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
• Bates is the first K12 School in New England to join FRC

• Bates joined WasteWise to account for non-food waste
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

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight (lbs/week)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donation</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>Animal Feed</td>
<td>69</td>
<td>19</td>
</tr>
<tr>
<td>Compost</td>
<td>107</td>
<td>29</td>
</tr>
<tr>
<td>Liquid</td>
<td>94</td>
<td>25</td>
</tr>
<tr>
<td>Recycling</td>
<td>42</td>
<td>11</td>
</tr>
<tr>
<td>Trash</td>
<td>27</td>
<td>7</td>
</tr>
</tbody>
</table>

- **Donations**: 32 lbs/week (9%)
- **Animal Feed**: 69 lbs/week (19%)
- **Compost**: 107 lbs/week (29%)
- **Liquid**: 94 lbs/week (25%)
- **Recycling**: 42 lbs/week (11%)
- **Trash**: 27 lbs/week (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

- Donate
- Drain Liquids
- Recycle
- Place Trash
- Stack Trays and Plastic Containers
Phase 1 Pilot Results: 40% Diversion

<table>
<thead>
<tr>
<th>Waste</th>
<th>Weight (lbs./wk)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donations</td>
<td>25.6</td>
<td>6</td>
</tr>
<tr>
<td>Liquid</td>
<td>78.0</td>
<td>20</td>
</tr>
<tr>
<td>Recycling</td>
<td>56.8</td>
<td>14</td>
</tr>
<tr>
<td>Trash</td>
<td>236</td>
<td>60</td>
</tr>
</tbody>
</table>

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
Special thanks to…

Christine Beling, EPA

Janet Bowen, EPA

Carolyn Dann, MA DEP
Thank you!

Marybeth Martello
Town of Wellesley, MA
mmartello@wellesleyma.gov