U of MN Recycling Program

- Recycling Rates over past years have hovered between 35% - 41%
- Students advocated for program in 1981 – started as one paper stream in one building
- Now a multi-stream program in every building on campus
- Currently:
  - Updating infrastructure
  - Expanding organic recycling

Resource Recovery Pilot

- College of Veterinary Medicine

Program Overview:
- Change Custodial Procedures
- Collect Organic Wastes
- Expand Laboratory Recycling
- Implement Centralized Collection

Custodial Changes

- Separate Cleaning from Material Collection
- Develop Material Collection Routes
  - Trash/Organic
  - Recycling
- Benefits
  - Cleaner Buildings
  - Increased Recycling Recovery
  - Reduced Costs

Organic Waste Collection

- Restrooms Paper Towels
- Food Wastes
- Benefits
  - Significant Reduction in Trash
  - Organics are ~25% of Waste Stream
  - Cost Savings of $40 per ton
  - Savings of ~$90,000 annually
Lab Recycling Expansion

- Polypropylene Packaging
  - 30 Tons/year of polypropylene generated
- Improving Glass Recycling
- Capturing Scientific Catalogs
- Education
- Setting up infrastructure

Maximizing Recovery

- Occupant Education and Awareness
  - Expand Recycling to New Materials
  - Orientations for Each Department
  - Centralized Waste Collection at Quad Locations
- Benefits
  - Increased Recovery of Recyclable Materials
  - Disposal Savings of $55 per ton
  - Revenues $80 per ton
  - Reduces Operational Costs
  - More Efficient Custodial Collection Procedures

Desk-side Recycling Options

- Place “wet” organic waste in the central quad bucket
- Place “dry” trash in desk-side waste container
- Place “Recyclables” in desk-side recycling container.
- Individuals place trash and recyclables into the central quad containers
- Custodians collect trash and recyclables from the central quad containers
- Alternative desk-side container options are available

Container Development

Left: Old version of organic recycling with handle and clip
Right: Hook on side of bucket, label away to clean

RRP: Organic Recycling Poster

Developed in a general poster for any university building
Printed on recycled paper & uses re-used plastic sheets to keep clean

Organic Materials (Compostable Items)
Trash Only
- Tea Bags
- Coffee Grounds
- Placeware Paper
- Microwave Popcorn
- Pencil Shavings
- Tea Bag Wrappers
- Paper Beverage Cartons

CORN-BASED (PLA)
- Brightly-Colored Compostable
- INCLUDES EGGS, CHEESE, MEAT & BONES

Trash Only
- Tissues
- Paper Towels
- CORN-BASED (PLA)
Survey Results

The recycling program released the resource recovery pilot survey in December of 2010 and we received 31% of surveys back out of the 100 we sent out.

After the educational presentations and the implementation of the Resource Recovery Pilot do you recycle:

- More 58.06%
- About the same 29.03%
- Less 03.22%
- No Response 03.22%

Which word best reflects your attitude towards recycling before and after the implementation of the resource recovery pilot?

<table>
<thead>
<tr>
<th>BEFORE</th>
<th>AFTER</th>
</tr>
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<tbody>
<tr>
<td>Positive</td>
<td>12.90%</td>
</tr>
<tr>
<td>Neutral</td>
<td>74.19%</td>
</tr>
<tr>
<td>Negative</td>
<td>12.90%</td>
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</tbody>
</table>

Waste Analysis

Communicate

- Key to Successful Program – involvement of stakeholders

Communication

- Successes
  - Custodial education
  - Limited contamination
- Areas to Improve
  - Attendance at presentations
  - Student interaction
  - Efficiency of Collection
  - Materials we can collect

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Continuing Education Conference Center

- Barriers
  - Continuously changing people
  - Non-Compostable placewear
  - Outside Contaminants
  - Container size for changing numbers
  - Equipment Expenses
- Solutions
  - Large posters
  - Switch to compostable materials
  - Educational slide on monitors
  - Container placement
  - Custodial changes
- Improvements
  - All compostable products in building
  - Further Education (announcements)
  - Improved container placement

CECC Organic Recycling Poster

Developed for the Continuing Education Conference Center – Material Specific
- Barriers
  - Continuously changing people
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ORGANIC RECYCLING

- Organic Materials (Compostable Items)
  - Trash Only
  - ORGANIC RECYCLING
  - A Cooperative effort between University Dining Services, FM Team, One Custodians, Wrappers, Creamer & Straws, Sugar & Tea packets
  - Corn Based (PLA)
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Organic Recycling Event Containers

Right: Green brute barrel for larger events.
Left: Green lid for Quad container (smaller or fancier events).

Zero Waste Events

- Working with University Dining Service
  - Identify locations with high frequency of events
  - Create “pretty” containers
  - Identify appropriate signage
  - Purchasing materials needed
- Website Development
  - Worked with co-workers to edit & develop informational documents for zero-waste events
  - Provide assistance and containers for non-UDS event requests

Questions or Comments?