



2024 SUSTAINABILITY
SUMMIT



Transforming Food Waste: Insights from New Jersey Municipalities and Schools

May 3, 2024

CEU SIGN IN



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 in to receive CEU credits.

WIFI INFORMATION: 2 Open Networks

1. **sustainablenj**: Ballroom, GS3, Nonprofit Exhibit area
2. **Bell_Works_Conf_Center**: Bell Theatre & Conference

Presenters

Véronique Lambert

Schools Program Manager
Sustainable Jersey

Amanda Nesheiwat

Director of Sustainability and Community Outreach
Hudson County Improvement Authority

Lois Kraus

Vice Chair
Town of Westfield Green Team

Sean McArthur

Supervisor of Buildings and Grounds
Westfield Public Schools

“Food waste has profound environmental consequences”

(ReFed 2023)

- In 2022, surplus food contributed 6.1% of U.S. greenhouse gas emissions, equivalent to driving 86 million passenger vehicles – more than the registered cars in California, Texas, Florida, and New York combined – for a year (ReFed, 2023).
- Nearly 60% of all landfill emissions of methane (a potent greenhouse gas) is from food waste (EPA).
- NJ passed food waste legislation:
 - S3027 in 2017 sets goal to reduce food waste generated 50% by 2030
 - A2371 in 2020 requires large food waste generators (52 or more tons/year) within 25 miles of an authorized food waste recycling facility to recycle food waste.





Wasted Food Scale

How to reduce the environmental impacts of wasted food



<https://www.epa.gov/sustainable-management-food/wasted-food-scale>

Sustainable Jersey Actions & Resources to Recycle Food Waste

- **Municipal Program: Food Waste 10 points**

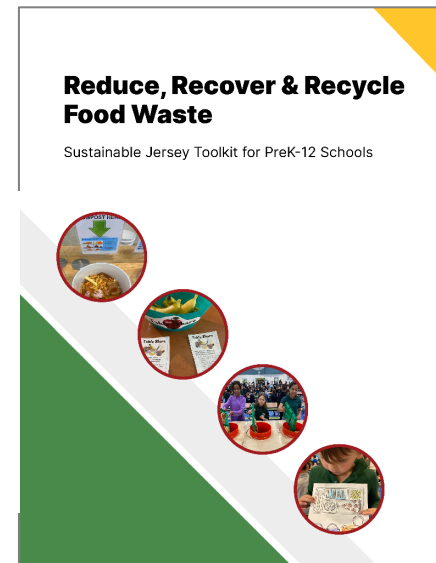
<https://www.sustainablejersey.com/actions/#open/action/97>

- **Schools Program: FoodWasteRecycling/Composting 15 points**

<https://www.sustainablejerseyschools.com/actions/#open/action/84>

- **Toolkit for PreK-12 Schools**

<https://bit.ly/FoodWasteToolkit>



Sustainable Jersey Grant Projects to Recycle Food Waste

Asbury Park City	Monmouth	\$2,000.00	2021	Pilot providing free compost bins for residents & education campaign
Chesterfield Township	Burlington	\$2,000.00	2021	Promote backyard composting with education campaign
Cranford Township	Union	\$2,000.00	2020	Living Green Without Single-Use Plastics
Hanover Township	Morris	\$10,000.00	2020	Sustainable Soil: Backyard Compost Initiative
Merchantville Borough	Camden	\$2,000.00	2020	Composting and Gardening at the Community Center
Raritan Twp	Hunterdon	\$10,000.00	2023	Residential Food Waste Recycling Drop-off
Collingswood Boro	Camden	\$10,000.00	2023	Food Waste & Recycling 101: Educating the 101 South Jersey towns in our Hub

Willard Elementary School	Ridgewood Public School District	Bergen	\$2,000.00	2023	Willard Composting Phase 1
Paramus High School	Paramus Public School District	Bergen	\$2,000.00	2023	From Garbage to Garden
Millburn Sr. High School	Millburn Township Schools	Essex	\$2,000.00	2023	Food Scrap Program
Delran Intermediate School	Delran Township School District	Burlington	\$2,000.00	2023	Recycling Expansion Project
Hopewell Valley Regional School District	Hopewell Valley Regional School District	Mercer	\$10,000.00	2023	Climate Action
Roy W. Brown Middle School	Bergenfield Borough School District	Bergen	\$10,000.00	2020	Sustainable Food Production Initiative
Stillwater Township Elementary School	Stillwater Township School District	Sussex	\$2,000.00	2021	I'm Still Hungry - Cafeteria Connection solves food insecurity through managing food waste!
Knowlton Township Elementary School	Knowlton Township School District	Warren	\$10,000	2022	Sustainability through the Seasons:
Delaware Township School District	Delaware Township School District	Hunterdon	\$10,000	2022	Greening Cafeteria Operations
Florence M. Burd Elementary School	Andover Regional School District	Sussex	\$10,000	2022	Dumpster Ghosting Through Composting
Somerville Elementary School	Ridgewood Public School District	Bergen	\$2,000.00	2021	Compost Training, Somerville Tree Walk, Healthy Food Choices, and Green Fair







Newton Partnership



- **Town of Newton**

- Received a US Department of Agriculture grant to create a town wide composting program
- Have created a partnership with AG Choice and the County Municipal Waste Management Team (SCUMA)



- **Student Involvement**

- Design information packets to be delivered to all town residents
- Demonstrate how to use the town composting receptacle.



HCIA Food Waste Pilot Program Grant

Amanda J Nesheiwat

Director of Sustainability and Community Outreach
Hudson County Improvement Authority



Food Waste Recycling Challenges

- County or municipal responsibility?
- Lack of space in Hudson County
- Lack of programs
- Messy

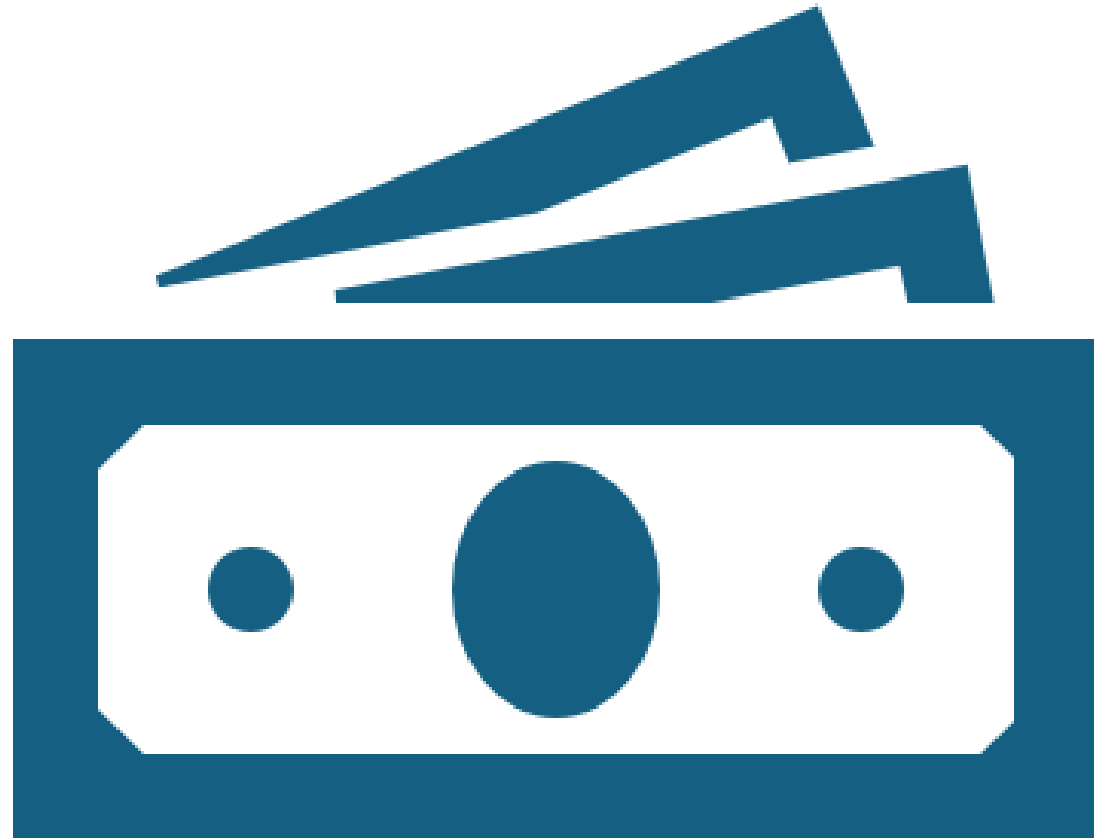
Current Food Waste Collection

Food Waste Collection from Community Compost Co in 2022.
405 Tons in 2023!

CITY/TOWN	LBS	TONS
Hoboken	261,389	131
Jersey City	381,571	191
Secaucus	35,675	18
Union City	4,916	2
North Bergen	2,044	1
West New York	622	0
Total	686,217	343

Recycling Enhancement Act (REA Grant)

- Pilot Program Approval
- County grant money



Food-Waste Pilot Program

- Pilot Programs for schools and municipalities!
 - North Bergen
 - West New York
 - Guttenberg (soon!)
 - High Tech High School (9 months pilot program)

Food Waste Pilot Success!

•Food waste diverted from landfill in 2022-2023 due to Rocket Composter: **3011 lb**

•Food waste diverted from landfill so far in 2023-2024 due to Rocket Composter: **1780 lb**



93,592 lbs diverted!

This is the total weight we have collected from you so far.



617 seedlings planted!

Composting has a huge impact on the environment. From a greenhouse gas equivalency standpoint your composting efforts are equivalent to 617 urban trees seedlings grown for 10 years.



82,435 lbs Greenhouse Gas Emissions Offset!

This is the equivalent greenhouse gas emissions offset by composting your food scraps instead of sending them to the landfill.



92,843 miles offset!

Your composting efforts are equivalent to not driving 92,843 miles. Whoa.



4,548,477 smartphones charged!

The number of smartphones that haven't spent time charging.



4,211 gallons of gas!

The number of gallons of gasoline offset by diverting food scraps from the landfill



41,367 pounds of coal burned.

You've avoided burning 41,367 pounds of coal. Congrats!



12 tons of waste recycled instead of landfilled.

You've saved 12 tons from sitting in a landfill. Thank you.

922 Students at High Tech

Savings

- 2022-2024 - \$5000
- Cost for 9 month contract for food waste pick-up is \$5,430.





High Tech High School Leading the way!

Thank you!

Amanda Nesheiwat

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www.hcia.org

Westfield's Food Waste Recycling Program

Fueling our Journey to Sustainability

Catherine Choudhry, Zero Waste Lead, Westfield Green Team Member



What I Will Cover Today

- Our approach to creating a food waste recycling program in Westfield
- Where the food waste goes
- Our elementary school pilot program
- Program economics
- Next steps toward sustainable food management



How the program got started...



Experience in NYC with DSNY's
organics recycling program
2013-2016

Identified a need in Westfield

Visited RVSA and CORE facilities
Fall 2018

Engaged potential key
stakeholders
January 2019

Official program kick-off
November 2019

Engaging Key Stakeholders and Building the Case

January 2019



Jim Van Woert,
Area Director of Diversion
Strategies Waste Management



Dr. Serpil Guran
Director of Rutgers' EcoComplex



Jim Meehan,
Executive Director Rahway
Valley Sewerage Authority



We invited: Town Engineer, Town Administrator, Head of Public Works,
Council Members, Local Businesses

From Concept to Town Approval

Key Player/Champion: David Contract, Westfield Town Council Member, Liaison to the Green Team, Chair of the Department of Public Works, Finance Committee Member

1) Assessed Community
Interest
Spring 2019

2) Secured Committee
Approval
Summer 2019

3) Secured Town
Council Approval
Fall 2019

4) Launched and
Promoted
November 2019

5) Quickly Expanded
December 2019



Processing the Collected Food Waste

Key Player: Arielle Bernard: Waste Management's CORE Sales Support Manager

WM | **CORE**. NEW JERSEY
WASTE MANAGEMENT



Location
847 Flora St
Elizabeth, NJ

500 tons per day
permitted capacity

Long-term
partnership with
Rahway Valley
Sewerage Authority
(RVSA)

Food waste transported to CORE

CORE in Operation
From food waste organics to EBS




CORE SSO Receipt Hopper & Bioseparator

EBS Mixing and Storage Tank

EBS Product

Food transformed into an engineered bio-slurry (EBS)


EBS Transported to WWTP
Brought to WWTP for co-digestion/energy production



EBS TRANSPORT TO WWTP

WWTP DIGESTER

RENEWABLE ENERGY



10

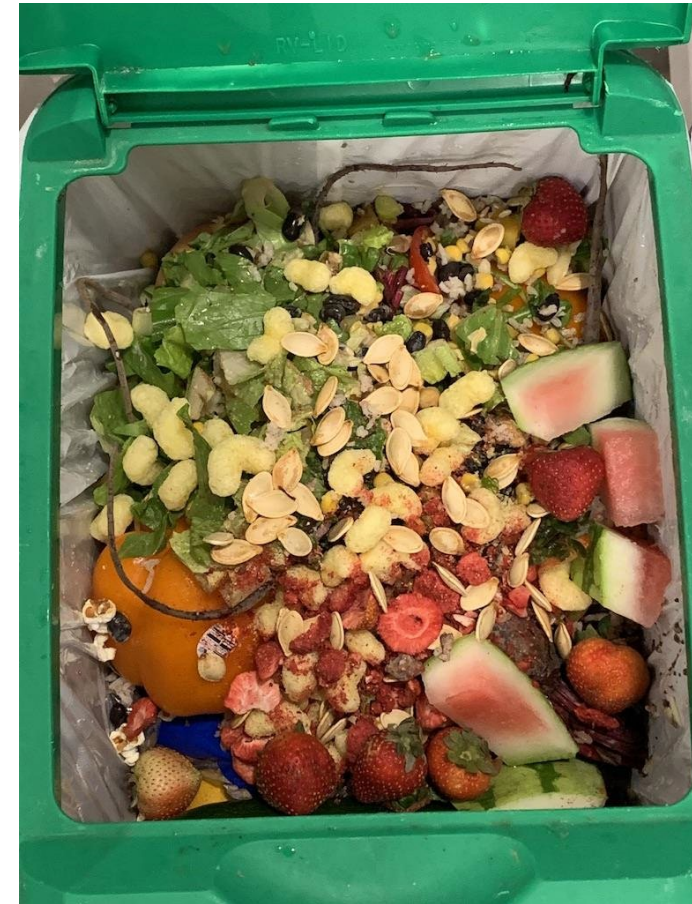
WM

EBS transported to a wastewater treatment digester where it is converted to energy



Overview of How Residents Participate

- ▶ I keep my bin in the kitchen
- ▶ It has a lid to help with any smells- just like regular kitchen garbage
- ▶ I take it weekly to our Conservation Center
- ▶ For this program, food waste can be collected in a container or a non-black plastic bag
- ▶ Low barrier to entry



Food Waste Collection at the Conservation Center

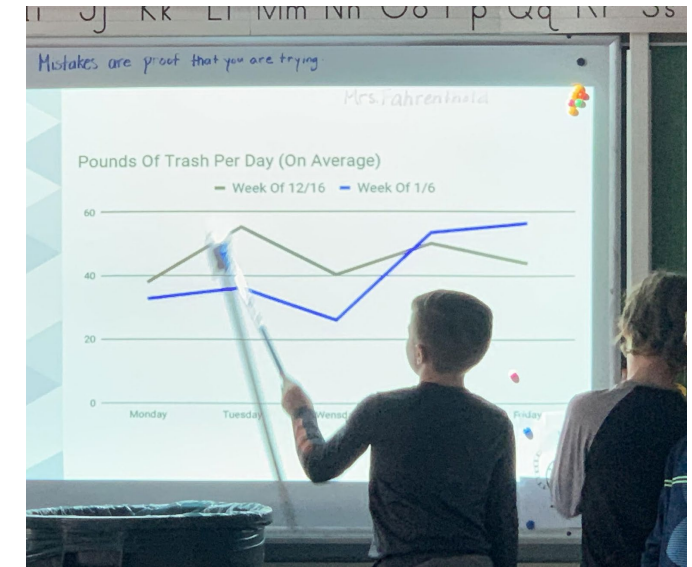
Key Player: Richard Eubanks: Westfield Department of Public Works, Supervisor Parks & Fields Division, Westfield's Recycling Coordinator

- ▶ Working with Waste Management to get started
- ▶ Initial concerns
- ▶ Demands on staff
- ▶ Troubleshooting contamination



Food Waste Recycling in an Elementary School

- ▶ Westfield Board of Education approved pilot in one of its ten schools
- ▶ Green Team worked with the principal, head custodian and a science teacher
- ▶ Students performed an assessment of the school's waste
- ▶ Most importantly we supported a very engaged group of 5th graders who educated the community and facilitated the waste sorting at lunch



Economic Considerations of Food Waste Recycling

- ▶ We need to switch from seeing food waste as heavy garbage to a valuable resource that we want to keep in our community
- ▶ Food waste is often heavier than other items found in household trash
- ▶ Currently it is \$355/month for three 64 gallon toters to be picked up weekly.
- ▶ Sustainable Jersey did give a grant to Cranford to start their own waste recycling program - there is some money out there
- ▶ If residents are source separating and food waste is being recycled, there is less garbage generated and waste removal fees can be renegotiated



Looking Ahead



Embarking on a Sustainable Organics Material Management Plan

Catherine Choudhry, Westfield Green Team Member

With direction and
support from Gary
Sondermeyer

17 Core
Opportunities
for Action

THE NEW JERSEY
CLIMATE CHANGE
ALLIANCE ORGANICS
WORKGROUP

Westfield as a
Pilot
Community

Engaging
Broader
Community



Next Steps and Concluding Thoughts

- ▶ Lunch and Learn with Important Community Leaders: clergy, BOE, Girl Scouts, library, volunteer organizations
- ▶ This is a piece of the puzzle for Westfield
 - ▶ We also have backyard composting
 - ▶ We would love to have an in-vessel composter
 - ▶ We have school gardens and are looking at a possible community garden
 - ▶ We would also be interested in diverting food waste to a composting facility
 - ▶ We have an active food pantry that wants to expand
 - ▶ We would like more food waste recycling drop off locations in town
- ▶ We are looking to think bigger in an effort to have a more comprehensive way to recover more food as well as divert food waste from our landfills
- ▶ Identify champions



Thank you!

Contact me:

- ▶ Catherine Choudhry, *Westfield Green Team Member*
 - ▶ catherinehirschman@yahoo.com
 - ▶ catherinechoudhry1@gmail.com





Food Waste at Jefferson School Westfield Public Schools

Sean McArthur
Supervisor of Buildings and Grounds



Educating about recycling and food waste

5th graders created a video presentation to teach others about recycling paper, cans, bottles, and food waste. Created in January 2022



Food Waste Posters

WM WASTE MANAGEMENT **THINK GREEN:** 

Food Waste Recycling Only

Fruits, Vegetables, Poultry, Meat, Seafood, Dairy, Bakery & Dry Goods, Liquids & Beverages, Teabags & Coffee Grounds



YES:
Food waste is being recycled at WM's CORE Facility.
Plastic liners are acceptable (except black bags) or dispose of food waste directly into toter.




NO

- Glass
- Wood
- Chemicals, paints, & other hazardous material
- Aluminum foil & trays
- Clothing & linens
- Corks
- Polystyrene foam
- Yard waste
- Dirt, rocks, stones

Small amounts of soiled paper goods, fats, oils, greases, and florals are acceptable. These items can contaminate recyclables if found in large quantities.

To learn more, visit www.westfieldnj.gov/green.



Physical set up in the cafeteria



Students monitor food waste separation early in the school year.



Food waste is placed outside in the yellow barrel for weekly pick up.






Promoting food waste recycling

Jefferson School Hub

- Home
- Sustainability Efforts
- At a Glance - Parent Reference Guide
- Arrival and Dismissal
- When Should I Keep My Child Home?
- Westfield 2023-24 Calendar
- Jefferson Code of Conduct
- Jefferson Updates

Food Waste Recycling

During the lunch hour, food scraps are placed in the green barrels so they can be recycled. Early in the school year, students are taught to only put unwanted food (no wrappers or bags) in the green barrel. For parents who come to help us at lunch time, please keep this in mind. Food scraps are collected and sent to the Rahway digesters, converting them into usable electrical energy. By doing so, we work to reduce the school's environmental footprint by diverting food waste from landfills. Thank you for helping us care for our environment!



Page 1 / 1

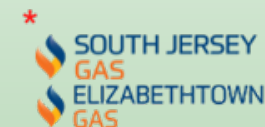
Jefferson students recycle food waste during the lunch hour. Please remind students to only put food scraps in the green barrels (no wrappers). Thank you.

Q & A

PROGRAM UNDERWRITERS



CORPORATE SPONSORS



*Digital Schools Sponsor

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.**