Waste Prevention, Reduction & Reuse

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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

[Bar chart showing the comparison of disposal, recycling, and prevention for various environmental impacts such as energy consumption, acidification potential, carcinogenic potential, etc.]
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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- 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:
- 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
• Cloth napkins and dishtowels
• Bring take home containers when eating out
• Create a consistent, personal, simple sense of style and wardrobe
  • Scrubs!
• Utilizing technology vs. print materials
• Share books (or other materials)
  • Clothing swap
  • Share among neighbors
• Reusable bags
• Buy used!
• Grow your own
• Donate
• Repair
• Corvallis Families Gift Economy Facebook group
• Reusing containers
  – boxes, gift wrap, etc.
• Make your own (toiletries, food, etc.)
• Remember waste and energy use when buying appliances
• Reuse photos for cards, postcards, décor, etc.
Waste Reduction & Reuse Tips

- Water wise gardening and home
- Be mindful of what you need with you during day. Remember where you put things so you don’t have to buy duplicates.
- Give away things you don’t want anymore
  - Will I use this again frequently? Could someone else use it more than me?
- Buy durable
- Donate to charity in lieu of gifts
- Corvallis Virtual Garage Sale (secret group on Facebook)
- SoKind alternative gift registry
- Avoid shopping when you’re emotional
- Keep in mind where you’re dollar is going – support local thrift shops
- Hotel toiletries – bring home and use partial containers
- Sewing group/party
- Carry reusable utensils
- Hand dryer in public area
- Hankerchiefs
- Choose a hairstyle that doesn’t require products
- Reusable at parties (Green Girl)
- Reusable at parties (Green Girl)
### Reuse Directories

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

![Reuse Directory Image](image-url)
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