Annual Student and Faculty Environmental Sustainability Projects

Summarized by The College of New Jersey's Office of Environmental Health and Safety ehs.tcnj.edu

Annual Student and Faculty Environmental Sustainability Projects

- 1. EPA RainWorks Annual Challenge
- 2. NJDEP Governor's Environmental Excellence Award
- 3. Stormwater Pollution Education



EPA Campus RainWorks Challenge

Summary Provided by The College of New Jersey's Office of Environmental Health and Safety

EPA Website:

https://www.epa.gov/green-infrastructure/campus-rainworks-challenge-0

What is RainWorks?

- https://www.epa.gov/green-infrastructure/campus-rainworkschallenge-0
- An annual federal funded American college and university green infrastructure design competition for students
- RainWorks goals include:
 - Stimulating the upcoming generations of environmental experts
 - Understand and improve stormwater management systems
 - Educate others on the benefits of a green infrastructure
 - Social, economic, environmental, etc





What are examples of Green Infrastructure? NJDEP: https://www.nj.gov/dep/gi/

- <u>Downspout Disconnection</u>
- Rainwater Harvesting
- Rain Gardens (pictured here)
- Planter Boxes
- Bioswales
- Permeable Pavements
- Green Streets and Alleys
- Green Parking
- Green Roofs
- <u>Urban Tree Canopy</u>
- Land Conservation



Why is Green Infrastructure so beneficial?

- Green Infrastructure systems aim to solve urban and environmental challenges through the use of natural resources for building, providing, etc
- Aims to mimic natural water cycles
- Green vs. Gray infrastructure
 - Gray- utilizes unnatural materials to direct rainwater away from built up environments
 - Green- uses soil, vegetation, and more to provide a wide range of benefits
 - Improving water and air quality
 - Benefitting pollinator habitats
 - Aesthetic and recreational value
 - Minimizing urban heat island impacts
 - Eliminating stormwater pollution





How to Enter

- Students will need to obtain a faculty advisor, create a team of students, and design a green infrastructure for TCNJ's campus
- Two design categories
 - O Demonstration project- site specific implementation of green infrastructure
 - Master plan- long-term implementation of a broad campus issue
- Register by October 1
- Submit design by December 11
- Judging and awards given early in following year



Prizes (from 2020)

- Student prize of \$7,000 divided amongst winners
 - This is funding to install the proposed design!
- Faculty prize of \$3,000
- Prizes will be awarded to second place winners, as well

TCNJ's Office of Environmental Health and Safety

- TCNJ's staff members can provide assistance with project ideas and pull in other areas such as Grounds and Landscaping Maintenance Services
- https://ehs..tcnj.edu/
- Amanda Radosti, <u>radosti@tcnj.edu</u>
- 609-771-2881
- To learn about Stormwater Pollution Prevent at TCNJ please visit https://ehs..tcnj.edu/stormwater/

NJDEP Governor's Environmental Excellence Award

Summary Provided by The College of New Jersey's Office of Environmental Health and Safety

NJDEP Website: https://nj.gov/dep/awards/index.html

What is the NJDEP Governor's Environmental Excellence Award?

- New Jersey's premier award program for recognizing outstanding environmental performance, programs and projects throughout the state.
- This award recognizes individuals, businesses, institutions, communities, organizations, educators, youth and others who have made significant contributions to environmental protection in New Jersey.

Application Categories

- Climate Change and Clean Air
- Water Resources
- Healthy Ecosystems and Habitats
- Landowner of the Year
- Healthy and Sustainable Communities and Healthy and Sustainable Businesses
- Environmental Education / Educator-Led and Student Led-Projects





Application Requirements

- 1. Documented Environmental Benefit
- 2. Meeting Needs
- 3. Coverage and Replicability
- 4. Leadership / Innovation
- 5. Education and Outreach

How to Enter

- Students will need to obtain a faculty advisor, create a small team of students, and complete the application and cover letter
- Register by late October (October 23rd for 2020)
- Award decision is made in November or early December
- Award Ceremony is in December (virtual or in person)
 - Award Winners are asked to bring a poster display to the ceremony and provide 3 slides used at the ceremony



TCNJ's Environmental Health and Safety

- TCNJ's staff members can provide assistance and support with project ideas and pull in other areas such as Central Utilities Plant or any other area on campus
- https://ehs.tcnj.edu/
- Amanda Radosti, <u>radosti@tcnj.edu</u>
- 609-771-2881
- To learn about Stormwater Pollution Prevent at TCNJ please visit https://ehs.tcnj.edu/stormwater/

TCNJ's Stormwater Pollution Prevention Education

Summary Provided by The College of New Jersey's Office of Environmental Health and Safety

TCNJ's Website: https://ehs.tcnj.edu/stormwater/

TCNJ's Stormwater Permit

- TCNJ is considered a Public Complex and as such has a Permit to prevent stormwater pollution to the surrounding waterways
- A part of our permit we are REQUIRED to complete stormwater pollution prevention education, which can include not just our campus BUT ALSO our surrounding community

Shabakunk Creek Cleanup!

November 9, 2019

A chilly day by the Creek but the AmeriCorps Watershed Ambassadors and TCNJ students managed to collect *nine pounds of recyclable materials* and *six pounds of trash* in almost 2 hours! Great job!









EHS Coordinates Each Year

- AmeriCorps is invited each year to present on Stormwater Pollution Education
 - Student Reviews have been positive!
 - Try to coordinate with Earth Day and America Recycles Day each year!
 - o If you are interested in the next presentation, please email Amanda Radosti, <u>radosti@tcnj.edu</u>
- Website Updates, https://ehs.tcnj.edu/stormwater/
 - Please email Amanda Radosti, <u>radosti@tcnj.edu</u> with any updates
- Annual Email to the campus
- Clean-ups (when students are on campus)

Some Education Categories

- School Presentations
 - Add stormwater pollution prevention into your class! Just share the information with the Stormwater Permit Coordinator for points!
- Educational Contest for Schools
 - Organize an educational contest with a local school district or a local community organization to design a posted, rain stick, or other craft/art object.
- Clean-up (sponser or organize a litter clean-up)
- Regional Stormwater Collaborative
 - Evaluate, develop, and implement remedies that resolve stormwater related issues with a waterbody or watershed
- Green Infrastructure Workshop
 - Organize or participate in a rain barrel, rain garden, other other green infrastructure workshop in a regional or watershed basis
- Community Activity

Example from the Permit Point System

Category 4: Watershed/Regional Collaboration		
Activity	Description	Points
Regional Stormwater Collaboration	Participate in a regional stormwater, community collaborative or other watershed-based group on a regular basis to discuss impaired waterbodies, TMDLs, regional stormwater related issues, or watershed restoration plans that address those waterbodies. Evaluate, develop and implement remedies that resolve stormwater-related issues within the affected waterbody or watershed.	3
Green Infrastructure Workshop	Organize or participate in a rain barrel, rain garden or other green infrastructure workshop on a regional or watershed basis. This could be a partnership exercise with a local watershed organization, utility, university, school, youth/faith-based group, and/or other organization.	3
Community Activity	Organize or participate in the organization of a regional or watershed- based event to carry out stormwater activities such as stormwater facility maintenance or litter clean-up. The permittee may identify and enter into a partnership agreement with a local group such as a watershed organization, utility, university, school, youth/faith-based group, and/or other organization to carry out these activities.	3