Striving Towards Zero Waste NJ Through Reducing Consumption

Gary Sondermeyer, Bayshore Recycling
N.Dini Checko, ANJEC
• Food Waste
• Recycling
• Plastics
• Making Connections
FOOD PROBLEM STATEMENT

• The NRDC estimates that 40% of all food grown in the USA is wasted;

• New Jersey is the 2nd most affluent State in the US which is the most affluent industrialized nation on earth;

• Four New Jersey Counties are in the “Top 20” most affluent in the United States:
  - #10 Morris
  - #11 Hunterdon
  - #15 Somerset
  - #20 Bergen

• Despite our relative affluence, 11% of New Jersey’s population and 15% of kids 18 years of age and younger are food insecure;

• Wasted food is landfilled. Landfills are the 3rd largest source of human-related methane emissions in the US - some 15.1% of these emissions;

• Our goals are to dramatically advance food recovery systems while driving food waste away from landfills and to small and large-scale composting facilities.
NEW JERSEY FOOD ASSET RECOVERY SYSTEM

- National Oversight Organization – “Feeding America”

- Recognized “Food Banks” in New Jersey:
  - Community Food Bank of New Jersey
  - Food Bank of South Jersey
  - Fulfill Monmouth & Ocean
  - Mercer Street Friends
  - NORWESCAP
  - REPLENISH

- 1,400 Food Pantries Statewide (rough estimate)

- 150 Soup Kitchens Statewide (rough estimate)
BASELINE WORK UNDERWAY

- **$172,000** Stockton/Rutgers REA Grant: “Food Asset Recovery Statewide GIS Mapping Project”

- **$335,261** Rutgers REA Grant: “New Jersey Leaves No Bite Behind” Food waste/climate change curriculum

- **$18,000** NJ State Policy Lab Grant: “Comparative analysis of State Food Recovery/Reduction Policies”

- **$25,000** Center For EcoTechnology: US EPA “Municipal, Business, Institution Education Grant”

- **$235,000** REA Grant to Sustainable Jersey: *In-vessel compost units* in George Catrambone in Long Branch, Delran and Newton Elementary Schools and Sustainable Food Management Tool Kit Development

- **$225,000** Taub Foundation Grant to Rutgers for Regulatory Reform and Composting Education

- **Bergen White Paper**: County Template for Food System Assessments & Outreach Coordination

- Rutgers Cooperative Extension: 1-Hour *Health Inspector Training Module*
## FOOD ASSET MAPPING INVENTORY CATEGORIES

<table>
<thead>
<tr>
<th>Excess Food &amp; Food Waste Generators</th>
<th>Excess Food Distributors</th>
<th>Food Waste Processing Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage Manufacturers</td>
<td>Food Banks</td>
<td>Compost Pick-Up Businesses</td>
</tr>
<tr>
<td>Wholesalers &amp; Distributors</td>
<td>Food Pantries</td>
<td>Aerobic &amp; Anaerobic Digestion Facilities</td>
</tr>
<tr>
<td>Grocery Stores</td>
<td>Soup Kitchens</td>
<td>Co-digestion Facilities</td>
</tr>
<tr>
<td>Restaurants &amp; Food Service</td>
<td>Faith-based Organizations</td>
<td>Food Waste Recycling Facilities</td>
</tr>
<tr>
<td>Hotels &amp; Motels</td>
<td>Non-profit Organizations</td>
<td>Composting Facilities</td>
</tr>
<tr>
<td>Casinos</td>
<td>Food Rescue Organizations</td>
<td></td>
</tr>
<tr>
<td>Event Venues</td>
<td>Food Delivery Organizations</td>
<td></td>
</tr>
<tr>
<td>Major Private Employers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K-12 Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Secondary Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correctional Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farms &amp; Fisheries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers Markets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Who Generates the Food?

- **Composition Estimate From NRDC:**
  - 43% Residential
  - 26% Restaurants
  - 14% Retail Supermarkets
  - 9% Institutions (Hospitals, Prisons, Schools)
  - 8% Food Manufacturers & Processors

<table>
<thead>
<tr>
<th>FWG Sector</th>
<th>Inventory Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Beverage Manufacturers</td>
<td>1,872</td>
</tr>
<tr>
<td>Wholesalers and Distributors</td>
<td>977</td>
</tr>
</tbody>
</table>
| Supermarkets and Supercenters       | 6,047 (Supermarkets)  
                                      | 67 (Supercenters)    |
| Hospitality                         | 1,596 (Hotels)   
                                      | 110 (Casinos)        |
| Restaurants and Food Service        | 18,321 (Full Service) 
                                      | 2,449 (Limited Service) |
| Colleges and Universities           | 165             |
| Elementary and Secondary Schools    | 2,558 (Public Schools) 
                                      | 716 (Private Schools) |
| Correctional Facilities             | 13              |
| Healthcare Facilities               | 110 (Hospitals)  
                                      | 858 (Long-term Care Facilities) |
| Major Private Employers (>500 employees) | 743         |
| Event Venues                        | 1,005           |
| Farms                               | 688             |
| Farmers Markets                     | 131             |
| Food Banks                          | 9               |
COUNTY FOOD REDUCTION PLANNING

- **A1439** Passed the Assembly (floor vote) on 2/27/23
- **S2730** Passed Senate Environment in June 2022
- Requires each solid waste management district to **develop and implement a strategy in solid waste management plan to reduce food waste within 2 years.** *(Full County Plan Amendment Needed.)*
- This is a follow-up to the NJ Food Waste Reduction Act of 2017 (S3027);
- DEP has yet to publish its final Food Waste Reduction Plan
- County involvement in food reduction planning is coming!
- Ongoing baseline work being done to help!
MUNICIPAL COMPOSTING

1. Identify Champion in Twp Council
2. How does town want to reduce waste? (diversion and composting)
3. Conduct survey with educational material to residents (Why the need to compost? What are you willing to do? How much are you willing to pay?)
4. Township budget (Staff time, Compost Bins, RFP for Haulers)
5. Drop Off Locations (Convenience Center Exemption, 2 Industrial facilities, Agriculture/Farm)
6. Pilot program
CONVENIENCE CENTER EXEMPTION

Westfield, Union County
- DPW convenience center yard drop off
- No DEP Permit Required
- Use MicroHauler (Green Bucket) to take it to CORe Facility

Examples of Haulers (ANJEC doesn’t endorse)
- Green Bucket Compost
- Java Compost
- Community Compost Company
- Un-Waste
East Brunswick Poster Contest
Hammarskjold Upper Elementary School

The Six “Rs”

1. Refuse products that are destined for the trash after one use.
2. Reduce items that have excess packaging or unneeded products.
3. Repair items in your home instead of discarding them.
4. Reuse products to reduce waste and save money.
5. Recycle if items can’t be refused, reduced, or reused.
6. Rot return nutrients to the soil by composting.
RECYCLING MATTERS!
RECYCLED CONTENT LEGISLATION

Rigid Plastic Packaging:
➢ By 2024 10% post consumer content required;
➢ 50% by 2036

Plastic Beverage Containers:
• 15% recycled content by 2024;
• 3% increase in content every 3-years thereafter;
• 50% by 2044

Glass Containers:
➢ 35% recycled content by 2024;

Carryout Bag Provisions:
➢ 40% post-consumer content by 2024 for paper bags
➢ Plastic film bags 20% content by 2024 and 40% by 2027
➢ 20% content for plastic garbage bags by 2024 and 40% by 2027 (1 Mil)

Polystyrene Packaging Peanuts:
➢ Banned by January of 2024
SUSTAINABLE JERSEY ACTION UPDATE

• Waste Task Force Reactivated in 2023
• New Action Development/Update Subcommittee Structure Adopted:
  - Litter Abatement
  - Waste Reduction
  - Food Waste
  - Actions Update (16 existing actions)
• New Actions on the Way in the Schools Program – All Food Related
  - New Proposed Action: Education & Behavior Change Campaigns
  - New Proposed Action: Food Service Best Practices to Reduce Food Waste
  - New Proposed Action: Food Recovery / Share Tables & Donation
  - Update: Food Waste Management/Composting action
  - Update: Waste Audit action
• Single-Use Plastics Action:
  - Balloon Ban;
  - Zero Waste Events;
  - Disposal Free Dining
ENVIRONMENTAL EDUCATION RESOURCES

• Report on K – 12 Climate Change Education Needs in New Jersey:

• NJDEP Division of Sustainable Waste Management Food Reduction Website:
  https://www.nj.gov/dep/dshw/food-waste/

• State of New Jersey School Food Waste Guidelines:

• Rutgers Cooperative Extension – “New Jersey Leaves No Bite Behind”
  https://foodwastelessons.rutgers.edu/

• Rutgers Cooperative Extension – “People, Plants and the Planet”
  https://sites.rutgers.edu/ppp/
Plastic Pollution Reduction Act: 1 Year Review

- reduction of **8 BILLION** single use plastic bags in one year
- reduction of **110 MILLION** single use paper bags in one year

**Cleanup Stats - Clean Ocean Action Beach Sweeps**
- 37% fewer plastic bags
- 39% fewer plastic straws
- 37% less polystyrene foam waste

***First time since 2007, plastic bags were NOT included in Clean Action Ocean’s 2022 Beach Sweep Dirty Dozen list***
Learning Lessons

NEW JERSEY: SINGLE-USE BANS

<table>
<thead>
<tr>
<th></th>
<th>2023</th>
<th>2022</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-use plastic bags</td>
<td>56%</td>
<td>61%</td>
<td>65%</td>
</tr>
<tr>
<td>Foam food containers</td>
<td>56%</td>
<td>64%</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic straws</td>
<td>50%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Supermarket paper bags</td>
<td>44%</td>
<td>47%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Monmouth University Poll
New Jersey, Aug. 10-14, 2023

The WHY Plastic is a Problem?
The Plastics Advisory Council

• 16 members (with guidance from NJDEP)

• Goals: Submit written reports to evaluate the implementation and effectiveness of the law, make recommendations to reduce the use of plastics, the amount of plastic entering the environment and increase the rate of plastics recycling

https://dep.nj.gov/get-past-plastic/plastics-advisory-council/
PAC RECOMMENDATIONS 1st Year Report

- Focus on enforcement
- Need robust metrics
- Reduce microplastics being released into environment
- Study the pros and cons of developing a New Jersey Bottle Bill
- Improve municipal recycling programs
- Foster a reuse & refill green business economy
- Expand waste reduction and recycling in schools
- Figure out a way to address the issue of grocery deliveries and the buildup of excess reusable bags
- Enact extended producer responsibility and hold manufacturers responsible and accountable for packaging waste
Need to Report a Violation?


What’s Next? More Progress….

➢ Extended Producer Responsibility with Incineration Ban
➢ Evaluate Bottle Bill (goal – improve recycling)
➢ Skip the Stuff
➢ Truth in Labeling
➢ Microplastics – washing machine filters, waste water treatment plants
➢ Balloon Releases
➢ Break Free From Plastic Pollution Act (HR 5845)
PRODUCT PACKAGING STEWARDSHIP (EPR)

- Where **producers take responsibility** for management of the disposal of products they produce once those products are no longer useful by consumers.

- Extended producer responsibility **shifts the economic burden** of the cost of disposal from the government to the producer of the product.
EXTENDED PRODUCER RESPONSIBILITY

Brands reduce packaging. Remaining packaging is free of toxics and is recyclable/contains recycled content.

Brands invest in infrastructure to improve recycling and reuse.

Brands pay for costs of recycling and disposing of product packaging.

Retailers and brands implement reuse + refill systems.

Consumers return or recycle product packaging.

BEYOND PLASTICS
Municipal Resolution of Support Packaging Reduction Act S426/A1444

RESOLUTION #XXX-XX
TOWNSHIP/BOROUGH OF XX, COUNTY OF XX AND STATE OF NEW JERSEY TO SUPPORT PACKAGING REDUCTION ACT

Support for the New Jersey State Legislature to Pass a Strong Packaging Product Stewardship Act (S426/A1444)

WHEREAS, packaging constitutes one-third of the municipal waste stream in New Jersey, and

WHEREAS, managing packaging waste costs New Jersey taxpayers hundreds of millions of dollars annually, and

WHEREAS, some packaging is not recyclable, and

WHEREAS, plastic causes serious pollution throughout its entire lifecycle - from extraction of the fossil fuels used to make it, to its manufacture, its petrochemical additives, its use, and its disposal, and

WHEREAS, those who produce these materials should bear the costs of managing them, and

WHEREAS, enacting the Packaging Product Stewardship Act, as drafted in the NJ Senate and Assembly (S426/A1444) would reduce waste, increase recycling rates, create green sector jobs, reduce toxicity in products, provide millions of dollars in savings for local governments and taxpayers, and lowers greenhouse gas emissions, and

BE IT RESOLVED, that [INSERT JURISDICTION] urges the New Jersey State Legislature to pass into law a strong and effective Packaging Product Stewardship Act,

RESOLVED, further, that [INSERT JURISDICTION] shall forward copies of this resolution to:

1. Senator Bob Smith [bobsmith@njleg.org]
2. Assembly Rep James Kennedy [jameskennedy@njleg.org]
3. Association of NJ Environmental Commissions [info@anjec.org]
Litter Survey & Data Form

Dear Cleanup Volunteers:

Thank you for your hard work, dedication and commitment to a litter-free NJ. In addition to your cleanup efforts, NJCC appreciates your time and attention in helping to quantify today’s litter data. Numbers are the only valid form of data, so please DO NOT use words or check marks in the boxes next to each trash item.

Date: ___________________ Name: ___________________ Email: ___________________ 

Cleanup Summary

Cleanup Site Location: ___________________

Total # of Volunteers at this site: _______ Total Hours of Cleanup: _______

Total # of Trash Bags Filled: _______ Total Weight of Trash Collected: _______ lbs. or _______ cubic yards

Estimated Distance Cleaned: [ ] 1/4 [ ] 1/2 [ ] 3/4 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 Other: _______ miles

Trash Collected: Please only enter NUMBERS in the field next to each trash item

<table>
<thead>
<tr>
<th>TOTAL #</th>
<th>MOST LITTERED ITEMS</th>
<th>TOTAL #</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>Balloons</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Plastic Bags</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Straws/Sippers</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Cigarette Butts</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>E-Cigarettes</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Bottles</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Cans</td>
<td>_______</td>
</tr>
<tr>
<td>_______</td>
<td>Nips/Mini Alcohol Bottles</td>
<td>_______</td>
</tr>
</tbody>
</table>
| _______ | Food Wrappers (condy, chips, etc.) | _______

Items of Local Concern:

[ ]

A Message from the Union County Board of County Commissioners

We Want Your Bags!

New Jersey’s bag ban has been an enormous success, reducing billions of single-use bags yearly from New Jersey’s waste stream, preserving wildlife and waterways, and improving our community aesthetic.

If you have extra cloth reusable bags, donate them here! This program collects these bags, gets them cleaned, and supplies them to the Community Food Bank of New Jersey for reuse in food distribution.

(Note: our program does not accept plastic bags)

Thank You!
DID YOU KNOW?

- We produce 350 million tons of plastics each year worldwide, which is almost equivalent in weight to the total human population.
- Plastic usage has increased 44% between 2000 and 2020.
- By the year 2050, it is estimated that production will increase by another 100%.
- A lot of plastic is produced for single-use.
- By weight, there are more plastics than fish in our oceans by 2050.
- Every minute one garbage truck of plastic waste enters the ocean.
- About 90% of single-use plastics are NEVER recycled, degraded into microplastics, or accumulate in trash. The United States is the largest generator of plastics waste in the world.

RESOURCES

- Get the Facts: https://www.factsoid.com
- Break Plastic: https://breakplastic.org
- NJ DEP: https://nj.gov/dep
- Plastic Pollution: https://www.plasticpollution.org
- Preventing Plastic Waste: https://www.preventingplasticwaste.org

NJ LAWS

- In the first year of the Plastic Pollution Reduction Act of 2020, New Jersey implemented a ban on single-use plastic bags in grocery stores and set a goal to reduce single-use plastic by 75% by 2030.
- Personal Care Products: https://www.personalcareproducts.com
- Food Wastewater: https://www.foodwastewater.com
- Clean Air Act: https://www.cleanairact.com
- Food Safety: https://www.foodsafety.com

NJ NO PLASTICS

WHY SHOULD YOU CARE ABOUT PLASTIC POLLUTION?

Plastic is connected to health, climate change and wildlife. Single-use plastics take an enormous amount of water, energy, and chemicals to produce and dispose, yet are only used for a few minutes and can persist in our environment for more than a millennium.

Laws & Bills

2. Sustainable Food Waste Management: https://www.foodwastemanagement.org
3. Food Waste: https://www.foodwaste.org
4. Food Safety: https://www.foodsafety.org
5. Food & Beverage: https://www.foodandbeverage.org
6. Food Service: https://www.foodservice.org
7. Food Policy: https://www.foodpolicy.org
8. Food Technology: https://www.foodtechnology.org
9. Food Science: https://www.foodscience.org
10. Food Safety: https://www.foodsafety.org

Resources:

- Sustainable Management of Food Waste: https://www.sustainablefoodwaste.org
- Food Waste: https://www.foodwaste.org
- Food Safety: https://www.foodsafety.org
- Food Technology: https://www.foodtechnology.org
- Food Science: https://www.foodscience.org
- Food Service: https://www.foodservice.org
- Food Policy: https://www.foodpolicy.org
- Food & Beverage: https://www.foodandbeverage.org

Questions? Contact us at info@njec.org

BEYOND PLASTICS

Food Waste Current and Future Outlook
Thank You!

Questions? nchecko@anjec.org
GSondermeyer@bayshorerecycling.com

https://ninoplastics.org/resources
https://www.nj.gov/dep/get-past-plastic
https://litterfreenj.com