



Building Bridges To Curriculum: Connecting Student Learning with Sustainability Actions

December 11, 2019



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Grant Funding Opportunities

Roots for Rivers Reforestation Grant Technical Assistance Program / Deadline: Dec 13

Technical assistance to design floodplain restoration projects and funding to cover between \$1,000 and \$20,000 of the material costs of tree/shrubs, tree protection tubes, and stakes.

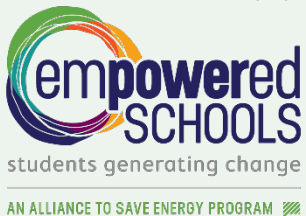
PSEG Grants / Deadline: Mar 1, 2020

Four \$10,000 and thirty \$2,000 grants for any initiative that would earn points towards Sustainable Jersey for Schools certification

For more details, visit www.sustainablejerseyschools.com/grants-resources



Sustainable Jersey is partnering with [South Jersey Gas](#) (SJG) and the [Alliance to Save Energy](#) (The Alliance) to bring the PowerSave Schools program to 40 schools within the [SJG service territory](#). SJG will fund the direct program costs for the 40 schools, while The Alliance will provide training, tools and resources to schools to implement the program, including access to the new empowered web platform. Go to the [Grants & Resources page](#) of our website to learn more about the program and apply.





The New Jersey School Boards Association (NJSBA), in collaboration with Sustainable Jersey for Schools, is offering one-day Sustainable Practices Working Sessions. Participants will review a Sustainability Wellness Check, that aligns with the [Sustainable Jersey for Schools](#) certification program. Board members will receive four board member academy credits and four Green Leader credits for participating in a working session. Pre-registration is required and seats are limited. Learn more on the [Events & Training page](#) of our website

- [REGISTER](#)- February, 20, Egg Harbor Township, NJ

Webinar Agenda

- The Value & Benefits of Sustainability Education
- Linking Student Learning with Sustainable Jersey Actions
- Institutionalizing Sustainability Education
- Questions




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Environmental education focuses on the relationships that exist between...

- **Nature and people**
- **Natural resources and human activities**
- **Natural systems and human systems**



Benefits of Environmental Education

- **Relevant** – real-world, community-based, civic applications
- **Engaging** – hands-on, self-led as well as group learning
- **Interdisciplinary** – supports many subjects
- **Memorable** – experiential and project-based
- **Motivates** – stimulates inquiry and investigation
- **Applies** – critical, creative and problem solving skills
- **Empowers** – action and solution-oriented
- **Adaptive** – to indoor and outdoor learning environments
- **Preparedness** – cultivates career preferences





Environmental education enters classrooms through lessons, maps, data collection and observations, audiovisuals, tools and technology, projects and experiments.

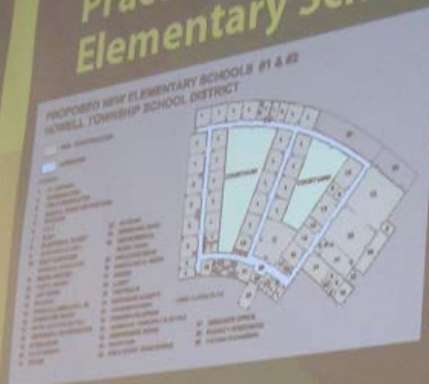


It also enters classrooms through student participation in real-world, problem-based projects and competitions.



Environmental education can bring students outdoors onto school property and transform these areas into extended classrooms and laboratories with the use of gardens, rain collection systems, trails, solar panels, green houses, aquatic sites and natural areas.

Practical Applications: Howell Elementary School



- **Holistic Design Approach:**
 - Architect, Owner, Construction Manager, and Users involved from day one to ensure sustainable design goals identified and met & education addressed

- **Water Conservation:**
 - Low Flush fixtures combined w/ a proposed rainwater catchment system to flush toilets would have saved \$15,000/yr and 500,000 gal/yr of water

Environmental education can also turn the school itself – its operational systems and infrastructure, into a wall-to-wall laboratory for hands-on investigations and monitoring.



Environmental education can also build bridges between the classroom and the study of local resources, businesses and places.

Resources

NAAEE

Guidelines for Excellence Series

(<https://naaee.org/eepro/publication/guidelines-excellence-series-set>)

K-12 Environmental Education: Guidelines for Excellence

- Free download



DEP

Governor Chris Christie • Lt. Governor Kim Guadagno
NJ Home | Services A to Z | Departments/Agencies | FAQs
Search All of NJ

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SEEDS - The State Environmental Education Directory

DEP Home | About DEP | Index by Topic | Programs/Units | DEP Online

SEEDS Home
About SEEDS
Environmental Education Basics
EEdNews Listserv
NJ Commission on Environmental Ed
Data & Information
Field Trips & In-Class Programs
Enrichment & Training Opportunities
Classroom Materials
Events & Contests
Volunteer Programs
Grants & Scholarships
Topical Index
Earth Day-New Jersey
Feedback/Contact

Seeds the state environmental education directory website

Cultivating environmental education in the school, workplace and community!

Administrators, business managers, grounds and maintenance staff, school boards, parent associations, school nurses and others, visit our [SCHOOL FACILITIES](#) website for non-educational resources and information for schools, daycare centers, colleges and universities.

Interested citizens can sign up to receive [EEdNews](#), the DEPs' electronic bi-monthly environmental education announcements list.

View the [EEdNews](#) website [HERE!](#)

Recognized by the Eagleton Institute of Politics (Rutgers, the State University of New Jersey) as a 2002 e-gov award winner in the category of *Best Educational Content!*

NJ Parent Link
The Early Childhood, Parenting & Professional Resource Center

Linking Environmental Literacy and the Next Generation Science Standards

A Tool for Mapping an Integrated Curriculum

Prepared by Bora Simmons
October 2015

www.naaee.org



How environmental education is conceptualized and implemented in elementary and secondary schools is critical if we are to meet our ultimate goal of environmental literacy.

- Introduction, pg. 1



Dimension 1: Practices

**Dimension 2:
Crosscutting Concepts**

**Dimension 3:
Disciplinary Core Ideas**

“Quick Search” Tool:
www.nextgenscience.org/

NJ Student Learning Standards

(Source: www.state.nj.us/education/cccs/)



- Science
- Social Studies
- Comprehensive Health and Physical Education
- 21st Century Life and Careers



The Cloud Institute: Provides training and resources for schools and educators to integrate sustainability into curriculum, instruction and assessment. <https://cloudinstitute.org/>

- [EfS Standards & Indicators](#)
- [Useful Steps to Embedding EfS Standards into Your Core Curriculum Using Backwards Design \(UbD\)](#)
- [Cloud Sample Cross-walk/Alignment Protocol](#)

Curriculum Lesson Sets – each lesson focuses on a particular EfS Standard and its relationship to the materials cycles. In four grade-appropriate lessons (K-2, 3-5, 6-8, and 9-12), each set includes tailored lessons that have been aligned to The Cloud Institute's Education for Sustainability (EfS) Standards and Performance Indicators, and that meet the McREL National Standards and Common Core State Standards by Cloud Institute and [TerraCycle](#). [https://cloudinstitute.org/k23568912//](https://cloudinstitute.org/k23568912/)

Education for Sustainability

Use the Questionnaire to Infuse Enduring Understandings to Existing Lessons

Sustainable Jersey for Schools

Education for

Answer these 4 questions about the **significant lesson** or **set of lessons** that you are submitting for points under the Education for Sustainability (EFS) action.

Sustainability Questionnaire (rev. 4/2018)

1 The lesson(s) must have addressed at least **one** of the **sustainability topics** listed below. Check off the sustainability topic(s) addressed by the lessons, and for which there are documented results:

Ecological Systems

Investigating natural environmental processes and systems – Students can investigate ecological systems at a local level – e.g. biodiversity in the school grounds – or link to studies occurring further away.

Climate Change

Acquiring climate literacy – Learning climate science to understand the causes and consequences of global climate change; studying the impact of human activity on the climate and adaptations of man-made and natural systems in the face of climate change. Students can take action to address climate change by reducing their "carbon footprints."

Waste

Reducing, reusing, recycling – Re-thinking consumption and product design to eliminate the very idea of "waste." Any school or community can reduce its environmental impact by analyzing the full life cycle of the products it uses, and acting to reduce packaging and transport distance, and to recycle or re-purpose as many items as possible.

Energy

Addressing sustainable energy supply and use – Learning about the multiple factors that play a role in energy demand, supply and use and the impacts on ecosystems and socio-economic systems. In some municipalities, schools are the largest energy consumers, but up to 30 percent of that energy may be used inefficiently.

Health and Wellness

Addressing issues that impact human health – Eliminating toxic and hazardous materials, while maximizing elements that promote health (e.g. providing clean air and good ventilation, providing clean water, promoting outdoor time and physical activity) will improve the school, work, and home environment for everyone.

Food Systems

Improving nutrition and food sustainability – Many of the systems for producing, processing, and delivering the food we eat rely on practices that have deleterious effects on the environment, on livestock, on food-sector workers, and on consumers. Choosing local and whole foods impact both human health and the environment.

The Built Environment

Addressing transportation, housing, and other infrastructure development – Raise awareness of sustainable solutions such as transportation and development plans that reduce fuel consumption, pollution, and car use.

Water

Addressing water quality, availability, and use – Learning about the water cycle and how use of water and land development in one place impacts water quality and availability in other places.

Economic Systems

Investigating how economic systems play a role in sustainability – History recounts the collapse of civilizations whose economic activity degraded the natural and/or social environments. Sustainable economies support a good quality of life for all and maintain healthy ecosystems.

Social and Cultural Systems

Investigating the impact of social and cultural systems on sustainability – Social and cultural norms shape the interaction of different groups with each other and with the environment; and these practices are themselves influenced by changes in natural environments.

2 The lesson(s) must have taught about and assessed for at least **one** of the **enduring understandings** of education for sustainability listed below. Check off the enduring understanding(s) that the lesson(s) addressed, and for which there are documented results:

A Healthy and Sustainable Future Is Possible

We can learn how to live well within the means of nature. This viewpoint inspires and motivates people to act.

We Are All In This Together

We are interdependent on each other and on the natural systems.

Healthy Systems Have Limits

Rather than exceeding or ignoring the limits, tap the power of limits. Constraints drive creativity.

Recognize and Protect The Commons

The Commons are the creations of nature and society that we inherit jointly and freely, and hold in trust for future generations. We all depend on them and we are all responsible for them.

Reconcile Individual Rights with Collective Responsibilities

Responsible and ethical participation and leadership are required in order to make the changes we need to make. We must reconcile the conflicts that exist between our individual rights and our responsibilities as citizens.

Diversity Makes Our Lives Possible

Diversity is required to support rich complex systems (like us), to build strength and to develop resilience in living systems. Biological diversity, cultural, gender, political and intergenerational diversity all serve this purpose.

Create Change at The Source Not the Symptom

Distinguish problems from symptoms. Identify the most upstream problem within your sphere of influence.

Think Far into the Future (1,000 Years)

Envision the kind of future we want and start working towards it. We should not sacrifice our children's future to meet our needs.

Sustainability Topics

- Ecological Systems
- Climate Change
- Waste
- Energy
- Health & Wellness
- The Built Environment
- Water
- Economic Systems
- Social & Cultural Systems
- Food Systems

View the detailed EFS Questionnaire within the “What to Submit” section of an EFS action:

<http://www.sustainablejerseyschools.com/actions-certification/actions/#open/action/92>

Enduring Understandings

- A Healthy & Sustainable Future is Possible
- We are all in this together
- Healthy Systems have limits
- Diversity makes our lives possible
- Reconcile Individual Rights w/ Collective Responsibilities

View the detailed EFS Questionnaire within the “What to Submit” section of an EFS action:

<http://www.sustainablejerseyschools.com/actions-certification/actions/#open/action/92>

Enduring Understandings

- Create Change at the Source, not the Symptom
- Think Far in the Future (1,000 years)
- We are all Responsible
- It All Begins with a Change in Thinking
- Live by the Natural Laws
- Read the Feedback

View the detailed EFS Questionnaire within the “What to Submit” section of an EFS action:

<http://www.sustainablejerseyschools.com/actions-certification/actions/#open/action/92>

Instructional Approaches

Inquiry based

- Students ask questions, plan and carry out investigations, analyze and interpret data, construct explanations and engage in argument based on evidence.

Experiential

- Students learn through doing – participating in projects, events, challenges, experiments and other learning activities.

Place-based student learning

- Students participate in investigations and learning activities in school grounds, neighborhoods or natural areas that engage them with real-life scenarios that are tangible, observable and meaningful to them.

Interdisciplinary

- 2 or more teachers covering different academic disciplines design and/or present related lessons that integrate subject matter from 2 or more academic disciplines (e.g. social studies and science).

Sustainability: Not Just for Science Class

- Arts
- Social Studies
- Health/Physical Education
- English Language Arts
- Math
- Technology

Green Initiatives		
ENERGY EFFICIENCY		
Energy Efficiency for School Facilities ★ 🌳 🏠		5-50
Behavior-Based Energy Conservation Programs	🌳	10
Energy Tracking & Management	🌳	10-20
INNOVATION PROJECTS		
Innovative Project #1	🌳 🏠	10
Innovative Project #2	🌳 🏠	10
INTEGRATED SCIENCE, TECHNOLOGY, ENGINEERING, ARTS & MATH		
iSTEAM Planning & Implementation	🌳 🏠	15
iSTEAM Strategic Plan Indicators/iSTEAM Policy	🏠	10
iSTEAM Collaborative Units of Study	🌳	10-50
iSTEAM Professional Development Plan	🌳 🏠	5-20
LEARNING ENVIRONMENT		
All Arts Disciplines Offered	🏠	10
Curriculum Mapping	🌳 🏠	15-30
Future Ready Schools Certification	🌳	10-15
Outdoor Classroom	🌳	10
Student Participation in the Arts	🏠	10
STUDENT LEARNING ★		
<small>(One approved action in this category counts toward priority requirements)</small>		
Education for Sustainability Integrated Unit	🌳	10-50
Education for Sustainability Pre K-3	🌳	5
Education for Sustainability Grades 4-12 Creativity/Arts	🌳	5
Education for Sustainability Grades 4-12 Career and Technical Education	🌳	5
Education for Sustainability Grades 4-12 English Language Arts	🌳	5
Education for Sustainability Grades 4-12 Health	🌳	5
Education for Sustainability Grades 4-12 Math	🌳	5
Education for Sustainability Grades 4-12 Science	🌳	5
Education for Sustainability Grades 4-12 Social Studies	🌳	5
Education for Sustainability Grades 4-12 Technology	🌳	5

Math

Reeds Road Elementary, Galloway NJ

6th Grade Inquiry Based Lesson

The lesson, “The Real Cost of a Water Bottle” was taught to three sixth grade classes on March 21st. Students couldn’t believe the images they saw relating to the water bottles they drink on a daily basis. The Press of Atlantic City also featured an article on the front page relating to the pollution and the ocean on March 21st. They did some research in groups of two and three students. They read four articles and wrote two to three facts for each. As a class we discussed how many water bottles they drink a day, week, and year. Totals were tallied and discussed. The students came up with possible solutions to the water bottle problem. Students decided to try to use more reusable water bottles and to make a point of recycling regular water bottles. Making the students more aware of the pollution water bottles are having on our environment will hopefully allow them to make better choices and recycle!

Math

“Read the Feedback”

We need to pay attention to the results of our behavior on the systems upon which we depend. If we keep our eyes on the feedback, we can adjust our thinking & behavior before we cross detrimental thresholds.

1. Write the definitions of each word below.

Price to put a sign on goods that shows the cost
 Cost the amount of money you must pay in order to buy something

2. Research the following three sites and write two facts from each website.

“Bottles, Bottles Everywhere” www.green.yahoo.com/blog/climate411/91/bottles-bottles-everywhere.html

FACTS: In the water bottle company bot^{ols} grow 10% each year. The nat^l recycling rate for all beverage is 38%.

“Bottled Water Cartoon” www.treehugger.com/files/2008/02/bottled-water-cartoon.php

FACTS:

Americans still buy upward of 28million bottles of water a year. 80% of the used bottle wind up in Landfills, not in recycling.

“Bottled Water” www.container-recycling.org/plasfact/bottledwater.htm

FACTS: Burn 17million barrels lead to the of an esti^{annual emission} instead of using disposable bot^{2.5(mill)} use a reusable

1. Estimate how many bottles of water Americans buy in one year. 1.5 billion
2. How many barrels of oil do they use to manufacture plastic water bottles in one year? 17million

tons of carbon dioxide

3. How does the price of bottled water compare to the price of gasoline? \$3.21
4. How does the price of bottled water compare to the price of tap water? \$421
5. How many water bottles does your family use in a week? 25 a year? 1,000

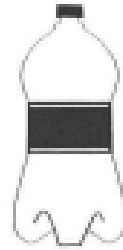
Math

“We are all responsible”

Everything we do and everything we don't do make a difference.

“A Healthy & Sustainable Future is Possible”

We can learn how to live well within the means of nature. This viewpoint inspires and motivates people to act.



Exit Ticket

1. How do water bottles harm the environment?

They are part of the cause for Global Warming, oil is a cause of fossil fuels.

2. What is the “real” cost of using water bottles versus just the price?

The real cost is barrels of oil which is expensive, shipping which is hundreds and the price is dollars and cents.

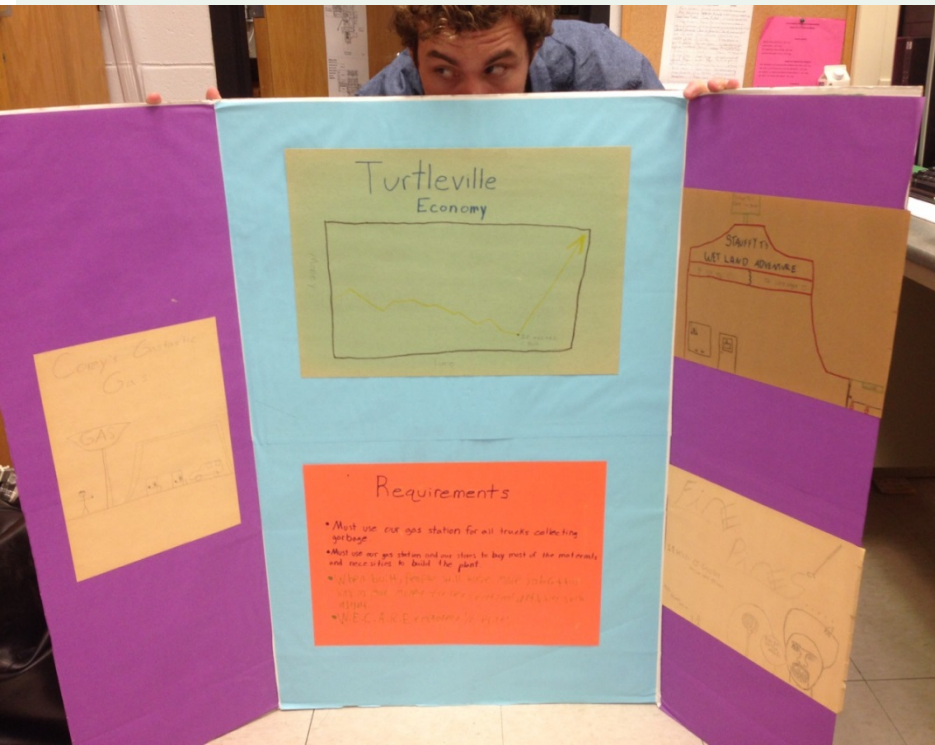
3. What are some solutions that you can think of to solve the water bottle problem?

Some solutions are stop buying bottles, make a poster saying no bottle in the house, drink tap.

Social Studies/ELA

Egg Harbor High School, Egg Harbor, NJ

“Turtlesville” Waste Management Facility Debate



As part of our unit on water quality and preservation and solid waste unit, we have the students imagine that they live in a fictional town called "Turtlesville". In the town of Turtlesville, they take on the persona of an interested group and are told that a Waste to Energy facility would like to be built in their town. The students decide whether they would want the waste to energy facility be built in their town based on the persona that they took on and they prepare materials to be involved in an debate held within class.

“Reconcile Individual Rights with Collective Responsibilities”

- Hospital-25 squares
- Elementary School-15 squares
- Playground for elementary 10 squares)
- High School-20 squares
- High School Fields-30 squares (needs to be adjacent to the high school)
- Parks and recreational areas around town 100 squares
- City Hall-16 squares
- Fire station-8 squares
- Police station-12 squares
- Powerplant-25 squares
- Sewage Treatment Plant-25 squares
- Landfill/recycling center-100 squares
- Gas station-3 squares
- Wawa-4 squares
- Grocery Store-12 squares
- Restaurant-4 squares
- Residential homes 2-6 squares each (you need at least 50 homes)
- Hardware store-9 squares
- Mall/shopping areas- 80 squares
- Farm-200 squares
- Office building-16 squares



Social Studies/ELA

Egg Harbor High School, Egg Harbor, NJ

“Cap in Trade/Carbon Market Simulation”

Question Set 1

- 1. Would installing a HTSS at your plant be cost effective? (Meaning would it cost more than the average of 50 million or less or the same)
- 2. Would your plant reduce its carbon emissions by 25%?

An important concept of social studies is to understand how economic systems work. To incorporate this into our lesson on sustainability, we had our students form groups that represented different factories. These factories were put on a cap and trade system. The students had to work within the system financially to understand what situation would work best for them.

“Healthy Systems Have Limits” Constraints Drive Creativity.

Health & Physical Education

Reeds Road
Elementary
Galloway,
NJ

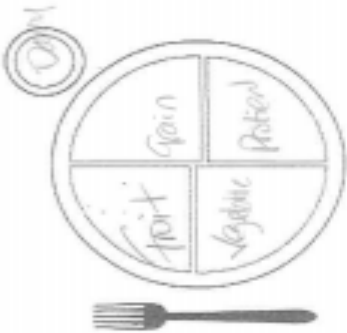
Food Source & My Plate
Healthy Eating

“We’re All
in This
Together”

We are interdependent on
each other and on the
natural systems

Healthy Foods/Sustainable Eating

Name Kristina Calera Class Stephens Date March 8, 2016

<p>Nutrition/Sustainable (Describe & Give Examples)</p> <p>Nutrition ① Foods give us energy</p> <p>Sustainable ① Eating Foods that don't hurt the environment</p> <p>② Buying from local farms</p>	<p>A "Well Traveled Table" (Give examples from the produce and grocery aisles. Ex: Banana - Mexico)</p> <p>Watermelon - Mexico</p> <p>Pineapple - California</p> <p>Cheerios - Illinois</p> <p>Pop-tarts - Mass.</p>	<p>MYPLATE (Place Food group in the correct location on the plate)</p> 
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Check out Examples!

Use the Participating Schools Map to find examples of documentation from certified schools

Search by action



View certified schools approved for that action



View certification report for example documentation

Map view List view

Map Satellite

TABERNAACLE ELEMENTARY SCHOOL
BURLINGTON COUNTY

Certification Level: **Silver**

Certified On: August 09, 2018

Total Points: 440

Certification Report: [View Report](#)

Applicant Profile: [View Profile](#)

BY TYPE

- District
- School
- All

BY STATUS

- Registered
- Bronze Certified
- Silver Certified
- Any Certified
- Any

BY CERTIFIED ACTION

SEE INSTRUCTIONS BELOW

Board Leadership & Planning

- Professional Development for Sustainability
- District Sustainability Policy
- Green Enhancement of District Strategic Plans
- Strategic Plan Implementation of Green Initiatives
- School District Foundation

SEARCH FEATURES

Map data ©2019 Google Terms of Use Report a map error

Check out Spotlights in Each Action!

Education for Sustainability Grades 4-12 English Language Arts 5 Points School

Why is it important?

Who should lead and be involved with this action?

Timeframe

Project costs and resource needs


What to do, and how to do it ("How to")

What to submit to earn points for this action

Spotlight: What New Jersey schools are doing

Resources

 Print Action Description

 Download PDF Version

Spotlight: What New Jersey schools are doing

Clara Barton Elementary School in Cherry Hill, NJ

Students at Clara Barton Elementary School learned about sustainable packaging in this lesson. The teacher created a KWL chart to find out what students KNOW, what they WANT to know, and, at the end of the lesson, what they have LEARNED. The teacher taught the class the meanings of the different recycling symbols as well as what items can be recycled. The teacher introduced the Packaging Life Cycle Loop and explained new vocabulary such as the word "sustainable". Students were asked to bring in a variety of packages from their homes and sort them into groups such as metal, plastic, glass, etc. The teacher led a class discussion on the different piles. Students chose one package to investigate in further detail. This lesson resulted in a paradigm shift in students' thinking. View their approved submission [here](#).

Brimm Medical Arts High School, Camden City School District

Dr. Charles E. Brimm Medical Arts High School students will be using the Time's series Carbon's Casualties to learn about how climate change is displacing people around the world. To view Brimm Medical Arts High School submission report click [here](#).

Resources

Take Advantage of Resource Sections!

Education for Sustainability Grades 4-12 Science 5 Points School

Why is it important?

Who should lead and be involved with this action?

Timeframe

Project costs and resource needs


What to do, and how to do it ("How to")

What to submit to earn points for this action

Spotlight: What New Jersey schools are doing

Resources

 Print Action Description

 Download PDF Version

Resources

The following resources may be helpful in completing this action.

Resources and organizations that support sustainability education in science

ANJR Educational Video Series https://www.youtube.com/watch?v=sSO2QMDUT-Q&index=7&list=PL4H1HQBF-SVcU2j_jodWC5yleLN5VK3hM

National Geographic, Education—activities, lessons, and resources, such as maps, articles, photographs, and videos, for K-12th grade educators of science and other subjects.

http://education.nationalgeographic.com/education/?ar_a=1

New Jersey Audubon, Resources and Curricula—links to resources for pre-K to 8th grade education about New Jersey's natural resources.

<http://www.njaudubon.org/SectionEducation/ProvidingfortheEducationCommunity/Resource>

New Jersey Department of Environmental Protection, Project Learning Tree for teacher training and classroom materials.

<http://www.nj.gov/dep/parksandforests/forest/plt.html>

- Sustainability Education Resources(SAGE, NJDEP)
<http://www.nj.gov/dep/aqes/sustainable-education.html>



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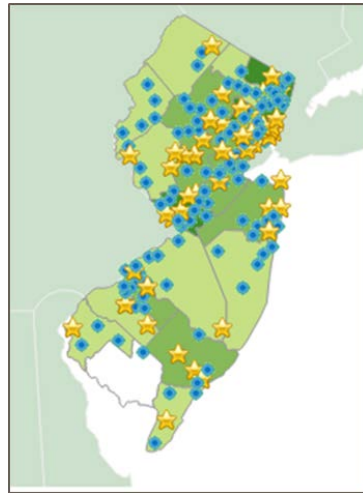
**NEW JERSEY
AUDUBON**
www.njaudubon.org



PSEG
Foundation



- Aligning Eco-Schools Student Actions with SJ4S -
Building Student Leaders in Sustainability



In New Jersey's 300 Eco-Schools

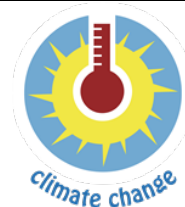
It's all about
student learning

Eco-Schools Pathways

Student Focus on Improving the Environment & Systems



↑ Biodiversity



↓ CO2



↓ Waste



↑ Green Spaces



↓ Water Use

↑ Recycling

↑ Outdoor Learning



↓ Energy Use



↑ Outdoor Time



↓ Chemicals



↓ Processed Foods



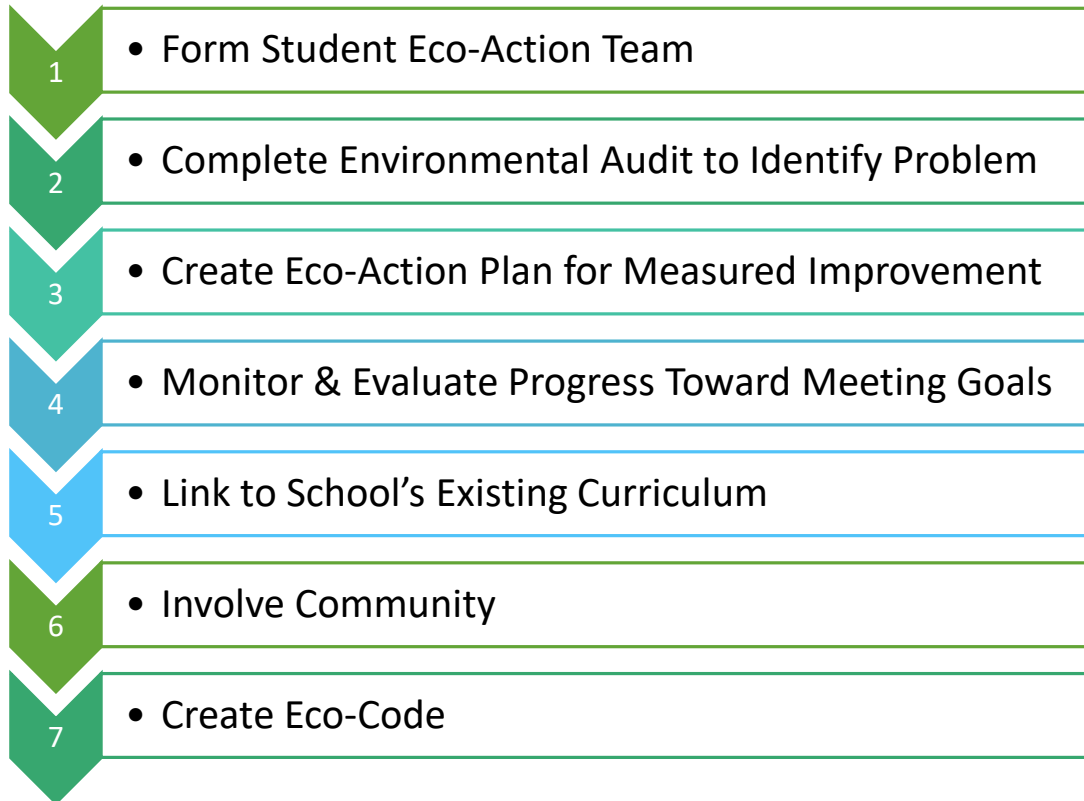
↓ Idling

↑ Renewables

↑ Indoor Air Quality

↑ Fresh Food

↑ Walk/Bike/Carpool



Seven Step Framework



Student Eco-Action Team

- Actively engaged in problem
- Practicing science skills
- Measuring impact through data collection
- Exposed to experts and resources
- Building confidence and teamwork



SJ4S Actions: Climate Mitigation, Renewable Energy, & Energy Efficiency

Eco-Schools Climate Change & Energy Pathways

- Student Carbon Calculator
- Exploring Solar, Wind, Hydro & Geothermal Renewable Power
- Low Cost / No Cost Behavior Changes
- Connecting with NJ Student Learning Standards for Science





SJ4S Actions: Food & Nutrition

Eco-Schools Sustainable Foods & Schoolyard Habitat Pathways

- Students Audit Breakfast, Lunch and Snack Choices
- Speak with school leaders about healthier and locally grown options
- Learn to grow their own food

SJ4S Actions: Green Cleaning & Healthy School Environments

Eco-Schools Healthy Schools Pathway

- Student Audits Include Hazardous Materials, Indoor Air Quality, Mercury, Mold Growth, Laboratory Waste & Pest Management





SJ4S Actions:
Healthy School
Environment cont.
*Eco-Schools
Transportation
Pathway*



SJ4S Actions: Biodiversity

Eco-Schools Biodiversity, Schoolyard Habitat and WOW Pathways

- Quantify Flora & Fauna on School Grounds
- Research, Select & Install NJ Native Plants to Create a Healthy Schoolyard Habitat
- Become a National Wildlife Certified Schoolyard Habitat

Time spent outdoors, physically active, and engaged in unstructured play is perhaps the best possible prescription to ensure a lifetime of good health.

Students identify & establish strategies to engage the school community in opportunities to unplug and engage in outdoor experiences.

SJ4S Student & Staff Wellness *Eco-Schools Healthy Living Pathway*



SJ4S Actions: Waste Management & Recycling
Eco-Schools Consumption & Waste Pathway

Sample Biodiversity Action Plan

What is the problem?	Plants and animals in the state are endangered. Biodiversity is low.
What action(s) will we take?	<ul style="list-style-type: none">• Hold a fundraiser to raise money• Have two work days for prep and planting• Host habitat hikes to share with the community
Who will do it?	<ul style="list-style-type: none">• Eco-Action Team• Staff, parents, volunteers
What is the timeline for completion?	<ul style="list-style-type: none">• Fall: research, fundraiser• Spring: planting, habitat hikes
How will we monitor progress towards our goal?	<ul style="list-style-type: none">• Eco-Action Team meetings• Photos/videos of progress
What will success look like?	<ul style="list-style-type: none">• New habitats that support diverse wildlife• A community engaged in habitat hikes
What materials do we need?	<ul style="list-style-type: none">• Need to purchase: soil, bird bath, bat house• Donations: trees, plants



Award Program with Measurable Results

Annually, New Jersey's Eco-Schools

- Reduced Electricity Use by 2,846,356 kWh
- Reduced CO2 Emissions by 4,437,472 lbs.
- Reduced Trash by 326,103 lbs.
- Reduced Water Usage by 2,829,183 gallons

Collaborations



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION



STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION





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The Role of the School Board and Curriculum

- Board member as a participating member on the green team.
 - Serve as a liaison, report/inform.
 - Share and provide a common understanding of Sustainability and support the rationale for sustainability curriculum in the district.
 - Communicate to the public about the importance of sustainability curriculum
- Develop and approve policy that includes curriculum development and EfS. NJSBA policy example.

The Role of the School Board and Curriculum

- Ensure that sustainability curriculum is an action in the district strategic plan.
- Create a board/district goal that focuses on sustainability and environmental education are integrated into the curriculum.
- Evaluate the process and outcomes
- Hire staff members with sustainability experience that can create or adapt and assess curriculum

The Role of the School Board and Curriculum

- Approve curriculum by adopting: – Education for sustainability that aligns to current statewide curriculum standards as well as connecting student learning to sustainability efforts of the district. The Building as a teaching tool.
- Oversee the efforts of school staff to imbed sustainability across curricular areas.

The Role of the School Board and Curriculum

- Approve professional development for staff and administrators aligned to district sustainability goals and will help the development of sustainability curriculum.
- Board certification (Green Leader).
- Samples from Green Program of Study (in resource section <http://www.sustainablejerseyschools.com/actions-certification/actions/#open/action/86>).

NJSBA-U.S. Army: A Unique Partnership for STEAM Education



2019

Fourth Annual Challenge

- **560 Teams Entered**
- **2,000 Students Engaged**



2018: Students from Moonachie's Craig School demonstrate the 'disinfecting towel heater'

Curriculum Mapping Action

- **District or School Level 15pts, 30 points if mapping with EFS**
 - Mandatory elements:
 - To receive points for this action, the school or district must show evidence of having developed or updated a comprehensive curriculum map no more than one year prior to the initial application submission deadline. The map can be either a detailed map of an entire course, a more-generalized map for an entire grade level across the disciplines, or a map for a subject area across grade levels. Additional information about the levels of maps that would qualify for points may be found in the "[What to do, and How to Do it](#)" section.



What is a Curriculum Map?

What is a curriculum map? A curriculum map is a collection of information about the different elements of the curriculum as it is delivered in the school or district within a certain timeframe. In addition to the content, skills, and assessment (how and when) of each unit, a comprehensive map would also indicate the standards, enduring understandings, and essential questions that guide the instruction, as well as the materials, activities, and resources used in the delivery.

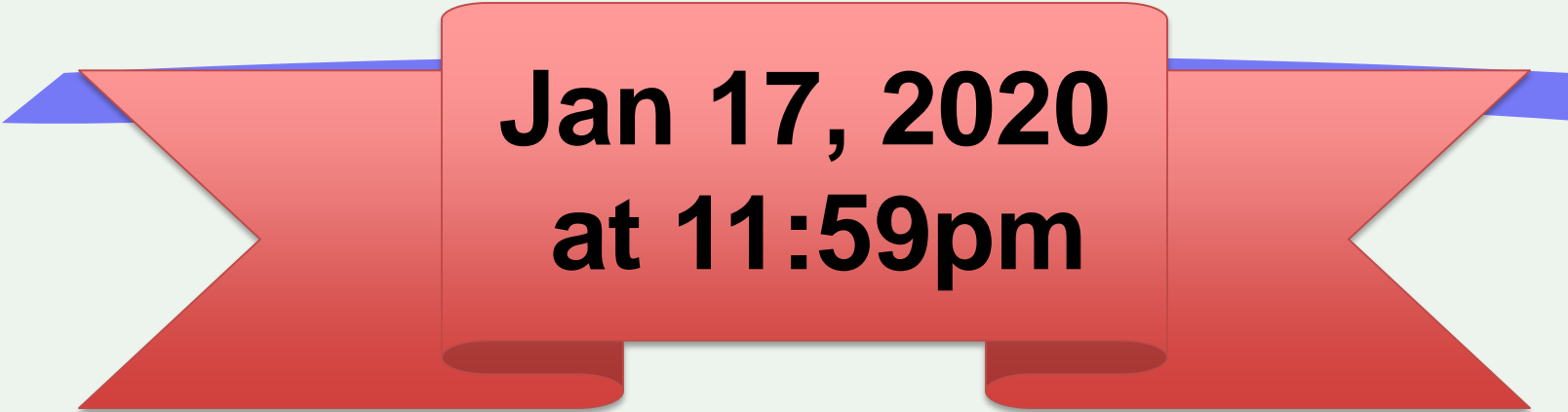
Who creates the curriculum map? Teachers and curriculum supervisors are the primary participants in the creation, use, monitoring, and revision of curriculum maps.





Questions?

First Certification Application Deadline:



**Jan 17, 2020
at 11:59pm**

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



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