

**Antrim County**  
**Materials Management Planning Committee Minutes**  
**October 23, 2025 at 2:00 PM**  
**Antrim County Government Center**  
**203 E. Cayuga St., Bellaire, MI 49615**

| MMPC Member Attendance                                                                                                                                |          |                                                                                       |                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------|--------------------------------------------------|
| Andre Grobaski, GFL<br><i>rep. of a solid waste disposal facility</i>                                                                                 | <i>E</i> | Bill Hefferan, Antrim County<br><i>elected official of the county</i>                 | <i>P</i>                                         |
| Melissa Zelenak, Sunshine Recycling<br><i>rep. of a hauler</i>                                                                                        | <i>P</i> | Mark Byard, Central Lake Township<br><i>elected official of a township</i>            | <i>P</i>                                         |
| Mark Bevelhymer, GFL<br><i>rep. of a materials recovery facility (MRF)</i>                                                                            | <i>E</i> | Michelle Fox, Village of Central Lake<br><i>elected official of a city or village</i> | <i>E</i>                                         |
| Vacancy<br><i>rep. of a composting facility</i>                                                                                                       | -        | Vacancy<br>business rep. generating material                                          | -                                                |
| Vacancy<br><i>rep. of waste diversion, reuse, or reduction</i>                                                                                        | -        | Isha Pithwa, Networks Northwest<br><i>rep. of the regional planning area</i>          | <i>P</i>                                         |
| Lindsey Mason, ECT<br><i>rep. of an environmental interest group</i>                                                                                  | <i>P</i> | Attendance Key:<br><i>A – Absent</i>                                                  | <i>P – Present</i><br><i>E - Excused Absence</i> |
| Others in Attendance: Terry VanAlstine (Antrim County BOC), Aubree Carlisle (EGLE), Dean Whitt (Whitt Farms), Mathew Cooke (DPA – Networks Northwest) |          |                                                                                       |                                                  |

**I. Welcome and Introductions**

Melissa Zelenak, Chair, called the meeting to order at 2:05 p.m.

**II. Public Comment**

None.

**III. Review Proposed Agenda**

*Motion by Andy Grobaski, supported by Mark Byard, to approve the August 28, 2025 MMPC agenda. Motion carried unanimously.*

## IV. Approval of April 24, 2025 Meeting Minutes

*Motion by Mark Byard, supported by Bill Hefferan, to approve the July 24, 2025 MMPC meeting minutes. Motion carried unanimously.*

## V. Food Waste Presentation

Aubree Carlise, Food Waste Specialist from EGLE presented on food waste to the committee (see attached presentation). Discussion generated from the presentation included:

- Elk Rapids composting, recycling, existing green waste, at compactor site
- Focus on larger companies, shorts, shanty, meadowbrook, schools,
- Ask farms about their composting practices, thoughts, or future plans
- Funding mechanisms (PA 69) webinar - EGLE
- Commission on Aging meal sites
- Grant funding for composting at county - what's available
- School - share tables, mini-fridges (county mini-grant?)

## VI. MMP Process Update

### a. Process Update

Mathew Cooke provided an update on the MMP process:

- 180 Resident responses in Charlevoix County
- Kearney Township posting on their webpage for survey promotion
- Municipal data collection completion
- Business and LUG survey collection continues, identify non-responding units
- Filling compost vacancy on MMPC
- Review of County Resident Survey Analysis at next meeting

### b. MMP Discussion

The MMPC members went through some question and answer prompts using polling software.

1. Is there anything you would like to learn about, relating to materials management, that would assist in the planning process?
  - Food Waste audits
  - Home composting
  - What is recycling costing the county vs how much is being recycled
  - What do existing contracts say? Do we need to add data?

2. What is one word that describes Charlevoix County materials management?
  - Necessary
  - Primitive
  - Basic
  - High potential
  - Educational opportunity
  - Bare minimum
3. What is the largest opportunity for materials management in Charlevoix County?
  - Cutting cost
  - Expand materials
  - Special materials
4. What residential recycling goals do you have for Charlevoix County?
  - Education
  - Curbside
  - Contracts for residential recycling
5. What commercial recycling goals do you have for Charlevoix County?
  - Need to do it
  - What is the cost?
  - Feasibility study for businesses
  - Logistics of this
  - Textiles

## VII. Committee Member Comments

None.

## VIII. Public Comment

Dean Whitt introduced himself to the MMPC and has an interest in composting.

## IX. Adjourn

*Melissa Zelenak, Chair, adjourned the meeting at 3:30 p.m.*

**Thursday, October 23, 2025**

**To:** Antrim County MMPC  
**Fr:** Mathew Cooke, Community Planner  
**Re:** MMP Update

## MMP Process Update

We continue to seek out survey responses for the County Resident Survey and Business Survey with Antrim County having 180 responses to the County Resident Survey. Kearney Township is posting on their webpage, and other municipalities have been asked to help promote the survey to their residents. We have also posted in many "Overheard in..." social media groups and an MMP article will be released for World Recycling Day (November 15). On November 1st, we are planning to visit Elk Rapids Compactor and Central Lake Township Waste Receiving Station to distribute survey cards. Business and economic development organizations, including schools, have been contacted for the business survey and a press release was sent out to news organizations. The non-responding local units of government have been emailed, with a letter prepared for a further follow up.

We intend to wrap up municipal data collection by the end of this month, with the data being analyzed to further consider the County recycling and diversion rates. The detailed facilities inventory will also be completed with that being sent for your review and comments. Lastly, the vacancy for the composting representative should be filled in the next month.

## MMP Next Steps

At the November meeting, we will have a first review of an analysis of the County Resident Survey responses received so far. Please recall an updated analysis will be done in January following the close of the survey. We aim to have the Local Units of Government Survey and Business Survey analysis for December's meeting. As we review these results, we should also begin discussing the goals and objectives of the plan. Attached you will find a Goals and Objectives Worksheet. Please take note that these are observations from prior meetings and are meant for us to revise and edit. I would expect there to be much configuration of these as we move forward.



Lastly, as part of the meeting today, we will use polling software which will utilize your phone or computer. Any answers given are anonymous, and we hope everyone will answer at least once per question, but more are encouraged. Please scan the QR Code below to access or go to [menti.com](https://menti.com) and enter: 11010925



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

# Food Waste Reduction in Materials Management Planning

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Charlevoix MMPC meeting

October 23, 2025

Aubree Carlisle

Recycling Unit, Materials Management Division

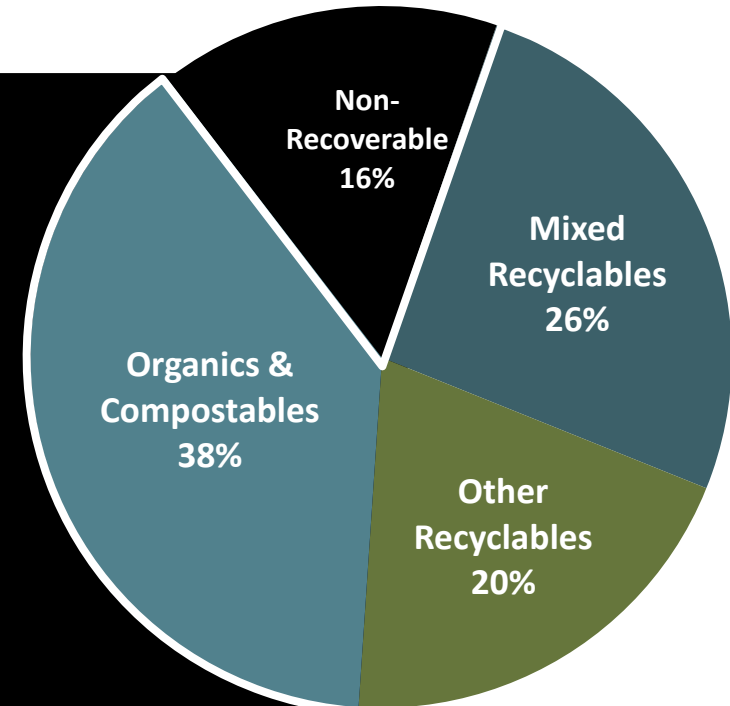
[CarlisleA3@michigan.gov](mailto:CarlisleA3@michigan.gov)

# Michigan Municipal Solid Waste Composition

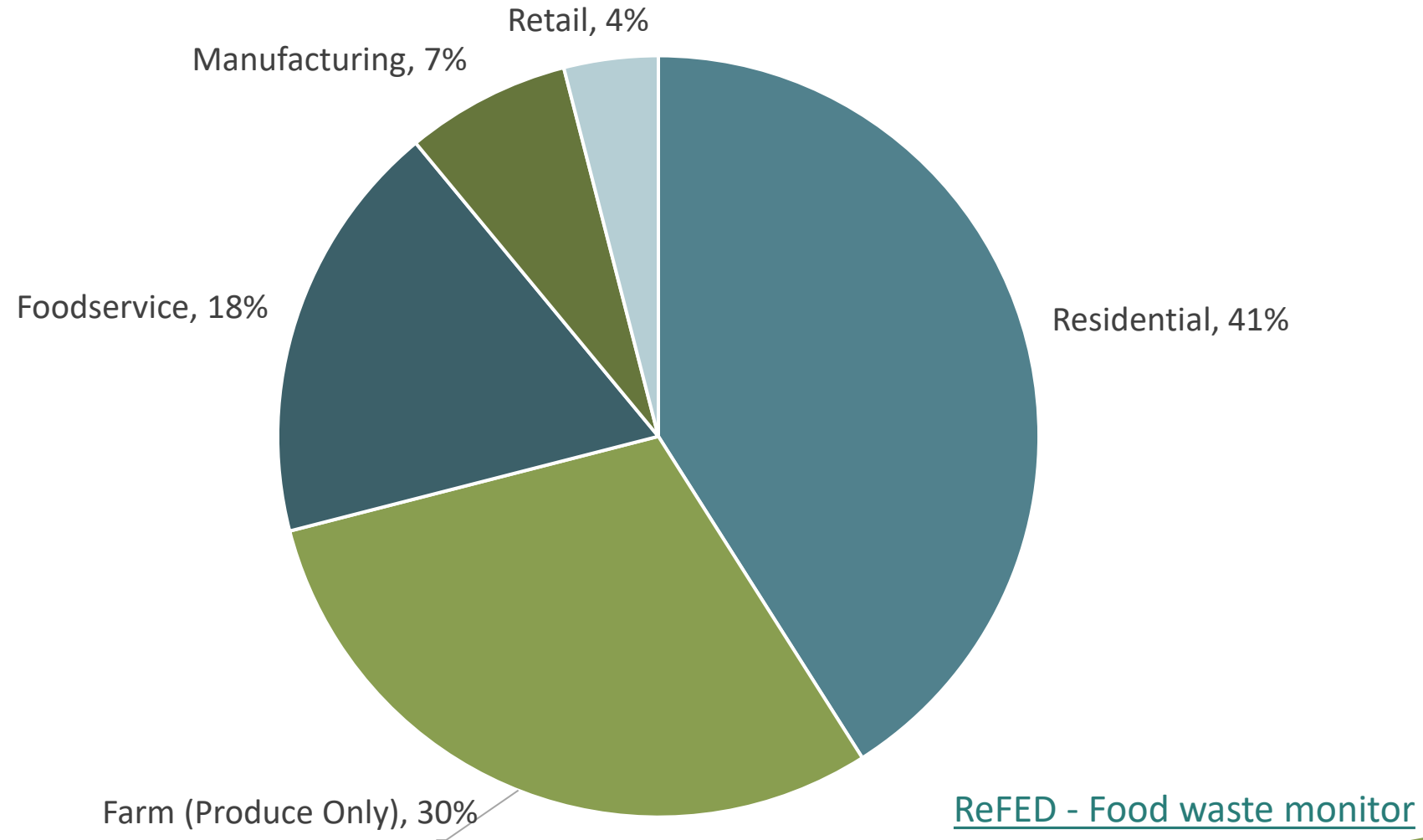
**MIXED RECYCLABLES** - paper, glass and plastic bottles and jars, plastic tubs and containers, and metal cans

**OTHER RECYCLABLES** - textiles, appliances, scrap metal, electronics, bulky plastics, and plastics films

**ORGANICS & COMPOSTABLES** - yard and food waste as well as compostable paper and compostable food service packaging

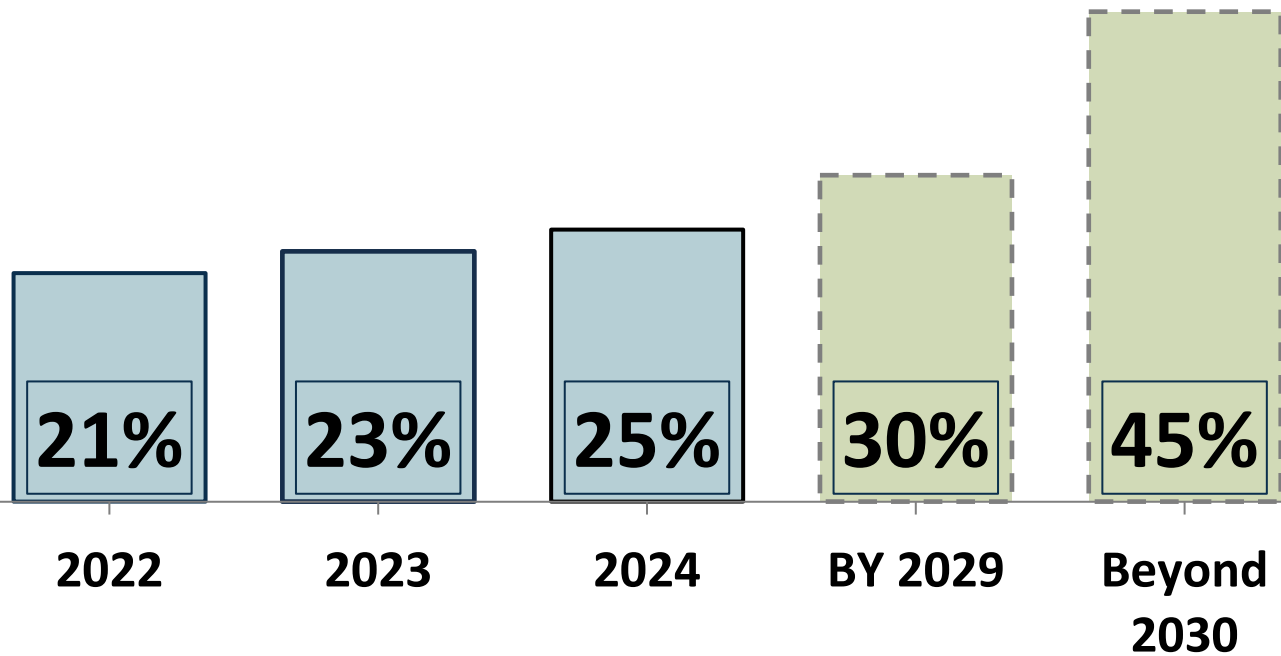


## 2023 Percentage of Food Waste by Sector in Michigan - ReFED



# STATE OF MICHIGAN GOALS

## Recycling Rate



## Food Waste Reduction

**50% total reduction**  
of food loss and waste

Based on a 2021 baseline

# MI Food Waste Reduction Goals



EGLE's MI Healthy Climate Plan Food Loss & Waste Reduction Goal

Drive clean innovation in industry: Cut food waste in half by 2030



USDA, EPA, and FDA: Federal Interagency Collaboration to Reduce Food Loss & Waste

Joint initiative to reduce the amount of food leaving the human food supply chain by 50 percent by 2030



United Nations Sustainable Development Goal 12.3

By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

# Impacts of Food Waste

- ◆ Financial
- ◆ Social
- ◆ Environmental

## Environmental Impacts of U.S. Food Waste: EPA

What resources go into a year of food loss and waste in the U.S.?

\*excluding impacts of waste management, such as landfill methane emissions



**Greenhouse gas emissions** of more than 42 coal-fired power plants

**Enough water and energy** to supply more than 50 million homes



The **amount of fertilizer** used in the U.S. to grow all plant-based foods for U.S. human consumption

An **area of agricultural land** equal to California and New York



Learn more: [www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste](http://www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste)

~30 -40%  
of food  
produced is  
never eaten

# Food Waste in Landfills

Municipal solid waste landfills are the third-largest source of methane emissions from human activities in the United States. (EPA)



# Why Divert Food Waste?

Methane accounts for 11% of global emissions and traps more heat in the atmosphere than CO<sub>2</sub>.

Methane & biogas capture systems are not the most efficient solutions for capturing harmful emissions generated by food waste in an anaerobic environment.

Landfilling food waste does not promote a circular economy

Food waste diversion increases the life of landfills and impacts our land, water, air, & communities.

Economic opportunities: Sustainability and economic viability can go hand in hand.



# Materials Management Planning – Setting Food Waste Goals

## County and CVT Food Waste Reduction Template

### 1. Understand the Food Waste Landscape

- Identify gaps & existing efforts

### 2. Program Support & New Program Development

- Food waste by sector (school, commercial, residential, etc.)
- Food rescue/donation and upcycling initiatives
- Food scrap processing, collection, & accessibility
- Provide support for municipalities, business, and non-profits

### 3. Community Engagement

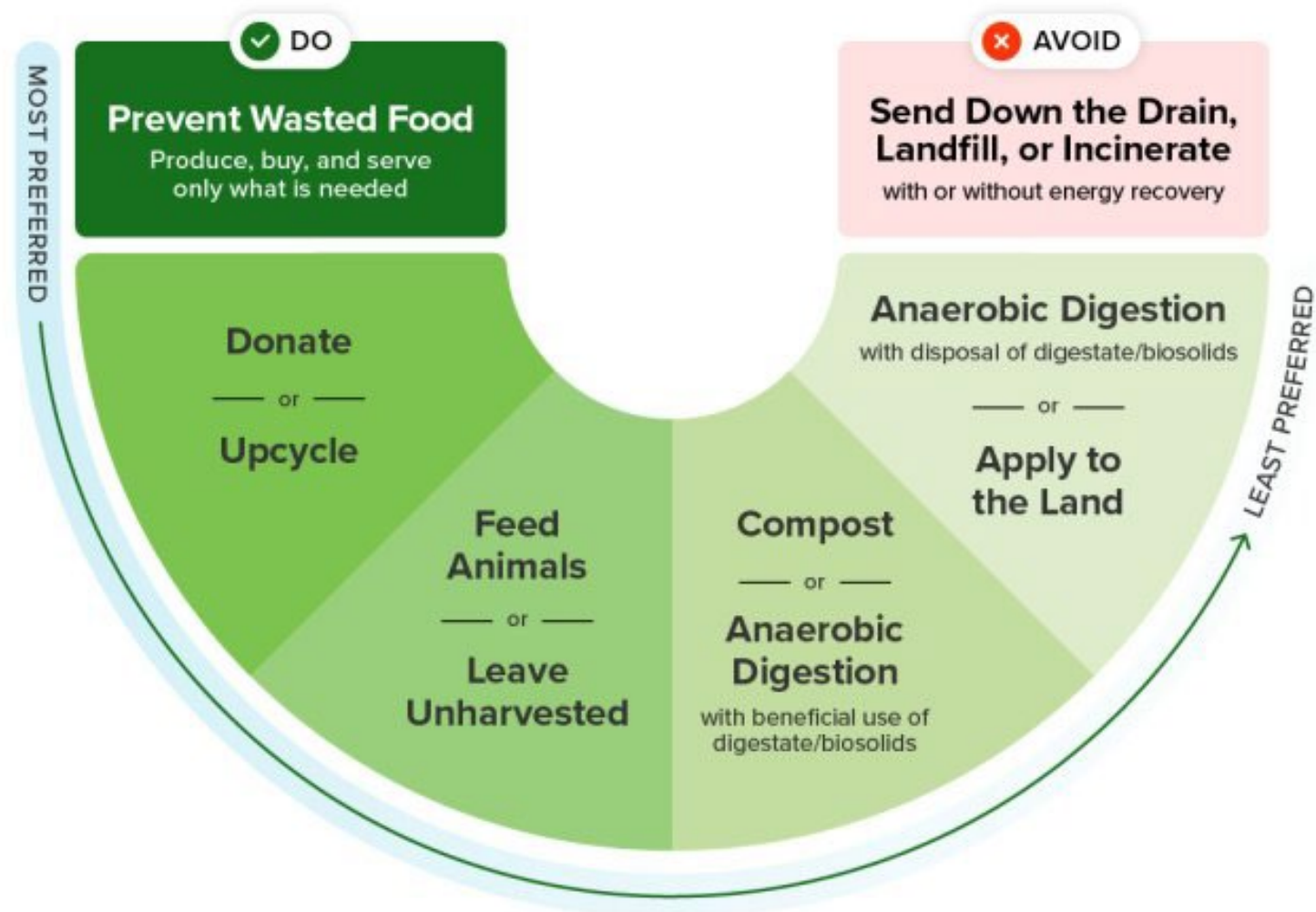
- Food waste education & awareness efforts
- Lead by example at the county level
- Receive community feedback





# Wasted Food Scale

How to reduce the environmental impacts of wasted food



# Prevent Food Waste

- **Public Education Campaigns:** Promote smart shopping, storage, and leftovers use
  - [EPA Food Too Good to Waste Campaign](#)
  - [NRDC Save The Food Campaign](#)
- **Support waste audits** for schools, residents, etc.
- **Support Local Businesses:** Offer toolkits and incentives for waste prevention
- **Engage Community Partners**

Of the food waste we throw away...



Oregon Department of Environmental Quality, 2019

# Donate – or – Upcycle

- Food Rescue/Donation
  - Food Banks, Food Pantries, Soup Kitchens
  - Larger Food Rescue organizations serving Antrim County
    - [Manna Food Project](#)
    - [Goodwill Northwest Food Rescue](#)
    - [Feeding America West Michigan](#)
  - [The Bill Emerson Good Samaritan Act](#)
    - [Good Samaritan Act FAQs](#)
- Low cost or wholesale avenues
- Upcycling



# Feed Animals – or – Leave Unharvested



- Many foods can be fed to chickens, turkeys, pigs, and cattle
  - Grains and Vegetables
- Must be recovered and handled properly
  - Harvard Legal Fact Sheet - Michigan Food Donation: Food Scraps for Animals
- Fed directly or reprocessed first
- Puts food materials back into the food chain

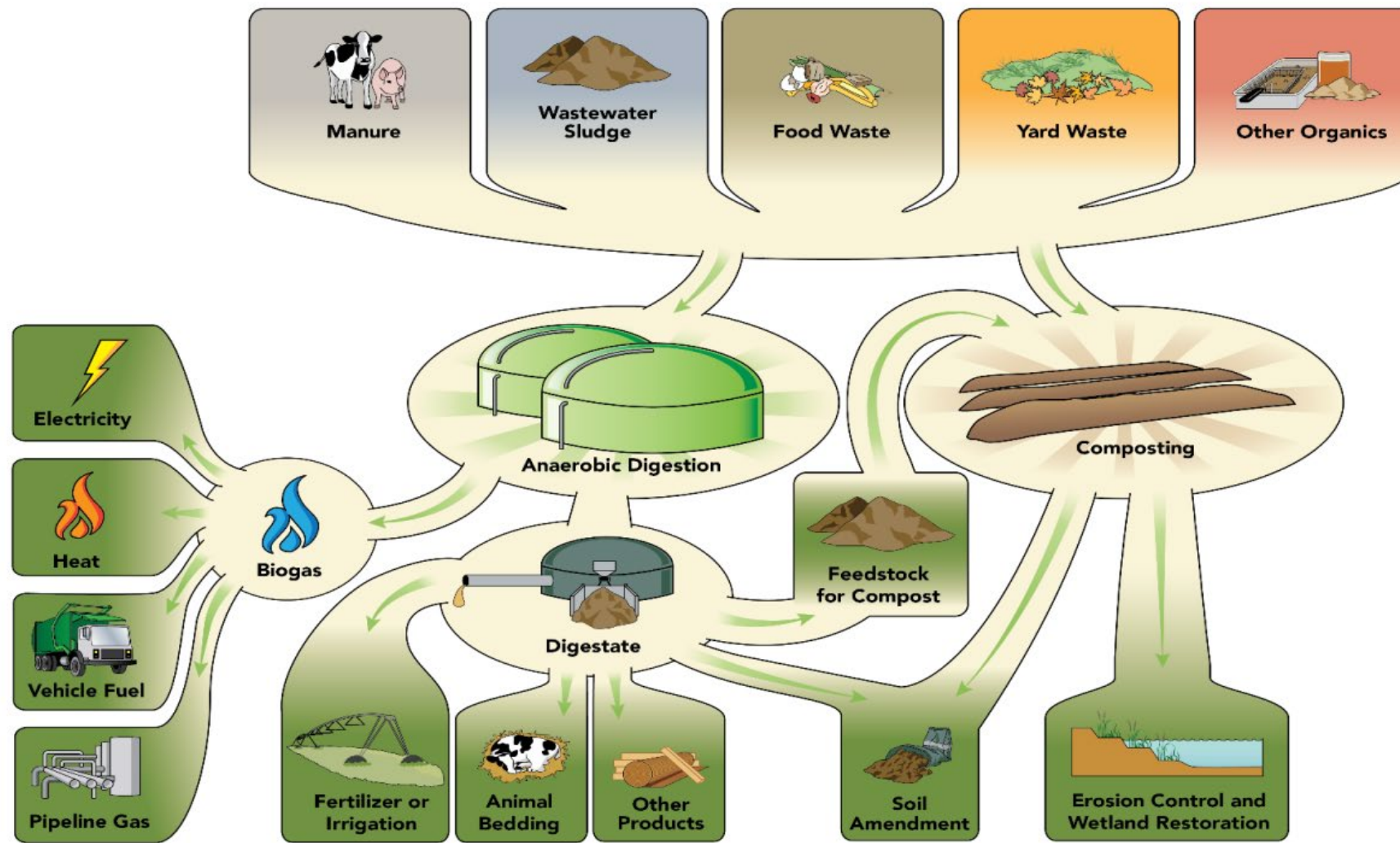
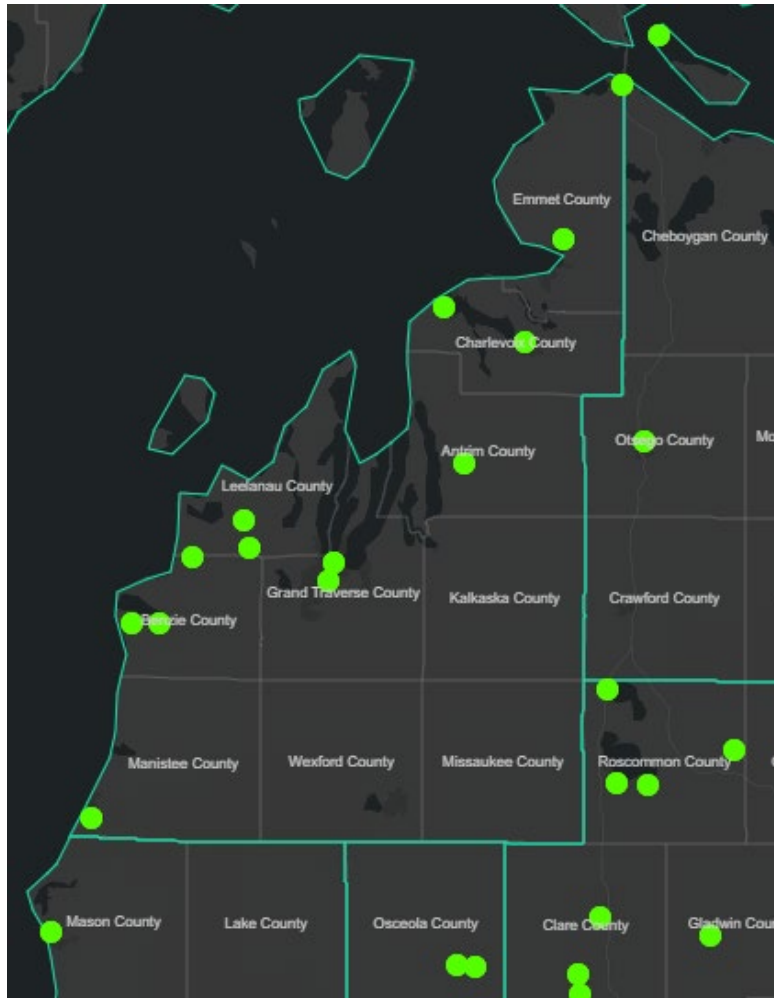


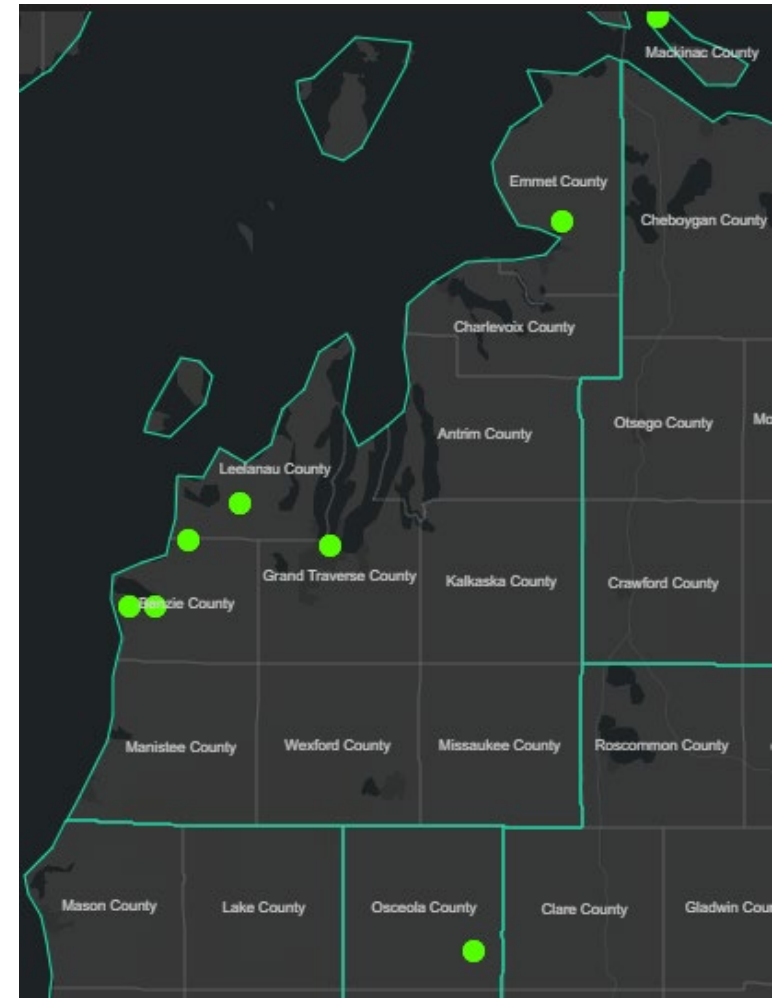
Figure 4-1. Byproducts and Beneficial Uses of Diverted Organic Waste.

# Compost Facilities

Accepts  
yard waste



Accepts  
food waste



Organics Map — NEXTCYCLE MICHIGAN

EGLE Michigan Materials Management Facilities map

# Pre-processing Technology



POWER KNOT LFC-70 BIODIGESTER,  
FUJITSU CAMPUS CAFETERIA, SUNNYVALE, CALIFORNIA

- Grinders
- Biodigesters
- Pulpers
- Dehydrators
- Aerobic In-Vessel Units

## Pros:

- ✓ Reduces volume & weight
- ✓ Reduces odors
- ✓ Enables diversion of food from landfills and can produce a usable by-product.
- ✓ On-site processing can reduce transportation emissions



DT-ENVIRONMENTAL ENVIRODRUM AEROBIC IN-VESSEL UNIT

## Cons:

- High upfront costs
- Requires source separation, depackaging, & staff training
- Not all outputs are usable by-products
- Some systems discharge to sewer and have other environmental impacts
- Some systems require other inputs
- Maintenance and operational oversight required

# Stakeholder Engagement & Resources

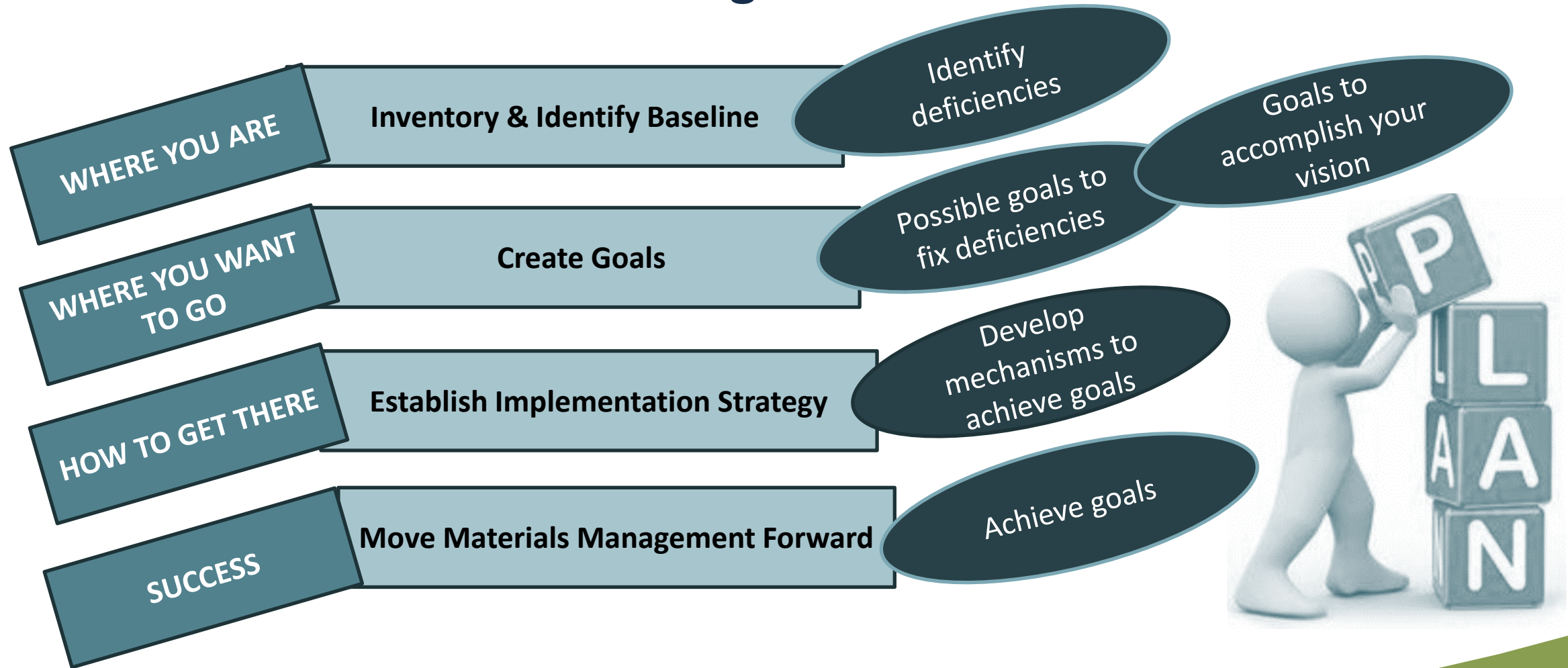
- [NextCycle](#)
- [EGLE Food Waste & Recycling Technical Assistance](#)
- [Grant Funding](#)
- [EGLE Food Waste Website](#)
- [MI 2030 Food Waste Coalition](#)
  - [MI Food Rescue Network](#)
- [Michigan Sustainability Conference \(MISCON\)](#)
- [Catalyst Communities](#)
- [MDHHS SDOH & Food Donation Initiatives](#)
- [Michigan Agricultural Surplus Systems \(MASS\) Funding](#)
- [MDARD Food Donation Guide for Businesses](#)
- [Michigan Green Communities & Michigan Green Schools](#)
- [MDE School Food Waste Resources](#)



# EGLE Funded Grant Projects



# Materials Management Planning Goal Setting Overview



# MMP Format: Materials Management Goals

## Implementation Strategy:

### ***Goal 1***

- Description:
- Resources Needed:
- Education and Outreach Programs:
- Implementation Timetable:

+ *Responsible Party:*

+ *Action Steps:*

# Example

**GOALS**  
**INDICATE**  
**DIRECTION**



**Increase School Recycling**

**OBJECTIVES**  
**SHOW**  
**PROGRESS**



- Increase awareness of the WHY
  - ✓ Met with school administration
  - ✓ Held school assembly(ies)



- Determine starting point & progress
  - ✓ Surveyed materials needing managed
  - ✓ Surveyed progress at 6 months & 1 year



- Design a best program for the school
  - ✓ Created GreenTeam
  - ✓ Determined types of materials, space needed, education
  - ✓ Add to School District solid waste/recycling contract

# Outlining Trackable Metrics

- **Set short term and long-term targets that focus on:**
  - Food waste reduction at the source
  - Increasing food rescue/food donation
  - Increasing food scrap recycling
- **Develop a plan for ongoing assessment of progress toward goals.**
- [Measure results](#)

*Example target metric areas:*

- Residential
- Commercial
- County
- Waste Diversion Rate
- Tonnage of Food Waste Collected
- Greenhouse Gas Emission Reductions
- Cost Savings
- Food Rescue metrics
- Composting Outputs



# Setting Food Waste Goals

## County and CVT Food Waste Reduction Template

### 1. Understand the Food Waste Landscape

- Identify gaps & existing efforts

### 2. Program Support & New Program Development

- Support efforts focused by sector (school, commercial, residential, etc.)
- Increase food scrap collection and processing infrastructure & access (composting/processing capacity, hauling services, etc.)
  - Expand yard waste facilities to include food waste
- Support food rescue/donation and upcycling initiatives
- Connect with and support local and regional solutions including municipalities, business, non-profits, etc.

### 3. Community Engagement

- Build public awareness and education on food waste reduction & diversion
- Understand community needs & interest
- Lead by example at the county level
- Ensure food waste services are accessible to all communities





## Example Goal Area: Establish and Expand Food Waste Processing Capacity

- Initiate and encourage the development of food scrap recycling sites, digesters or other food waste reduction sites
- Explore yard waste expansion to include food waste
- Develop food scrap recycling drop off programs for communities over *(example)* 5,000 residents
- Develop food scrap recycling curbside programs for communities that have demonstrated interest
- Pilot and scale composting programs

# Example Goal Area: School Food Waste

- Encourage schools to commit to reducing food waste and provide guidance for schools to:
  - Donate food or use share tables
  - Track food waste through cafeteria waste audits and kitchen food waste logs
  - Implement food scrap collection in the cafeteria and kitchen
  - Incorporate changes to reduce food waste through menu planning and procurement, Breakfast in the Classroom, or rescheduling lunch
  - Incorporate food waste education into curriculum
  - Participate in Michigan Green Schools.



# Example Goal Area: Residential Food Waste

- Food Scrap Drop off sites
- Curbside pickup
- Backyard & community composting
- Food Waste reduction Education/Outreach programs



# Example Goal Area: Awareness & Education

- Build public awareness and education on food waste
  - Public education campaigns, social media, workshops, composting courses, community feedback
- Support municipalities, businesses & nonprofits education & outreach efforts
- Include food waste and local food donation information available on county websites.





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ENVIRONMENT, GREAT LAKES, AND ENERGY

# THANK YOU!

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Aubree Carlisle – Food Waste Specialist

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# More Resources for School Food Waste

- MI Dept of Ed [Solutions to Reduce Food Waste in Schools](#)
  - [EGLE Classroom](#)
  - [Michigan Green Schools](#)
  - MDE Share Table [Food Service Admin Memo](#)
  - EGLE [School Resources](#) for compost
  - MDE Production Record Template
  - MDE Offer Versus Serve Online Training Module
  - MDHHS Food Donation webpage
  - Requirements for Advisory Boards and Student/Parent Input in School Nutrition Programs for FSMCs Memo
- 
- National Resources
  - [NRDC: Wasting Less Food in K-12 Settings](#)
  - [World Wildlife Fund: Fighting Food Waste in Schools](#)
  - USDA: [Schools | Home](#)
  - EPA: [Food Tips for K-12 Schools](#)

# More Resources for Residential Food Waste

- [FoodKeeper App | FoodSafety.gov](#)
- [NRDC Save The Food Campaign](#)
- [EGL E Food Waste and Recovery](#)
- [AMAZING WASTE Cookbook - 50 recipes to use food scraps, repurpose leftovers, and reduce food waste](#)
- [Love your leftovers | Love Food Hate Waste](#)
- [Eat or Toss? Is it OK to eat?](#)
- [We Don't Waste At-Home Food Waste Audit](#)
- [What is Community Composting? \(Video\)](#)
- [MDHHS SDOH Food Donation page](#)

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