

Sustainable Environmental Stewardship

Resource Conservation Challenge Opportunities for Federal Agencies



April 12, 2007

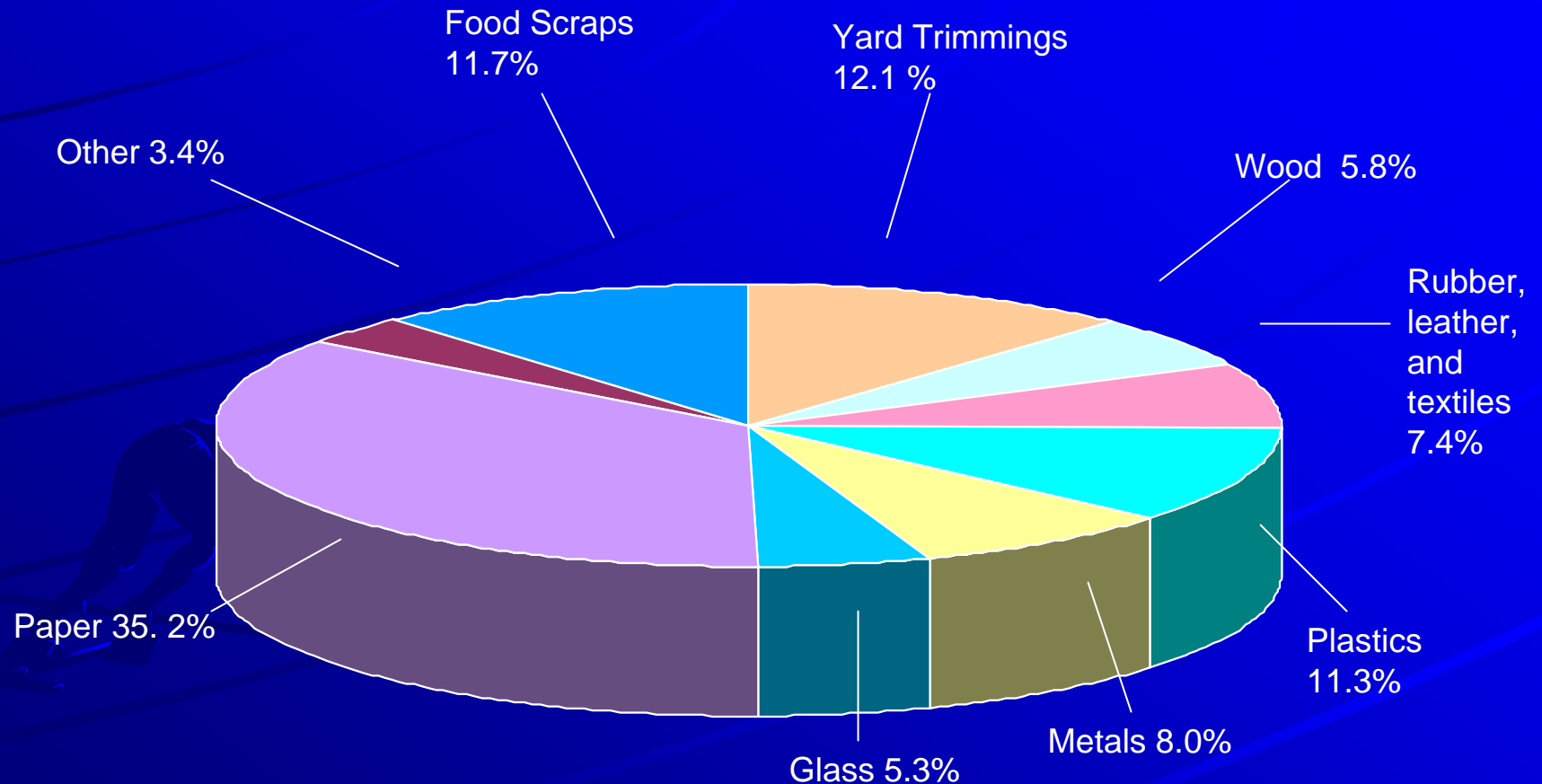
Deborah Hanlon
Office of Solid Waste

RCC Focus Areas

- ◆ Reduce priority or toxic chemicals in the environment through product substitution or recycling (NPEP)
- ◆ Electronic Products and Wastes (FEC, Plug In)
- ◆ Industrial Material Recycling (C2P2)
- ◆ Solid Waste Reduction and Recycling: *Focus of today's discussion*

2005 Municipal Solid Waste Generation

246 Million Tons

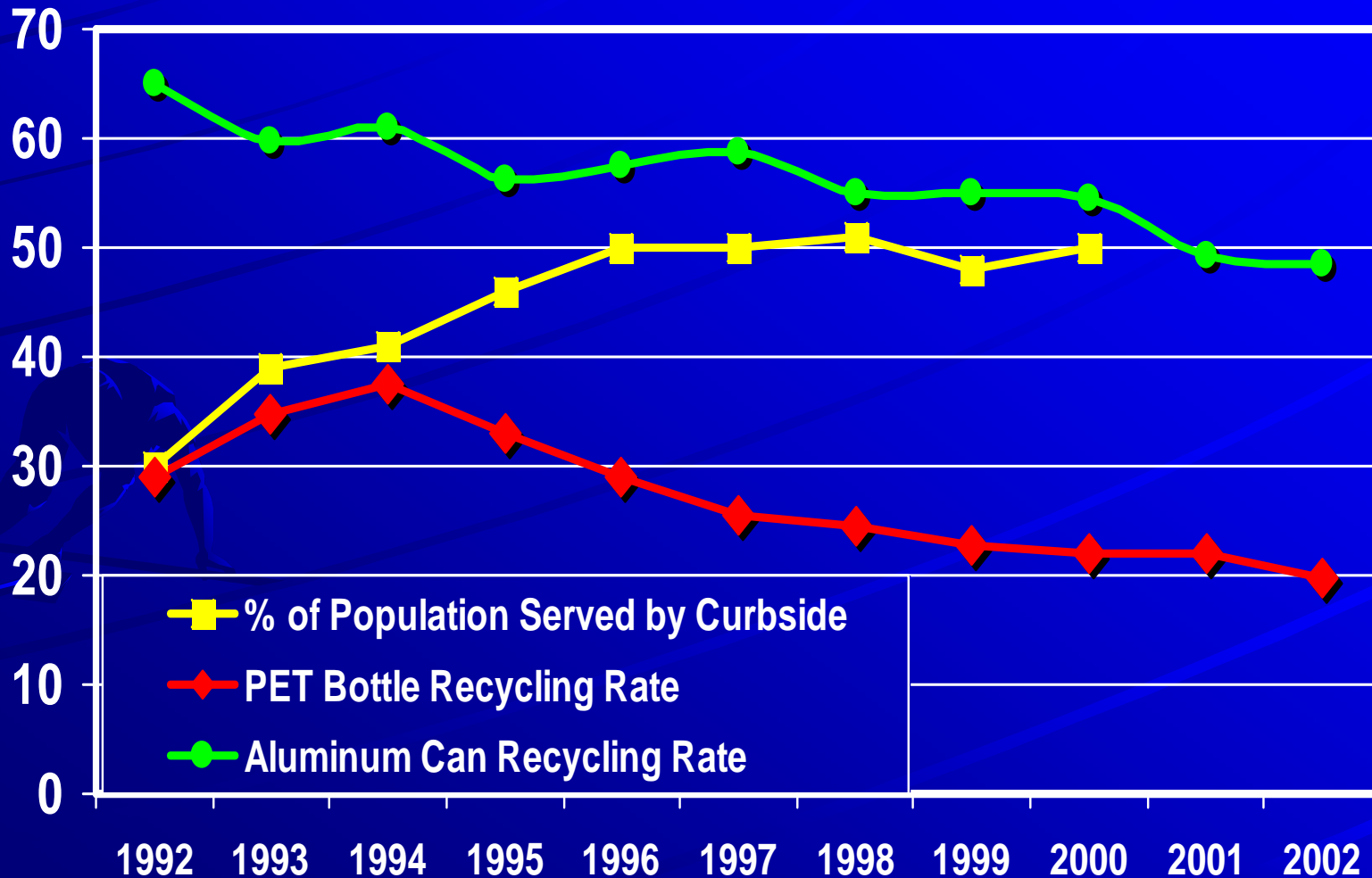


Recycling Opportunities

- ◆ 8,875 curbside programs across the USA
- ◆ 51% households have curbside access
- ◆ 50% of those that have access use it
- ◆ Recycling- Away from Home and On the Go targets the 40% of MSW generated away from home (*Away from Home*)

Container collection trends

Percent



Source: BioCycle, American Plastics Council, Aluminum Association, US Chamber of Commerce

Recycling-Away from Home and On the Go

Objectives

- ◆ Develop a recycling infrastructure for away from home collection
- ◆ Increase the amount of waste collected for recycling
- ◆ Promote a culture of recycling by making it convenient, available and cost effective

Priority Areas and Opportunities for Federal Agencies to Promote Away from Home Recycling and Recycle on the Go

- ◆ Office Space (paper, beverage containers)
- ◆ Stadiums
- ◆ Special Events that attract large crowds
- ◆ Transportation: Airports, Highway, Trains
- ◆ National Parks, Recreation Facilities

Special Events: Litter and overflowing waste containers detract from your event





Recycling containers at public events



Containers are clearly
labeled for recyclables
and wastes

Beverage container collection receptacles from the American Beverage Association



- ◆ Attractive recycling collection containers were used to collect beverage containers at this marathon race and summer festival in Pittsburgh

Why Airports?

- ✦ Airports and airlines are large generators of waste: 450,000 tons in 2004 (1.3 lbs/per day/per capita)
- ✦ Airports are a visible target for implementing recycling programs.
- ✦ NRDC Report "Trash Landings" brought attention to need with less than 20% of industry now recycling
- ✦ Successful programs save money: Sea-Tac saves \$180,000 annually

Recycling at BWI



Recycling at Charles de Gaulle Airport in Paris



Three
compartment
receptacle collects
paper, containers
and wastes





**PLASTIC BOTTLES
&
PLASTIC CUPS
ONLY**



RECYCLE

Recycling of non-traditional wastes

- ✦ Denver Stapleton Airport had 6.5 million tons of concrete and asphalt recovered from the demolition process.
- ✦ Wisconsin's Waukesha County Airport used fly ash to create new runways lowering the cost of runway replacement by \$50,000.

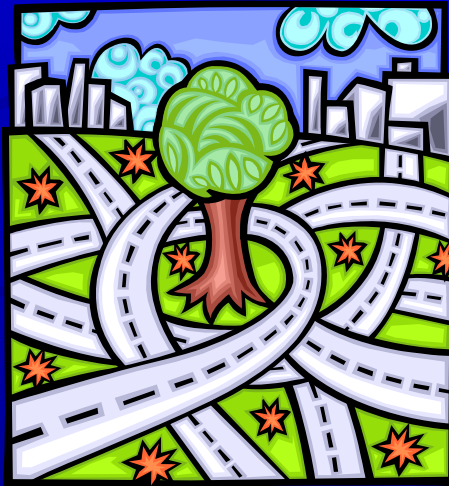
Recycling in Public Spaces at the National Parks



Volunteers at the National Cherry Blossom Festival keep the festival litter free!

Green Highways Partnership

- ◆ Similar environmental stewardship goals
 - REDUCE, REUSE, RECYCLE, REBUY



Recycling on the Go: Highway Rest Stops provide great recycling opportunities for motorists

✦ Rural Community Recycling Containers



Recycling containers at a Maryland Highway Rest Stop

◆ Drive up and recycle!

◆ Labeled containers made of recycled plastic lumber



Tennessee Welcome Center provides recycling collection for customers



Recycling containers should be made available to the public for wastes generated away from home

- ◆ Newspaper Recycling containers are located in the Subway in Washington DC



Vendors are critical to success of program

- ◆ Must try to reduce packaging impacts and encourage customers to recycle beverage containers
- ◆ Minimize use of packaging materials in products
- ◆ Replace styrofoam with lightweight paperboard containers
- ◆ Eliminate or reduce size of napkins and straws
- ◆ Purchase paper products that are made with recycled or biobased content.

What are the Benefits?

RECYCLING and WASTE REDUCTION Save Energy and
Reduce GHG Emissions

- ✦ Lower emissions in manufacturing with recycled feedstocks
- ✦ Increase in forest carbon storage with paper products
- ✦ Some emissions from collection and processing of recyclables
- ✦ No emissions from waste disposal

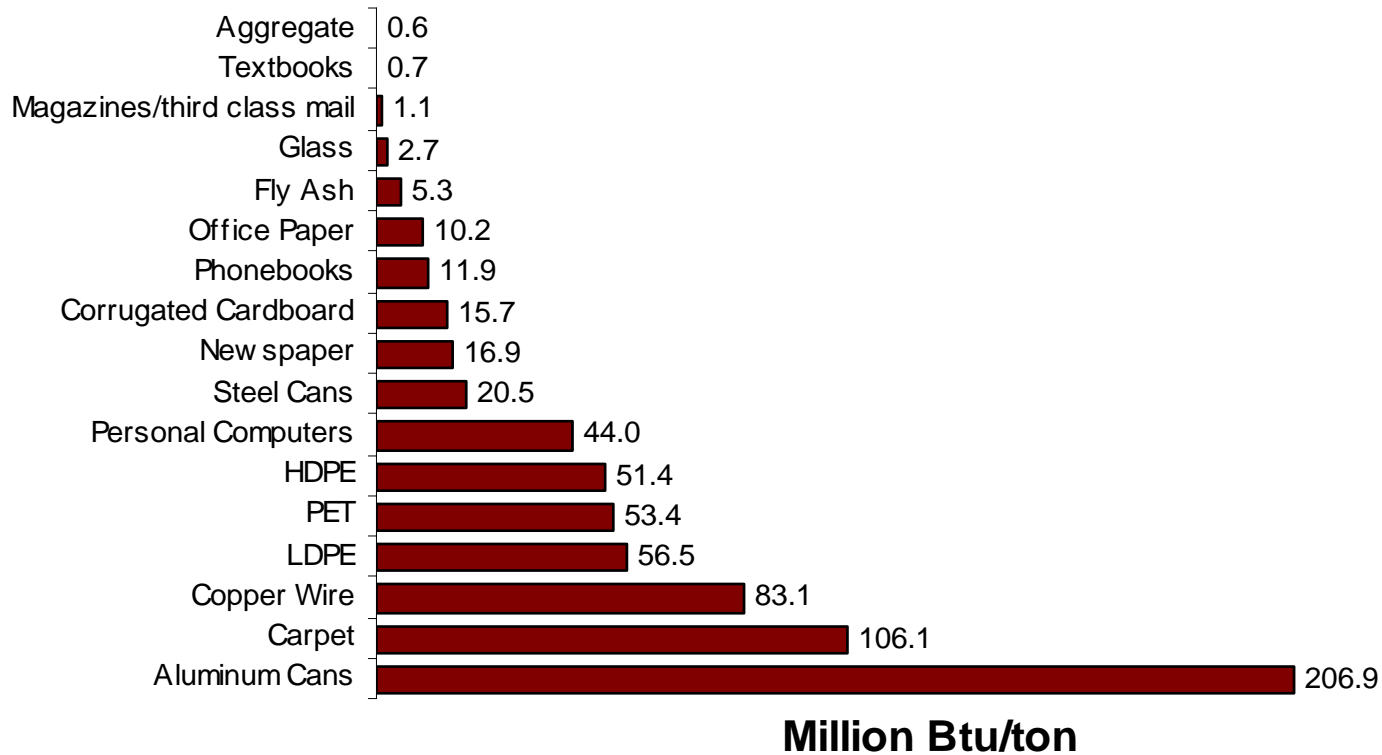
Energy Savings-GHG and Waste Connection

- ✦ Recycling (instead of landfilling) 10 common wastes has reduced GHG emissions by 138 MMTCE since 1990 (23 MMTCE per year)
- ✦ In 2005 benefits of recycling: 32% or 79 million tons saved 1416 trillion BTUs equivalent of 11.3 billion gallons of gas
- ✦ Reduced GHG emissions 49.92 MMTCE = 39.6 million cars off the road

Energy-Waste Connection

Energy Savings per ton of material recycled

**Energy Savings Per Ton Recycled
(Million Btu)**



Contact Information

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