of an applicant/developer's stormwater management plan is compliant with the regulations lies solely with

- the municipality
- the developer
- the landscape architect

Asking the Right Questions in Stormwater Review

- Is the sole approver of a stormwater management plan
- Designs a plan to maintain groundwater recharge, reduce sediment runoff, and reduce runoff rates
- Understands how to meet BMPs for stormwater management
- Understands a permit from NJDEP is not an approval of the stormwater management plan

Rutgers New Jersey Agricultural Experiment Station
• Expand *Stormwater Management in Your Schoolyard* program in urban, CSO communities
  – Stormwater Management in Your Schoolyard Teacher In-Service
  – Technical assistance for Demonstration/Education programs
    • Samsel Upper Elementary School (Sayreville, NJ),
    • Milford Public School (Milford, NJ)
  – Demonstration Projects and Formal/Informal Education
    • Malcolm X Shabazz High School (Newark, NJ)
    • Grace Wilday Junior High School (Roselle, NJ)
    • Jersey City Public School #5 (Jersey City, NJ)
    • Samuel E. Shull Middle School (Perth Amboy, NJ)
Technical Support for Schools

Dear Sirs,

Thank you for your interest in the Rutgers Cooperative Extension (RCE) Water Resources Program. We are happy to hear that through your participation in the Technical Service Program held in January 2014 that you were able to provide your students with the knowledge and skills necessary for success in the field.

The RCE Water Resources Program is funded in part by the New Jersey Agricultural Experiment Station (NJAES), which reserves all and holds financial support. Our projects and programs are made possible through grants and agreements with the state as well as through contributions from our clients. Financial support for these programs, which provide the necessary resources to continue the work, is essential and must be maintained. Without these contributions, the work that we do will not be possible.

This Technical Service Program was made possible through generous funding from the New Jersey Agricultural Experiment Station (NJAES). Our clients and partners have been generous in their support of this important work. As such, we are committed to providing the highest level of service and support to our clients.

Sincerely,

Christopher C. Chang
Rutgers University
Department of Landscape Architecture

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The RCE Water Resources Program does not currently have a funding stream to provide technical assistance services for the New Jersey Agricultural Experiment Station. As a result, the program is unable to provide technical assistance services to its clients.

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Implementation at Schools

[Diagram of stormwater management system at schools]

- Stormwater downspout
- Plant layer
- Perforated pipe
- Overflow drain
- Soil layer
- Stone storage layer
- Underground discharge pipe

[Diagram of stormwater management system at schools]

- Overflow drains to existing catchbasin
- Permeable concrete w/ perforated pipe underdrain
- Raised stormwater planter (pre-cast concrete)
- Existing downspout
- Perforated pipe attached to downspout
- Stormwater

[Photo of people at a school]
Nine (9) demonstration projects
Currently, over 1,000 school children are reached through education
565 municipalities have access to resources
Leveraged private, federal, state, and municipal funds to support future work
Rutgers Cooperative Extension
Water Resources Program

www.water.rutgers.edu

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