

Cafeteria Waste Reduction and Recycling Project

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Town of Wellesley
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Town of Wellesley
SUSTAINABLE ENERGY COMMITTEE

Overview

- Why change cafeteria practices?
- Assessment
- Pilot
- Evaluation
- Custodians's role
- Possible Roll-out



Food Waste in the United States (40 mil. tons/yr)

- Could fill a football stadium each day (Bloom, 2011)
- Could feed the world's one billion malnourished people each year (Stuart, 2015)
- **Wastes money**
- **Harms the environment**



Food Waste and Climate Change



Landfills



Plastics in the Environment

- Not biodegradable
- Harmful to wildlife
- Harmful human health



Opportunities to...

Help the Environment



Save Money

Feed Hungry People

A Town-wide Collaborative Effort

- Growing interest at Bates and throughout Wellesley
- SEC, 3R Working Group, Green Collaborative
- Food Services, FMD
- DPW, BOH, RDF
- EPA, DEP



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USEPA Food Recovery Challenge and WasteWise

- Bates is the first K12 School in New England to join FRC
- Bates also joined WasteWise to include non-food waste



Assessment: Sorting into Eight Types of Waste



Sharing Items



Animal Feed



Simple Compost



Complex Compost



Recycle



Trash



Liquid



Napkin Packets



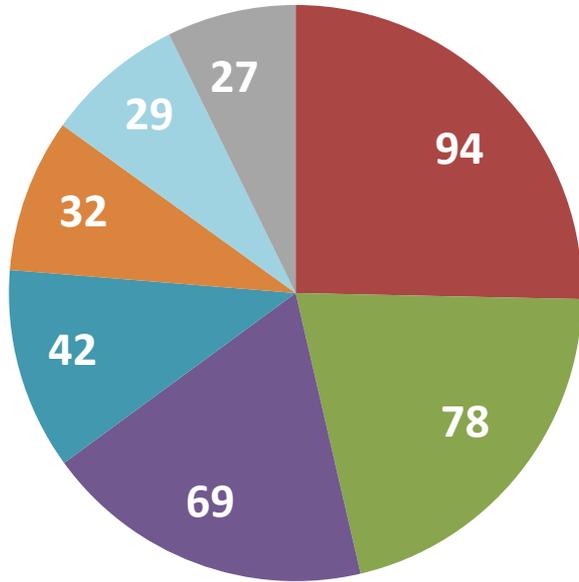


Assessment

- 1 week
- 3 lunch periods/day
- 10 volunteers/day
- 395 Cooperative kids!

Assessment: Weekly Waste Generation

371 lbs./week



Waste	Weight <i>L</i> <i>lbs. per week</i>	%
Liquids	94	25
Complex Compost	78	21
Animal Feed	69	19
Recyclables	42	11
Donations	32	9
Simple Compost	29	8
Trash	27	7

Pilot: Support from FMD, WPS Administration, and Food Services



Lunch Recycling at Bates

Step 1:



Step 2:



Step 3:



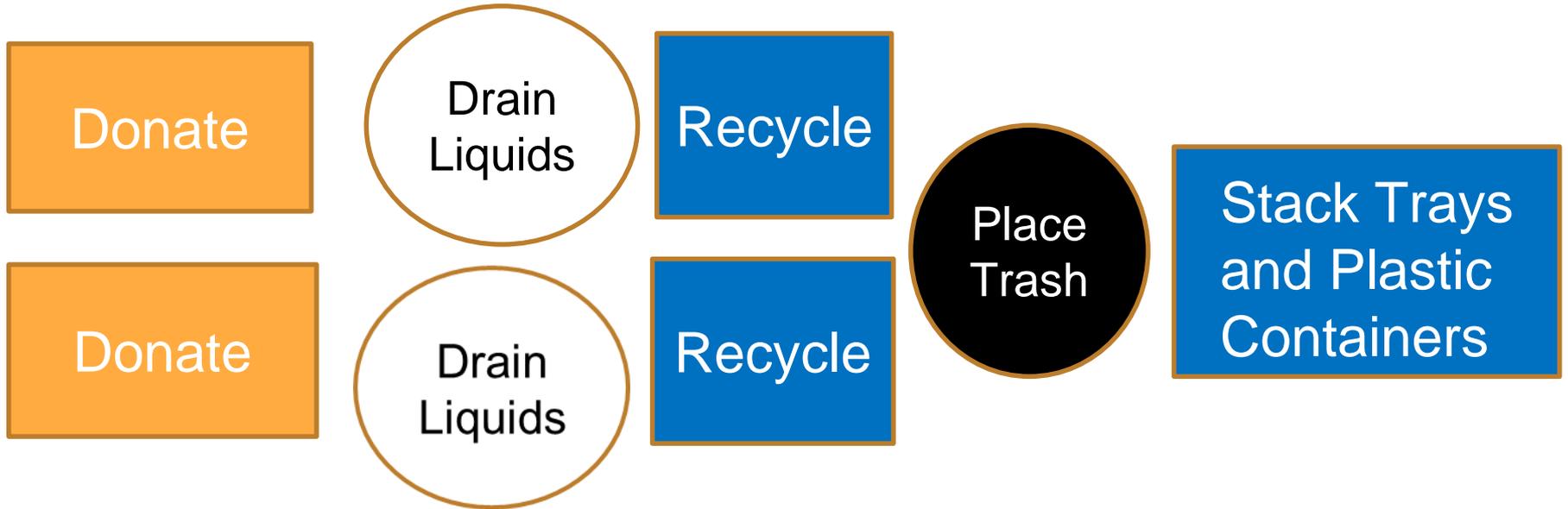
Step 4:



Step 5:



Pilot: Plan View of Cafeteria Stations



Process

Liquid

- Empty two buckets in slop sink - 1x at end of full lunch period.
- Soak funnels in enzyme 1x per day
- Soak with bucket with enzyme 1x per week



Recycling

- Bag in clear plastic and place in dumpster – 1 at end of full lunch period

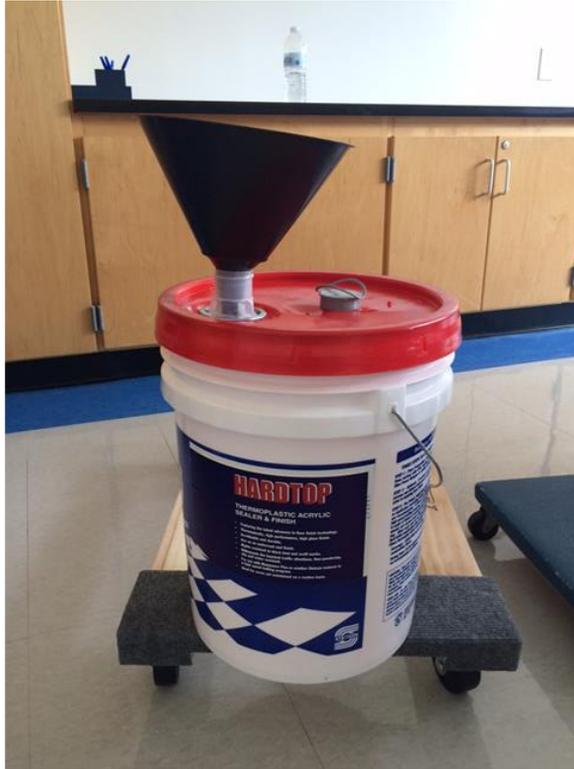


Trash

Pilot: Food Donation



Pilot: Divert Liquid Waste



- Currently 25% about 2 to 3 gallons per day (largely milk)



Pilot: Recycle Trays



Trays with food residue must go in trash.

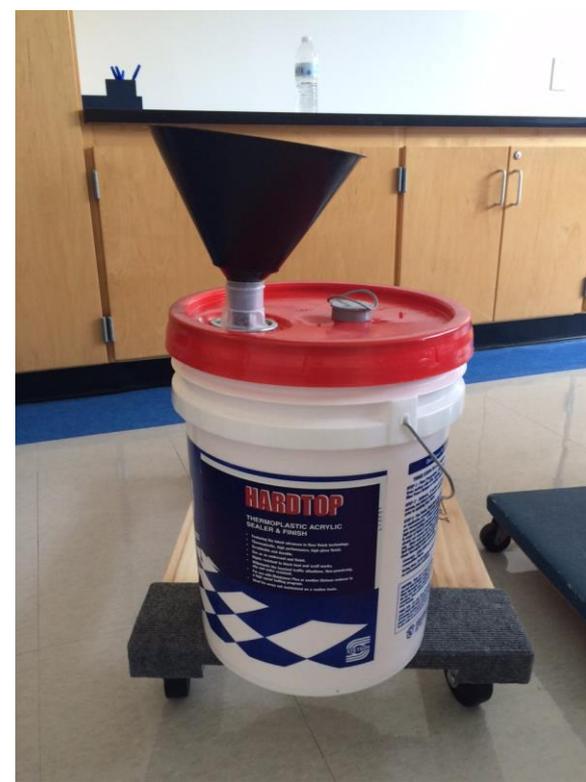


Pilot: Recycle Containers





Liquid Receptacle



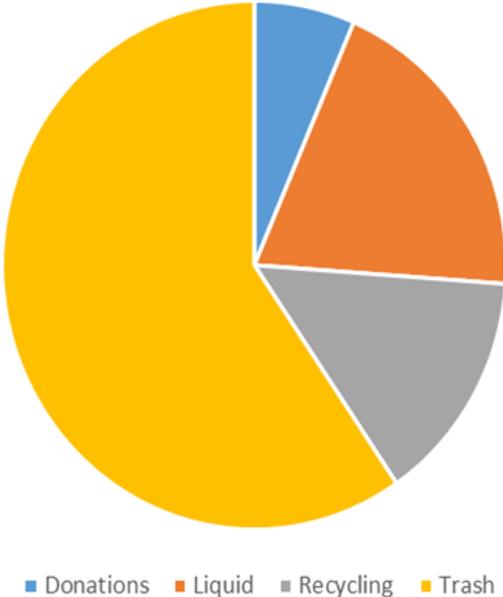






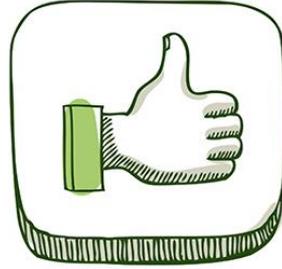
Evaluation: November Results

Bates November 2016 Assessment Results



Waste	Weight (lbs./wk)	%
Donations	25.6	6
Liquid	78.0	20
Recycling	56.8	14
Trash	236	60

Pros and Cons

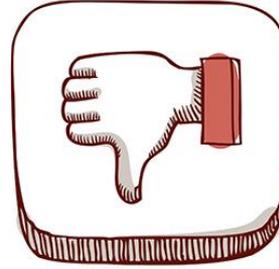


Less trash volume, could save \$

Leakage of liquid from bags has almost completely stopped

Fewer and lighter trash bags

Fewer trips to the dumpster – one trip after all five lunch periods.



Setup/cleanup takes a net additional 5 to 10 minutes per day.

Some of the food waste ends up on the floor.

Broader Goals...

- Win-win financial and environmental opportunities
- Cultivate civically-minded students
- Inspire other groups inside and outside of Wellesley to act
- Foster continued teamwork
- Generate knowledge and experience that can benefit Wellesley and similar communities



Checklist for Roll-out to Other Schools

- Support from principal and custodial staff
- Smaller size groups during lunch periods (if possible)
- Staff member with some responsibility for process
- Education program – training for adults and students
- Parent volunteers for 3 or 4 weeks & volunteer sign-up system
- Signage, equipment, clear plastic bags
- Fridge space for donations and an adult or student to move donations to the fridge
- Parent responsible for the bringing donations to food pantry

