



Wasted Food Solutions for Northern New Hampshire

Stakeholder Engagement and Initial Findings

Introduction

In 2021 and 2022, the Center for EcoTechnology (CET) engaged stakeholders in the food business sector in the towns of Bethlehem, Littleton, and Lancaster in New Hampshire. With support from the United States Department of Agriculture (USDA), CET connected with nine businesses, solution providers, and regional representatives to build relationships and to better understand the key drivers that are working well and those that would benefit from future marketplace development in Northern New Hampshire.

There is a clear baseline of activity and growing interest in creative solutions to address wasted food which will support the overall food waste marketplace. The state of New Hampshire also has strong legislative liability protections in place for businesses that donate or distribute surplus food. CET has identified key areas of existing success, challenges to overcome, and opportunities to make a significant impact.

Food Recovery and Waste Prevention

Highlights of Existing Successes

- Organizations such as the [New Hampshire Food Bank](#) have partnerships with businesses that donate their surplus food.
- There are businesses in Littleton and Bethlehem with food donation programs in place.
- Local restaurants practice food waste prevention strategies through first-in-first-out food storage and rotation systems, repurposing of surplus ingredients, and staff training.
- A local food co-op prevents wasted food by donating surplus edible food items.
- [Taproot](#), a non-profit organization based in Lancaster, runs a food access program that strives to increase equitable access to fresh, local food, and runs educational programs that foster a relationship with food that respects nature.
- When a local hunger relief organization has food close to its expiration date, they oftentimes bring this to the Food Bank for quicker distribution.
- Businesses and local camps have a history of donating surplus food items as a result of a closing or at the end of a summer season.
- According to the [ReFED Insights Engine](#), New Hampshire has strong liability protection regulations in place for businesses that donate or distribute surplus food.

Challenges

- Recipient organizations sometimes receive redundant donations, leaving them with more food than they can handle and distribute.
- Businesses have noted that perishable food items occasionally go bad during the time it takes to coordinate donations and get in touch with food pantries.
- Food rescue organizations receive food that has already expired, or have food they cannot distribute, and have no feasible alternatives to disposal.
- There are not many food rescue agencies in the region that can accept prepared foods.

Opportunities

- Businesses could benefit from educational outreach about food waste prevention and donation efforts and increased use of signage that describes best practices.
- Businesses and organizations that are already rescuing and recovering food can highlight their programs to engage others who are interested in adopting similar programs.
- Farmers could share surplus food with food rescue organizations if there is anything at risk of being discarded for composting or otherwise.

Composting and Anaerobic Digestion

Highlights of Existing Successes

- There are at least two animal feed operations in the area that accept certain wasted foods: [Meadowstone Farm](#) (animal feed and compost) and [Bardo Farm](#) (animal feed).
- Successful long-standing and new partnerships exist between local businesses and schools and the aforementioned animal feed operations.
- There are two known organics hauling services that currently serve or would expand to Northern New Hampshire: [Casella](#) and [AgriCycle](#).
- Taproot leads local composting efforts in their community garden space that diverts their inedible gleaned material, inedible food scraps from their marketplace, and the organics from individuals with plots in the garden space.
- The [North Country Council](#), a local economic development agency, has led an initiative to encourage businesses and organizations to start composting.
- There is support among locals towards establishing a compost facility. In a [Food & Agriculture focus group](#) hosted by the North Country Council in 2021, the need for a regional composting facility was vocalized by participants.

Challenges

- Food waste processing infrastructure is not abundant in the region - this includes local drop-off sites and large-scale processing facilities.
- There is community hesitation toward the expansion of certain hauling services in the area, posing a challenge to growing infrastructure.
- There is a lack of strong legislation to prevent or encourage businesses from disposing of their organic waste.
- The added cost that can (but does not always) come with surplus food diversion creates a negative perception among business owners and prevents them from pursuing these solutions.
- Businesses and institutions are source separating food scraps that are handled by local processing facilities at minimal or no charge. This is limiting opportunities to expand or sustain the processing facilities.
- There is a learning curve regarding what is compostable vs. what is not compostable. Additional education is needed for employees and customers to understand proper sorting.
- There is local hesitation towards utilizing the municipal finished compost product that includes yard waste due to concerns of residual chemicals that may enter with this material.
- At schools and other business sectors, it can be difficult to get all necessary stakeholders on board to start a food scrap separation program, which may be related to a general lack of awareness and attention on sustainability issues in the region.

Opportunities

- The local food waste processing service providers, Meadowstone Farm and Bardo Farm, are looking for additional sources of food scraps. Additionally, there is a high demand for finished compost.
- Local schools are showing interest in composting and taking the initiative to start source separation programs in their cafeterias.
- Organics hauling services are seeking to expand their services to more businesses and institutions in the area.
- Additional food scraps drop-off sites for businesses and residents and diversification of service providers could spur the growth of local food waste processing infrastructure such as compost and AD sites.

- There are additional funding opportunities for schools to implement on-site composting operations or pay for organic hauling services.
- Taproot is moving their marketplace to a larger area which may result in an expansion of their composting operation.
- Interest in organics separation for composting has been indicated by the hospitality and restaurant sectors in the area.

Collaboration

Highlights of Existing Successes

- A local food co-op holds meetings with similar businesses to raise awareness of waste.
- Taproot works with several local farmers, gardeners, and bakeries to obtain fresh food that is provided to several food rescue organizations.
- Schools, grocery stores, and businesses are working with Meadowstone Farm to divert their food scraps to their compost facility.
- A student-run sustainability group at a local school is planning and pushing for a food waste diversion program.
- The North Country Council has made efforts to form a North Country Food Council, an organized effort that could rally behind increased diversion activity and a regional composting facility.
- The New Hampshire Department of Environmental Services recently [updated their composting regulations](#) in an effort to clarify and simplify the requirements for operating a composting facility in New Hampshire.

Challenges

- Food rescue organizations receive donations from multiple sources, which in turn can result in an excess of one or more items (i.e. baked goods) that cannot be redistributed before they spoil. At times when high volumes of food are donated this can also impact a rescue organization's capacity for handling and redistributing materials in a timely fashion.
- There is a lack of documented examples of local success stories and collaborations between waste generators, solution providers, and government.
- For a working group dedicated to food waste diversion to be successful (such as the North Country Food Council) it will be necessary to identify funding sources and motivated individuals with an ability to commit time to the effort.
- Stakeholders are unclear whether an initiative for a composting facility should be regional or community-based: what is more feasible in terms of planning, funding, and constructing.

Opportunities

- Highlighting success stories would strengthen partnerships and create replicable examples for others in the state. An example of this is the [CET spotlight articles on Ohio businesses](#).
- Providing a platform for open communication between service providers and businesses could encourage more collaboration.
- The rural location (out of the way of many major organic hauler routes) necessitates localized, smaller scale wasted food solutions, which are oftentimes more beneficial for a community economically and environmentally.
- The Bethlehem landfill may be closing within a few years, creating the opportunity for alternative, sustainable waste management systems. To prepare, businesses and residents could start diverting wasted food from the trash stream in advance of the closure.

Recommendations

Spread Educational Information and Advertise Available Assistance

Near-term Actions

- Create and disseminate a directory of area food waste processors and food rescue organizations with local businesses.
- Share surplus food tracking methods with generators, which can provide them with an understanding of the quantity and content of their surplus food. Examples include the [EPA Food Waste Logbook](#) and this [food waste audit guide that can be used in schools](#).

- When promoting wasted food prevention, reference public data on the most wasted food products in the retail sector, which include bread and other bakery items. This [2012 NRDC Issue Paper](#) presents the largest losses in food retail on page 10.
- To encourage businesses to get on board with composting initiatives, provide comprehensive reasoning: composting wasted food and returning it to local soils will support growing more in the region to feed the local population (re-investing in the region).

Medium-term actions

- Encourage educational programming around food waste prevention, rescue, and diversion in schools and head-start programs for children, provide funding for the related materials.
- Provide training resources to businesses, such as source separation best practices, that will make adopting wasted food programs more seamless. One resource example is the [Zero Waste Guide](#) for foodservice establishments developed by City of Philadelphia.
- 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 material from disposal. An example can be found in this [Waste Free Event Guide](#) developed by the Los Angeles Department of Public Works.
- Work with health inspectors and food rescue organizations 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

- Start a network or working group for food waste processors.
- Provide direct technical assistance to businesses on implementing food surplus reduction, recovery, and diversion programs by 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.
- 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](#).
- If funding food recovery operations, consider following [guidelines outlined by the California Resource Recovery Association Edible Food Recovery Technical Council](#) that emphasize equity, longevity, transparency, and flexibility.

Develop Food Waste Processing Infrastructure

Near-term Actions

- Increase food scraps drop-off sites in the town for residents and businesses at existing transfer stations and spread awareness about source separation.
- Review zoning and other building codes in Northern New Hampshire to ensure that they do not include requirements that restrict the siting or operation of composting facilities or other technologies for diversion. This [Bans and Beyond](#) resource developed by Harvard has a section on how zoning policies impact food waste reduction.

Medium-term Actions

- Understand the main needs of food rescue agencies by asking them what resources would help them serve more people or better serve their existing clientele. If needed, provide financial or in-kind support to organizations that are 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 [Philadelphia](#).

- Support existing processors and organics haulers by providing business education, offering grant opportunities, incorporating finished product into bid specifications for local construction projects, and seeking opportunities for additional end sites.
- Determine a location for multiple local or a single regional composting facility.

Long-term Actions

- Consider supporting organics 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.

Share Success Stories

Near-, Medium-, and Long-term Actions

- Promotion of successful local examples and best practices from across the region and country would help close the information gap, encourage industry growth, and accelerate adoption of new practices. For example, highlighting Littleton Food Co-op for their composting and food donation programs, Rek-Lis brewing for their waste prevention and diversion programs, and Bethlehem Elementary for taking initiative to start a source separation program for composting. Examples include this [Social Media Toolkit](#) developed by CET that highlights businesses in Rhode Island and RecyclingWorks in Massachusetts posting [social media content that can be re-shared by businesses](#).
- Highlight the prevalence of participation in food waste programs by providing ways to publicly recognize generators. The Certifiably Green Denver program, for example, [provides window clings to certified businesses](#).

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