

WISCONSIN Food Waste Evaluation

February 3, 2026



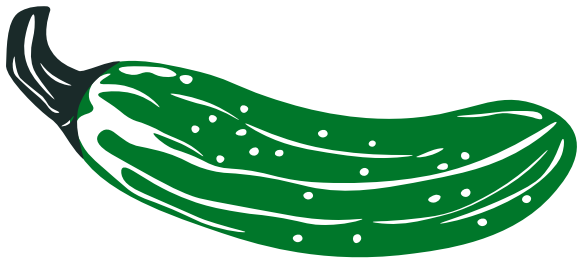
Welcome & Agenda

- Introductions
- Project Background
- Data Review & Collection
- Surveying & Listening Session Efforts
- Findings
- Recommendations & Strategies
- Questions & Answers



Introductions

Project Team

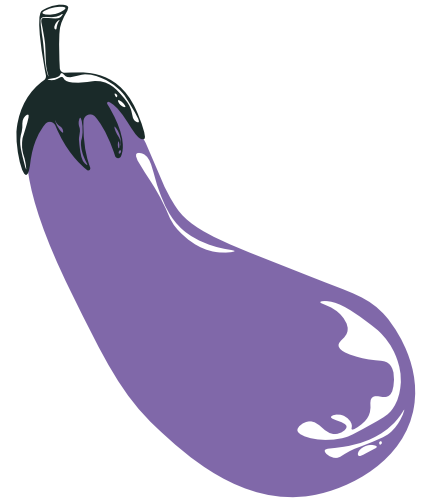


This project started at the Wisconsin DNR with **Kate Strom-Hiorns**, **Casey Krausensky**, **Jennifer Semrau**, and **Amy Dubruiel** putting together ideas for a U.S. EPA Solid Waste Infrastructure for Recycling (SWIFR) grant, with help from **Michael Schmit** and **Cynthia Moore** with the grant application. **Ruth O'Donnell** managed the contract with HDR and made significant contributions to the project, and the team of **Sarah Murray** and **Erik Flesch** finalized the report documents and publicized them.

Project Background

Wisconsin set a goal to reduce per-capita food waste disposal in landfills by 50 percent by 2030 and to reduce methane emissions.

- ➡ Wasted food/food scraps accounted for 20% of trash sent to landfills—*the largest single category*
- ➡ Estimated **854,000 tons** annually, **294 pounds per person**
- ➡ **Three-quarters** of food could have been eaten
- ➡ Goal to reduce food waste to landfills, which wastes **resources, time** and **money**



Project Approach

THE STUDY INCLUDED:

- ✓ **Significant data review**

DNR, U.S. EPA Excess Food Opportunities Map, ReFED Insights Engine, other state-specific information

- ✓ **Robust surveying efforts and listening sessions**

Input from industries, food donation, local governments, food waste processing, and waste haulers

- ✓ **A final report**

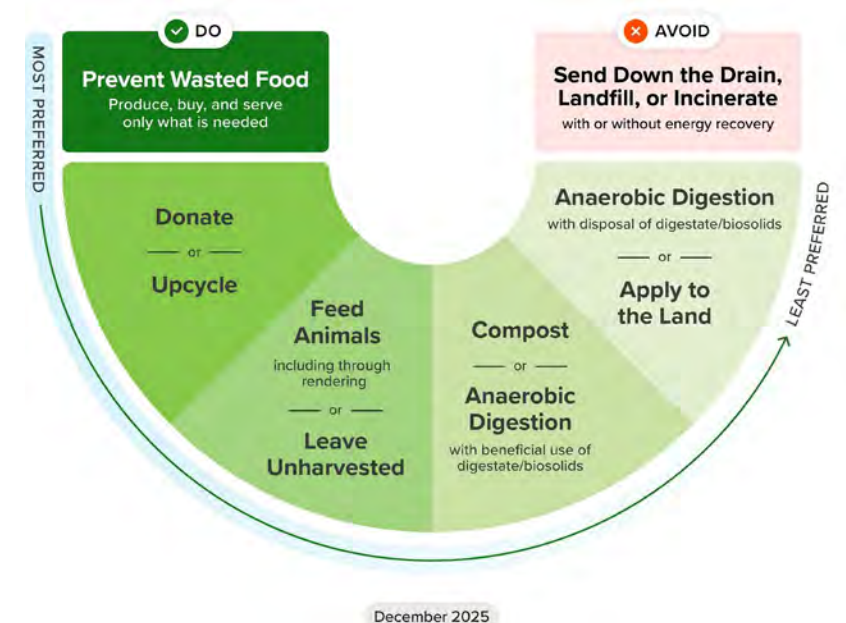
Existing food waste generation and management, recommendations to reduce food waste to landfills



EPA Wasted Food Scale

Project scope followed the EPA Wasted Food Scale:

- Prevent food waste from all sectors
- Food rescue and donation, plus upcycling
- Feeding animals or leaving unharvested in fields
- Food waste processing
 - Composting & anaerobic digestion



Wasted Food Scale

How to reduce the environmental impacts of wasted food



Food Waste in Wisconsin



3.05 million total tons of surplus food generated in 2023 in the Wisconsin Food Supply System



\$10.4 billion value of Wisconsin surplus food generated in 2023



1,033 pounds of Wisconsin surplus food per capita based on ReFED estimates

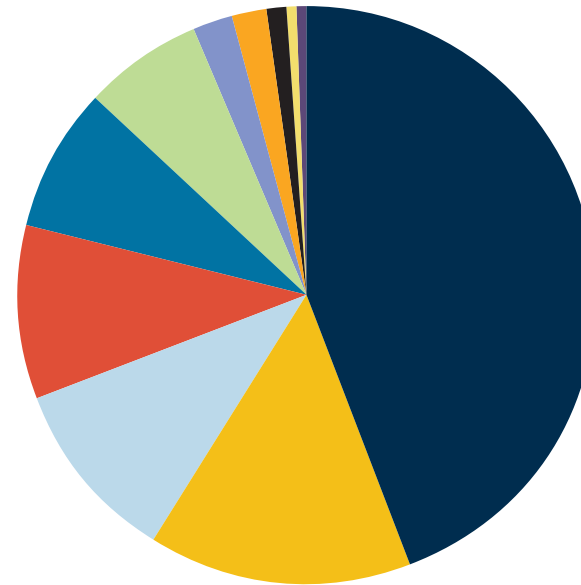
Food Waste Destinations



Approximately 44% of food waste goes to land application



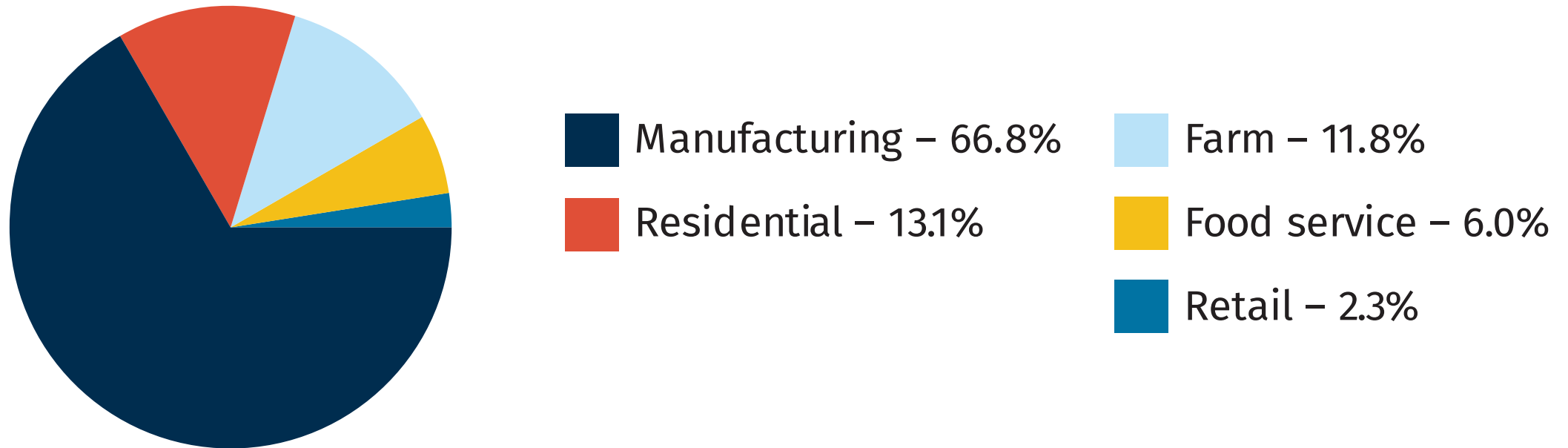
Landfills managed more than 900,000 tons of food waste in 2024



ReFED Estimate of Wisconsin Food Waste Destination

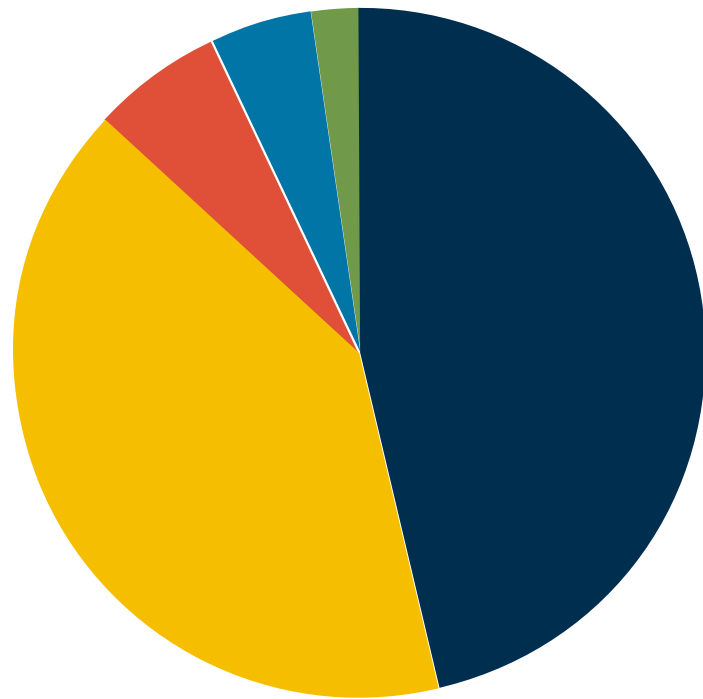
Food Waste Estimates

ReFED estimated food waste generation by sector



ReFED Estimate of Wisconsin Food Waste Generation by Sector

Food Waste to Landfill



Residential

209,000 tons (47%)



Retail

23,400 tons (5%)



Food Service

182,000 tons (41%)



Farm (produce only)

8,600 tons (2%)



Manufacturing

25,800 tons (6%)

ReFED Estimate of Wisconsin Food Waste to Landfill by Sector

Surveying & Listening Sessions

1:

Robust survey to food industries, food donation, local governments, food waste processing, and waste haulers

2:

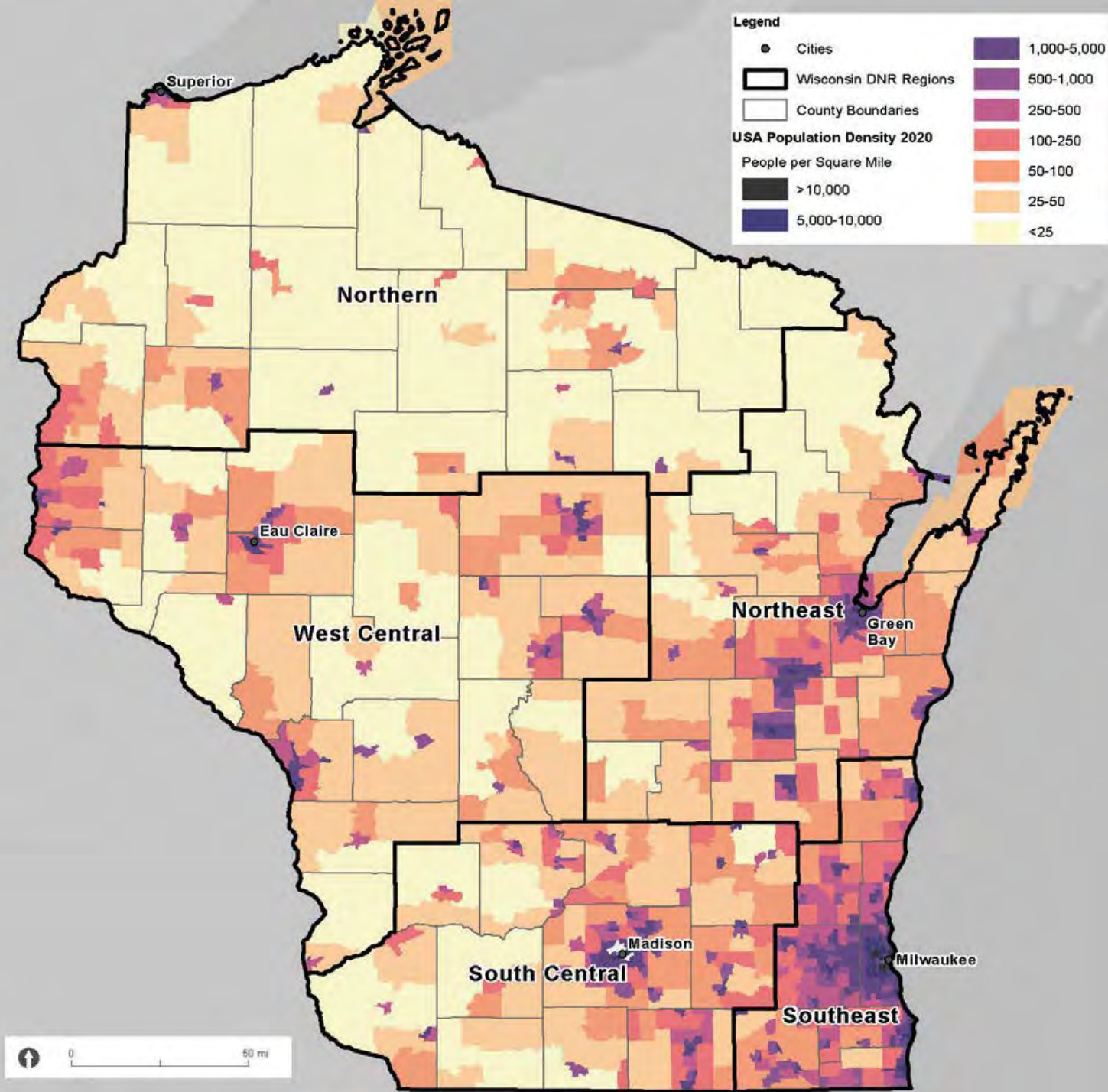
Targeted listening sessions to gather detailed insights



Data Visualization

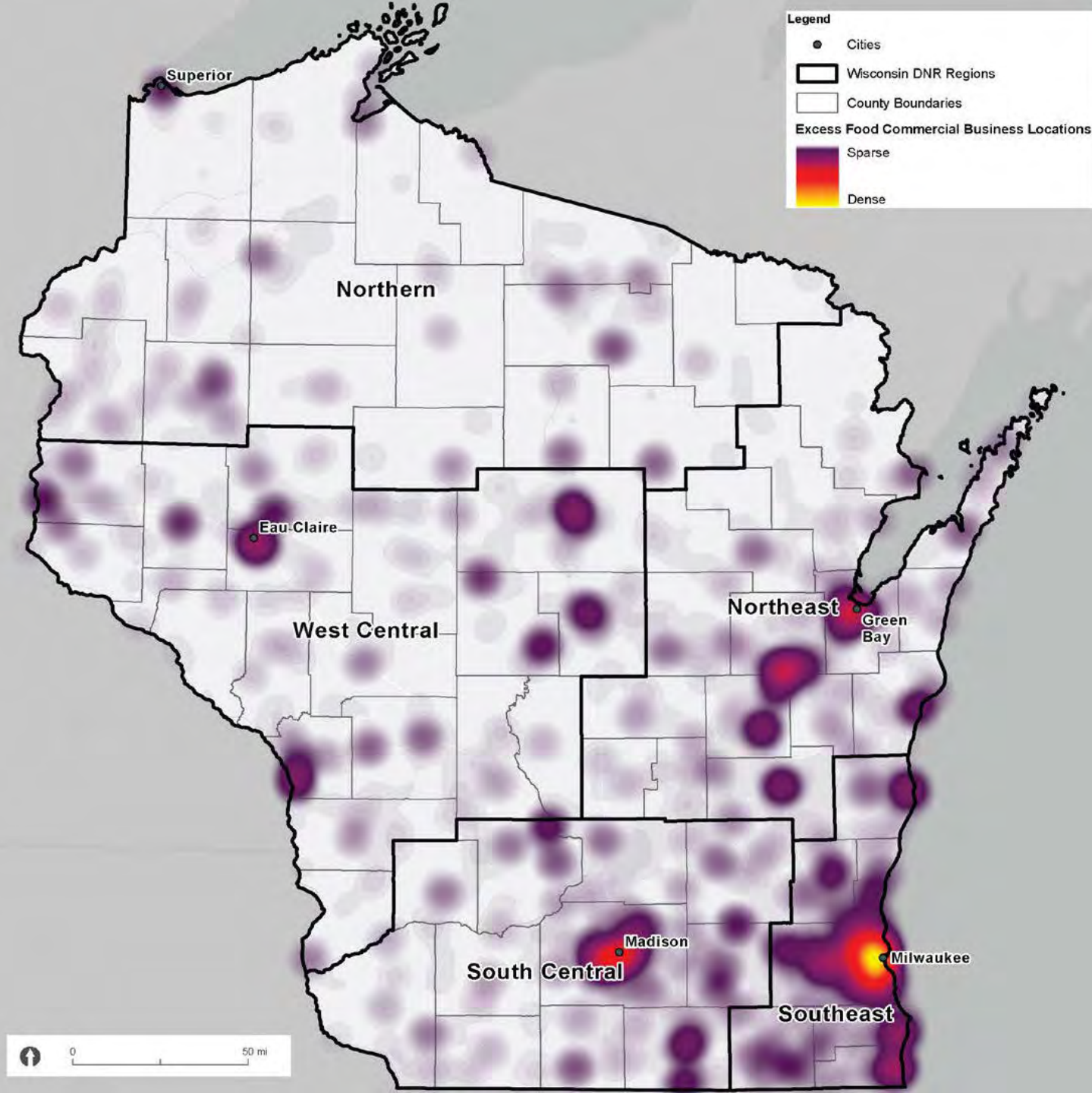
Regional Approach via
DNR's Five Regions

Population Density



Regional Approach

Food Waste Generation and Commercial Entities



Food Rescue – Food Donation




Estimated 72,300 tons of food were donated in 2023 (~2% of all food waste)



- Nearly one in eight people in WI face hunger
- **Survey Insights:** organizations have limited capacity, logistical challenges, and lack of storage space, funding, and personnel
- Businesses lack logistics and outlets to donate food

Food Rescue – Food to Animals

 Animal feed accounted for 295,000 tons (~9% of all food waste)

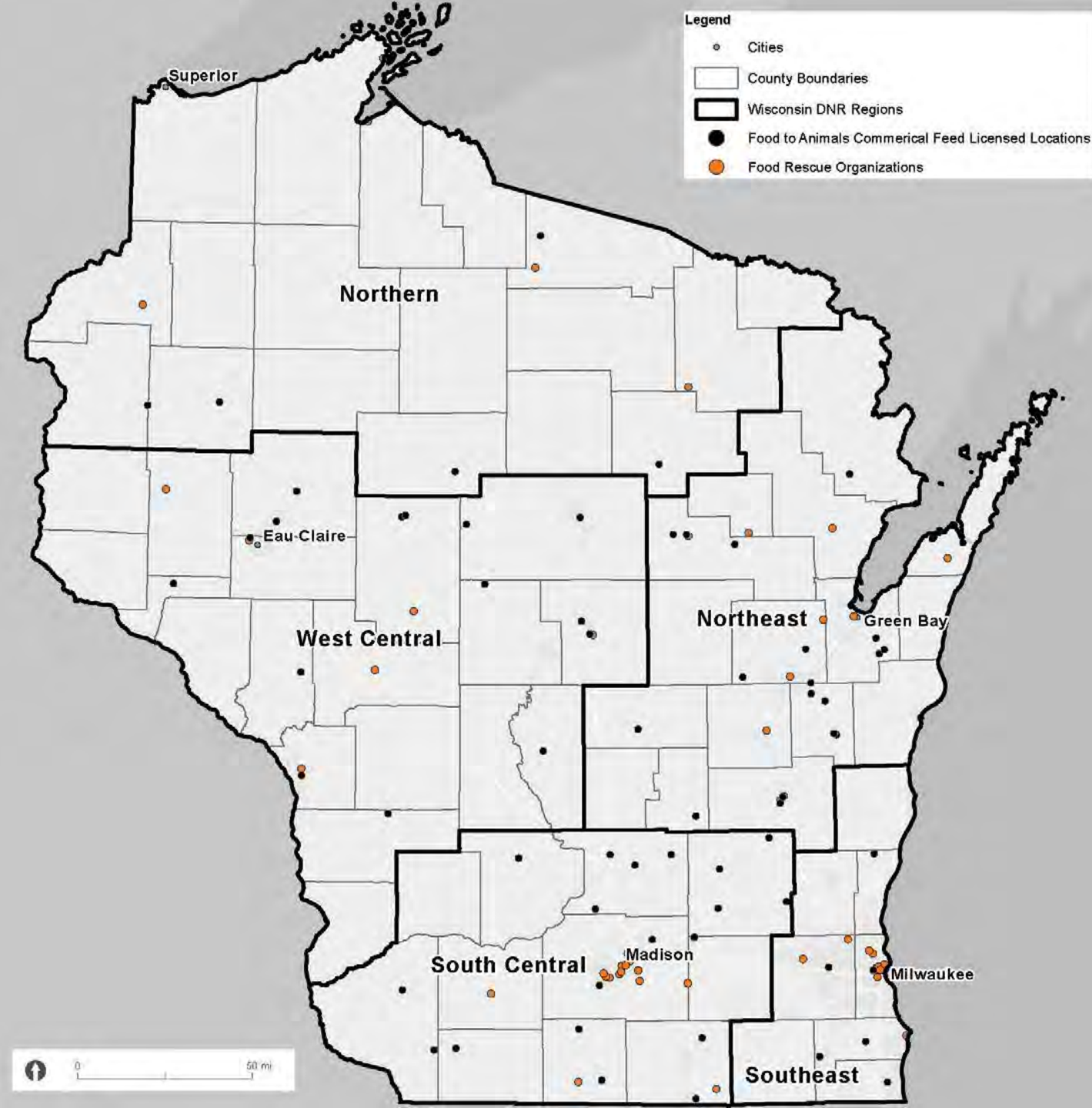
- Home to more than 1.2 million dairy cows
- Food byproducts are used in commercial animal feed
- **Survey Insights:** regulations can be barriers to expanding food waste as animal feed



Food Rescue Locations

Visualize existing locations and gaps

Consider population density and commercial businesses



Existing Infrastructure - Composting

- **286 licensed composting facilities**, including 30 approved to accept food waste
- **License-exempt facilities** also managing food waste
- Facilities managed **1.6 million CY** of organic materials



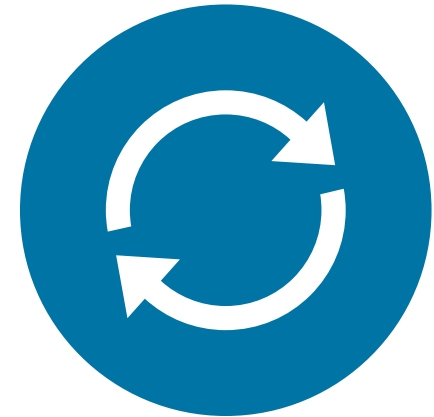
Recommendations - Composting

- Opportunities for **expanded capacity** would require new technology and enhanced processes
- **Existing facilities** do not have enough capacity to manage all food waste
- Identified challenges including:
 - Regulatory considerations
 - Capital and operational costs
 - Food waste transportation
 - Feedstocks
 - End market demand
 - Potential partners



Existing Infrastructure – Anaerobic Digestion

- 122 **anaerobic digestion facilities**, including 37 currently accepting food waste
- Manage:
 - Food waste
 - Fats, oils and greases
 - Beverage processing waste
 - Food processing waste



Recommendations – Anaerobic Digestion

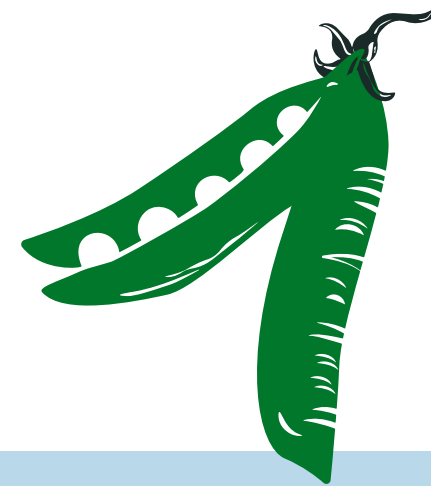
Challenges associated with adding food waste to existing WWTPs

- Staffing and equipment due to contaminated stream
- New or expanded processes to manage food waste
- Costly due to system enhancements

Opportunities for new facilities specifically for food waste management

Recommendations – Processing Infrastructure

- Review siting, zoning, and permitting to address barriers
- Policies to use landfill tipping fees to incentivize diversion
- Strong end markets
- Promote on-site management



Existing Infrastructure - Hauling

- **1,260 licensed solid waste haulers**, approximately **130** reported hauling for food waste
- Regional community composters



Opportunities in densely populated areas and near processing infrastructure

Challenges include lack of convenient processing facilities, lack of interest/customer density, cost of service, regulatory concerns, and nuisance/odor issues

Landspreading

Landspreading involves directly applying organic materials to agricultural fields to reintroduce nutrients for soil quality benefits

- Most common form of food waste management, **44% of all food waste generated in the state**

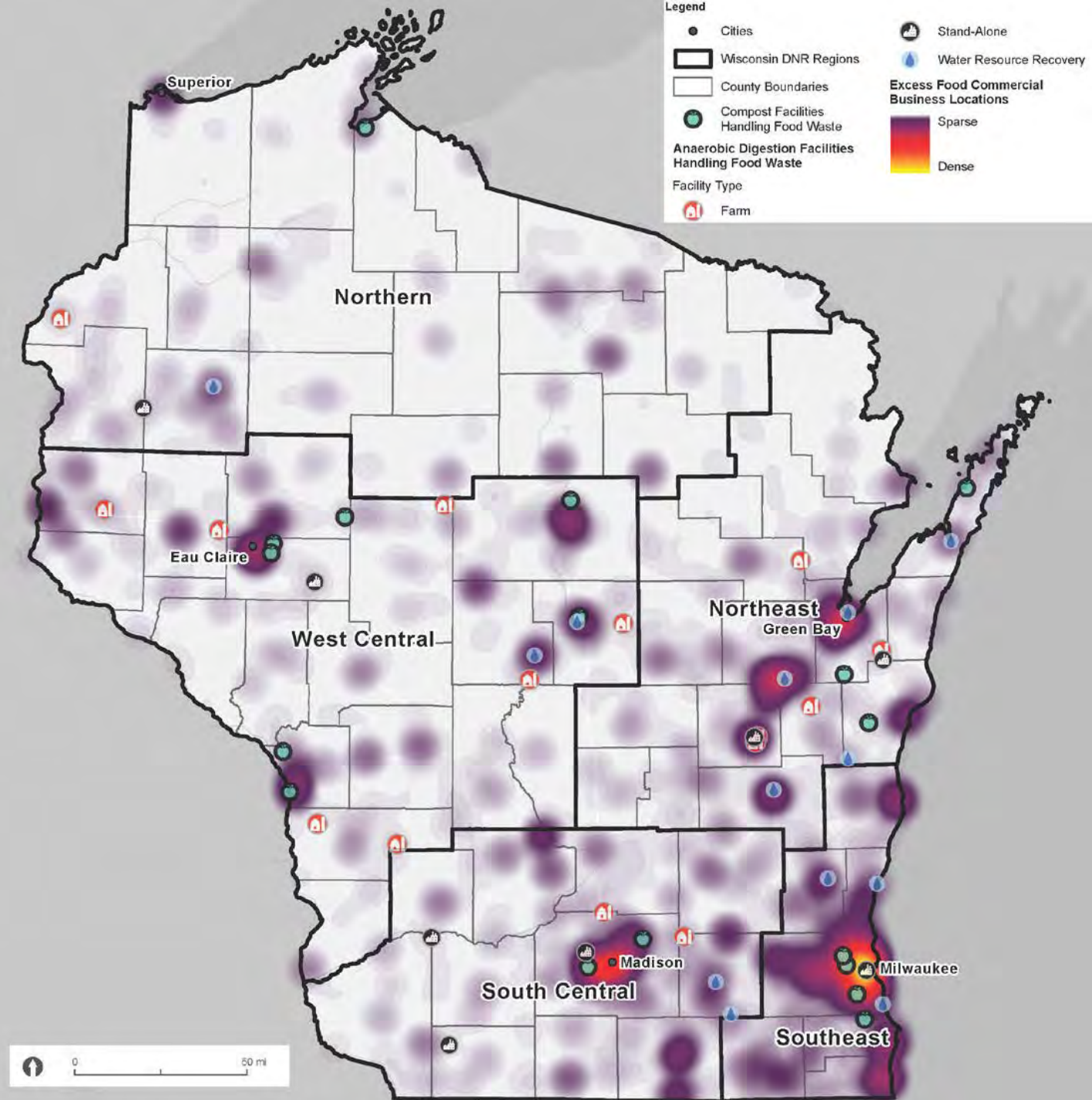
Challenges for expansion

- Logistics for accepting materials
- Cost of hauling









Processing & Infrastructure Needed

Processing capacity beneficial in the South Central, Southeast, and Northeast regions



Food Waste Prevention and Reduction Strategies

-  **Residents:** Education about food prep, date labels, and more
-  **Farms and Farmers:** Markets for imperfect food and sale of surplus food
-  **Manufacturing:** Upcycle food, track food waste generation, and optimize processes
-  **Restaurants:** Manage and track inventory, audit waste, and donate prepared food
-  **Wholesale and Retail:** Donate food, use markdowns, and sell imperfect food
-  **Events:** Donate excess and consider best practices

Landfill Diversion Strategies

Households and Businesses

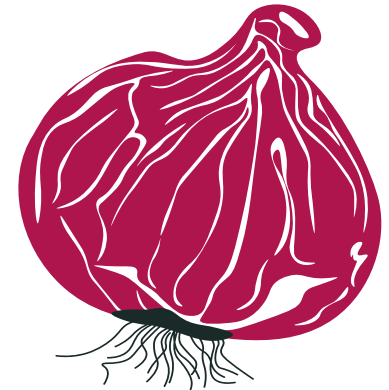
- Additional processing infrastructure in dense regions
- Regional approaches and small-scale operations in less dense regions
- Expand landspreading
- Curbside collection when feasible



Landfill Diversion Strategies

Manufacturing and Agriculture:

- Food waste processing when feasible
- On-site management opportunities



Institutions, Food Service, and Retail:

- Staff training, donation, and on-site management for cost-effective options
- Local processing facilities
- Technical assistance and peer networks to share relevant resources

Recommendations - Food Waste Prevention and Reduction

- Education and consumer behavior change **campaigns**
- **Date labeling** changes to reduce food waste
- Partnerships with state agencies, environmental groups, and the waste management industry
- Grants to support prevention and diversion
- Inventory tracking tools and audits to reduce food waste
- Training **resources** for food waste generators



Recommendations – Food Donation

- **Promote and expand** food rescue and food donation
- Implement **policies** to encourage or require food donation
- Connect community-level food rescue operations
- Support **expanded capacity** of existing food donation outlets
- **Allocate funds or offer grants** to encourage food donation



Recommendations – Feeding Animals

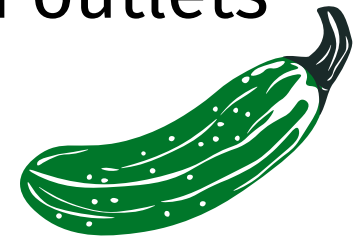
- **Expand** the use of food waste for animal feed
- **Reduce barriers** for businesses interested in providing food waste for animal feed
- Promote resources available from the **Wisconsin Farm Bureau Federation**



Prioritizing Actions: Near-Term

Actions identify immediate opportunities without significant costs, time, or regulatory requirements

- Educational programs and campaigns
- Local partners
- Expanding food rescue using existing industries and outlets
- Leveraging existing landspreading practices
- Explore new composting facility opportunities



Prioritizing Actions: Medium-Term

Actions identify opportunities that require more effort, funding, or partner support

- Regulations/policies to promote expanded food donation
- Grants/technical assistance for food waste generators
- Technical support for WI-specific industries and agriculture
- Regional approaches



Prioritizing Actions: Long-Term

Actions identify opportunities for significant diversion through regulations, infrastructure, and private industry

- Siting locations for new processing facilities
- Financial support for food waste diversion, including higher landfill tipping fees
- Food waste diversion requirements



Questions?

February 3, 2026



Thank you!

READ THE FULL REPORT:



Amanda Erickson

HDR, Solid Waste Planner

Amanda.Erickson@hdrinc.com

