

# Best Practices for Diverting, Preventing & Managing Wasted Food

Missy Hall, Food Waste Diversion Program Manager

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## Missy Hall

Program Manager: Food Waste Diversion

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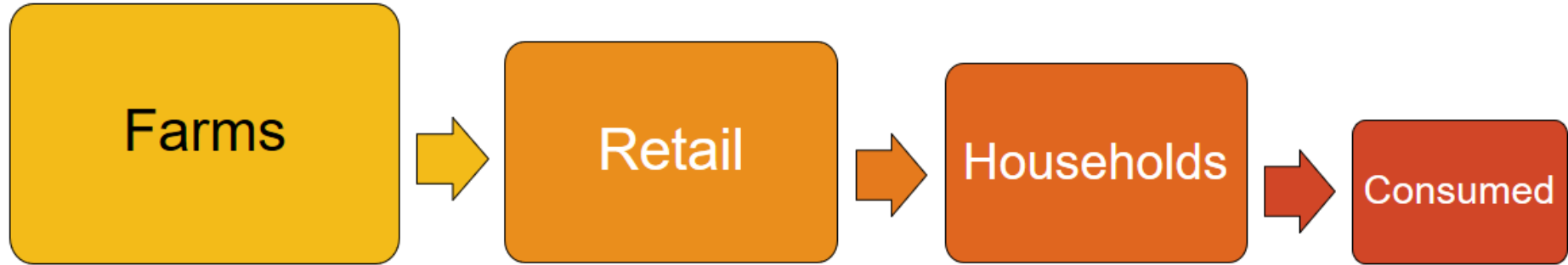
- Leads NYSP2I's Food Waste Diversion
- Background in lean manufacturing and sustainability
- Assists companies on process assessments and recommendations for P2 improvements



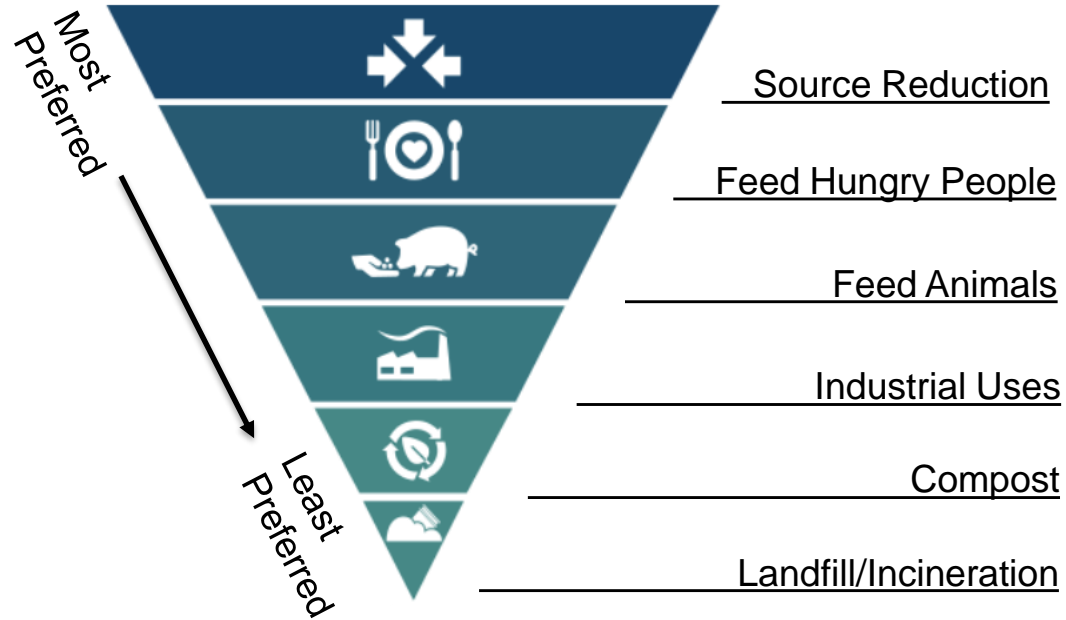
# NYS Pollution Prevention Institute

- HQ at RIT
- Established in 2008
- \$3.9M in annual NYS funding administered through the NYS Department of Environmental Conservation
- Focus areas include:
  - Sustainable Manufacturing Assessments
  - Supply Chain Sustainability
  - Technology Commercialization
  - Food Waste Diversion
  - Outreach & Education
  - Research & Development
  - Emerging Contaminants

# Impact of Wasted Food



# Food Recovery Hierarchy



# Alternative Use Opportunities and Nutritional Assessment for Spent Grain Flour

## ■ Challenge:

- Identify use opportunities for spent grain flour from Rise Products

## ■ Solution:

- Conducted product testing
- Performed analysis of lab results and consumer trends

## ■ Results:

- Flours were high in protein and fiber, and low in carbohydrates, while staying whole grain
- Flours aligned with many of the trends observed, e.g. clean labeling

# Restaurant Food Waste Diversion Pilot

## ■ Challenge:

- Expand food waste management efforts at Outback restaurants

## ■ Solution:

- Conducted food waste diversion trial
- Created improvement plan
- Developed a diversion program for future store locations

## ■ Results:

- Pilot store ready to scale up efforts
- Other locations can leverage tools developed to replicate

# Municipal Food Waste Composting Pilot



## ■ Challenge:

- Reduce community landfill waste through composting in the Village of Clifton Springs

## ■ Solution:

- Developed an implementation plan for scale up
- Collaborated with Cornell Waste Management Institute to conduct a food waste composting trial

## ■ Results:

- Approximately 2,000 lb. of food waste collected each month from three local businesses
- Community has the plans available for future upgrades



## How to get started (part 1)

Set goals



Connect with  
local partners

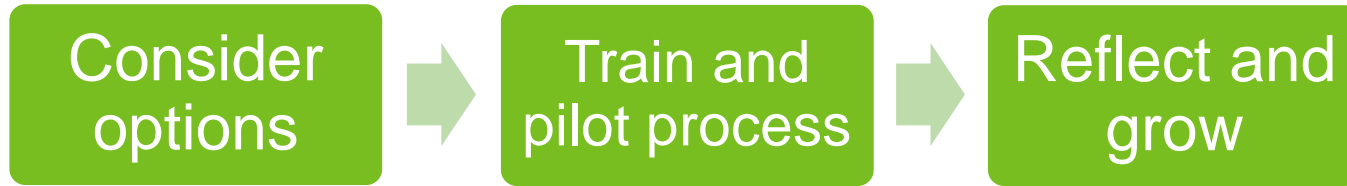


Estimate  
food waste



Characterize  
waste stream

## How to get started (part 2)





Step 1:  
Organizing your  
Food Waste  
Management Plan


Step 2: Defining  
your Plan and  
Establishing  
Objectives

Step 3:  
Implementing the  
Plan

# Food Waste Prevention – Best Practices



Buy with a purpose



Creative use and reuse of ingredients



Empower staff and track progress



Update and refine menu



Offer/display smaller portions



Tackle opportunities one at a time



*Wegmans*

Wegmans is a family-owned, regional supermarket chain founded in 1916 by the Wegman family. Wegmans, currently one of the largest private companies in the United States (2017 annual sales of \$8.7 billion), operates 95 stores and employs 48,000 people. Wegmans stores



The **Red Fern** is an entirely vegan eatery in Rochester that was founded upon principals of health, ethics, environment, and social consciousness. The restaurant creates meals from scratch, using locally-sourced and organic ingredients when possible. Menu offerings include entrees, sandwiches, salads,



Genesee Brewing Company in Rochester is home to New York State's oldest brewery, founded in 1878, and an affiliated pub-style restaurant with approximately 140 employees, called the Genesee Brew House.



**ANCOLIE**  
the epicurean cantine

Ancolie is a sustainably operated restaurant located in the heart of Greenwich Village which sources local and seasonal ingredients to serve delicious and nutritious meals in reusable glass jars.



# Food Waste Essentials e-book

Understanding  
Sources

Managing the  
System

Prevention  
Opportunities

Donation Best  
Practices

Recycling  
Basics

Available at [nysp2i.rit.edu/resources](https://nysp2i.rit.edu/resources)



# Food Waste Estimator

**Pick A Category**

Colleges and Universities - Residential

Colleges and Universities – Non-Residential

Correctional Facilities

Distribution and Wholesale

**Schools - elementary**

Schools - middle



**Food Waste Generation Factor**

**1.13** lb/student/week

**Input Field**

Number of Students


**565.00** lb/week

**0.28** tons/week

Available at [nysp2i.rit.edu/resources](https://nysp2i.rit.edu/resources)

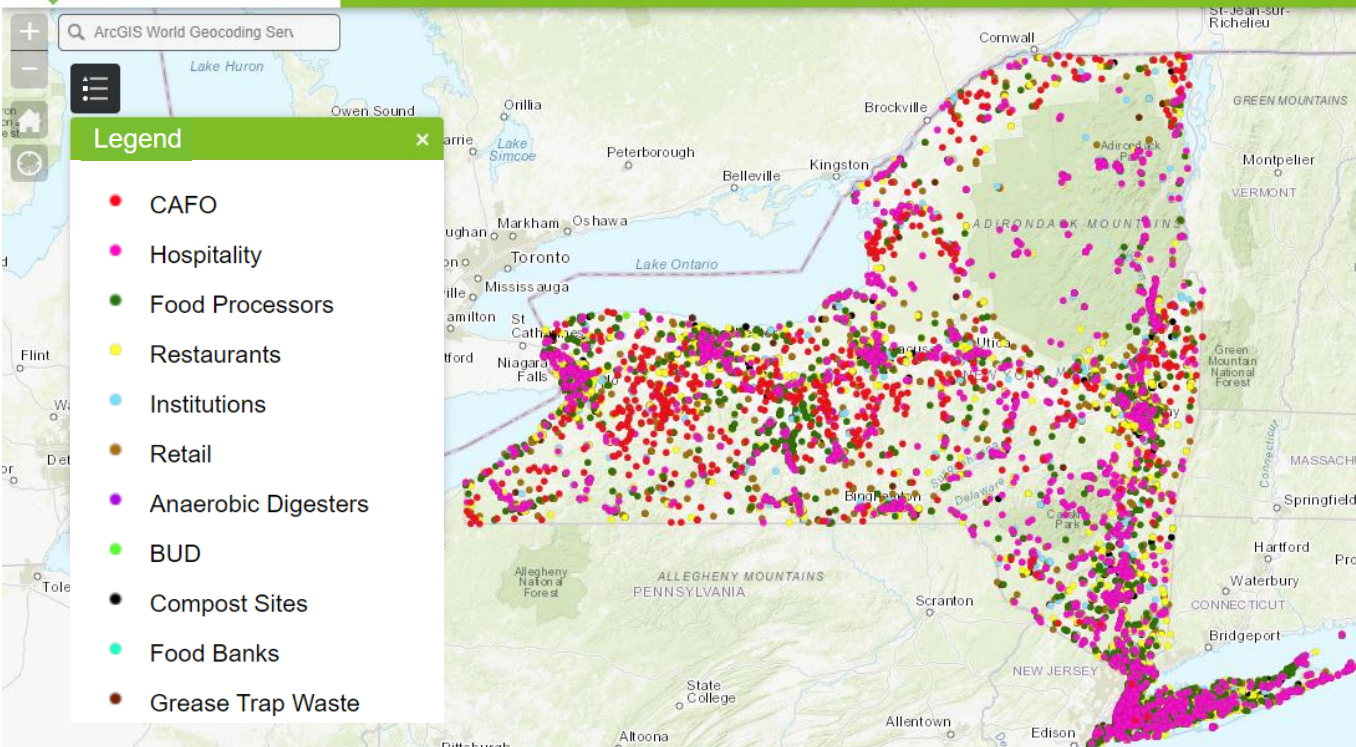
# Organic Resource Locator

## Input Criteria


New York State  
Pollution Prevention Institute

Organic Resource Locator

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### Legend

- CAFO
- Hospitality
- Food Processors
- Restaurants
- Institutions
- Retail
- Anaerobic Digesters
- BUD
- Compost Sites
- Food Banks
- Grease Trap Waste

### Resource Locator

1. Choose Layer:

- ☐ CAFO
- ☐ Hospitality
- ☐ Food Processors
- ☐ Restaurants
- ☐ Institutions
- ☐ Retail
- ☐ Anaerobic Digesters
- ☐ BUD
- ☐ Compost Sites
- ☐ Food Banks
- ☐ Grease Trap Waste

2. Choose a Radius and Location:

5 miles

Choose Location From Map

Or Enter an Address

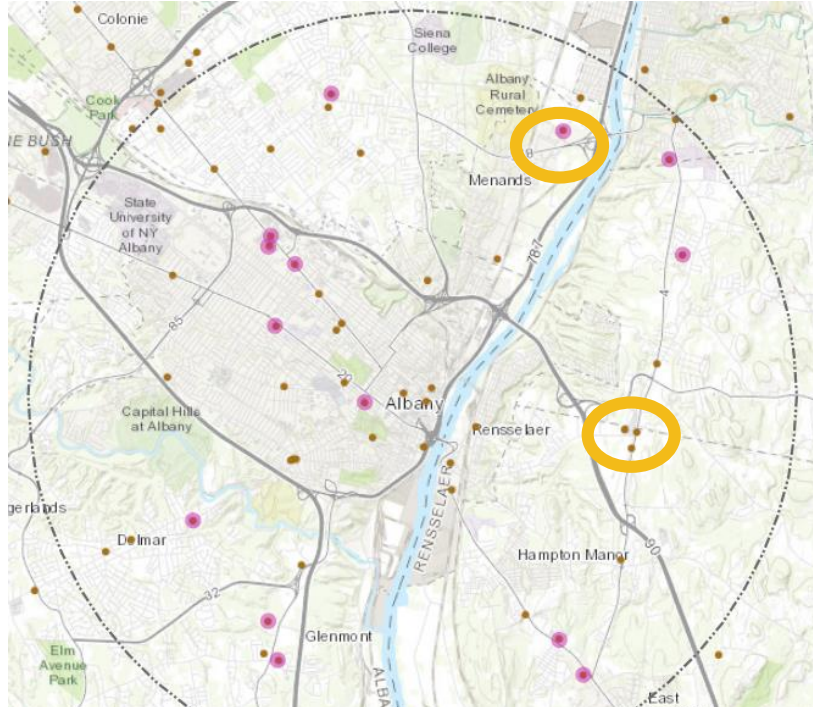
Clear Map

**Run Search**

Query results will be highlighted on the map



# Organic Resource Locator



Available at [nysp2i.rit.edu/resources](https://nysp2i.rit.edu/resources)

## 1. Choose Layer:

- ☒ Retail
  - ☒ big box
  - ☒ convenience stores
  - ☒ supermarkets

## 2. Choose a Radius and Location:

5 miles

Choose Location From Map

Albany, NY, USA

Clear Map

## 3. Filter Businesses by Estimated Food Waste:

Greater than or equal to 2 tons per week

\*Filter will only apply to businesses with food waste estimates

Run Search

## 4. Download Search Results:

Download Results

# Assistance for NYS Companies, Municipalities & Non-Profits

- **Must be NY-based**
- **Typical project cost range is \$15-\$50k**
- **NYSP2I funding offsets most of the project cost to the organization**
  - Expenses are non-capital expenses
  - RIT's engineering, technical and project management services
- **Post-project reporting**
- **Typical project takes about 2-6 months**



# Food Waste Program Projects

- **Clients:** Restaurants, haulers, municipalities, organics processors, start-ups, institutions, etc.
- **We Offer:**
  - Food waste strategy development and implementation
  - Technology assessment and validation
  - Guidance on improved food recovery and food waste management practices
  - Customized education and training



# Food Waste Reduction & Diversion Reimbursement Program



- Empire State Development selected RIT in 2018 to administer a grant program aimed at reducing food waste in landfills
- \$4M available over a 2-year period or until funding runs out
- Reimbursement up to 44% of eligible equipment expenses
- Eligible projects must divert food waste from landfills or incinerators
- More info available at:  
<https://www.rit.edu/affiliate/nysp2i/collaborations>

# EPA Food Recovery Challenge

- Who Should Participate
- Why Get Involved
- How to Join





# NYS Food Donation and Food Scraps Recycling Law – Effective January 1, 2022

Receive law announcements and other news: [surveymonkey.com/r/D67Z23J](https://surveymonkey.com/r/D67Z23J)

Learn more about the law: [dec.ny.gov/chemical/114499.html](https://dec.ny.gov/chemical/114499.html)

Submit your questions via email: [FoodScrapsLaw@dec.ny.gov](mailto:FoodScrapsLaw@dec.ny.gov)

# Thank You

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