Waste Prevention, Reduction & Reuse

Andrea Norris, OSU Campus Recycling
Reduce and Reuse Defined

• Defining terms
  • Reduce – minimize/prevent waste material
  • Reuse – continue to use material (for same function or new one)
  • Recycle – convert waste into reusable material
  • It’s a hierarchy
Why the Hierarchy?

• **Life Cycle Assessment**
  • “An evaluation of the environmental burdens and impacts over the entire life cycle of a product or service.”

• **Quantifies the various impacts of a product across all stages such as:**
  • Raw material extraction
  • Production
  • Transportation
  • Use
  • Final end-of-life management

*Image source: storyofstuff.org
Text source: Oregon DEQ*
Figure 1.
Comparison of Disposal, Recycling and Prevention

- Energy Consumption
- Acidification Potential
- Carcinogenic Potential
- Ecotoxicity Potential
- Eutrophication Potential
- Global Warming Potential
- Non-carcinogenic Potential
- Ozone Depletion Potential
- Respiratory Effects Potential
- Smog Potential

Legend:
- Black: Purchase + Disposal
- Gray: Purchase + Recycling
How about waste prevention? (3rd Scenario)

- Drink tap water in a reusable bottle
- Bottle is washed every single day in a very inefficient dishwasher
- Bottle is used for 1 year before it’s disposed of
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- Purchase + Disposal
- Purchase + Recycling
- Waste Prevention (tap water)
How about “best case” scenarios?

- Best Case Waste Prevention – tap water:
  - Washed once per week in average dishwasher. Used for 5 years before disposal.

- Best Case Purchase + Recycling:
  - Ultra-thin bottle w/ 25% recycled content, low energy and packaging, shipped short distance, 100% are recycled.
Figure 2. Comparison of “Best Case” Recycling and “Best Case” Prevention

Source:
http://www.deq.state.or.us/lq/pubs/docs/sw/LifeCycleAssessmentDrinkingWaterSupplement.pdf
The Bottom Line:

“Drinking tap water and recycling single-use bottles are equally effective ways of keeping waste out of landfills and incinerators, but DEQ’s study shows that most effects on the environment from bottled water occur from manufacturing and transportation, not disposal. Recycling single-use water bottles, at best, offers only moderate reductions in environmental impacts.”

“For consumers, the most important message is: reduce first, then recycle.”

- David Allaway, DEQ solid waste senior policy analyst
Activity

- Worksheet on own
- Group discussion
- Each person share 1 thing to reduce, along w/ a barrier and benefit to doing so.
- What in the readings surprised you the most?
- What resonated with you the most?
- How might you apply what you learned to outreach work you do?
Waste Reduction & Reuse Tips

- Buy in bulk
- Buy used
- Use the library
  - Lending library
- E-books
- Reuse containers/bags for bulk
- Buy only what you’re going to use
- Meal planning
- Donate things you don’t need
- Use all parts of your food
- Preserve food
- Value experiences over things (and gift this)
- Save single-sided paper for reuse in printer
- Bring your own mug / food storage / bottle / cup
- Borrow things!
- Print double-sided (learn how!)
- Bartering
- Sharing tools (neighbors, etc.)
- Start a garden
- Attend or host a clothing swap
Waste Reduction & Reuse Tips

• Facebook – Corvallis Family Gift Economy
• Vote with your dollar – buy less packaging option
• Gift items that are tools for reuse
• Magazine exchanges
• Save envelopes and reuse
## Reuse Directories

- **Albany-Area Reuse Directory**
- **Corvallis-Area ReUse Directory**

### Albany-Area Reuse Directory

### Attributes for Reuse Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliances (large)</td>
<td>X</td>
</tr>
<tr>
<td>Appliances (small)</td>
<td>X</td>
</tr>
<tr>
<td>Art supplies</td>
<td>X</td>
</tr>
<tr>
<td>Bedding / Bath</td>
<td>X</td>
</tr>
<tr>
<td>Books</td>
<td>X</td>
</tr>
<tr>
<td>Books / Exercise / Sports / Camping</td>
<td>X</td>
</tr>
<tr>
<td>Clothing / Accessories</td>
<td>X</td>
</tr>
<tr>
<td>Cooking / Kitchenware</td>
<td>X</td>
</tr>
<tr>
<td>Discs, DVDs, LPS, video games</td>
<td>X</td>
</tr>
<tr>
<td>Cell phones (including chargers)</td>
<td>X</td>
</tr>
<tr>
<td>Clothing (jeans, clothing)</td>
<td>X</td>
</tr>
<tr>
<td>Clothing (suits)</td>
<td>X</td>
</tr>
<tr>
<td>Computers / Monitors</td>
<td>X</td>
</tr>
<tr>
<td>Eyeglasses</td>
<td>X</td>
</tr>
<tr>
<td>Fabric (material, batting, supplies)</td>
<td>X</td>
</tr>
<tr>
<td>Firewood</td>
<td>X</td>
</tr>
<tr>
<td>Food (unopened, expired)</td>
<td>X</td>
</tr>
</tbody>
</table>

**Notes:**
- Always call before dropping items off.
- Items are collected bi-monthly.
- Call ahead to verify availability.
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- Call ahead to verify availability.

### ReUse Directory:

**Albany Area ReUse Directory**

**Corvallis Area ReUse Directory**

**Contact Information:**

- Albany: 541-349-6580
- Corvallis: 541-754-3440

**Item Acceptance Guidelines:**

- Clean, working items in good condition
- Always call first to confirm item acceptance
- Never donate items without permission

**Reuse Location:**

- Albany: 810 North 16th Street
- Corvallis: 251 First Street

**Operating Hours:**

- Monday to Friday, 9:00 AM to 5:00 PM
- Closed weekends and holidays
Break time!
Activity: Group Problem Solving

• Divide up into groups of 3-5 people
• Read the scenario
• Discuss and note:
  • Identify the waste problem
  • Define the motivations and interests of the person who wished to reduce waste
  • Identify at least 3 potential solutions
  • Identify 1-2 group members to share out