AGENDA

- Posters
- Presentations
  - Office of Campus Sustainability
  - Waste Reduction & Recycling Office
  - Michigan Dining
  - Planet Blue Ambassador Program
- Q & A
- Posters
2014 WASTE
GOAL: REDUCE WASTE SENT TO LANDFILL BY 40% BASED ON 2006 BASELINE DATA BY 2025.
SINCE 2006 BASELINE

- Total Waste (despite increase in staff and space)
- Total Recycled
- Percentage of Waste Recycled: from 26% to 29%
- Composted food waste: 49 tons to 351 tons!
CHALLENGES

- Diverse campus buildings, uses, population
- Growing campus
- Determining infrastructure needs for program development and expansion

OPPORTUNITIES

- Food waste reduction at source
- Food waste composting
- Reducing office waste at the source
- Overcome barriers to consistency of signage, awareness and ease of recycling
2013 Business & Finance Strategic Initiative

Purpose:
- baseline data for detailed sorts and packaging waste analysis
- Evaluate chain input (i.e. ordering decisions and procedures)

2 admin buildings, 3 sorts each

Building tours & interviews of building & admin staff

Project Team: OCS, WRRO & Procurement Services

<table>
<thead>
<tr>
<th></th>
<th>LSA</th>
<th>Beyster</th>
</tr>
</thead>
<tbody>
<tr>
<td>workstations</td>
<td>824</td>
<td>902</td>
</tr>
<tr>
<td>sq. ft.</td>
<td>67,408</td>
<td>144,535</td>
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<tr>
<td>rooms</td>
<td>More admin &amp; conference</td>
<td>More classrooms, labs &amp; student lounge areas</td>
</tr>
<tr>
<td>signage</td>
<td>Consistent bin labeling and accompanying signage</td>
<td>Signage absent, many labels outdated</td>
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Figure 1: Percentage Composition by Weight

Total LSA Trash:
- Landfill: 17%
- Bottles and Cans: 3%
- Recyclable Paper: 23%
- Non-Recyclable Containers: 5%
- Other: 13%
- Compost: 35%

Total LSA Recycling:
- Recyclable Containers: 1%
- Recyclable Paper: 93%
- Other: 2%
- Landfill: 2%
- Bottles and Cans: 2%

Total Beyster Trash:
- Landfill: 15%
- Bottles and Cans: 6%
- Recyclable Paper: 15%
- Recyclable Containers: 6%
- Other: 14%
- Compost: 40%
- Non-Recyclable Containers: 4%

Total Beyster Recycling:
- Recyclable Containers: 2%
- Non-Recyclable Containers: 3%
- Compost: 4%
- Other: 2%
- Landfill: 5%
- Bottles and Cans: 5%
37% of trash stream is suitable for compost
22% of waste was incorrectly placed
Most common contaminants in trash were paper, bottles and cans
Importance of signage
  Recycling streams averaged 7% contamination rate
    • Beyster: 15%
    • LSA: 5%
Education of staff on source-separate programs
Sustainable purchasing practices
2014 B & F strategic initiative to make signage more consistent

Education / Outreach

Growing Data supporting Composting of food waste

- 37% of trash stream suitable for composting in buildings without food service
- Composting options being evaluated; many considerations including capital and operation expenses.
- Strategy for rolling out composting program highlighting need for accompanying education program, signage, etc.
U-M OFFICE OF WASTE REDUCTION AND RECYCLING

Sustainability Town Hall
October 8, 2014

MICHIGAN RECYCLES!
WHAT IS COMPOSTING?

- Natural process by which organic materials (e.g. food waste, yard waste, plants, etc.) decompose into a nutrient-rich substance known as compost
- Different from biodegradation and decomposition
- 3 types: aerobic, anaerobic, vermic
Composting is purposefully managed, while Decomposition is not.
COMPOSTABLE VS. BIODEGRADABLE

- Compostable
  - 60-90% of product will break down within 180 days
  - 90% of product breaks down into tiny pieces
  - when it breaks down will not leave metals toxic to the soil

- Biodegradable
  - breaks down by natural processes over a period of time (at some point eventually it will break down)
3 TYPES: AEROBIC, ANAEROBIC, VERMIC

Aerobic: matter broken down by naturally-occurring, oxygen-needing bacteria, must be stirred up to ensure all bacteria has access to oxygen.

Anaerobic: matter broken down by anaerobic bacteria, produces methane that can be used as a fuel source.

Vermic: aerobic, relies more on worms than bacteria. (bin with vents, shredded paper, worms, and organic material)
CURRENT COMPOSTING PROGRAM

- Grounds composes all yard waste generated, an aerobic composting program
- The finished compost is used throughout campus
- We’ve been composting pre-consumer food waste since 1997
- Grounds produces all of the compost campus needs, we don’t buy any
- Student Sustainability Initiative Zero Waste Program
HOW IS OUR WASTE COMPOSTED?

- WeCare Organics
- Collected from loading docks, dumped at City’s compost site
- Formed into long piles (windrows), begins to aerobically compost
- Finished compost is tested to assess its potential as a fertilizer
WHY CONTAMINATION IS IMPORTANT

- Compostables don’t get sorted in the way recyclables do.
- Any contamination stays through the whole process, you end up with compost that has trash in it.
- Difficult when campus community members are the ones with the responsibility to dispose properly.
MICHIGAN DINING
AND WASTE REDUCTION
INITIATIVES
FLOW OF FOOD

- Purchasing
- Storage
- Production
- Service
- Post Production
PURCHASING

- Local Produce when available
- Standards for receiving food
- Tracking historical data to order properly, produce at the right amounts and reduce waste
- Reduce number of Deliveries
Sheet to Shelf inventory

Recycling starts here (cardboard, pallets, etc.)

Smart Temps - improves food safety, reduces loss

investing on expansion
PRODUCTION

- Record Keeping- can help predict estimated usage
  - tracking helps us understand customer preferences
- Pre-consumer waste collection
- More recycling (cans, containers, cardboard, etc.)
- Proper portioning and following the recipe
- Trash sort
SERVICE

- Temperature monitoring reduces waste
- Signage for ingredients and allergens
- Smaller portions/ Plated dining
- Trayless dining
- Cooking oil recovery
POST PRODUCTION

- Repurposing food into next meal
- Food Recovery Network/ Food Gatherers
- FRN Certification
- Post consumer Composting
- Pulpers
Single Stream Recycling

- Easier for everyone
- Event set-up versus reality
- Potential to change “trash” label to “landfill”
- Developing a Recycle Label
RESPONSIBLE RENOVATIONS

- Energy Star equipment
- Recycle during renovations
- ASHRAE standards are applied (American Society of Heating, Refrigeration, and Air Conditioning Engineers)
- Carpet made from recycled material
- Recycled items wherever we can (South Quad has chairs made out of recycled coke bottles)
Student Life: water bottles handed out to Freshmen

Goal: encourage change a behavior and reduce bottled water usage

All new renovations have refill station

Many retrofits to switch to refill station

Over 140 within Michigan Dining

Usage tracking as education
GOALS FOR THE UPCOMING YEAR

- Pre-consumer composting in all units
- Planet Blue Ambassador program
- Workplace Certification
- Food Recovery Network/ Food Gatherers
- Smart Temps in all units
WHAT CAN YOU DO?

- Take only what you can eat
- Vote with your mouth
- Pay attention to recycling
- Read the labels
- Get involved
To embrace University-wide efforts and become a campus leader in sustainability by involving, educating, and changing behavior of students and staff.
ambassadors

- current stats
- upcoming improvements
- upcoming events & resources

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PBA Program Coordinator
Graham Sustainability Institute
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Ambassador Program

- Over 1600 Certified
- Over 41k pledges made
- Over 21k pledges completed

monthly newsletters
events
Updates

• Dashboard Overhaul
  – impact data
  – competitions
• Training
  – updated information
  – new videos and interactives
• Additional
  – In person training
  – Ongoing training & discussion hours
You have saved:

- 152 lbs CO2 emissions
- 348 lbs of waste
- 68 gal. water

waste warriors 2014

Planet Blue Ambassadors video

water
Join us! October 17th Noon to 1pm.

Webinar: U-M Sustainability Discussion Guide

Join us for a presentation from the sustainability discussion experts at the Northwest Earth Institute on how to engage others in sustainability and become a sustainable leader on campus.

Lead the conversation.
Inspire action.

partnered with:

Northwest Earth Institute
DISCOVER CHANGE, TOGETHER