

Sustainable Jersey for Schools
Donna Drewes, PP/AICP
Co-Director
Sustainability Institute at TCNJ
Sustainable Jersey



Sustainable Jersey for Schools













Johner Future, One School at 9

Sustainable Jersey for Schools

- Modeled off of the municipal program
- Free and voluntary
- NJ based and consensus driven
- School level certifications but requires School Board and district level support

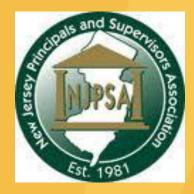




Program Partners





















Why Participate?





- Framework for action
 - > Best practices, guidance and training
 - > Technical support resources
 - > Small grants
- Positive impact on school community
 - Cost savings
 - > Healthier learning environments
 - > Student and staff performance



Why Participate?

Move towards a sustainable future

- Increase recognition and understanding of current and future challenges
- Arm students with knowledge and insights to make wise choices
- Connect STEM education with real-life
- > Expose students to future career paths

Recognize and reinforce progress

- > Celebrate accomplishments
- > Share successes
- Distinguish your district and school









Leverage Success in Other Programs

- Build Additive and Supportive Model
 - US Dept. Of Education "GREEN RIBBON SCHOOLS"
 - National Wildlife Federation, "EcoSchools"
 - NJ Partnership for Healthy Kids
 - Alliance for a Healthier Generation
 - Lots of other great programs.....







Municipal

Schools





Sustainable
Jersey
Program
Participants





Program Updates

Registrations

	April 2015	July 2015	Octobe r 2015	Februar y 2016
Districts	64	91	119	155
Schools	192	239	297	400

Certification Cycles

	March 2015	January 2016	Certifie d in 2015	Denied In 2015
Districts	20	21	8	N/A
Schools	74	93	20	13
Actions to Review	2,270	1,398		
Certified Schools	59	?		

213 O&M actions submitted: 15% of total submissions



Sign in or sign up.





A BRIGHTER FUTURE

SUSTAINABLE JERSEY

· CERTIFIED ·

one school eime

ABOUT

ACTIONS & CERTIFICATION

EVENTS & TRAININGS

GRANTS & RESOURCES

MEDIA & COMMUNICATIONS

SUPPORT US

REGISTER



HEADLINES



Sustainable Jersey for Schools Announces 2015 Champion and Leadership Awards

OCT 20, 2015



Sustainable Jersey for Schools Announces the First 59 Schools to Achieve Sustainability Certification

SEP 28, 2015

ABOUT SUSTAINABLE JERSEY FOR SCHOOLS

Sustainable Jersey for Schools is a certification program for New Jersey public schools that want to go green, conserve resources and take steps to create a brighter future, one school at a time. Learn More—

PARTICIPATING DISTRICTS & SCHOOLS



306

DISTRICTS

SCHOOLS

CHOOL

REGISTER NOW →



UPCOMING EVENTS



New Jersey School Boards Association Workshop 2015

Atlantic City Convention Center

OCT 27, 2015 - 08:00 AM TO OCT 29, 2015 - 05:00 PM

Five Certification Steps



• School district adopts resolution of participation and registers. Superintendent invites district's school principals to participate



• School principals register their school with letter of participation signed by principal and superintendent



• Green Team created at district or school level



• District/School completes certification actions totaling at least 150 points.



Green Team uploads documentation and submits application.



Green Team

- Mandatory Action
- No need to create a new team
- District and/or school level
 - Diverse membership recommended
 - Must have at least two representatives appointed by the union leadership
 - District Green Teams must have school representation
- Successful School Green Teams
 Webinar available on website





Program Actions: Where Can We Start? STUDENT & COMMUNITY **CLIMATE MITIGATION & ENERGY EFFICIENCY** OUTREACH RENEWABLE ENERGY **Energy Audit*** Green Team** School Carbon Footprint* **Building Efficiency Measures*** Community Education & Outreach* On-site Renewable Generation System-**Energy Tracking & Management** Solar Green Fair Sustainable Energy Transition Plan On-site Renewable Generation System-"Green" Your Green Fair or **LEADERSHIP & PLANNING** Geothermal School Event **Professional Development for** Green Challenges Sustainability* Civic & Stewardship Volunteer Initiatives School Community Asset Mapping on Government Energy **Enrichment Programs** Aggregation Program Green Facilities Management Checklist through Partnership SCHOOL GROUNDS Green Enhancement of District **DIVERSITY & EQUITY** Biodiversity Audit & Strategic Plans Breakfast After The Bell Management Plan Strategic Plan Implementation of Accessible Communications Green Initiatives Biodiversity Project Diversity on District Task Forces Green Infrastructure District Sustainability Policy & Committees Assessment & Plan School District Foundation **FOOD & NUTRITION** STUDENT LEARNING* Healthy Food Choices (only one action in this category will be School Gardens counted toward priority requirements) GREEN DESIGN Promote Locally Grown Foods Education for Sustainability K-3*

Buy Renewable Electricity Collaborate with Municipality Green Infrastructure Installation Sustainable Landscape Design Green Building Policy* STUDENT SAFETY **Education for Sustainability** Green Building Training Grades 4-12 Science* Safe Routes to School District Policy Green Building Survey **Education for Sustainability** School Travel Plan for walking & biking Bid New Construction & Major Grades 4-12 Math* Pedestrian and Bicycle Safety & Renovations using Green Standard **Education for Sustainability** Promotion Initiatives Build New/Renovated Project that Grades 4-12 ELA* Safe Driving Awareness Programs meets Green Standard **Education for Sustainability** for High School Students Commissioning Approval for Grades 4-12 Social Studies* STUDENT & STAFF WELLNESS New/Existing Building that **Education for Sustainability** meets Green Standard School Wellness Council* Grades 4-12 Creativity/Arts* GREEN PURCHASING School Health Assessment **Education for Sustainability** Green Purchasing Policy* Policies to Promote Physical Activity Grades 4-12 Health*

POINTS

10

(5-40)

10

10

10

10

10

10

10

10

10

10

10

10

20

20

10

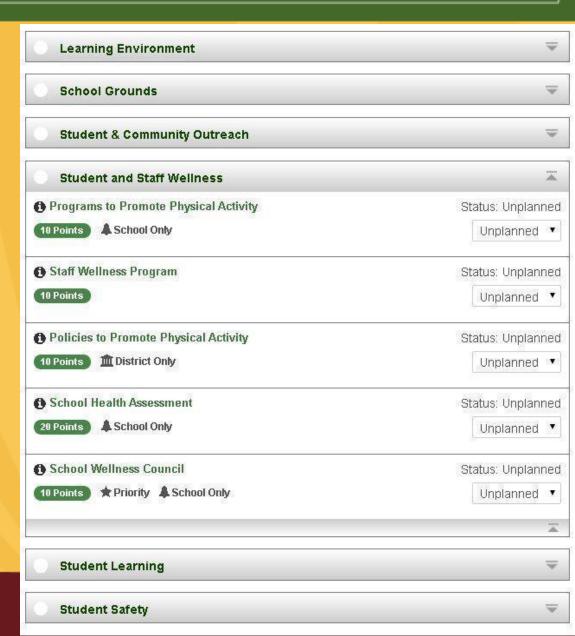
Types of Actions

District Only

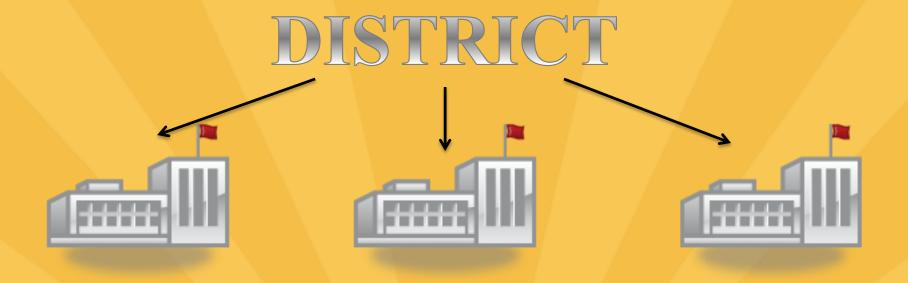
District completes these actions and submits them for review

School Only

- Individual schools complete these actions and submits them for review
- Either District or School can complete the action
 - Action must be claimed by the agreed upon entity



District and School Participation



- District actions flow down to all participating schools in the district
- Certification is awarded at the school level



Certification Requirements

150 Bronze

- Total of at least 150 points
- Mandatory Green Team
- Implement 2 of 11 priority actions
- Actions completed in 6 of 17 categories



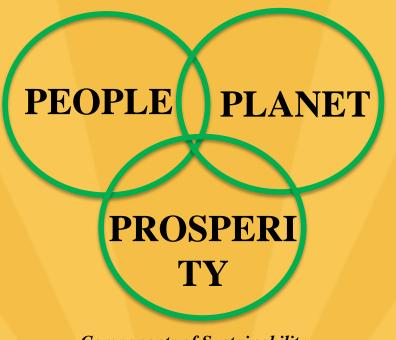
- Total of at least 350 points
- Mandatory Green Team
- Implement 3 of 11 priority actions
- Actions completed in 8 of 17 categories



Certification Action Categories

PEOPLE

- Diversity & Equity
- Food & Nutrition
- Healthy School Environments
- Safe Routes to School
- Student & Community Outreach
- Student & Staff
 Wellness



Components of Sustainability

PLANET

- Climate Mitigation& RenewableEnergy
- Green Cleaning
- Green Design
- Green Purchasing
- School Grounds
- Waste Management& Recycling

PROSPERITY

- Student Learning
- Energy Efficiency
- Innovation Projects
- Leadership & Planning
- Learning Environment



11 Priority Actions

- Community Education & Outreach
- School Wellness Council
- Indoor Air Quality Review
- Energy Audit
- Building Efficiency Measures

- Professional Development for Sustainability
- Education for Sustainability
- School Carbon Footprint
- Green Building Policy
- Green Purchasing Policy
- Waste Audit



Related Actions for EE Providers

- Green Infrastructure Assessment & Plan
- Green Infrastructure Installation- (rain gardens, water capture and reuse, etc.)
- Civic & Stewardship Volunteer Initiatives
- Enrichment Programs Through Partnership
- School Gardens
- Biodiversity Audit & Plan
- Biodiversity Project



RUTGERS

New Jersey Agricultural Experiment Station



Rosana Da Silva

Rutgers Cooperative Extension Water Resources Program

rdasilva@envsci.rutgers.edu

EXAMPLES OF SCHOOL GREEN INFRASTRUCTURE INITIATIVES



Water Resources Program



Our mission is to identify and address community water resources issues using sustainable and practical science-based solutions.



Green Infrastructure Assessment & Plan Spotlight

McKinley Community School, New Brunswick, NJ

- In 2015, an impervious cover assessment and reduction action plan was developed for the New Brunswick area by the RCE Water Resources Program which includes several schools within the district. The ICAs and the RAPs include data necessary to obtain points.
- Task 1: Impervious Cover Audit
- Task 2:
 Determining the
 Amount of
 Pervious Surfaces
- Task 3: Identify Where Stormwater goes

MCKINLEY COMMUNITY SCHOOL

Subwatershed: Mile Run

Site Area: 121,864 sq. ft.

Address: 15 Van Dyke Avenue

New Brunswick, NJ 08901

Block and Lot: Block 596, Lot 5.04





Parking spaces and the asphalt adjacent to the playground can be converted into pervious pavement to infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervi	ous Cover	200,000	sting Loads vious Cover		Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
65	78,611	3.8	39.7	360.9	0.061	2.16

Recommended Green 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
Pervious pavements	0.651	109	47,782	1.80	17,753	\$443,825

Green Infrastructure Assessment & Plan Spotlight

McKinley Community School, New Brunswick, NJ

• Utilizing the ICA and RAP, McKinley Community School already has half of the work done in obtaining points for the Green Infrastructure Assessment and Plan.





Green Infrastructure Assessment & Plan Spotlight



Summer Elementary School, Camden, NJ

• In 2011, two fourth grade classes, participated in the Rutgers' Stormwater Management in Your School Yard educational program that was designed to provide students with an opportunity to apply their science, math, and communication skills to real-world environmental problems through the building of a rain garden on the Sumner Elementary School's campus.



Sumner Elementary School 1600 South 8th St Camden, NJ

2010 Rain Garden Layout

Plant List

Purple Coneflower (Echinacea purpurea)
Inkberry Holly (Ilex glabra)
New England Aster (Aster novae-angliae)
Sweet Pepperbush (Clethra alnifolia)
Swamp Rose (Rosa palustris)
Seaside Goldenrod (Solidago sempervirens)
Coreopsis (Coreopsis lanceolata)
Swamp Milkweed (Asclepias incarnata)

Rain Garden Design





Rain Garden Drainage Area: 1800ft² Rain Garden Size: 340ft²









Sweet Pepperbush

Summer Elementary School, Camden, NJ

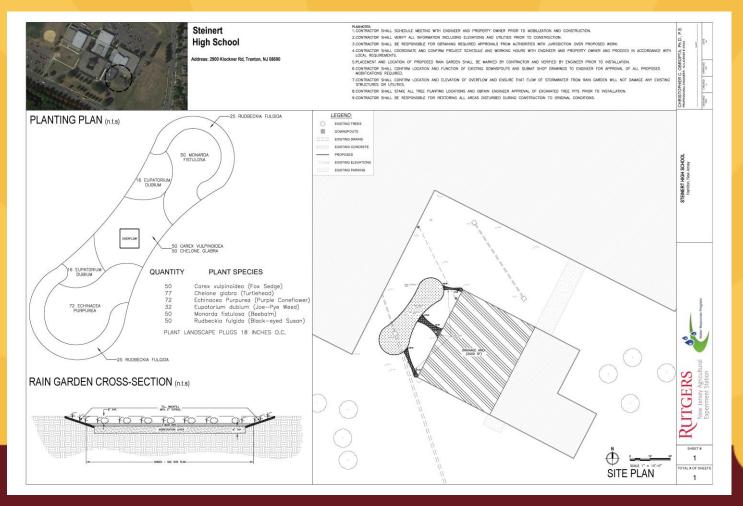
- The stormwater from the roof enters the rain gardens through redirected downspouts. These rain gardens help mitigate nuisance flooding in the area and help reduce nonpoint source pollution and stormwater that would otherwise discharge into the City of Camden's combined sewer system.
- Rain garden size 340 square feet
- Drainage area 1,800 square feet





Steinert High School, Hamilton, NJ

• In 2013, staff from the Rutgers Cooperative Extension Water Resources Program conducted an educational program for the Steinert High School AP Biology class.









Steinert High School, Hamilton, NJ

- This educational program included a discussion on what a watershed is, an overview of rain gardens using a virtual rain garden simulator, a lesson on soils, a demonstration about how to monitor their rain garden, and facts about the native plants that they helped to install in their school's rain garden. This rain garden manages stormwater runoff from a portion of the school building's roof via three redirected downspouts. To address the water quality issues associated with increased stormwater runoff, demonstration projects like this rain garden are essential.
- Rain garden size 450 square feet
- Drainage area 2,000 square feet

Sustainable Jersey Small Grant Awards

Sponsor	Deadline	Awards	Total Amount
PSEG	2/23/2015	34	\$100,000
DOH (Health)	6/26/2015	29	\$116,000
NJEA	10/4/2015	50	\$180,000
Gardinier (Energy)	11/1/2015	8	\$100,000
PSEG	1/24/16	34	\$100,000
Total		155	\$596,000

Has anyone here received a Sustainable Jersey grant?



Opportunities to Partner with the RCE Water Resources Program

- Berkeley Heights Township
- Bound Brook Boro
- Branchburg Township
- Bridgewater Township
- Delaware Township
- Dunellen Boro
- East Amwell Township
- East Brunswick Township
- Edison Township
- Englishtown Boro
- Fanwood Boro
- Flemington Boro
- Franklin Township
- Freehold Boro
- Freehold Township
- Green Brook Township
- Helmetta Boro

- Highland Park Boro
- Hillsborough Township
- Jamesburg Boro
- Manalapan Township
- Manville Boro
- Marlboro Township
- Metuchen Boro
- Middlesex Boro
- Millstone Township
- Milltown Boro
- Monroe Township
- Mountainside Boro
- New Brunswick City
- North Brunswick Township •
- North Plainfield Boro
- Old Bridge Township
- Plainfield City

- Perth Amboy City
- Piscataway Township
- Raritan Township
- Readington Township
- Sayreville Boro
- Scotch Plains Township
- Somerville Boro
- South Amboy City
- South Bound Brook Boro
- South Brunswick Township
- South River Boro
- Springfield Township
- Summit City
- Raritan Boro
- Watchung Boro
- Warren Township
- Woodbridge Townshipsustainable



2016 Certification Cycle

January 15 – Initial Application Deadline

• Late February – Reviewer Comments

April 8 – Second Application Submission

- Early May Reviewer Comments
- June 24 Final Application Submission
- Mid July Certified Schools Notified
- October Certified Schools Celebration



Sustainable Jersey for Schools Supporters

Underwritten By:









Sponsored By:

Sustainable Jersey for Schools Small Grants Program Underwriters









Founding Sponsors







Silver Sponsor



Bronze Sponsor





For More Information

- Visit us at www.sustainablejerseyschools.com
- Email schools@sustainablejersey.com
- Call Sustainable Jersey Staff
 - Heather McCall 609-771-2469
 - Veronique Lambert 609-771-3427



