

# Presentation to VORS

## April 11, 2019

### **Municipal Contracts for Solid Waste and Food Scrap Collection and Composting**

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District

# **WINDHAM SOLID WASTE MANAGEMENT DISTRICT COMPOST FACILITY 2019**





- Compostable Waste Removal
- Triple T collects compostable waste for composting.
- Food waste, unrecyclable paper packaging such as frozen food boxes, napkins and paper towels, and untreated wood.

# Town of Brattleboro

Curbside Organics Collection



# Brattleboro, Vermont



**Population  
12,000**

# Demographics of Program

- Curbside program available for all residential properties and multi-unit apartments with four or fewer units.
- Approximately 4,450 eligible housing units participate in Brattleboro's Curbside Program.
- Approximately 3,500 Structures/Stops
- Curbside organics collection began in late FY13.
- Initially rolled out as a pilot project.



# Brattleboro's Solid Waste Stream

	<b>Trash</b>	<b>Recycling</b>	<b>Organics</b>	<b>Total</b>	
<b>FY18</b>	931	1080	606	2617	
<b>FY17</b>	939	842	511	2291	EOW
<b>FY16</b>	1090	980	449	2519	PAYT
<b>FY15</b>	2318	926	245	3489	
<b>FY14</b>	2357	840	222	3419	

# Organics = Cost Savings \*

\*in Brattleboro

Organics	
FY18	606
Organics per Ton	\$65.00
	\$39,378.30
Trash per Ton	\$110.00
	\$66,640.20
Annual Savings	\$27,261.90



# Reasons for Success

- Teamwork!
  - Windham Solid Waste Management District
    - Receives Food Waste
    - Generates Valuable Compost
  - TTT Trucking
    - Not Just Another Hauler
    - Creative – Flexible – Willing to Try New Ways of Doing Business
  - Town of Brattleboro
    - Manage Contracts with TTT and WSWMD
  - Citizens
    - Collect Food Scraps
    - Great Track Record – Very Little Contamination

# PERMITTED AS SMALL FOOD WASTE COMPOSTING FACILITY

- Up to 2,000 cubic yards per year of food waste
- Up to 3,000 cubic yards of yard waste
- Also permitted to compost soiled paper and cardboard
- Low-tech operation using turned windrows
- Batches tracked in weekly piles
- Temperature of windrows measured at 1' and 3' depth
- WSWMD employees have taken Vermont ANR class to become certified compost facility operators



## **ALL Food Scraps**

- ✓ Fruits & Vegetables
- ✓ Bread/Rolls Crackers
- ✓ Rice/Pasta/Beans
- ✓ Cheese/Dairy Products
- ✓ Egg Shells
- ✓ Meat & Fish (Cooked & Raw)  
(including bones)
- ✓ Shellfish
- ✓ Coffee Grounds & Filters
- ✓ Tea Bags

## **Non Recyclable Paper & Cardboard**

- ✓ Damp/ Wet Paper
- ✓ Wax/Parchment paper
- ✓ Soiled or Waxed Cardboard
- ✓ Milk/Juice Cartons (remove plastic spout)
- ✓ Paper Towels
- ✓ Paper Plates & Cups
- ✓ Sugar/Flour Bags (without plastic liners)
- ✓ Cardboard Egg Cartons
- ✓ Frozen Food Containers

\*Also kitty litter and pet waste.

# INCREASING TONS OF ORGANICS

- FY 2016- 457 tons of food waste from Brattleboro curbside collection
- FY 2017- 531 tons of food waste from Brattleboro curbside collection
- FY 2018- 604 tons of food waste from Brattleboro curbside collection
- FY 2016- 26 tons of commercial food waste
- FY 2017- 154 tons of commercial food waste
- FY 2018- 315 tons of commercial food waste
- Projected to increase to over 1,000 tons
- Need increasing amounts of wood chips

# 7-YEAR CONTRACT WITH BRATTLEBORO

- Brattleboro Selectboard approved contract to have residential curbside organics go to WSWMD
- Tip fee \$50/ton, with CPI escalator
- Includes leaves and grass which are collected for 2 weeks in the spring, and 2 weeks in the fall
- No tip fee for yard waste
- Brattleboro also has a contract with Triple T Trucking for the same period of time for curbside collection of trash, recycling, and organics
- Weekly collection of single stream recycling and organics
- Every other week collection of trash

# Contracts

- TTT is Awarded a 5 year Contract in 2009 – (FY10 – FY14)
  - Weekly Trash and Recycling Collection
  - Includes Option for the Town to add Organics Collection in years 4 and 5
- Amendment 1 in 2012
  - 4 Month Pilot Program in FY13
  - Voluntary Participation
  - Limited to Approximately 150 Households
  - Town wide Organics Collection after the 4 Month Pilot
- Amendment 2 in 2015
  - Adopt Pay-As-You-Throw
  - Acknowledge the Potential for Every Other Week Trash Collection

# Contracts - Continued

- Amendment 3 in 2016
  - Adopt Every Other Week trash collection beginning 7/1/17 with a 42% or approximately \$96,000 reduction in the cost of trash collection.
  - Extend Contract to include FY15 – FY24
  - Acknowledge the potential for a transition to Single Stream Recycling
    - Must give Notice by 12/31/16
- Amendment 4 in 2016
  - Extend Deadline for Notice to 5/15/2017
- Amendment 5 in 2017
  - Transition to Single Stream Recycling on 7/1/17 with a reduction in recycling collection costs of \$24,000
  - Town directs all organics to Windham Solid Waste Management facility and will compensate TTT at a rate of \$15 per ton for hauling organics.



# Contracts - Continued

- WSWMD
  - All organics to be diverted to WSWMD through FY24
  - All towns in the district shall pay the same tip fee.
  - Tip fee shall increase on July 1 of each year by the percentage increase in CPI for the Northeast as measured in November of the previous year.
  - WSWMD and Town agree to collaborate on additional public education if contamination is found to be an issue in the organics program.
    - So far, so good!

# SOURCE SEPERATED ORGANICS FROM:

- Brattleboro Curbside Pickup by Triple T Trucking
  - 2,000+ Residences Served Weekly
  - Up to 4 Unit Apartments
- Commercial/Institutional Collection By Area Haulers
  - Restaurants
  - Bread Manufacturers
  - Vitamin Manufacturer
  - Schools, Colleges
  - Food Coops, Supermarkets
- Transfer Station Drop-Off
  - WSWMD



# Curbside food scrap collection



www

# TRIPLE T TRUCKING CURBSIDE ORGANICS COLLECTION





# BRATTLEBORO CURBSIDE ORGANICS



# TIPPING BREAD AND DOUGH





# ELM CITY COMPOST-KEENE, NH SUBSCRIPTION FOOD SCRAPS COLLECTION





# WSWMD CONVENIENCE CENTER ORGANICS DROP-OFF



# BRATTLEBORO CURBSIDE LEAVES





# COMPOST RECIPE



+



# LOADER MIXING PILES



# BRATTLEGROW COMPOST-3/8"





# DONATE COMPOST TO SCHOOLS



# COMPOST AT BRATTLEBORO RETREAT





# COMPOST PRODUCT ANALYSES

- “Brattlegrow” compost meets Vt. ANR standards for heavy metals and pathogens
- Test compost for agronomic parameters of N,P,K, pH, conductivity, and micro nutrients
- Bioassay of compost by UVM to check for persistent herbicides – over 90% germination (not phytotoxic)
- Staff measure pile temperatures to confirm pathogen kill temperatures of 131+ F
- Staff utilize compost at WSWMD gardens, and at home gardens and lawns

# RETAIL DISTRIBUTORS

- D & E Tree Company  
Guilford, VT
- Maple Hill Nursery  
Swanzey, NH
- Renaud Tree &  
Landscaping  
Dummerston, VT
- Boyd Nursery  
Wilmington, VT



# COMPOST SALES

- Retail distributors pay \$20 per cubic yard
- They sell to customers for \$30 - \$40 per cubic yard
- FY 16 compost sales 855 cubic yards; revenue \$15,219
- FY 17 compost sales 525 cubic yards; revenue \$10,353
- FY 18 compost sales 1,965 cubic yards; revenue \$37,831
- Compost used for gardens and lawns
- Compost used for solar project construction
- WSWMD sells directly to buyers of more than 10 cy
- WSWMD also manufactures a compost/soil blend which is sold to distributors for \$25 per cubic yard
- Donate compost to towns, community gardens, and schools

# WSWMD STAFF COSTS

- FY18 \$11,740 of staff time to operate compost facility
- WSWMD front loader with operator mixes incoming organics on a daily basis, approximately ½ hour per day
- Staff measure and record compost pile temperatures
- Hire contractor to operate screen

# MONITORING TEMPERATURES



# COMPOSTING OPERATIONS FINANCIAL REPORT FY 2017 – FY 2019

	FY 2017	FY 2018	FY 18 (3/19)	
<b>Revenue</b>	\$55,402	\$113,071	\$68,684	
<b>Expense</b>	\$23,473	\$69,325	\$42,381	
<b>Surplus</b>	\$31,929	\$43,746	\$26,303	



**TA-DA!**

