



School Leadership Perspective: Advancing Sustainability Initiatives in Schools

May 2, 2024



## Panel Speakers



Ed Potosnak
Council Member
Former President of Board of
Education Franklin Township



Daniela González
Student
Princeton High School



Joseph Annibale
Assistant Superintendent
Hazlet Township School
District



Shaina Brenner
Teacher
Jackson School District



Kira Sikorski Teacher Franklin Township Public Schools



# A commitment to the future

Sustainable Schools Jersey Presentation

#### Who We Are



Mr. Ed Potosnak

Executive Director of New Jersey's League
of Conservation Voters

Past - President of FTPS Board Of Education



Mrs. Kira Sikorski

District Coordinator of School Based Green

Teams

Elementary Teacher





August 2017

January 2019

August 2020

Spring 2021

August 2021











Adopted Energy
Conservation, Sustainability
and Green Initiative Policy

The Board agreed to participate and encouraged schools to create green teams to seek Sustainable Jersey for Schools

Certification.

Two schools received Bronze
Certification.
District Goal included
Sustainability and Green
Initiatives.

All Schools were asked to create a Green Team.

Middle School Received Silver and Digital Star Certifications.

#### A commitment to the future

2021 - 2022

Fall 2022

February 2023

Spring 2023

August 2023











Schools Explored
Sustainable Jersey School
website and actions.

Monthly meetings with
School Representative and
Assistant Superintendent,
explored options to assist
schools in the certification
process.

District Approved stipend
position of District
Coordinator of School-Based
Green Teams to assist with
schools on their applications
and actions.

District Coordinator met with each school's administrative and green teams to develop a plan of action for their individual school applications. Also discussed actions that the district could help with.

Four Elementary Schools
received Bronze
Certification.
Franklin High School
Received Silver and Digital
Star Certification.
Superintendent's Cabinet
met with Sustainable Jersey.

#### This year...

- Our District has continued to make Sustainability efforts part of District Goals each year. Expanding the Goal to be: Reduce food and energy waste; foster environmental awareness; continue increasing clean-energy projects; increase recycling efforts; and encourage the FTPS community to engage in environmentally-sound projects. Support each school's pursuit of achieving Sustainable Jersey certification.
- The district began a PSE&G Energy Efficiency Partnership Program to assist all schools in the district.
- District Coordinator attended Sustainability in Motion Conference.
- District Coordinator continued outreach and support to each of the schools, especially those seeking initial certification.
- The District updated, reviewed and approved the previous Energy Conservation, Sustainability and Green Initiative Policy to be more reflective of the Sustainable Jersey Policy Action.
- Three schools received NJEA \$2000 grant



#### Sustainable Jersey Schools Success















#### **School Action Photos**











# Claremont Elementary School LEED GOLD CERTIFIED









**Claremont Elementary School** 

# Thank you very much!

#### Bugs, Bubbles, and Bulbs: Sustainability Projects at Princeton High School

Daniela González, Grade 12













#### Bugs, Bubbles, and Bulbs: Sustainability Projects at Princeton High School

Daniela González, Grade 12

























#### **SUSTAINABILITY HERO**



Mike Miller

Supervisor of Science, Raritan High School Member, Raritan High School Green Team Hazlet Township Public School District



# 2020 SUSTAINABILITY CHAMPION AWARD





- RHS Environmental Club
- RHS Silver Certified
- RHS Received 360 Points







Cafeteria trays are cleaned in our dishwasher operated by a RHS alumnus.



## RHS FOOD SCRAP COMPOSTING & OUTDOOR COURTYARD GARDENS









"With the simple steps we take today, we can shape a greener, cleaner and more sustainable future for generations to come"





## MONMOUTH COUNTY SHADE TREE COMMISSION

Saving energy also helps us secure our energy future.

y saving energy, we can reduce dependence on non-renewable and environmentally unfriendly energy sources, and switch to cleaner and more sustainable energy sources.











## SHAINA BRENNER

- Second Grade Teacher at Elms Elementary School in Jackson
- Green Team Co-Advisor
- District Green Team Lead
- 2022 Milken Educator



## KEY POINTS



STORYTELLING

**PASSION** 

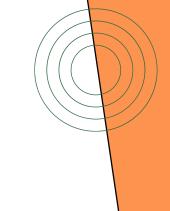
LEAD BY EXAMPLE

**COMMUNITY** 

**TEAM EFFORT** 

STARTS WITH OUR YOUTH

## EMPOWERING STUDENTS



classroom



school



district



#### CLIMATE CHANGE EDUCATION

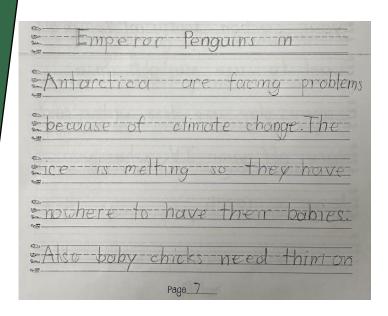


Our award-winning science curriculum focuses on teaching students engineering practices that are centered around solving environmental challenges through creative problem-solving.



American Education Week
Students and their families learned about
endangered NJ birds and ways they can help
them. Then they made bird feeders together.

#### CLIMATE CHANGE EDUCATION



Climate change education is interdisciplinary and spans subjects. Students wrote about how climate change has affected Emperor Penguins in Antarctica.





Oak Tree Nursery tudents were curious about what

Students were curious about what was growing out of the acorns on the ground. They had also been learning about the loss of habitat for birds here in NJ. Students started to grow trees in our classroom, and the project will be moved into a greenhouse that's being built.

#### CLIMATE CHANGE RESOURCES

#### Rutgers NJ Climate Change Resource Center

Provides actionable science, planning tools, and technical guidance to policymakers, practitioners, and communities addressing climate change in New Jersey

- State of the Climate Report
- NJ Climate News

#### NJ Energy Data Center

#### NJ Climate Change Education Hub

Provides teaching resources, exemplar lesson plans, and self-paced teacher PD

#### EMPOWERED SCHOOLS PROGRAM



- established by the Alliance to Save Energy and subsidized by NJNG in Morris, Ocean, and Monmouth Counties
- hands-on, real-world energy and sustainability lessons
- t-shirts for 3-12 and capes for PK-2
- \$200 stipend
- personalized, ongoing support
- access to the EmPowered platform

#### STUDENT GREEN TEAM





- 18 members
- grades 3 and 4
- Students serve as ambassadors and collaborate to make the school and community more sustainable.
- website [Google Sites] to showcase our work

#### RECYCLING



#### Recycling at Elms

Each classroom has a blue, 7 gallon recycling container.

All acceptable items should be placed in this one container.





Each year staff participate in professional development and receive training on the Ocean County Department of Solid Waste's recycling guidelines.

The Student Green Team receives training and then presents to every classroom. They also conduct recycling audits to provide feedback to classrooms.

#### RECYCLING



Recycle toner to Savin and HP

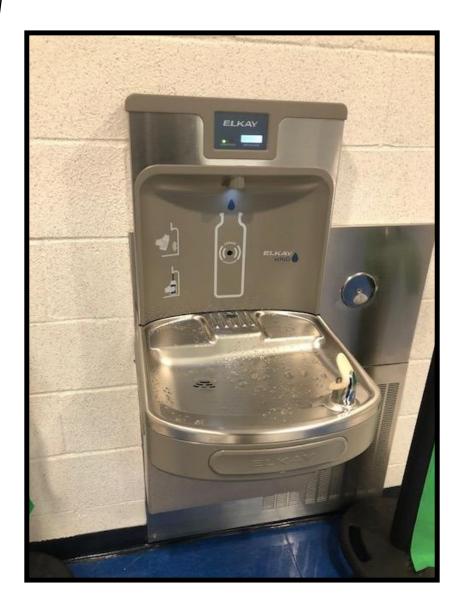


Recycle station



NexTrex Recycling Challenge

#### WATER REFILL STATIONS



We have four water refill stations located throughout our school courtesy of our PTN. Our water refill stations provide filtered, safe drinking water without spreading germs. Not only are we able to ensure that all staff and students stay hydrated, we are also reducing plastic waste. We have established a culture of sustainability in our building, so most students bring water bottles to refill throughout the school day.

#### ENERGY AUDITS

#### **Energy Audit Checklist**

<b>Date:</b> _		
Room	Number:	

LIGHTING	0		<b>2</b> right lighting or lights out
DOORS & WINDOWS	O door open and window(s) open	door open OR window(s) open	<b>2</b> door closed AND windows closed
APPLIANCES	<b>O</b> any applianc <i>e</i> on		2 • Promethean Board off ✓ • doc camera off ✓ • laptop off ✓

### ELMS ENERGY SAVING REMINDERS CLASSROOM CHECKLIST:

#1) LAST OUT LIGHTS OUT Each time you leave the classroom, turn the lights OFF. Designate a light monitor.
#2) RIGHT LIGHTING Most classrooms are too bright. Only use the lights you need.
#3) HEATING & AIR CONDITIONING Close your doors and windows when the heat or AC is on.
#4) APPLIANCES

Turn off your Promethean Board, document

camera, laptop, and any other appliances.

Our Student Green Team members provided every classroom with a checklist. They conduct monthly audits to provide feedback to classrooms.

## FOOD WASTE CAMPAIGN





The Student Green Team learned about food waste and then presented to students in every classroom. They also created posters that they hung up around the cafeteria.

## **Food Waste**

Let's explore what food waste is and how we can help minimize food waste.



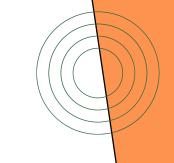
## FOOD SHARE





Students place unwanted, uneaten food in the food share. Students who would like additional servings may take from the food share. The leftover food is offered to students in our after-care program. Then, each Saturday, I bring the leftover food to the Jackson Food Pantry and Helping Hearts Equine Rescue. Purchased by our PTN, we have a cart and mini fridge in our food share.

# AQUAPONICS





We raise tilapia and coy in our 190 gallon fish tank and use a filter to pump tank water into the highest parts of our system. About 150 gallons then flow from pipes, using gravity and water force, through the trays and eventually into the grow beds at the bottom.

The Student Green Team participates in the maintenance of the system. They cut plants that are ready for harvesting and bring them home to eat.

## TROUT IN THE CLASSROOM







Trout in the Classroom is a hands-on science-based program that teaches students about coldwater conservation.

Students raise trout from eggs until they reach fingerling size. The eggs arrive in October. Students count the eggs, measure and feed the fish, change the tank water, and monitor the pH. In the spring, when the trout are fully grown, they are released in a stream at the Jackson Forestry Center.

## NJ AIR QUALITY FLAG PROGRAM



The Flag Program uses brightly colored flags based on the U.S. EPA's Air Quality Index (AQI) to inform New Jersey communities about outdoor air quality conditions.

We receive a notification each day around 10 am informing us of the air quality forecast. Students update the flag accordingly.

## FIRESMART



The creation of the curriculum was spearheaded by Bill Brash, member of the NJ Forest Fire Service and President of the NJ Fire Safety Council.

Jason Hoger, a Chief Park Naturalist with Ocean County Parks and Recreation, and Geoffrey Lohmeyer, a County Park Manager with Ocean County Parks and Recreation served as consultants.

In the summer of 2023, Elms' librarian and Green Team Co-Advisor, Sheryl Konopack, and fourth grade teacher Jennifer Giaconia, developed the Fire, Fuels, and Forest Health Curriculum- also known as FireSmart.

The creation of FireSmart sets a precedent in the state of NJ for educating students on how to be firewise at home and understand how wildfires contribute to the necessary regrowth of the Pine Barrens.

As a pilot school for the curriculum, a before-school club was created in September of 2023. Students in grades 4 and 5 began meeting in October and will meet for a total of seven times this year.

## SENSORY GARDEN



Our sensory garden contains various visually appealing plants and flowers, plants with a variety of textures and fragrant smells. There is a walking path through the garden to allow students an opportunity to experience the sites, smells and tactile qualities of the various plants. The space also includes rain barrels and a little library.





## OUTDOOR ENVIRONMENTAL LEARNING





- pollinator garden
- vegetable garden
- greenhouse
- weather station
- outdoor learning space
- composter
- rain barrels
- bird houses with camera
- seed library
- kindness rock garden
- insect hotel







# GREEN CAREER DAY





Students were treated to an enriching experience featuring presenters from all different green career paths. They learned about renewable energy sources and recycling and explored careers in conservation and agriculture. The event aimed to inspire students to pursue green careers and make positive contributions to the environment.

Ocean County 4H, Rutgers University, Rutgers Botanical Garden, Rutgers School of Engineering, Climate Generation, Ocean County Department of Solid Waste, NJDEP, Bayshore Recycling, Java's Compost, Ciel Power, Solar Edge, Abe's Acres Farms, Pinelands Commission, Ocean County Parks & Recreation, New Jersey Natural Gas, NJ Audubon

# DISTRICT GREEN TEAM





The mission of the Jackson School District's Green Team is to lead our district toward a more sustainable future by advocating for and implementing environmentally conscious practices. We strive to reduce our ecological footprint, promote education on environmental issues and climate change, and inspire all stakeholders in our community to embrace a more sustainable and greener lifestyle.

- meet monthly
- representatives from each building
- Google Classroom to manage communication and share information
- website [Google Sites]
- long-term goals (e.g. remove plastics from cafeteria)

# LET'S CONNECT

Shaina Brenner sbrenner@jacksonsd.org

# Questions?









## **CEU SIGN OUT**



### **QR CODE INSTRUCTIONS:**

- 1. Open the Camera app on your phone.
- 2. Hold your phone so that the QR code appears in view.
- 3. Tap the notification to open the link.
- 4. You MUST Sign out to receive CEU credits.

### WIFI INFORMATION: 2 Open Networks

1.sustainablenj: Ballroom, GS3, Nonprofit Exhibit area

**2.Bell\_Works\_Conf\_Center:** Bell Theatre & Conference

### **UPCOMING EVENTS AND OPPORTUNITIES**

#### **EARNING YOUR DIGITAL SCHOOLS STAR: TIPS FOR SUCCESS WEBINAR**

This webinar offers an overview of the Digital Schools program, insights and examples of ways to improve digital school action submissions and earn points to attain Digital Schools Star recognition. The informational webinar will be held on

Wednesday, May 8, 2024, 3:30pm-4:30pm.

Register: bit.ly/4dhdj91

#### ■ 2024 MUNICIPAL CERTIFICATION CYCLE

The next deadline to apply for certification is **Friday, May 10, 2024**. The final application deadline is **Wednesday, July 31, 2024**. View the full cycle timeline on the 2024 Certification Cycle page.

Learn More: bit.ly/SJ2024CertCycle

#### NJBPU'S COMMUNITY ENERGY PLANNING GRANTS

The New Jersey Board of Public Utilities is offering a new round of Community Energy Plan Grants for all New Jersey municipalities.

Application Deadline: Friday, May 24, 2024

Learn More: bit.ly/3WcmAt7

#### ■ TRI-COUNTY SUSTAINABILITY GENERAL MEETINGS

This Sustainable Jersey Regional Hub will host virtual meetings on a variety of sustainability topics throughout the year. The next meeting is

Tuesday, May 28, 2024, 7:00pm-8:00pm.

Learn More: bit.ly/Tri-CountySustainability

### 2024 SUSTAINABLE COMMUNITIES GRANT PROGRAM

Atlantic City Electric is contributing \$35,000 to support municipal environmental stewardship and resiliency projects within its service territory. Join us for an informational webinar on **Monday, May 13 from 1:00pm-2:00pm** to learn more about the program and how to use the online application portal.

Application Deadline: Thursday, June 27, 2024

Learn More: bit.ly/SustainableCommunitiesGrantProgram

### ☐ 2024 SCHOOL CERTIFICATION CYCLE

The final deadline to apply for certification and Digital Schools Star Recognition is **Thursday, June 13, 2024**. View the full cycle timeline on the 2024 Certification Cycle page.

Learn More: bit.ly/SJS2024CertCycle

### ☐ HOW TO ADOPT OR UPDATE A COMPLETE AND GREEN STREETS POLICY WEBINAR

Save the date! Join a one-hour walkthrough on how to create your own model municipal Complete and Green Streets Policy, brought to you by the Voorhees Transportation Center at Rutgers University, Sustainable Jersey, the New Jersey Department of Transportation, and the North Jersey Transportation Planning Authority, on Tuesday, September 17, 2024, 12:00pm-1:00pm. Registration information coming soon. Follow-up Open House Q&A for attendees to be held virtually on Wednesday, October 30, 2024 from 3:00pm-5:00pm.

### PROGRAM UNDERWRITERS



















### **CORPORATE SPONSORS**























































# Thank You



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Session slides will be available on sustainablejersey.com by 5/10.

# SUSTAINABILITY SUSTAINABILITY SUSTAINABILITY

