

Food Scraps: Howard County's Adventures in Municipal Collections and Processing



Bureau of Environmental Services
Howard County, Maryland

Why Food Scraps?

- 23% of trash is compostable food scraps
- Trash disposal cost has risen by \$10 a ton
- Reduce garbage disposal use
- Returns nutrients to soil – Stormwater issues!
- Phone survey 63% likely to participate
- Reduce Greenhouse Gas emissions



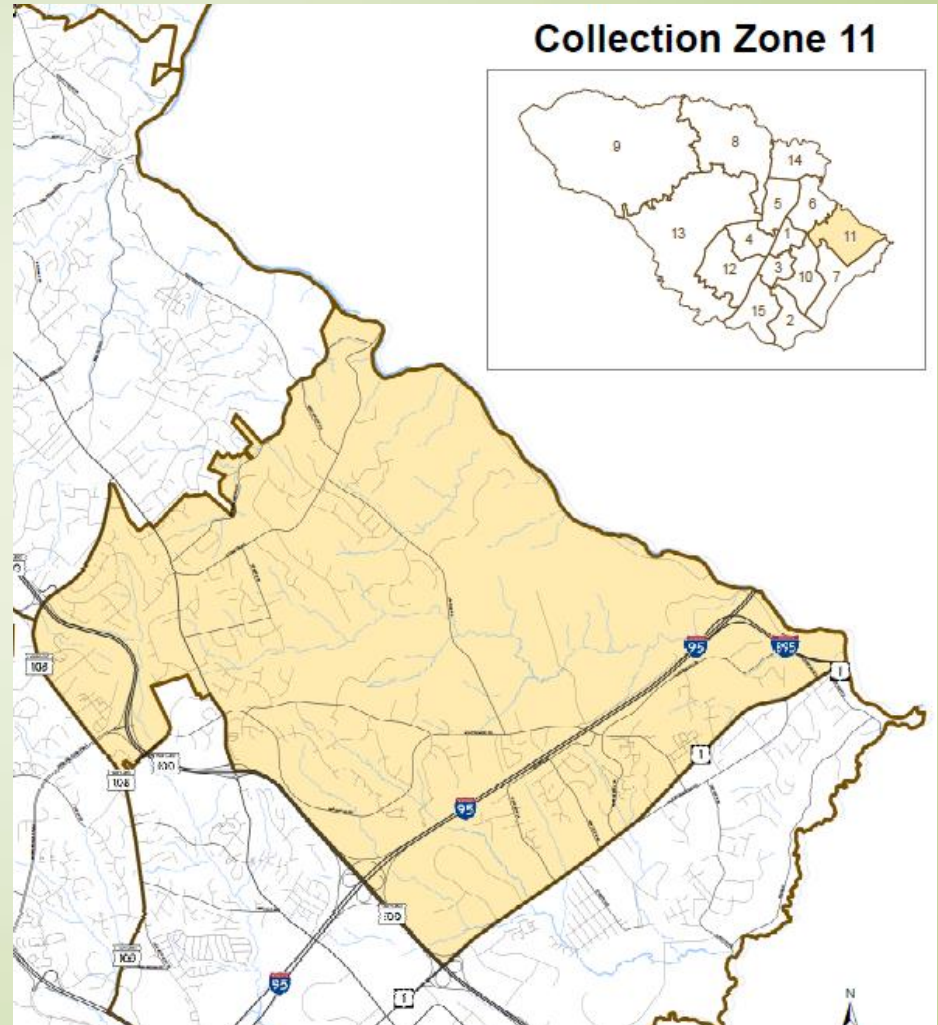
Pilot Programs – to date

- Mini- Pilot (34 homes)
 - August 2010 to January 2011
- Full Scale Pilot (1000+ homes)
 - September 2011 and on-going
- Pilot Processing facility – March 2013
- Expanding Full Scale Pilot – Fall 2013



Collections – currently

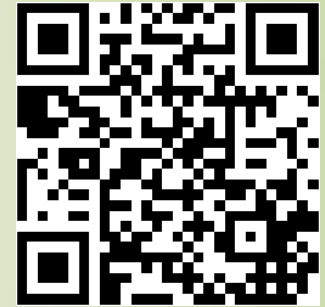
- 1000+ homes in Ellicott City & Elkridge
- Provided 35 gallon carts
- Option to use own container
- Year-round collection
- Have collected over 500 tons food scrap to date!





Collections - Next expansion

- 3,800 homes being offered the program
 - Mostly SFH, some townhouses
- Direct Mailings - 3
 - First one in homes 9/12/13. Next ~9/26/13
- Sign up options
 - Sign up via mail, phone or online
 - QR code
- Providing carts
 - Choice of size – 35gal or 65gal
 - Sample 3 gal compostable bags (kitchen)
 - Information brochure
 - Magnet
- Increased community outreach – demo carts & displays





Food Scrap Collection Program

[Disclaimer](#) [About](#)

Search Address in Food Scrap Collection Program

Begin typing your street name,

MAIN

then select it from the list:

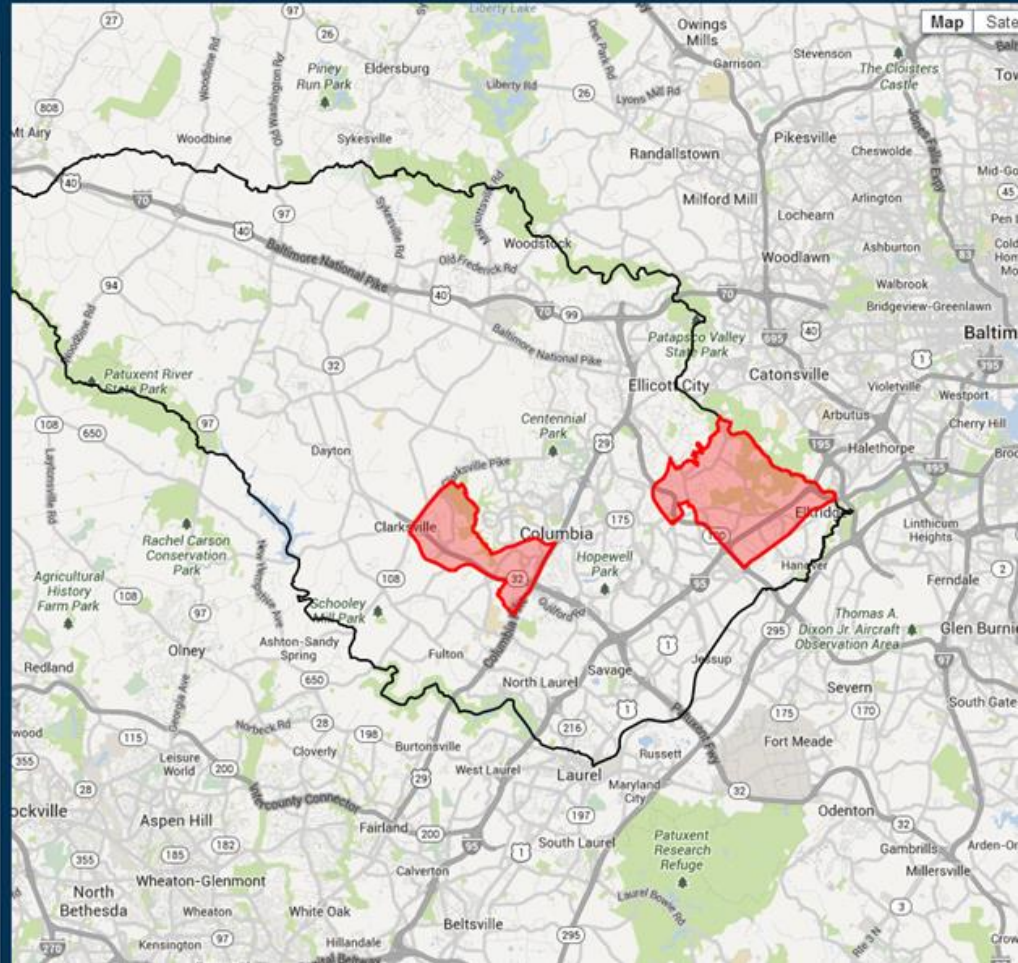
MAIN ST

Next

Select a Valid Address:

5681 MAIN ST

Search



Online signup



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Types of items collected:

Not accepted:

- Meat, fish, shellfish (including bones)
- Dairy products (cheese, butter, ice cream, etc.)
- Fats, oils, grease
- Facial tissues
- Styrofoam
- Pet waste
- Diapers

Accepted:

- Fruit and vegetable scraps (fresh or cooked)
- Bread, pasta, rice, grains, cereal, baked goods, etc.
- Nuts, beans, seeds (including shells/hulls)
- Coffee grounds, filters, tea bags (no foil or foil-backed products)
- Paper products (paper towels, napkins, paper plates)
- Pizza boxes (remove non-food items)
- Houseplants, cut flowers
- Chopsticks and popsicle sticks
- Grass, leaves, yard trim



Previous Surveys & Feedback

- How would you prefer to collect your material?
 - 56% County-provided container, 30% Biodegradable bags, 14% Container of choice
- How likely would you be to participate in a curbside food scrap program?
 - 63% said very likely



Focus Group – June 2013

- Food Scrap Collection:
 - Less numbers (i.e. 23%)
 - Like free stuff from the government (carts)
 - Use more environmental messaging
 - Less details
 - Don't connect with the terms Food Scrap or Organic
 - Promote yard trim collection in carts more



Focus Group – Secondary Questions

- Plastic Bags – why do you use them?
 - Convenience
 - Cost
 - Unsure about paper
- Bagging Grass clippings – why?
 - Habit
 - Aesthetics
 - Peer pressure – curb appeal
 - Very personal decision



Collections - next steps:

- Successfully expand into TRZ-12
- Continue to monitor weights, setouts and participation rates
- Identify next possible expansion area (or whole county?)
- Continue to educate residents in TRZ-11 and encourage more participation



Pilot Compost Facility



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Pilot Compost Facility

- Current facility is 1 acre
- Processing capacity – 7,000 cubic yards/year
 - On track to process 1,500 tons this year
- Covered windrows, negative aeration
- Construction began June 2012
- Material from curbside routes March 2013, ribbon cutting Earth Day 2013





Ribbon Cutting – April 20, 2013



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Pilot Compost Facility

- What needs are we meeting?
 - Reduce waste and increase recycling
- Yard Trim
 - Residential, Commercial, Government
- Food Scrap
 - Residential only
- Material Produced
 - Mulch, Compost, Topsoil, Specialty Mixes



Where is it?

- Alpha Ridge Landfill, Marriottsville MD
 - Existing operating site (County property, staff and equipment present)
 - Utilities exist (scales, water, sewer, electric, fiber optic)
 - Centrally located - shorter transportation distances
 - Existing wood waste operations



Issues worked through

- Design
 - Stormwater
 - Process Water
 - Technology Selection
 - Space
- Permits
 - State
 - County





Plastic bags



2 loader buckets per truck load



How to remove?
Buy hand?



Screening?



Next Steps....

- Continue to evaluate and monitor the ‘plastic bag issue’ – from a processing & product perspective
- Expand processing capacity – be able to compost County-wide collections
- In midst of planning full-scale site - possibly under roof?
- Design for the future – including possible new state requirements









What we've spent so far.....

- Curbside collection: **\$60,000**
 - Outreach (2 mailings + postage, promotional items, booklets): **\$14,000**
 - Containers (35 gal carts, IML's, assembly and delivery): **\$46,000**
 - *Budget for next expansion \$120,000*
- Pilot Compost Facility: **\$1,218,000**
 - Compost system (Covers, monitoring system, piping, biofilter, blowers etc...)
 - Equipment (grinder - \$418,000)
 - Construction (grading, paving, permits etc...)



Questions?

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www.HowardCountyRecycles.org

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