



Food Waste Prevention & Management Study

Iowa Department of
Natural Resources

October 2025



This Food Waste Prevention & Management Study was prepared on behalf of the Iowa Department of Natural Resources. The project was funded by a Solid Waste Infrastructure for Recycling grant through the U.S. Environmental Protection Agency.



The goals of this study were to:

1

Identify opportunities to reduce food waste in the state of Iowa.

2

Review existing food donation and food waste processing infrastructure.

3

Consider options to increase food waste management for productive uses in Iowa.

THE PROBLEM OF FOOD WASTE

Food waste is a large portion of the waste stream in the U.S. and can have an impact on the environment and economy.

What is food waste?

Food waste (noun): an overarching term to describe food that was not eaten and was instead thrown away and disposed of in a landfill.

NEARLY

40%  of food in the U.S. is never eaten

The average American family spends **\$3,000**  per year on uneaten food

The average Iowan disposes of



of food per year at home

ABOUT **1/4**

of that was thrown away in its original packaging



Impacts

Food waste affects individuals and families, the environment, and the economy.

- The Food Bank of Iowa estimates that **1 in 8 Iowans** and **1 in 6 Iowa children** face food insecurity. Approximately **385,000 Iowa residents do not know where they will find their next meal**, and the problem is worsening.
- When food waste is landfilled, the many resources used to grow, store, process, distribute, and prepare the food are also wasted. ReFED estimates that in 2023, the **cost of wasted food was \$338 billion**.
- **Wasted food creates emissions of air pollutants** from municipal solid waste landfills.

FOOD WASTE IN IOWA

In Iowa, food waste is managed in a variety of ways.



There are five composting facilities and three water resource recovery facilities in Iowa that accept food waste.

Most food waste in Iowa is currently disposed of in landfills.

Some food is donated via food banks, pantries, and other programs located throughout the state.

Options to Avoid Sending Food Waste to the Landfill

There are opportunities for individuals, businesses, and municipalities to reduce their food waste footprint.



Residents can save food (and money!) by:

- Planning and shopping strategically.
- Storing food properly.
- Being creative with cooking and preparation.



Businesses can:

- Look for opportunities to reduce food waste during food manufacturing and processing.
- Donate excess food to food banks or food pantries.
- Manage and track inventory to reduce the amount of time food is stored.
- Invest in onsite food waste processing technologies.



Municipalities can:

- Advance policies that govern the donation, processing, and disposal of food waste.
- Promote or incentivize practices that reduce food waste.
- Identify successful plans and policies in other states to gain insight into options for Iowa.

TARGETS AND CONSIDERATIONS

The following options could be implemented to reduce food wasted in the State of Iowa. Food is wasted in homes, manufacturing facilities, retail businesses, and restaurants, and all sectors can be part of the solution to reduce food waste and redirect edible food to lowans in need.

The following options include potential considerations for various sectors and time frames for how long it may take to implement the actions. Actions were designated as short-term (0-3 years), medium term actions (4-10 years), and long term actions (10+ years). These timeframes are estimates, but actions may take more or less time to implement depending on available resources, time needed for relationship-building and strategic planning, political interest, and other factors. Potential considerations that are outside the control of the Department were not assigned time frames, as many factors may influence the timeline.

Measuring progress is an important component of food waste reduction. The Department has historically measured food waste during Material Characterization Studies and may plan to continue those efforts on a regular basis to assess effectiveness of the State’s efforts to reduce food waste.

Key

-  Short-term (0–3 years)
-  Medium-term (4–10 years)
-  Long-term (10+ years)
-  N/A – Potential considerations that are outside the control of the Department were not assigned time frames

Prevent Wasted Food

-  Reduce state business licensing fees for businesses that have food waste reduction plans.
-  Offer financial assistance to businesses for food reduction efforts.
-  Offer technical assistance to businesses for food reduction efforts.
-  Develop and share educational materials related to the EPA Wasted Food Scale, food labeling (including “use by”, “sell by”, and “best by” dates), and strategies for reducing food waste for homes and businesses.
-  Focus reduction efforts on items that food banks and pantries do not want or that have limited nutritional value, such as bakery items and candy. Encourage grocery and retail stores to reduce cost of day-old bakery items rather than donating to food banks or food pantries (based on coordination and agreement with local food rescue organizations).
-  Coordinate with grocery stores on food waste reduction efforts and messaging, especially around use of “imperfect produce” or close-dated items.
-  Promote school conversations focused on food waste.
-  Encourage the Iowa Department of Education to consider starting sharing table programs in schools to allow students to share packaged food that they do not intend to eat.

Donate or Upcycle

-  Develop and share educational strategies related to food donation, including Good Samaritan laws, USDA’s Food Keeper Guide, and ideas for residents who want to reduce food waste at home.
-  Reinvigorate the Department’s business and school engagement post-pandemic focused on options for reducing, donating, and upcycling food.
-  Partner with wholesalers and retailers to train staff on food rescue processes.
-  Continue the Department’s Food Storage Capacity grants to support food rescue efforts.
-  Create a scholarship program for businesses or students to attend seminars, conferences, or webinars to learn about food waste reduction strategies that they can implement in their organization.
-  Establish requirements for businesses to donate food, based on their size.
-  Add food waste to the Special Waste Authorization process where other upcycling outlets for the material must be exhausted before requesting disposal if food waste quantity is above a certain threshold.
-  Increase the tax credit available for taxpayers that donate food to emergency feeding organizations and food banks (compared to the current tax credit valued at 15% of fair market value or up to \$5,000 annually).

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Feed Animals or Leave Unharvested

- Evaluate animal feed policies currently in place in other Midwestern states to consider whether there may be best practices that Iowa could consider implementing.
- Strengthen partnerships with Iowa State University Extension, USDA, and food gleaning networks to promote food recovery and distribution.

Send Down the Drain, Landfill, or Incinerate

- Consider preventing landfilling certain food wastes (for example, compostable items like fruits or vegetables) in Iowa landfills.
- Continue to conduct Statewide Materials Characterization Studies to track progress toward food waste reduction goals.
- Continue to monitor other states’ efforts to divert organics and food waste from the landfill for future implementation in Iowa (i.e. restrictions, incentives).
- Investigate state policies that subsidize tip fees for food waste processing at compost or WRRFs.
- Adjust landfill disposal fees or a DNR surcharge on tip fees to incentivize diversion efforts and reduce environmental impacts.

Compost or Anaerobic Digesion with beneficial use of digestate/biosolids

- Consider a legislative requirement that food waste generators submit information on food waste generation and reuse or disposal quantities.
- Facilitate public-private partnerships to purchase or rent composting equipment.
- Encourage municipalities to accept food waste in organics management programs.
- Encourage participants in the DNR Solid Waste EMS program to select food waste projects to fulfill the Organics Management requirement.
- Provide grants or incentives to facilities that accept and process food waste to offset equipment and operational costs.
- Consider a legislative requirement for businesses to compost food waste if the entity is within a certain distance of a local food waste processing facility.
- Encourage on-site food waste management by providing information about best practices for at-home composting and onsite food waste management tools.
- Incentivize public-private partnerships.
- Consider incentives or funding to pre-process food waste so it can be depackaged, ground, and flowable and therefore suitable for WRRF and AD processing.
- Consider a statewide hub and spoke system, where food waste from the eastern, central, and western portions of the state would be directed to a few dedicated facilities, including centralized pre-processing facilities.
- Add food waste processing equipment to the recycling property tax exemption, with finished compost and beneficially-reused digestate as recycled finished products.