

Wasted Food Solutions for Morris County Municipal Utilities Authority

Marketplace Analysis and Roadmap

Introduction

In 2023, the Center for EcoTechnology (CET) received funding from the Morris County Municipal Utilities Authority to work with stakeholders throughout the county to develop recommendations to strengthen the wasted food marketplace. As part of this initiative, CET conducted a SWOT—strengths, weaknesses, opportunities, and threats analysis to review the marketplace landscape, make new connections, and uncover short- and long-term actions that will lead to increased activity. CET contacted over 650 stakeholders and successfully connected with 20 food businesses, schools, emergency food rescue organizations, service providers, and environmental organizations to understand current practices for managing wasted food and document existing opportunities around the region.

This report highlights the strengths, weaknesses, opportunities, and threats to the wasted food marketplace that were identified across the region. Strengths and weaknesses represent internal factors as experienced by interviewed stakeholders, while opportunities and threats are external factors of the marketplace overall. Overarching themes are identified in a traditional SWOT analysis chart, and additional details and specific observations about SWOT themes are expanded upon in the sections Overall Wasted Food Activity; Source Reduction; Food Donation; and Source Separation for Composting, Anaerobic Digestion, and Feeding Animals. In addition to a summary of recommendations, a comprehensive list of short-, medium-, and long-term recommendations for moving forward are also included at the end of the document.

Summary of recommendations section

CET identified several opportunities to advance Morris County's wasted food marketplace. Many generators were unaware of best practices, did not prioritize food waste prevention, and/or did not indicate a need or ability to reduce waste further. Morris County can highlight existing prevention, food donation, and composting activities, and provide educational resources to motivate participation for reasons such as environmental and community benefits. Many generators did not know who to contact or what next steps to take if they were interested in reducing their food waste. Staff limitations, training, technical knowledge, and cost were limitations for expansion indicated by nearly all generators and service providers. Notably, many contacts declined participation at all in the survey because they did not believe food waste prevention in Morris County applied to their business or could not make time to discuss the topic.

The County can develop networking and ongoing educational opportunities with generators and service providers to support collaboration and further facilitate source reduction, food donation, and source separation efforts. Pairing these efforts with the creation and distribution of fact sheets, best management practices, and educational webinars can help guide generators when making decisions on how best to manage their unique surplus food. Additionally, CET recommends that Morris County pursue opportunities to provide funding and technical support for food donation and source separation initiatives. Lastly, support is needed for composting infrastructure development and for existing service providers. This can be achieved by promoting the services of existing food waste haulers and processors, showcasing successful projects, and fostering new opportunities for additional processing capacity in the area. Food rescue agencies also need financial support and increased networking to bolster their operations and continue serving the community.

Overall wasted food activity

Strengths

- Website communication: Morris County Municipal Utilities Authority offers a clear and up-to-date website with relevant resources and contact information for residents, businesses, and service providers.
- **Community partnerships:** Many service providers and generators are either currently developing partnerships with other organizations to reduce food waste or are interested in learning more and collaborating with working groups to inform best practices.
- State policy: <u>New Jersey Food Waste-to-Energy Production Law</u> requires "large food waste generators who generate an average projected volume of 52 tons of food [pre-consumer]waste or more per year to source

separate and recycle their food waste" and provides online resources on the state website.

- Liability protection for food donation in New Jersey: The protections are for businesses that donate or distribute food in good faith. <u>New Jersey</u> <u>liability protection</u> covers the donation of food that is past its "best by" or other open date but is still fit for consumption unless there is direct negligence, recklessness or knowing misconduct.
- Accessible Contact Information: <u>Contact information</u> for Morris County food pantries and meal services are maintained on the county website.
- **Pantries meeting needs:** Food pantries in Morris County have high confidence in their ability to meet the needs of the community while minimizing waste.
- Engagement and accountability: Some service providers track material to report sustainability efforts to subscribers through e-newsletters and other marketing materials.

Weaknesses

- Limited capacity: Additional service provider staff capacity is needed to provide technical assistance to generators through various strategies, including phone and email, on-site assistance, and educational outreach, such as workshops and resource development. Capacity pertains to both time and expertise available.
- Lack of funding: More funding is needed to support wasted food solutions on the commercial scale, such as food donation and composting. Businesses and service providers reported a desire to expand systems and services but lacked the financial ability to do so.
- Lack of awareness: Many generators did not believe food waste prevention applied to their business or had a very limited understanding of the food waste prevention marketplace. Few generators were aware of tax incentives for municipalities or food donation liability protections for businesses and institutions. Few generators knew of available organizations to aid in food waste management improvements. Few generators were aware of the New Jersey Food Waste Recycling Law. The law may also lead to confusion for businesses and restaurants generating pre-and post-consumer food waste. Informational sessions led by the county would lead to increased clarity and understanding for these entities. Resources from the NI Composting Council provide more

information and contact information for those seeking more information about the law.

- Lack of education: Many generators were unaware of next steps if they did see potential opportunities to improve current systems.
- Lack of infrastructure for processing: Service providers discussed a need for more convenient drop-off site locations for residents and businesses to participate in food waste collection. Service providers shared the importance of more local end-sites to limit fuel costs when hauling materials.
- **Outreach:** Service providers expressed challenges reaching potential high-volume customers and generators.
- Lack of awareness: Service providers were generally not aware of organizations that may aid in efforts toward improved food waste management.

Opportunities

- **Public recognition:** Showcase high-profile generators and local leaders in sustainability. Written or video spotlights, case studies, and stories for local media channels can be motivational to other businesses and institutions in the area.
- **Highlight potential cost savings:** A pandemic-induced focus on financial savings presents an opportunity to share prevention tips and guidance with commercial generators who are actively seeking strategies to control costs.
- Leverage the <u>Morris County Chamber of Commerce</u>: This association can reach a variety of merchants and restaurants with educational materials and/or offers of support.
- **Diversion:** Divert from county and city-maintained facilities. For example, golf courses, after-school initiatives, and summer camp programs could start diverting pre- and post-consumer food waste through composting.
- Legislation: Incorporate into Morris County's Legislative Positions the 10 policy categories presented in the <u>Natural Resources Defense Council</u> (NRDC) 2021 New Jersey Food Waste Policy Gap Analysis and Inventory <u>Reports</u> that can be influential to food waste. There is a chance to explore the applicability of each policy category to Morris County and adopt text from the NRDC on the importance of these policy measures and their

effects. Particularly relevant categories include Food Donation Liability Protections; Organics Processing Infrastructure Permitting; Food Systems Plans, Goals, and Targets; and Grants and Incentive Programs Related to Food Waste Reduction.

- Highlight methane emissions reduction: As shown by the EPA Waste Reduction Model (WARM), food waste diversion is a greenhouse gas emissions reduction strategy, and therefore an important approach to combat climate change. A climate action plan or policies that set climate action goals can influence food waste, as referenced in the above NRDC report. Project Drawdown, a nonprofit seeking to help the world reach "drawdown" — the point in the future when levels of greenhouse gases in the atmosphere stop climbing and start to steadily decline, thereby stopping catastrophic climate change. They aim to achieve this as quickly, safely, and equitably as possible. Project Drawdown identifies food waste reduction as one of the top potential influences.
- Support schools: Schools are interested in food waste prevention and are seeking funding, training, staffing, and technical assistance. Schools request more physical resources such as signage, bins, and equipment to support an effective waste prevention program. The Rutgers University Cooperative Extension Food Waste Team leads the <u>New Jersey Leaves No Bite Behind program</u> to "improve school administrations' and students' knowledge, attitudes and behaviors toward adopting food waste reduction practices."

Threats

- Lack of flexibility: Corporate restaurants and state institutions (correctional facilities and schools) had limited ability to make changes to food waste systems within single locations.
- **Cost:** Many generators and service providers are interested in expanding programs but reported a lack of affordable outlets.
- Food waste diversion is a secondary concern: Experiencing other financial stress, stakeholders in the business sector have voiced that food diversion programs are a priority for another year.

Source Reduction

Strengths

- **Restaurant practices:** Some restaurants and schools integrate source reduction into their operations by adapting menus to include specials, utilizing multiple ingredients across dishes, ordering ingredients daily, optimizing production schedules to avoid leftover food, and more.
- **Food pantry practices:** Food pantries allow clients to select their food items to prevent unwanted or unappreciated foods, indicating a conscious effort to reduce food waste through client choice.

Weaknesses

- Low priority: Food waste prevention was not a priority for many generators. The <u>RecyclingWorks MA Food Waste Estimation Guide</u> may be a useful tool for various sectors to estimate how much food waste they generate and develop a greater understanding of their impact on generation of food waste in the county.
- Lack of resources and programs on prevention: Prevention is the most impactful measure to mitigate wasted food, but limited resources highlight this cost-benefit.

Opportunities

- **Cost savings:** Food prices are the highest they've been in a decade, which means the cost of wasting food is also at a high. Food waste prevention avoids having to pay for food twice (purchasing and disposal), representing potential cost savings for foodservice businesses.
- **Controlling in-house reduction:** Source reduction efforts can be undertaken solely by the generator, allowing for increased control of the process.
- **Strategic menu planning:** Grocery stores can investigate new recipes or upcycling measures. This primarily applies for items with a consistent surplus, such as bakery products.
- <u>Reshaping consumer environment</u>: An action area proposed by ReFED, businesses can encourage consumers to waste less by creating the appropriate conditions in retail and restaurant settings. These actions may include reducing portion sizes, going tray-less, increasing signage at buffets, etc.

Threats

• **Portion requirements:** The pandemic increased food wasted at schools with expanded free-lunch programs that must offer specific amounts of food regardless of student preference or appetite. Schools reported no or very little source reduction efforts.

Food Donation

Strengths

- **Established operations:** Food rescue and donation operations, especially food pantries, are well-established in Morris County.
- Liability awareness: Some generators were aware of liability protections for donated food.
- **Partnerships:** Some generators currently partner with food rescue organizations to maximize food donation. Others are interested in building partnerships for organizations to routinely collect edible surplus food.
- School interest in new systems: Some Morris County public schools are interested in starting share tables and source separation efforts pending space for the equipment and food away from high-traffic student areas.
- **School interest in partnerships:** Schools are interested in partnering with local food rescue organizations to transport edible food from school sites.
- **Diverting edible food:** One compost hauler utilizes a system to provide edible food to residents facing food insecurity with surplus food that was fit to eat but would have otherwise been composted. The food is identified and rerouted before being picked up for compost.

Weaknesses

- Limited awareness: Education and outreach are needed to clarify liability protections for generators donating food.
- Low donation rates in schools: Schools reported little or no food donation efforts. Schools dispose of surplus food and food scraps with other solid waste.

Opportunities

- **Build awareness:** Support and raise awareness of policies that support food donation. These include the <u>ReFED New Jersey Food Waste Policy</u> page, <u>NRDC 2021 New Jersey Food Waste Policy Gap Analysis and</u> <u>Inventory Report, tax incentives, liability protections, and share table guidance.</u>
- Utilize an intermediary app or service: Foodservice businesses could use this to upload donatable items at the end of each day that could be used by food rescue agencies providing pick-up services. Existing models, such as <u>MEANS Database</u>, Food Rescue US, <u>Wasted Food Solutions New</u> <u>Jersey</u>, and others exist and can be incorporated.
- **Change to regulations:** Consider regulations to require an attempt by restaurants, commercial kitchens, and grocery stores to donate surplus food to food rescue organizations.

Threats

- Limited partnerships: Generators and service providers are both seeking more partnerships and administrative support to enable more food donation efforts.
- Limited logistics: Food donation requires extra planning and coordination as compared to disposal. Awareness is needed to ensure generators understand and buy into the social, environmental, and economic benefits of rescue to build motivation to participate.
- **Food spoilage:** Despite investments to expand infrastructure, there is a need for more support to enable distribution of food such as deli meat and produce before it spoils. Necessary resources include equipment for refrigeration and transportation, as well as staffing for businesses and service providers delivering food between locations.
- Limitations on space and employee bandwidth: These limitations inhibit food rescue organizations from accepting and distributing large quantities of food items.
- Availability of culturally sensitive foods: Food donation agencies may find it difficult to secure sources of certain culturally sensitive foods, such as halal meat.
- **Store policies:** Grocery stores without food donation in their store policies are deterred from participating due to liability concerns. In operating a

food donation program, it is important to note that food donors are protected under <u>federal laws</u>. Extensive legal research by the Harvard Food Law and Policy Clinic did not find a single legal case related to food donation liability in the United States.

Food Scrap Diversion: Composting, Anaerobic Digestion, and Feeding Animals

Strengths

- Existing haulers of and outlets for organic waste: Java Compost, Neighborhood Compost, and <u>Community Compost Company</u> all serve both the residential and commercial sectors.
- Source separation programs at businesses: Some generators prioritize food scrap diversion, have partnerships with farms to divert food scraps for compost or animal feed, and are interested in expanding garden composting efforts.

Weaknesses

- No municipal organics collection: No organics collection service is offered by Morris County. This lessens the likelihood that citizens will compost and translate this concern to the businesses they support.
- Lack of participating generators: More large generators source separating food scraps for diversion are needed to spur an increase in demand for organics hauling and processing.
- Limited awareness: Food waste generators are not always aware of their diversion options.

Opportunities

- Leverage and support existing service providers: The organics haulers and processors serving businesses and institutions in the area can collect from more entities and are actively seeking new customers. The <u>RecyclingWorks MA Guidance for Businesses Contracting for Trash,</u> <u>Recycling, and Food Waste Services</u> may be helpful for businesses exploring contract options.
- Use large generators to seed marketplace demand: Large volume generators can act as anchors for establishing new hauling routes and ensuring feedstock for processors, which in turn can drive additional capacity in the system.

- Share training procedures: The high employee turnover rate common to foodservice businesses in a college town presents the opportunity to create and share robust training procedures for source separation among businesses.
- Education and marketing: Restaurants with composting programs can supply informational materials on residential drop-off options with takeaway food and/or compostable to-go containers. These green practices can also serve as a marketing opportunity for businesses.
- Highlight the symbiotic relationship between generators and processors: For example, showcase a hauler that provides finished compost product back to a business that contributed food scraps.
- Widen use of reusableware by restaurants and caterers: Once implemented, this can cut down on contamination in private and public food waste receptacles. Current programs to reference: <u>Rutgers University</u> <u>Reusable Bag and Bottle Program</u> for practices to spur demand for these items in local businesses.
- **Direct partnerships with farms:** Some generators are interested in more composting options and connecting haulers who would bring materials directly to farms.

Threats

- **Permitting new organics processing sites:** The process can be lengthy, costly, and difficult.
- Space constraints and fear of attracting rodents: These are common concerns cited by organizations as reasons preventing them from source separating food scraps. However, effective disposal techniques and equipment will minimize or negate this issue.
- **Time required:** The perception that source separation is time consuming deters business participation.
- **Contaminated feedstocks:** Source separation programs that include postconsumer waste, such as those of restaurants and festivals, may lead to increased contamination.
- **Permitting requirements and fees:** Costly Schedule C Recycling Permit requirements prevent small compost haulers from expanding services.

Recommendations

Immediate actions

- Working groups: Offer working groups for businesses interested in reducing their food waste. Gather service providers and experts in the field to share best practices and technical knowledge. If new restaurants are starting or refining food donation programs, host open discussions among businesses, health inspectors, and food rescue organizations that clarify any remaining misconceptions about safe food handling guidelines.
- Pursue ongoing opportunities to highlight positive examples of wasted food diversion activity: For instance, sharing best practices of leaders in the institution, grocery, and restaurant sectors. Consider offering promotional templates or platforms that can be utilized by restaurants with existing wasted food programs on social media. See this <u>Social Media</u> <u>Toolkit</u> developed by CET that highlights businesses in Rhode Island.
- Leverage the cost-savings opportunities of food waste prevention: Consider offering technical assistance and other resources. Showcase successful businesses and provide opportunities for the community to learn more about the cost-savings benefits of food waste prevention. For example, this Leanpath case study on the University of Rochester shows that the benefits of food waste prevention include financial savings.
- Promote the many benefits of food waste diversion and donation efforts: Benefits include feeding hungry people, environmental sustainability, and positive public relations. Cater messaging to each business sector.
- Emphasize that source separation programs can lead to cleaner, more efficient waste collection systems: Oregon's <u>Wasted Food, Wasted</u> <u>Money</u> campaign highlights the potential return on investment from food waste prevention.
- Develop and distribute legal fact sheets for food rescue: Explore partnering with the Harvard Food and Law Policy Clinic (FLPC) to develop legal fact sheets on <u>liability protections</u>, <u>tax incentives</u>, <u>date labeling laws</u>, and <u>animal feed for New Jersey</u>, and disseminate these to generators. More information is available on the <u>Harvard FLPC website</u>.
- Equip health inspectors: Tools such as the abovementioned legal fact sheets and other guidelines on prevention and source separation can be conduits of information to food service businesses in Morris County. The NRDC Engaging Health Departments: Overview Guide provides

information on engaging health departments in the process of tackling food waste.

- Highlight businesses that are donating food or composting food waste: Businesses can utilize window clings or adaptable marketing materials. For example, the Certifiably Green Denver program provides window clings to certified businesses, and RecyclingWorks in Massachusetts posts social media content that can be re-shared by businesses.
- Provide online or physical resources to businesses: Resources can be tip sheets, training tools, and contact information of local service providers that support their efforts to explore donation and diversion programs. Develop an online database of service providers, including food rescue organizations, animal feed operations, haulers, and processing facilities. One resource example is the <u>Zero Waste Guide</u> for foodservice establishments developed by City of Philadelphia.
- **Support awareness of source separation among residents:** Clearly communicate which materials are compostable to aid source separation efforts. Combine this outreach with visualizations of the impact that many people can have if they compost food scraps.
- Support programs for youth that directly address, or instill the importance of, donating surplus food and reducing food waste:
 Examples of these efforts include this guidance document on Food
 Sharing Tables in Schools created by Vermont organizations, and this
 Philadelphia Parks & Recreation initiative to provide free meals to students.
- Support existing food scraps processors and haulers: Conduct outreach to businesses promoting their services and the community benefits they can have by participating in the composting process. Share resources such as the New Jersey Climate Change Alliance Organics Workgroup's Sustainable Organic Material Management Plan.
- Understand the main needs of food rescue agencies: Ask them what resources would help them serve more people or better serve their existing clientele.
- Publicly recognize and promote food rescue organizations through networking and public-facing channels: Ensure that there is transportation available to the food rescue locations that do not offer a drop-off service.
- Reference <u>existing waste characterization studies</u>: These studies offer -a better understanding and raise awareness of the percentage of food waste and other organic material in municipal solid waste. The <u>2012 NRDC</u> <u>Issue Paper</u> highlights that food represents the single largest component

of municipal solid waste reaching landfills, and this NRDC document provides guidance on <u>estimating quantities and types of food at the City</u> <u>level</u>. It is significant that most characterization studies find a larger percentage of food waste material comes from Industrial, Commercial & Institutional (ICI) sources than from residential sources. Additional studies could be conducted to customize this data for Morris County.

Medium-term actions

- Encourage chain grocery businesses: Those without existing programs can integrate food donation into their policies, opening them up to the partner pick-up program facilitated by networks such as Feeding America.
- Identify and contact generators: Morris County's businesses that do not have existing programs for source reduction, donation, and source separation programs can be contacted directly to
- **Provide tangible goals:** Businesses with tonnage diversion or donation may become eligible to receive financial incentives or public recognition from the county as rewards.
- Demonstrate wasted food management at public events: Encourage event planners using public spaces to implement wasted food prevention, rescue, and composting practices to raise awareness about wasted food and divert the waste from disposal. An example can be found in this <u>Waste Free Event Guide</u> developed by the Los Angeles Department of Public Works.
- Provide direct technical assistance to businesses: Waste assistance to implement food surplus reduction, donation, and diversion programs includes conducting site evaluations and providing customized recommendations on organics service providers, donation agencies, and best practices. Explore the opportunity for replicating existing efforts. Implement a Food Waste Business Challenge that businesses can opt into. Examples of technical assistance and food waste business challenges are: RecyclingWorks in Massachusetts Technical Assistance, the Food Matters Restaurant Challenge in Denver, the Philly Food Waste Business Challenge, and the Zero Waste Business Rebate in Austin.
- Explore funding opportunities and collaborative approaches to support expansion of food donation infrastructure: For instance, shared service opportunities for cooler space that is underutilized, and development of a central location to repackage bulk food for distribution. The <u>Food Waste</u>

<u>Innovation Grants</u> offered by the Department of Small and Local Business Department in Washington, D.C. are one example.

- Review zoning and other building codes in Morris County: Ensure that they do not include requirements that restrict the site or operation of composting facilities or other technologies for diversion. This <u>Bans and</u> <u>Beyond</u> resource developed by Harvard and Center for EcoTechnology has a section on how zoning policies impact food waste reduction. <u>Sustainable Development Code</u> also produced a resource highlighting cities with model zoning codes that can be adapted for Morris County.
- Work with health inspectors and food rescue agencies. Partner to create and disseminate detailed and clear fact sheet to businesses about acceptable food items for donation, highlighting perishable and hot food items of contention. Denver, for example, has a Donations and Safe Food Handling webpage and a brochure that outlines food donation best practices.

Long-term actions

- Open fee-based residential compost drop-off sites that are more convenient to small businesses. Expanding the number of food scrap drop-off sites would decrease the logistical burden of diverting food waste.
- Support the expansion of intermediary food donation organizations that are active in the state. Examples include <u>Food Rescue U.S.</u> or <u>MEANS</u> <u>Database</u>.
- After gaining a better understanding of food rescue agencies' needs, provide financial support. Organizations may be low on space, cold storage, vehicles, and staff. This support could be in the form of microgrants, such as those offered by the city of <u>Philadelphia</u>.
- **Consider supporting organic micro-haulers** (bicycles or small trucks) financially to help create diversion opportunities for local businesses and organizations and minimize the carbon emissions involved in the transport of organics.
- **Review and adapt state policies** to better meet the needs of a growing food waste landscape.

Conclusion:

Morris County Municipal Utilities Authority has a tremendous opportunity to expand food waste prevention throughout the county. Many service providers and businesses would prioritize food waste prevention if given access to funding, education, technical assistance, training, and equipment to start, expand, and continue programs. Few businesses generating food waste know or understand their place in the food waste prevention marketplace. Service providers are eager to support the county and increase diversion and rescue. Spreading awareness to contextualize food waste prevention, educating the public on best practices and logistics, and connecting businesses with service providers will be an effective first step in these endeavors.

Additional Resources:

The Center for EcoTechnology Wasted Food Solutions Toolbox

These resources were originally developed by the Center for EcoTechnology (CET) under contract to the Massachusetts Department of Environmental Protection (MassDEP) as part of MassDEP's RecyclingWorks in Massachusetts program. CET has modified these documents to remove Massachusetts-specific information so that they can be applied region-wide.

- <u>COMMUNITY TOOLKIT: Adding Food Waste to a Yard Trimmings Compost</u>
 <u>Facility</u>
 - Existing municipal yard trimming composting sites represent an underused potential to quickly increase the capacity to effectively process food scraps locally. COMMUNITY TOOLKIT: Adding Food Waste to a Yard Trimmings Compost Facility, published by the Center for EcoTechnology in partnership with BioCycle, will help municipalities determine how to employ this strategy in their community.

• Source Reduction Guidance

- The Source Reduction Guidance document includes information on the source reduction of food waste at institutional foodservice operations.
 Guidance includes strategies such as waste tracking, meal planning, food purchasing, and dining hall design.
- Bans and Beyond: Designing and Implementing Organic Waste Bans and Mandatory Organics Recycling Laws (Referenced previously)
 - The Harvard Law School Food Law and Policy Clinic, with support from the Center for EcoTechnology (CET), has released a toolkit on organic

waste bans and their potential to reduce food waste and strengthen local economies.

• <u>Source Separation Guidance</u>

• The Source Separation Guidance document was developed with health officials for health officials. It is intended to provide best practices for acceptable handling, storage, and hauling of this material, and to assist health agents that may be unfamiliar with wasted food separation for composting.

• Food Donation Guidance

- This document is intended to provide guidance to organizations interested in establishing food donation programs by offering a broad overview of how successful food donation programs should be structured.
- Hauler Contracting Guidance (Referenced previously)
 - This document provides guidelines for businesses and institutions to help set up contracts for hauling trash, recyclables, and/or organics, effectively manage these services, and adjust contracts.
- <u>Crossing State Lines: Getting the Most Out of Radius Provisions in Food Waste</u> <u>Disposal Laws</u>
 - Among the nine U.S. states that have passed commercial food waste disposal legislation, five include radius provisions. Businesses that generate wasted food are subject only if there is a food waste processing facility within a designated distance. This insight demonstrates how proactively including the catchments of facilities in border states can give food waste policies a boost as in-state infrastructure catches up with the demand.
- Food Waste Separation for Anaerobic Digestion Processing
 - This document provides specific guidance for source separating food scraps for anaerobic digestion. Guidance includes best practices for source separation in the kitchen, hauler collections and frequencies, outdoor storage practices, as well as frequently asked questions when collecting food scraps for anaerobic digestion.
- Northeast Anaerobic Digestion Accelerator Food Waste Digestion Insights
 - The insights document reviews the anaerobic digestion (AD)
 fundamentals and provides examples of service providers haulers and

food waste preprocessing and digester facilities in the Northeast. Developed in collaboration with BioCycle Connect, LLC, readers can learn more about varied types of anaerobic digestion facilities and guidance for managing contamination.

- Washington, D.C. Spotlight Latino Economic Development Center
 - Learn more about DC food businesses that are reducing, rescuing, and recycling their wasted food. These businesses are an inspiration to other generators and their stories can be motivational tools to inspire others to implement or expand their own programs.
- <u>Reducing Food Waste in Manufacturing: Strategies to Prevent, Donate, and</u>
 <u>Recycle Waste</u>
 - Learn about wasted food prevention, donation, and diversion opportunities and get a deeper understanding of anaerobic digestion.

RecyclingWorks in MA Tools

These resources were developed by the Center for EcoTechnology (CET) under contract to the Massachusetts Department of Environmental Protection (MassDEP) as part of MassDEP's RecyclingWorks in Massachusetts program. Although these documents reference the state of Massachusetts, they are public documents and may be applicable region wide.

- <u>Food Waste Estimator Tool (</u>Referenced previously)
 - RecyclingWorks has compiled industry data from published reports and studies, which can be used as guidance for facilities with little to no current wasted food diversion programs in place. Select the industry category that best fits your business or institution to start estimating your wasted food today.
- How to Reduce Food Waste
 - A resource for businesses and institutions with tips and guidelines to save money, improve labor efficiency, and reduce waste.
- Food Waste Diversion Guide for Restaurants
 - Guidance for starting or expanding a wasted food diversion program at a restaurant, including tips for evaluating current operations, designing the program, staff training, and monitoring and maintaining the program.

Additional Tools

- EPA's Sustainable Management of Food
 - Choose your state or EPA region from the map or search by state to find EPA regional wasted food prevention and diversion efforts.
- <u>ReFED</u> (Referenced previously)
 - This collaboration of businesses, nonprofits, foundations, and government leaders is dedicated to reducing wasted food in the U.S. by 50 percent by 2030. In March 2016, ReFED released the Roadmap to Reduce U.S. Food Waste, an economic study of wasted food aimed at providing a feasible guide for action. It features 27 of the most cost-effective ways to reduce wasted food based on societal economic value, business profit potential, and other non-financial impacts.
 - ReFED's Food Waste Innovator Database maps commercial and nonprofit entities that are working in the food waste innovation sector. The 350+ entities are mapped by geography and solution type.
- Further With Food
 - Comprehensive information about food loss and waste in the United States and the solutions dedicated to reducing it. This virtual resource center offers a broad spectrum of users – such as businesses, government entities, investors, NGOs, academics, and individuals – a platform to find and share information about proven solutions and innovative new approaches to reduce the volume of surplus food generated, feed hungry people, and divert food and scraps to the highest beneficial use.
- <u>Save the Food</u>
 - The Natural Resources Defense Council has partnered with the Ad Council to develop a host of resources to help communities and individuals address the important issue of wasted food.
- <u>BioCycle</u>
 - BioCycle is a great resource for organics recovery information through its conferences, websites, and publications.
- Feeding America
 - Feeding America provides a directory of more than 200 food banks nationally, as well as research and reporting on hunger across the United States.
- <u>Food Rescue US</u> (Referenced previously)

- Food Rescue US is made up of individuals and nonprofit organizations who provide for food insecure individuals and families.
- <u>The Compost Navigator</u>
 - This BioCycle tool helps locate composting facilities, anaerobic digestion sites, and organics collection services near you.
- <u>Harvard Food Law and Policy Clinic</u> (Referenced previously)
 - FLPC has published reports, legal guides, and fact sheets on a variety of topics related to food law and policy. They partnered with CET to develop the first set of fact sheets on donation (<u>date labeling laws</u>, <u>liability</u> <u>protection</u>, <u>tax incentives for businesses</u>) for Massachusetts and have since replicated them for many other states. There are also many other great resources in their library.
- <u>Natural Resources Defense Council</u> (Referenced previously)
 - The NRDC has done comprehensive analyses on the importance of the wasted food issue and has developed many resources to address the problem. The <u>Food Matters</u> project at NRDC partners with cities to provide technical expertise, best practices, and other tools to help them achieve reductions in wasted food. Resources include a policy and program toolkit, strategic communications and partnership guide, and more.
 - Food Waste Policy Gap Analysis and Inventory: MidAtlantic, Southeast, and Great Lakes Regions: These three regional reports were prepared for NRDC by the Center for EcoTechnology, the Harvard Law School Food Law and Policy Clinic, and BioCycle Connect, LLC to provide an overview of existing food waste-related policies and opportunities for furthering food waste reduction in states within each region.
- Food Waste Reduction Alliance: Best Practices and Emerging Solutions Guide
 - This toolkit was developed to help guide companies through the basic steps in wasted food reduction. Included are sections on how to get started, as well as suggestions for identifying a range of solutions.
 - FWRA has undertaken assessments of the volume of wasted food being produced by each member sector – manufacturing, retail, and foodservice. It has also developed recommended emerging solutions and best practices for food manufacturers, retailers, and food-service operators.

- Sustainable America's Food Rescue Database
 - A directory of organizations across the United States that rescue, glean, transport, prepare, and distribute food to the needy in their communities.

• <u>AmpleHarvest.org</u>

 A nationwide resource to help reduce wasted food with the goal of reducing hunger and improving the environment. Through <u>AmpleHarvest.org</u>, gardeners that have excess produce can locate a food pantry near them, find directions to the pantry, as well as the pantry's day/time for receiving donations.

• The National Restaurant Association's ConServe

- This program provides information to help restaurants reduce wasted food and donate edible food. The website has a <u>Best Practices</u> section with tips for reducing wasted food; it also has a number of "how to" videos for restauranteurs. The <u>Tools & Solutions</u> section has information on donating food, zero waste, and more.
- Funding Opportunities for Organics & Compost Related Businesses in the Northeast (Referenced previously)
 - Northeast Recycling Council (NERC) compiled the funding opportunities for organics and compost-related businesses from state and federal agencies in the Northeast. These states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The document does not include information regarding possible funding from foundations and other organizations.