

Cafeteria Waste Assessment

Katharine Lee Bates Elementary School

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EPA SMM Web Academy
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Outline

- Collaboration and framework
- Assessment goals and design
- Assessment results
- Pilot and next steps
- Acknowledgements



Collaborative, Town-wide Effort

- Leadership from **Sustainable Energy Committee**
- **School Admin, Custodian/FMD, Parents**
- 3R Working Group, Green Collaborative
- Food Services, BOH
- DPW, RDF



Town of Wellesley
SUSTAINABLE ENERGY COMMITTEE



USEPA Food Recovery Challenge & WasteWise

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

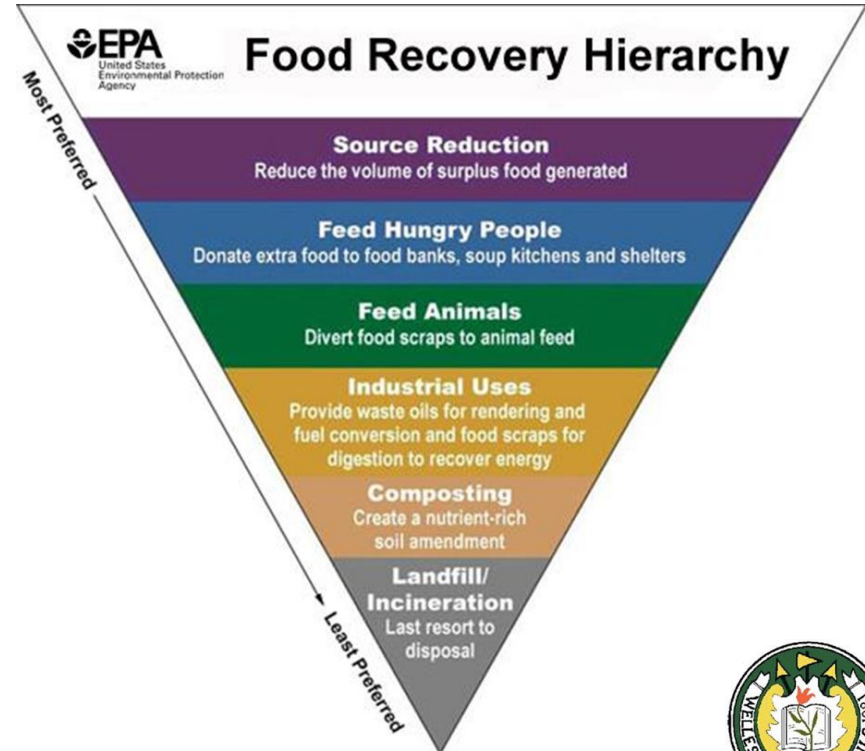


We are here



Assessment Goals

- Measure **food waste**, **liquids**, **recyclables**, & trash
- Analyze variation of waste with: **age**, **home vs. school**, **menu**
- Engage students
- Minimize disruption
- Rely on volunteers



Assessment Categories



Sharing
Items



Animal
Feed



Simple
Compost



Complex
Compost



Recycle



Trash



Liquid



Napkin
Packets



Assessment Design



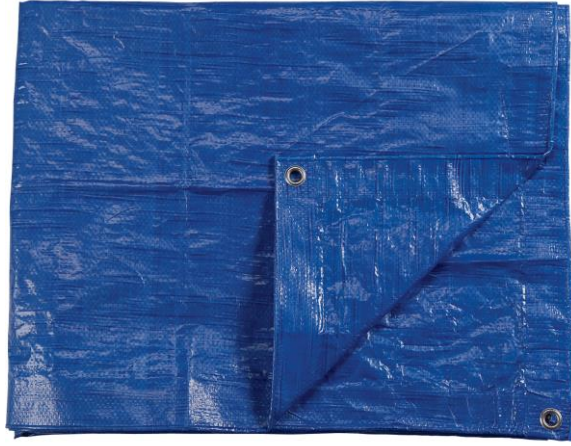
- 1 week
- 3 lunch periods/day
- 10 volunteers/day
- 395 cooperative kids!



Assessment: Supplies for Sorting



Assessment: Supplies for Weighing



Assessment Education



Weigh and Record

- Prepare data sheets
- Make note of lunch menu
- Count individual donation items and napkin packets



Weigh { School } donations, feed, compost, recyclables, liquid, trash
 { Home }

Weigh { K } donations, feed, compost, recyclables, liquid, trash
 { 5th Grade }



Animal Feed: 17 lbs/day



Complex Compost: 20 lbs/day



Simple Compost: 7 lbs/day

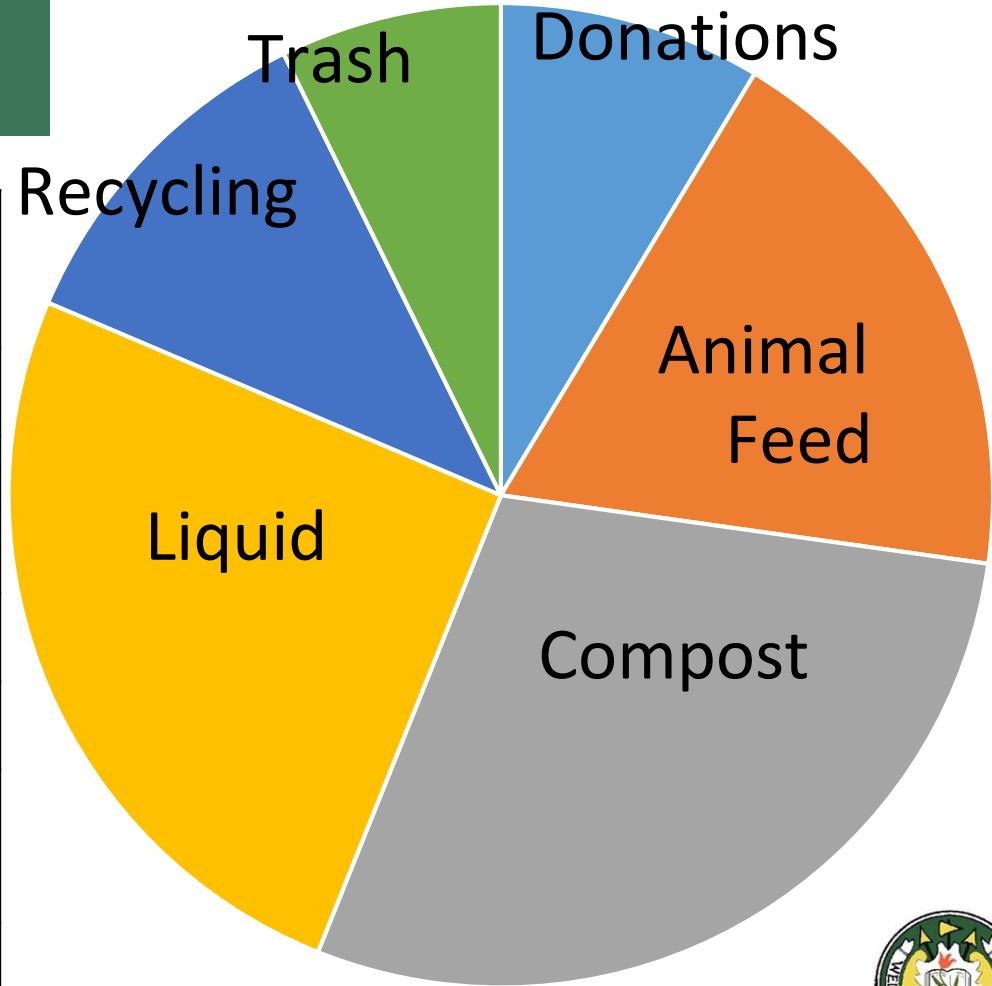


Recyclables: 11 lbs/day



Results

Item	Weight (lbs/week)	%
Donation	32	9
Animal Feed	69	19
Compost	107	29
Liquid	94	25
Recycling	42	11
Trash	27	7



Results

- 371 lbs/week or over 13,000 lbs/school year
- School Lunch Waste = 4 x Home Lunch Waste (by weight)
- Older Kid Waste = Younger Kid Waste (by weight)
- Least popular lunch menus generate more waste per lunch (tentative finding)



Recommendations

Donate, Divert Liquid, Recycle, Compost and...

HOME LUNCH

- Reusable containers for all lunch items
- Cloth napkins
- Stainless steel or other reusable utensils
- Reusable drink containers



SCHOOL LUNCH

- Reusable trays or eliminate trays
- Eliminate plastic, clamshell containers
- Napkin & utensil dispensers
- Reusable or compostable utensils
- Condiment & milk dispensers
- Further analyze school lunch waste and adjust menus



From Assessment to Pilot

- Compromise w/Town departments
- Implement recycling & composting in phases
- Build trust and lay a strong foundation



Phase 1 Pilot

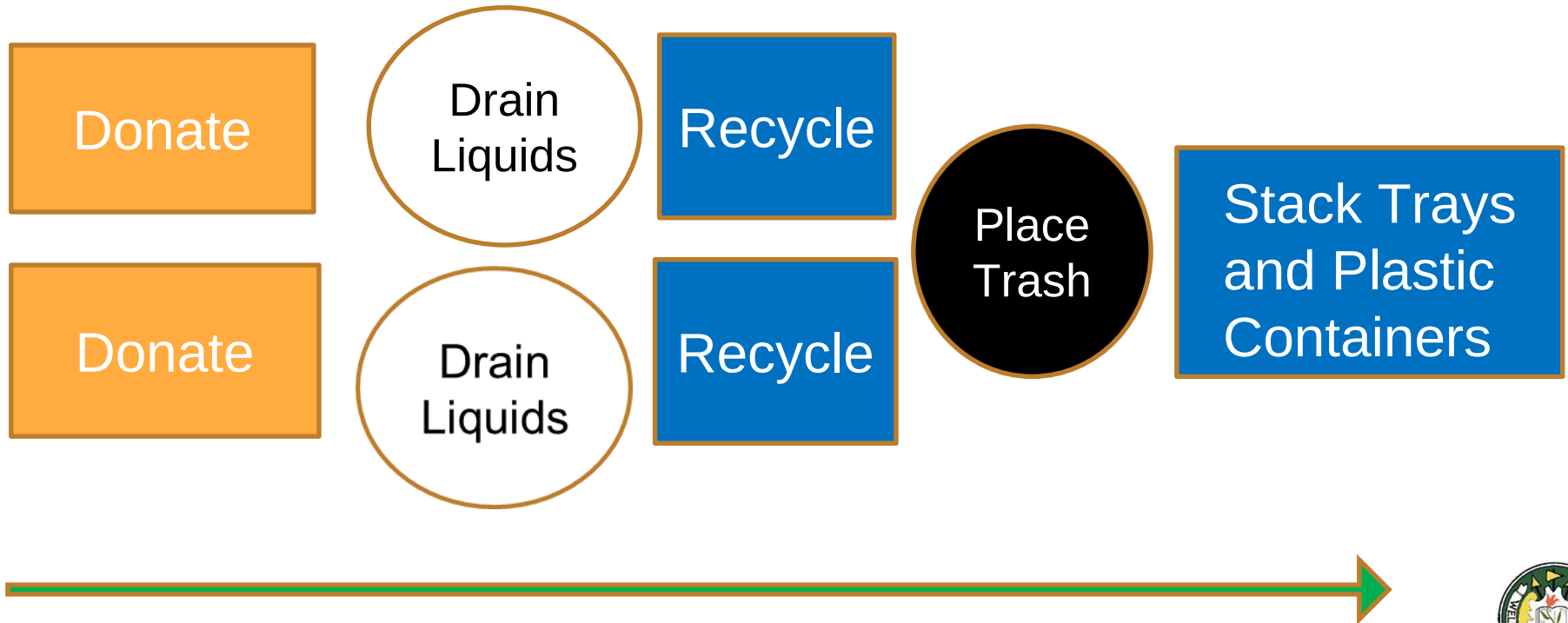
- 5th Grade Recycling Leadership Team
- Waste reduction
- Donation
- Liquid diversion
- Single Stream



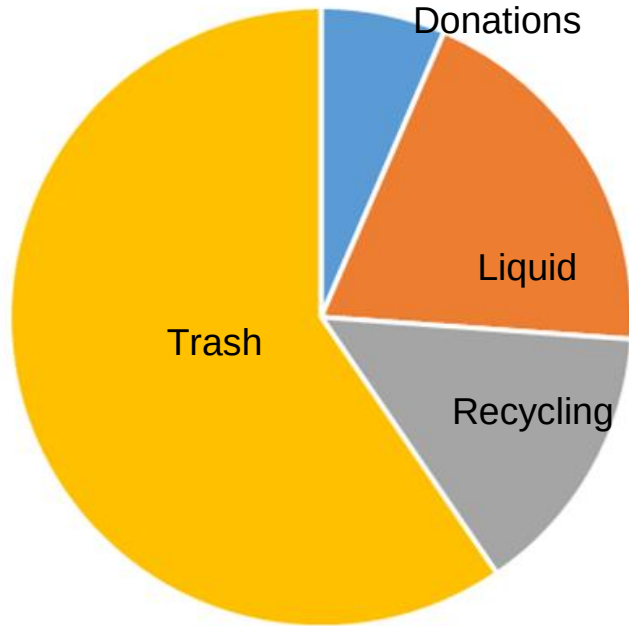
Recycling and Food Recovery Pilot



Recycling and Food Recovery Pilot



Phase 1 Pilot Results: 40% Diversion



Waste

**Weight
(lbs./wk)**

%

Donations

25.6

6

Liquid

78.0

20

Recycling

56.8

14

Trash

236

60

**Phase 2 Pilot will divert approximately 93%
of previously landfill-bound waste.**



Next Steps

- Introduce pilot in additional Wellesley schools
- Expand food rescue
- Compost pick-up



Bates Assessment Team

- **Nancy Braun**, Wellesley Green Schools
- **Gretchen Hall**, Bates Parent
- **Stephanie Hawkinson**, Natural Resources Commission
- **Marybeth Martello**, Sustainable Energy Committee
- **Alexa Plenge**, Bates Parent

Toni Jolley, Bates Principal

Al Martignetti, Bates Custodian

Mike Santangelo, Custodial Services Manager

Joe McDonough, Facilities Maintenance Department Director

Matt Delaney, Food Services Director



Special thanks to...

Christine Beling, EPA

Carolyn Dann, MA DEP

Janet Bowen, EPA



Thank you!

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