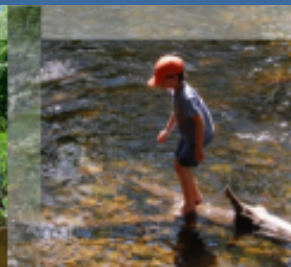
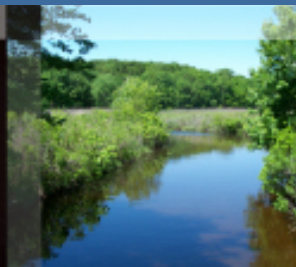
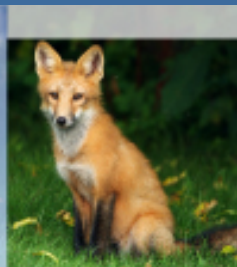


Connecticut Coalition for Sustainable Materials Management – Organics

Caren Harder

Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**One of the largest components of
the solid waste stream is
Food Waste**



Organics Diversion Law (CGS 22a-226e)

- 2011 – Legislation passed with a start date of 2014; CT first state to implement a program.
- Applies only to food wholesalers, distributors, manufacturers, processors, supermarkets, resorts & conference centers that:
 - Generate 52 tons/year (1 ton per week) of source separated organics (prior to 2020 the volume was 104 tons per week) and:
 - Are located within 20 miles of an authorized food waste processing facility.

Permitted and Operating Volume Reduction, Anaerobic Digestion and Food Waste Composting Facilities

Facility Name	Type of Facility
Harvest New England, Ellington	Composting - Outdoor Turned Windrow
New Milford Farms, New Milford	Composting – Indoor Turned Windrow
Supreme Energy and Recycling (Quantum Biopower), Southington	Anaerobic Digester

Small Scale Composting

Facility Name	Type of Facility
New England Compost, Danbury	Composting - Outdoor Turned Windrow

Anaerobic Digesters that are Permitted, but NOT built

Bridgeport Bioenergy, Bridgeport
(permit expired and will not be renewed)

City Wide Energy Action, North Haven

Turning Earth, Southington



On-site visit from DEEP

Visit includes:

- type and amount of food waste generated (CET tool kit and food waste calculators)
- programs and methods for reducing food waste
- review of prep/manufacturing areas
- types of containers and how each would work within the facility



On-site visit from DEEP (continued)

- **suggest a pilot program and explain how to implement one**
- **facility layout for transporting waste**
- **hauling options and a review of all state permitted facilities, along with animal feed options**
- **suggestions on training employees**
- **significant follow-up communication**

On-site visit from DEEP (continued)

- **Banquet Halls – suggest that contracts include the cost of food waste removal**
- **compliance assistance visits are also conducted at companies, restaurants, hotels, hospitals, etc. to help implement an organics diversion program, even if the law does not apply.**
- **checklist of their general recycling program**
- **case studies**

**Food Waste Diverted from
Carla's Pasta located in South Windsor**



CASE STUDY - Carla's Pasta, South Windsor

- Large pasta manufacturer that employs 200 people on three shifts; products are sold at approximately 1000 locations
- This mandatory program was started in 2017, as a result of the CT Organics law. I explained the law and all of their options for setting up an organics program (did not know CT has a law)
- From mid 2017 – 2019, approximately 1,540 Tons were sent to Quantum Biopower in Southington
- They also have an arrangement with the CT Food Bank to donate large amounts of pasta

CASE STUDY - Carla's Pasta, South Windsor

- The owner indicated that less than 5 percent of total pasta production is food waste
- Cost – there were up-front costs:
 - Additional dumpster
 - Increased hauling costs and fees because they chose to go to a facility further away

Previously paid \$80-100 per ton for MSW

Now paying \$50 per ton for food waste processing









CASE STUDY – Yard Goats, Hartford

- I contacted them in early 2018 and their program was implemented in late 2018. We met several times to determine the best approach:
 - Totes or dumpsters for waste storage - ultimately deciding that totes would be the best option
 - Composting, AD or animal feed
- Started with the food prep area and then added waste generated from the ball park cook out areas

CASE STUDY – Yard Goats, Hartford

- The original thought for reuse was animal feed, but the farmer was almost an hour away and there were too many logistics that couldn't be worked out so they decided to send their waste to Quantum
- Voluntary program

From the start of the program through 2019, 11 Tons of waste has been diverted





Inspection Statistics late 2016 through 2019

- 85 sites inspected
- 19 diversion programs implemented following inspections (9 not mandated by the law)

Donation only – 2

Animal Feed – 4 (large pig farms)

Quantum – 11

Compost – 2

Of the 85 sites inspected, 17 were subject to the law and about half were in compliance.

Food Waste Diverted 2016 through 2019

2016 – 2017 **513 Tons**

2018 **727 Tons**

2019 **1,230 Tons**

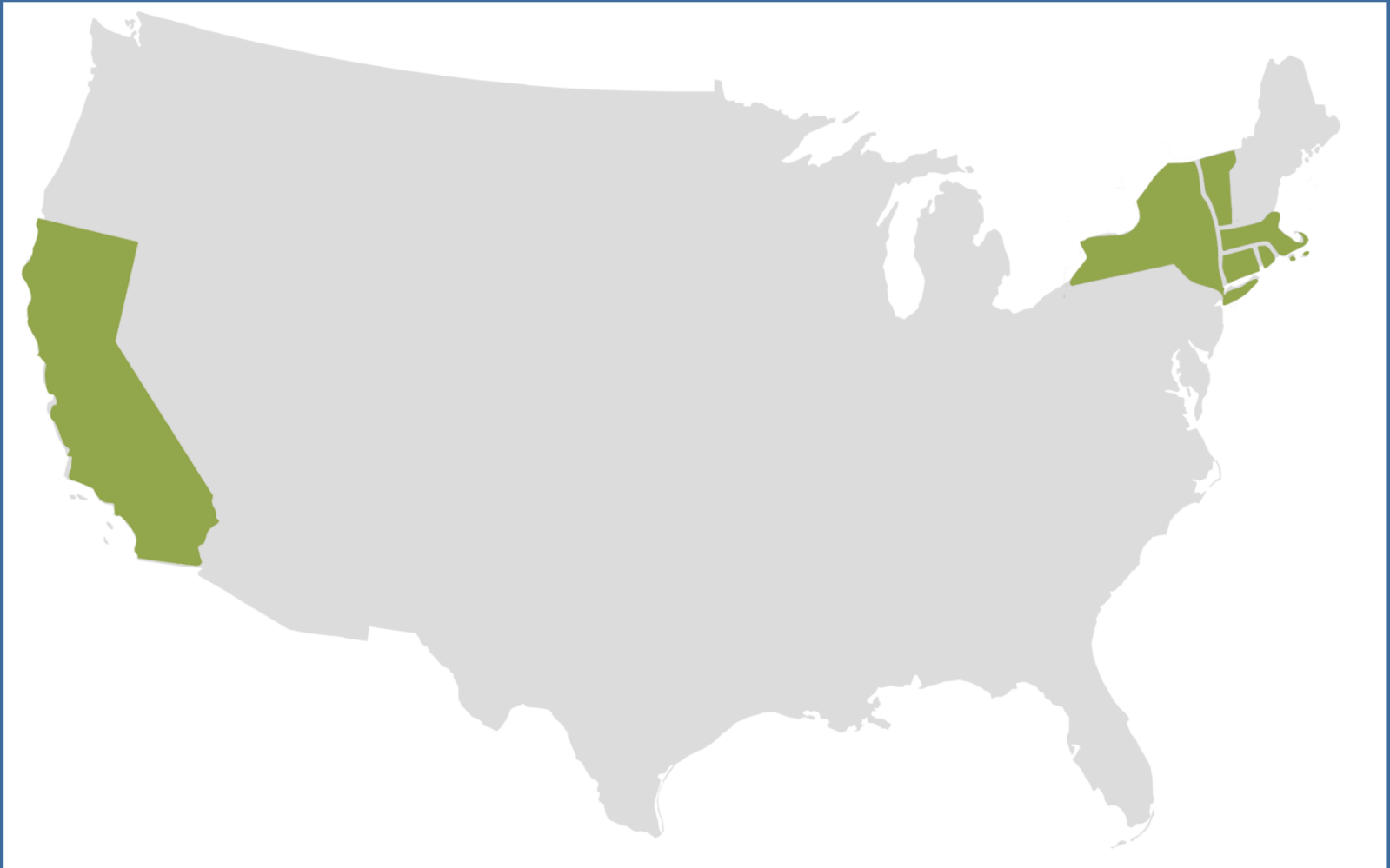
TOTAL **2,470 Tons ***

* - some programs up and running have not reported numbers so total is even higher

Sources of Information for Inspections

- DEEP website – *“Identifying, Quantifying and Mapping Food Residuals from Connecticut Businesses and Institutions”*
14 maps and a database
- Google search
- Dept. of Public Health (inspects food service)
- Dept. of Consumer Protection (regulates food manufacturers and producers)
- Banquet Facilities
- EPA Online database
- Informal request for assistance

States With Food Waste Disposal Bans



Daria Larson

- Currently working on her Master's Degree in Public Policy as well as a Graduate Certificate in Sustainable Environmental Planning and Management at UCONN (May 2021 expected graduation). Completed a Bachelor's of Science Degree in Environmental Studies and Animal Science in May 2020.
- Interning with South Central Regional Council of Governments (SCRCOG) for the 2020-2021 academic term.
- DEEP 2019 – Completed a major outreach project related to food waste diversion, focusing on farms willing to accept food waste for use as animal feed. Also developed a fact sheet to accompany the list of farms.

Outreach Project Overview

- Goal: develop a list of farms that would be interested in accepting food waste for use as animal feed
 - Provides additional diversion options for waste producers to supplement existing permitted facilities
- Compiled a list of over 75 farms to contact
 - Mostly from Connecticut Grown Meat Producers list
 - Also reached out to Connecticut NOFA, Connecticut Farm Bureau, Connecticut Department of Agriculture, UConn Extension, and the Connecticut Brewers Association

Final Product

- The final spreadsheet includes 24 farms that expressed interest in accepting food waste for use as animal feed
 - Includes name, address, contact information
 - The size of the operation and food waste preferences were also included to guide potential donations

Example rows in final spreadsheet:

Farm Name	Town	Address	Donation Details	Type(s) of Animals	Farm Size (donation amount)
Rowland Farm	Oxford	72 Towner Lane, Oxford, CT 06478	Bagels, bread, ice cream, anything else (NO meat or post-consumer)	Pig, beef, goat	120-140 hogs
Scantic Valley Farm	Somers	327 Ninth District Road, Somers, CT 06071	March-September: vegetables, fruit, some pasta and carbs (NO MEAT)	Pigs, hens	Small operation, generally have 6-15 pigs
Secchiaroli Piggery	Waterford	62 Miner Lane, Waterford, CT 06385	Pre and post-consumer food waste -- must be unpackaged and contaminant free	Pigs, goats	50-100 sows, 300-1000 hogs on farm depending on time of year

Fact Sheet

- Directed at farmers interested in accepting food waste and is meant to provide basic information about accepting food waste for use in animal feed
- Meant to promote interest in the program
- Includes:
 - Importance
 - Benefits
 - Examples
 - Additional Resources
 - testimonial from a Connecticut farmer

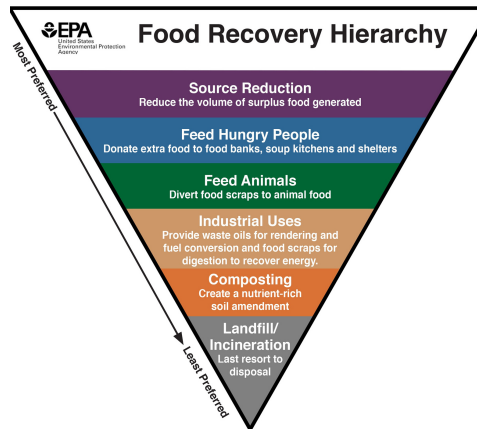
WANT TO ACCEPT FOOD SCRAPS FOR ANIMAL FEED?

Information for Connecticut Farmers



FOOD WASTE HIERARCHY

When food scraps cannot be donated for human consumption, animal feed is the next best option



Taken from: <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>



BENEFITS

- Reduces feed costs
- Builds partnerships
- Environmentally friendly
- Resource and energy efficient
- Nutritious supplement for diet

EXAMPLES OF COMMONLY ACCEPTED FOOD SCRAPS

- Fruit/veggie scraps
- Bread/pastries
- Spent grains
- Brewery waste

MORE INFORMATION

- Before accepting prepared/hot food, please contact the Department of Consumer Protection and the U.S. Department of Agriculture (USDA)
- Legal fact sheet, "Connecticut Food Donation: Feeding Food Scraps to Animals"
 - available through the DEEP website, use search term "Connecticut Food Donation"

FARMER TESTIMONIAL

"Anytime you can find a source of food waste, it is worth it. It's better than paying for grain or corn, and better than throwing it away"

- Connecticut Livestock Producer

**IF YOU ARE INTERESTED IN ACCEPTING FOOD WASTE, CONTACT:
| CAREN HARDER | CAREN.HARDER@CT.GOV | (860) 424-3277**

Caren works for the Connecticut Department of Energy and Environmental Protection (DEEP) to partner farmers with generators of food scraps

Future Work

- Focus on:
 1. Expanding the list of potential farmers
 2. Providing more resources to farmers to promote awareness and educate about accepting food waste
- There is always room for improvement so please let us know if you know of any farms that may not be included in this list, or have any other comments/suggestions surrounding this project

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www.ct.gov/deep/recycle



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