

Sowing the Future of Food Scraps: A 20 week pilot collection & composting program

Michigan Recycling Coalition
Learning from Food Scrap Collection Pilots
Annual Conference
Thursday, May 5, 2016





We're sowing the future of food scraps!

Feed farms and gardens, not landfills.



**Emmet County
Recycling**

We thank this establishment for participating in

**Emmet County Recycling's
Food Scraps Collection Pilot Project**

June-October 2015.

Who We Are: Emmet County by the Numbers

295,000 acres including:

- 190,000 acres forestland
- 95,000 acres farmland
- 10,000 acres inland water area
- 68 miles of Lake Michigan shoreline

22 government units:

- 2 cities
- 3 villages
- 16 townships
- Little Traverse Bay Bands of Odawa Indians Sovereign Nation

32,000 people

14,000 households



We operate the Emmet county Drop-off Center

- Solid Waste Transfer Station
- Dual Stream hub & spoke Material Recovery Facility
- Bulky Materials recycling (15 different items)
- 3 X yearly Household Chemical Drop-off
- 13 Public Recycling Drop-sites scattered
- Curbside Recycling for 60% of Residents in 5 municipalities
- Over 300 Businesses recycling weekly in our commercial curbside recycling collection program
- Yard waste composting and brush recycling site since 2005







Drop-off Center

Emmet County DPW

RECYCLING | COMPOSTING | WASTE TRANSFER









Yard Waste Compost Facility





Harbor Springs municipal yard waste collection drop-site



We contract with local haulers to bring in yard waste from the Harbor Springs drop-site



From the city of Petoskey in 2014 we started collecting yard waste- their bucket loader, our 40 yd. roll off bin and our driver live loading X 1 weekly service April thru November



Steaming hot windrow turning February 2016



Emmet county's finest black gold...



Slow process yard waste composting =
finished material rich in organic &
microbial content







Yard waste to valuable to burn or bury...

- Since 2008 we have composted over 25,000 cubic yards of yard waste
- Sold over 4,000 cubic yards of slow cooked finished and tested compost to local gardeners and landscapers
- With a plethora of carbon on site (leaves, evergreen mulch, woodchip mulch, hardwood mulch) and a facility that was ready to grow, we were in a unique position to tackle that next portion of the solid waste stream...
- At last years MRC conference when JD from RRS told us if Michigan wanted to really increase it's recycling rate it would go after organics in the waste stream... we took that on as a call-to-action!



An arranged marriage between source separated organics and commercial curbside collection service... hmmm

- Building upon our stellar base of commercial curbside recycling customers, many of which were food service businesses and institutions we identified that next low-hanging fruit to be commercial food scraps comprising well over 30% of the waste stream
- Knowing our customer base we identified several restaurants and flower shops that were ready to take on that next waste diversion opportunity...





Hoteliers Happy With Recycling

*"We get it to the curb and
Emmet County Recycling does the rest."*

*—David Marvin
Stafford's Hospitality*



Emmet County
Recycling

Call
231-348-0640
to learn how easy
recycling can be!





Restaurateurs Rave About Recycling

"We love the curbside service, especially the wheeled carts. They're easy to maneuver and they look good."

—Mary Keedy

"Recycling is a no-brainer with curbside collection. It just makes sense—it's cheaper to recycle it!"

—Bob Keedy

Bob and Mary are the proprietors of Roast & Toast Coffee & Cafe and are partners in the City Park Grill.



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Our goal was then to:

Further organics diversion and expand our composting operations by piloting a commercial food scrap collection in the form of a 20 week pilot program.

A small, nimble and easily manageable pilot with the ability to:

- *test our education and outreach efforts to participating businesses*
- *test the effectiveness of commercial food scrap collection service*
- *test our ability to integrate food scraps into our existent yard waste composting operations*



Feeding Farms & Gardens, Not Landfills

- The 20-week pilot food scrap collection program included 20 restaurants and flower shops in Petoskey and Harbor Springs.
- We estimated that commercial food waste comprised 30% of the waste stream going to our local landfill
- Food scraps are resources from which restaurants can capture value by using reduction techniques, resources for feeding livestock, and, resources to compost to build the soil of local farms and gardens.



Feasibility study conducted by RRS



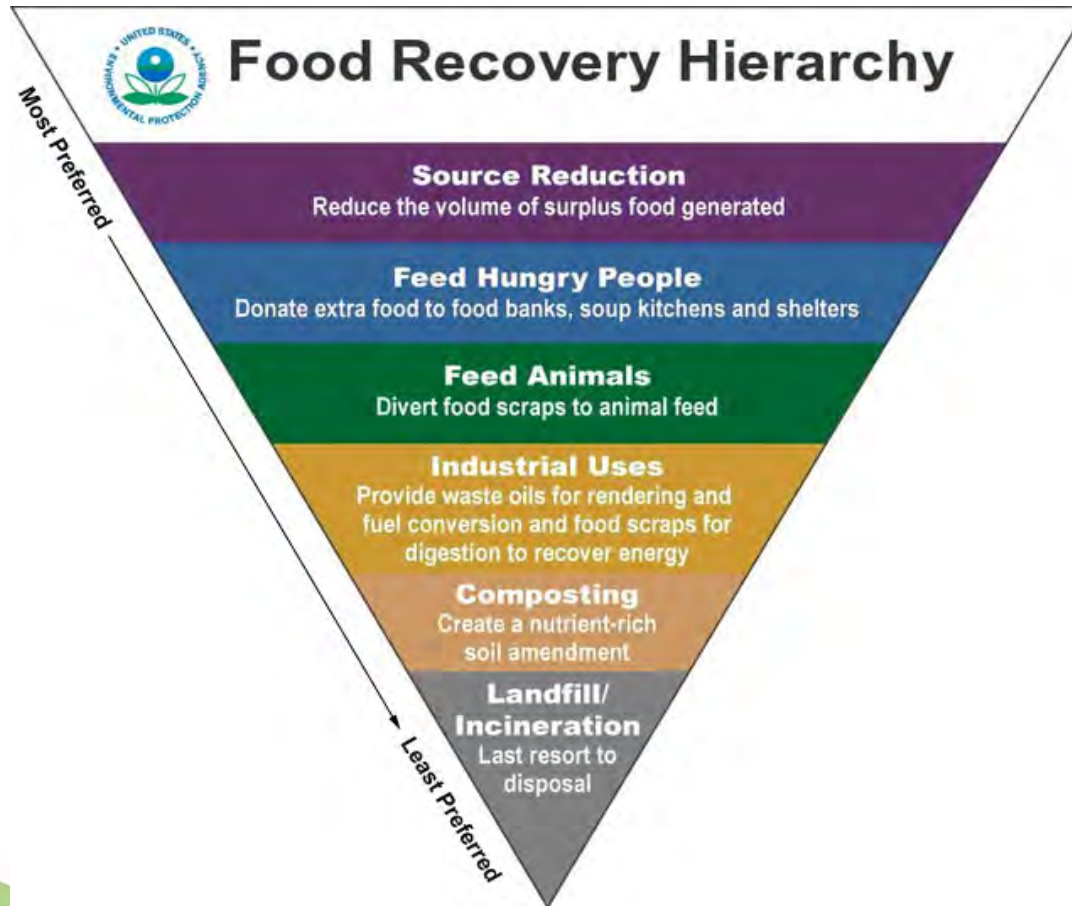
Food Waste Collection Feasibility Study

Emmet County
Department of Public Works
March, 2015

RRS 



The BIG test: how to keep food waste reduction at the forefront. By using the EPA's Food Recovery Hierarchy as our guiding light...



Casting a wide net but not too wide...

- We contacted over 50 of our commercial recycling customers and asked them if they were interested in participating in a *free* food and flower scrap collection program. We hoped and planned for 30 businesses each with two carts, 25 were initially interested, and we concluded the pilot after 20 weeks with 20 successful participants.





Food Scrap Pilot "How To" Checklist

At Your Initial Meeting With Us

- Determine, together, where you will set your carts out for us to empty.
For this pilot, we can only provide two 64-gallon carts per participating business. Carts will be mechanically tipped into our truck, then rinsed and returned to the agreed upon set-out location. Materials are collected loose: no plastic bags or liners (not even if they say they are "biodegradable" or "compostable.")
- Determine, together, which days your carts will be serviced.
- Determine, together, how many of our various signs, labels and handouts you need.
- ✓ We will provide initial training at this time.
- ✓ We will answer your initial questions.

In Preparation

- Decide what containers you will use for internal collection.
Some possibilities include using 5-gallon buckets or "slim jim" containers.
- Put labels (provided) on each container and/or signs on the wall above each.
- Train any staff who weren't part of the initial training.

During the Pilot

- Put collected food scraps in the carts.
- Set the carts out at the designated location by 7:00 a.m. on collection days.
- Continue training as needed.
- Contact Emmet County Recycling at Recycle@EmmetCounty.org or 231-348-0640 with any questions or concerns that arise.

We will be very curious to hear about your experience during and after the pilot, so please, be in touch!

This pilot is a project of



**Emmet County
Recycling**

Questions?
Call 231-348-0640





Food Scraps for Composting Only

Yes! (both raw and cooked)

Fruits and vegetables

Meat, poultry, fish
and seafood including shells

Bones

Dairy products

Egg shells

Coffee grounds,
coffee filters and tea bags

Baked goods, pasta

Baking ingredients

Beans, grains, nuts, nutshells

Flowers and greenery

Paper napkins and paper
towels

Soiled paper

Pizza box liners

This pilot is a project of



Questions?
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NO

No plastic of any kind

*— not even if it says it is "biodegradable"
or "compostable"*

— not even plastic coated paper

No plate scrapings

No twist ties, twine, rubber bands or strapping

No stickers or labels

No liquid oil or grease

No cigarette butts

No candles, corks, wrappers or toothpicks

No sauce packets or containers





Food Scraps for Composting Only

Feed farms and gardens, not landfills!





Our modified 30 yd drop-site bin, older model hook lift truck, new Perkins cane lift and the purchase of sixty new 64 gallon Cascade curbside organics carts comprised our collection infrastructure



For the twenty week pilot
beginning 6/2015 thru 10/2015
we collected 2 times a week
every Tuesday and Friday
morning





04153 11848

04153 11841

04153 11870

0125290

WM
MANAGEMENT

Central County Recycling
www.centralcountyrecycling.com

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www.centralcountyrecycling.com

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Servicing carts in tight alleyways...







We're sowing the future
of food scraps!





Truck equipped with 100 gallon water tank and spray hose, to rinse carts after every tip...



2015 Food Waste Collection Pilot Program Participants

Independance Village of Petoskey
Flowers from Sky's the Limit
Monarch
Julienne Tomatoes
City Park Grill
American Spoon Gelato Cafe
Roast N Toast
Petoskey Bay View Country Club
Little Traverse Bay Golf Club & Restaurant
Pontius Flower Shop
Tom's Mom's Cookies
New York Restaurant
Tap 30
Manna Food Project
Harbor Springs IGA
Stafford's Perry Hotel
American Spoon Production Facilities
Friendship Center & Council on Aging
Chandler's & Symon's General Store
Bay Bluffs
Gurney's



Emmet County
Recycling



Participating Businesses

- American Spoon Gelato Café **1,088 Gallons**
- American Spoon Production Facilities **832 Gallons**
- Bay Bluffs **1,792 Gallons**
- **City Park Grill 4,376 Gallons**
- Flowers from Sky's the Limit **3,584 Gallons**
- Friendship Center & Council on Aging **1,536 Gallons**
- Gurney's **1,472 Gallons**
- Harbor Springs IGA **2,880 Gallons**
- Independence Village of Petoskey **960 Gallons**
- Julienne Tomatoes **1,024 Gallons**



Participating Businesses Cont.

- Little Traverse Bay Golf Club & Restaurant **704 Gallons**
- Manna Food Project **640 Gallons**
- Monarch **3,776 Gallons**
- New York Restaurant **1,408 Gallons**
- Petoskey-Bay View Country Club **1,216 Gallons**
- **Pontius Flower Shop 5,440 Gallons**
- Roast N Toast **2,176 Gallons**
- Stafford's Perry Hotel **896 Gallons**
- TAP 30 **896 Gallons**
- Tom's Mom's Cookies **768 Gallons**



A.R Pontius Flower Shop- Harbor Springs

Jamie Platte –

Our highest volume winner!

- **5,440 gallons** of floral scrap collected
 - **85** -64 gallon curbside carts
 - **27** cubic yards of flower scrap

“ Between our recycling and flower scrap composting with Emmet county we have nearly eliminated all garbage.”



Exceptional Harbor Springs area participants Continued:

- **Harbor Springs IGA-** our only grocery store participant. Owners, Dennis and Suzanne were so enthusiastic and requested an additional cart early on. At the half way point of the pilot they had no problems with contamination. Suzanne commented she couldn't wait get some of Emmet county's black gold for her garden beds this Fall. When asked what they liked most about the pilot Suzanne commented,
"It was a total no-brainer, I didn't have to think about separating meat from vegetable scrap, cooked from raw, it was all just food and paper."





Sowing the Future of Food Scraps Food Scraps Collection and Composting Pilot 2015

Feeding Farms & Gardens, Not Landfills

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Harbor Springs IGA

2,880 Gallons of Food Scrap
Recovered

45- 64 Gallon Curbside Carts

Thanks for your participation!

Overall Program Totals:

90,000 Pounds
of Food and Floral
Scrap Recovered

145 Yards of
Food and Floral
Scraps Recovered

590 64-Gallon
Curbside Carts



Gurney's of Harbor Springs

Gurney's generated **1,472 gallons** of sandwich scraps = **23- 64 gallon carts** worth of food scraps July - October



- **The New York Restaurant Harbor Springs:** Owner, chef City Council member Matt Bugera jumped on board immediately when asked to participate. His back of house staff was fully on board. Note: prep station with food scrap bucket inside trash bin. Confessed he needs to work on front of house staff to get their buy-in..



Bay Bluffs- Emmet County Adult Care Facility



Bay Bluffs started 7/20 and immediately saw the need for 3 carts! **1,792 gallons** of prep and staff salad bar food scraps were collected for composting.









Sowing the Future of Food Scraps
Food Scraps Collection and Composting Pilot 2015

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Bay Bluffs

1,792 Gallons of Food Scrap
Recovered

**28 Full 64 Gallon Curbside
Carts**

Thanks for your participation!



**Overall Program
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90,000 Pounds
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**591 Full 64-
Gallon Curbside
Carts**



Petoskey Bay View Country Club



October's Petoskey Chamber of Commerce's business after hours was hosted by PBVCC and we were able to sponsor and highlight our food scraps program as part of that evening.



This season PBVCC has diverted 1,216 Gallons of food scraps.



City Park Grill

- Overall largest volume from any business with nearly 15 cubic yards of paper and coffee grounds diverted from the waste stream.
- Food and paper scrap diversion has made a significant contribution to the reduction of their total waste stream this season.
- They also represent a different piece of the Food Recovery Hierarchy in that the majority of their pre-consumer pre scraps were going to a local Pig farmer. Feeding animals first with preferred food scraps before being made into compost.



Council on Aging- Friendship Center of Emmet County

- **Friendship Center of Emmet County** provides freshly prepared in house lunches daily M-F for 30-100 elders. Whatever prepared foods are leftover from lunch are frozen for that weeks **meals on wheels** entrees. They represent the top two tiers of the food recovery pyramid in source reduction and feeding people.
- The Friendship Center of two staff and lots of volunteers prepare 150-160 meals on wheels entrees daily!
- Here Dorothy Sabin, Flash Shepard and Director Cindy Helton demonstrate what does go into their (lined) internal collection bins.
- They have diverted **1,536 Gallons** of food scraps from their waste stream. Staff and volunteers are enthusiastic!!





Sowing the Future of Food Scraps
Food Scraps Collection and Composting Pilot 2015

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Friendship Center & Council on Aging

1,536 Gallons of Food Scrap Recovered

24 Full 64 Gallon Curbside Carts

Thanks for your participation!

Overall Program Totals:

90,000 Pounds of Food and Floral Scrap Recovered

145 Yards of Food and Floral Scraps Recovered

591 Full 64-Gallon Curbside Carts



Gurney's typical cart, bread ends and sandwich scraps and Tom's Moms Cookies treats for the driver!

Gurneys started 7/30, uses both carts and has recovered 4cy of food scraps AND signed up for curbside after...



Tom's Moms Cookies food scraps consist of egg shells and paper towels they have just one cart



Stafford's Perry Hotel -H.O Rose Room



Kitchen internal collection set-up



Enthusiastic staff making food scrap recycling happen



Flower's From Sky's the Limit

Recycling X 2 thru their Flowers for Friends flower recycling program and recovering all plant and flower scraps with our composting program. They also have offered their alcove for the food scrap carts of Tap 30.



As of 9/4 Sky's the Limit has diverted over **11 cubic yards** of flower and plant waste from the waste stream...





Little Traverse Township participants



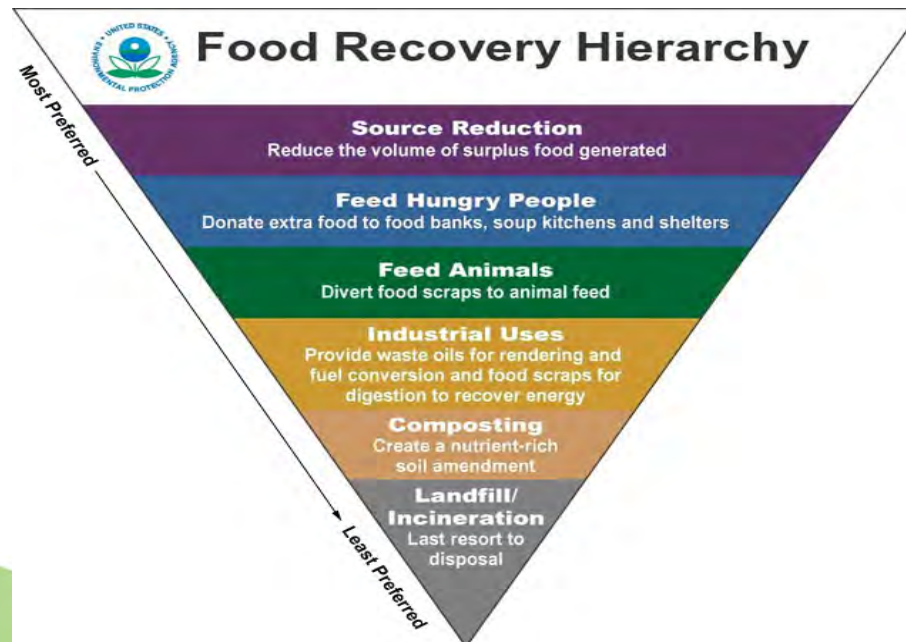
Earl checking carts
at Little Traverse
Bay Golf Club –

Winner of Food
Scrap carts-with-
the-best-view-of
Little Traverse Bay



Little Traverse Township's **Star** participant:

- **Manna Food Project** As our only food bank participant the food they have rescued, recovered and fed to people, compliments the EPA's food recovery hierarchy. *Packaging continues to be an obstacle to total food recovery.*
- After exit interview with Deb Noblett, ED, **we identified dented cans and other damaged packaging now as an opportunity to divert.** A change in infrastructure, volunteer tasks and a system, dented cans food and steel packaging can now be recovered...



Project totals

90,000 Pounds of Food and Floral Scrap Recovered

150 Yards of Food and Floral Scraps Recovered

In the peak of the summer on August 4th we collected **3,880lbs** or **6.5 cubic yards** in one day



Highlights of program based on exit interviews

- Clean, convenient and comprehensive
- Even with small volumes, they saved on small things like trash liners
- Food scrap program is easier than recycling
- Twice a week service worked well-especially for flower shops because they receive deliveries two days a week
- “It’s the right thing to do”
- Can see how their prep cooks are preparing food, to help correct bad habits
- We would take overflow
- Driver was friendly, courteous and helpful
- Education materials were helpful
- Helped identify further waste stream diversion opportunities
- Many people were already donating to food pantries or animals



Obstacles based on Exit Interviews

- Time, space and staff
- Once obstacles were assessed, we were able to overcome those barriers
- Hard to identify impact on waste stream



Yard Waste windrows and one mixed leaf and food scrap windrow Fall 2015...



On the Composting Operations end of things...



Every Tuesday and Friday between 11-12 the seagulls anxiously await Earl's arrival... o yes they know...

The front part of the pile is the 6 yards of carbon "nest of leaves" awaiting the arrival of the food scraps truck...





We're sowing the future
of food scraps!
ready to go compost
from the heart of the community
www.EmmettRecycling.org

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MISSISSIPPI
12W 4377

HYDE
TRUCK CO
INC.



Truck tipping on Tuesday 8/11/15 **3,860 lbs** of food and flower scraps



Earl tipping 81115.mp4



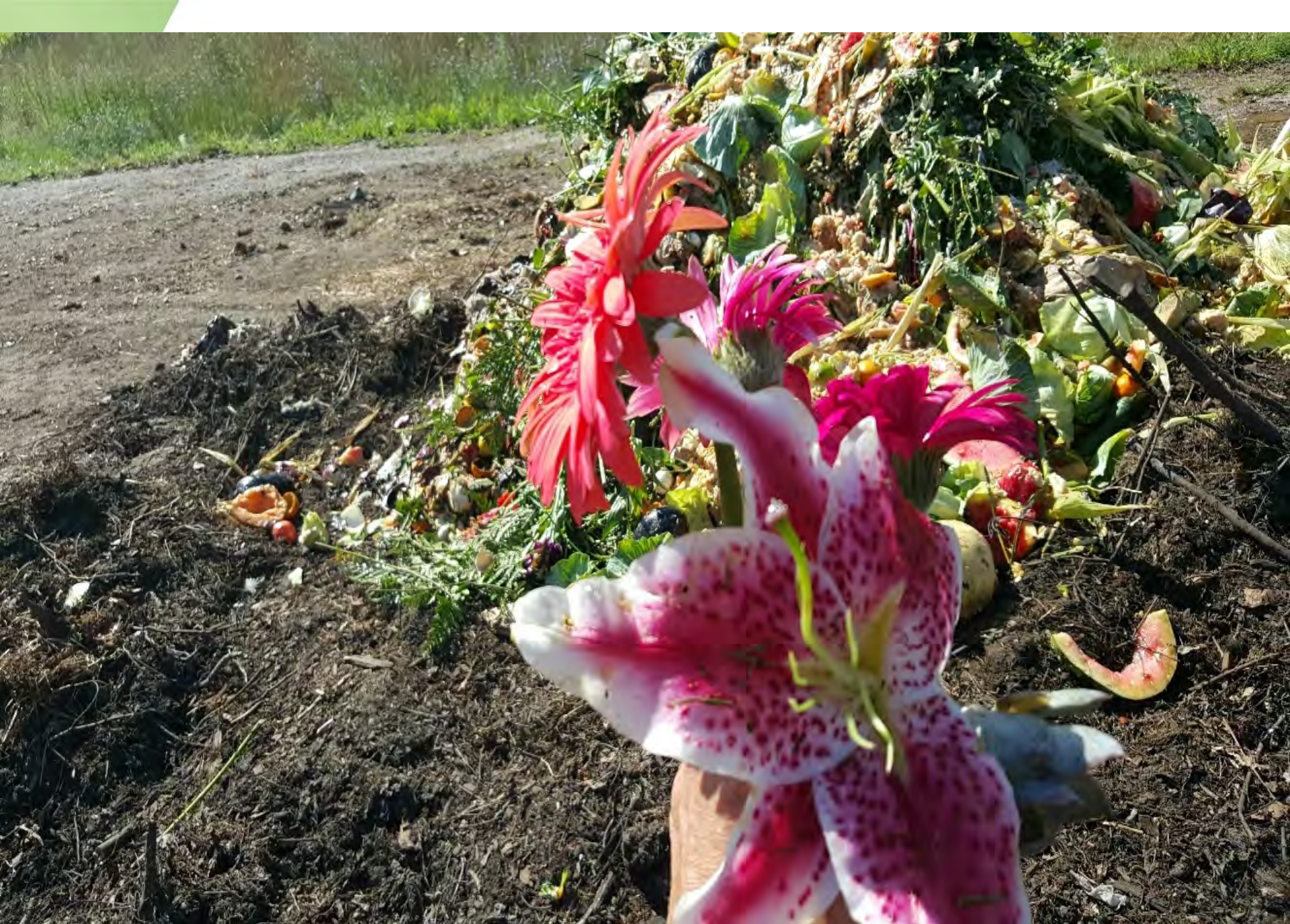
Tipping...



Tipped pile, rinsing truck...









Compost Operator covering...



More covering with carbon...





Conclusions & some recommendations:

- Some businesses would gladly pay. Others maybe not if they are getting the service for free, return to working with chicken and pig farmers
- The majority of restaurants in the pilot only need one cart.
- Grocery Stores produce a large volume of food scraps from their deli, bakery and produce departments. Willing to pay and great source of volume for a future pilot phase 2- Spring thru Fall 2016.
- It was prudent of us to not accept plate scrapings unless the restaurant can absolutely assure no contamination.
- If we accepted plate scrapings (post-consumer) from restaurants we would get more from each restaurant, assisting them with greater diversion from the waste stream. But, we would also get more contamination (what we don't want).



Recommendations

- Propose to run a phase two pilot for Spring thru Fall of 2016.
- Offering a flat per cart per collection fee at twice a week service with cost savings available with multiple carts
- Utilization of all 60 of our Cascade carts- our entire fleet would need to be in use for the program to be most cost effective
- Promotion and implementation in the largest generators who were not chosen to participate in pilot phase one (RRS recommendations) in our larger chain grocery stores-Olsen's, D&W, Aldi's, Walmart & Meijers, McClaren Northern Michigan, Odawa Casino, our community college and perhaps one of our local public schools
- Exit interviews with this year's pilot program participants will reveal more about businesses attitudes toward a service fee for a future integrated collection program and addressing waste stream composition.



Where to now...

- We just launched Phase two of our commercial food waste collection on Tuesday May 5th was first service day for 2016 we will run until the snow flies... November? With intentions of figuring out food scrap collection in winter...
- The Odawa Casino and McLaren Northern Michigan and a local wood fired pizza truck are our newest customers. The first two representing our largest volume customers
- In the month of May we hope to add on several small volume restaurants, a michigan chain grocery store



COMPOST



be loyal to your soil.

*International Compost Awareness Week
May 3rd-9th, 2015*



Keeping the Green in Northern Michigan





Emmet County Recycling

Lindsey Walker

Emmet County Dept. Public Works

lwalker@emmetcounty.org

231 348-0640

www.EmmetRecycling.org

