Food Waste Collection for Composting in Orange County, NC: Building Partnerships for lasting success

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Food Waste Collection in Orange County NC

- Program History
- Program Details
- Working with Our Partners
- Program Data and Metrics
- Pictures of Sites
Why Has Orange County Invested in Food Waste Recycling?

- 61% Waste Reduction Goal
- Preserve Landfill Capacity
- Significant Portion of Commercial Waste Stream (~25%)
- Proven to be Economical
History of Program

- Program initiated in 1994.
- Material collected for Animal Feed with small hog farmers through Sept. 1999.
- Switch to collection from private composter collection in 1999
- Partnered with UNC for food and lab animal bedding
- Now servicing 45 locations including twelve grocery stores, about 1,600 tons/year.
- Solid Waste provides collection of food waste from multiple small–large scale public events.
Initiated Fall 1999 when Hog Farmer went out of business
Began working with Brooks Contractor Inc. Chatham County NC
Composting enables collection of non-edible compostables and post-consumer food wastes
Semi-automated collection at least 3 days/week
Imposed a nominal minimum generation rate in order to participate (at least 2 tons/month) - not always adhered to
Composting continued

- Turn-key contract – Contractor provides carts, collection, long haul and composting

- Materials placed in 65 gallon carts, not more than \( \frac{3}{4} \) full to avoid spillage during collection/breaking

- Some sites now use dumpsters (6 and 8 cubic yd) through-the-wall and freestanding

- Carts washed by contractor at each collection, wash water dumped into compost

- “Close the Loop” by purchasing finished compost from Brooks and selling to citizens at the Orange County Landfill.
## Food Waste Program Data

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<th>FY 12/13</th>
<th>FY 13/14</th>
<th>FY 14/15</th>
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<td>1,014 tns</td>
<td>1,564 tns</td>
<td>1,622 tns</td>
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Estimating Potential for commercial food waste recovery

- Top Down:
  - Percent food waste in commercial waste stream (from waste sort? Estimate? National data?: Orange County ~ 25%
  - Tons of commercial waste (non-residential minus multifamily) delivered to landfill:
    - 20,000 tons x 25% = 5,000 tons v. ~ 2,000 captured last FY = 28% capture rate
  - What’s realistic? 50% total = 3,500 tons or 1,500 more tons than now captured
How it works

- County staff works with businesses and contractor to site containers
- Business determines if post-consumer waste is included or pre-consumer only
- Business trains staff
- County staff trains businesses with cooperation from contractor on organics separation
- Contractor collects & provides monthly weights and feedback to businesses. Poor performers are corrected or removed from program
- Current cost: $80/ton: collection, hauling, composting & container provision & wash out.
Pictures of Collection Sites

8 yard dumpster through the wall at Harris–Teeter (note vent at top & gasket b/w dumpster & hood)
Inside grocery store food lift.

Store invested $15K in lift.

Payback est. 5 yrs in avoided tip fees.
Cart Collection Site at Restaurant
This simple bussing station at the ‘back of the house’ makes scraping plates easy and the dishwashers really appreciate it.
Cafeteria Food Waste separation makes it easy on dish washers – human & machine.
Contaminated Cart
Current and Future Issues

- Labor intensive to add new commercial establishments.
- Minimum of 2 tons/month.
- Budget now constrained and unable to expand without possible future financial support from businesses.
- Shift some waste collection to local farmers e.g. spent grain from breweries. Reliability issue.
- Consider local ordinance -- mandatory recycling for large generators (> 5tpm?)
- Orange County may evaluate collection of residential and other commercial organics including food in carts in 2016–2017.
Questions / Contact

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