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# REDUCING WASTED FOOD AT FEDERAL FACILITIES

Sustainable Materials Management

#### **Food Recovery Challenge**



CHANGING HOW WE THINK ABOUT OUR RESOURCES FOR A BETTER TOMORROW

Laura Moreno

Environmental Protection Agency, Pacific Southwest Region February 28, 2013

#### Outline

- Food Waste Basics
- EPA Food Recovery Challenge
- EPA Federal Green Challenge
- EPA Tools



#### A Rose Bowl A Day...

33 million tons of food reach landfills each year in the United States.



More food reaches landfills than any other material in municipal solid waste.

#### **Saving Food Saves Money**

Wasted food costs America more than \$165 billion annually (USDA).



A family of 4 could save \$1600 each year.



#### Feed People, Not Landfills

50 million Americans didn't have access to sufficient, safe and healthy food in 2009.



14% of American households are food insecure.



#### GHGs, Water, and Resources...Oh My!

Food + Landfills = Methane



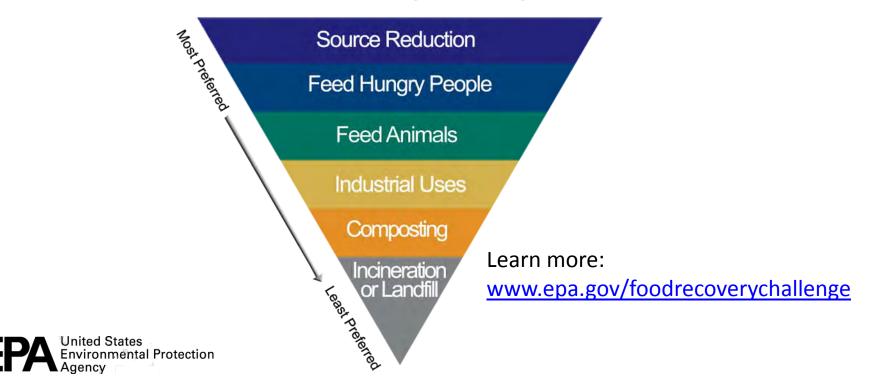
Resources used to grow wasted food: 300 million barrels of oil and more than a quarter of freshwater consumed in the United States<sup>1</sup>.



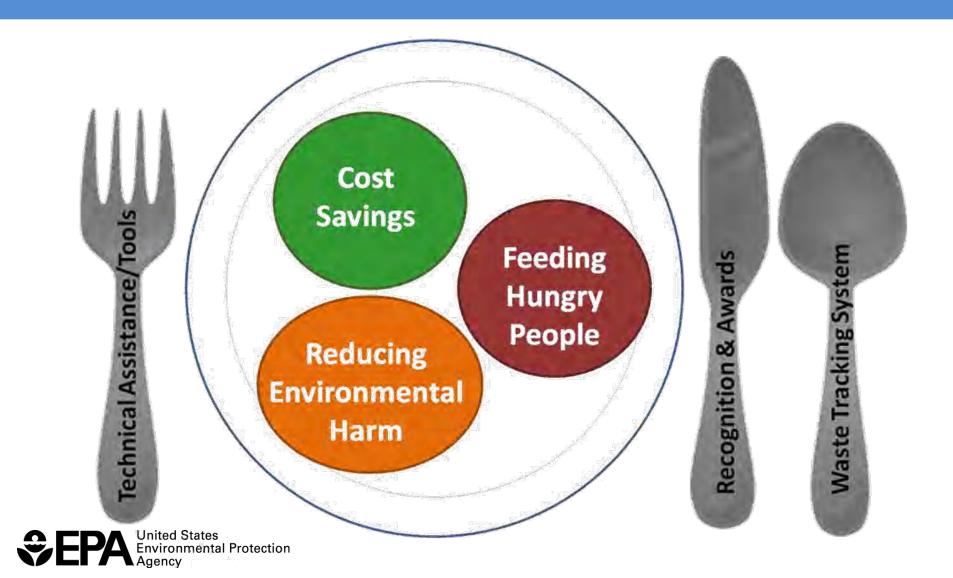
## What Is The Food Recovery Challenge?

Challenge organizations to reduce amount of food sent to landfills.

Food Recovery Hierarchy



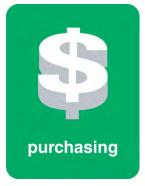
### **Benefits to Joining**



#### What is the Federal Green Challenge?

- Supports federal agencies in meeting and exceeding their Executive Order 13514 requirements.
- Challenges federal facilities to commit to a minimum 5% reduction in two of the six target areas. *Partners must choose waste, purchasing, or electronics as one of two target areas.*













www.epa.gov/federalgreenchallenge

#### The Federal Footprint Matters

#### **Did you know?** The Federal Government:

- Nation's largest vehicle fleet operator
  - over 600,000 vehicles
- Largest consumer of energy in the U.S
- Largest purchaser of goods and services in the U.S.
  - \$425 billion/year; and
- Controls a real estate portfolio of more than 1.2 million assets including 550,000 buildings.

## EPA Tools: Reducing Your Wasted Food

- Food Waste Management Calculator
  - Helps determine cost savings from various food waste reduction techniques
- Food Waste Source Reduction Tool
  - Helps identify and measure areas to source reduce wasted food
  - In draft form
  - Contact Laura Moreno (<u>moreno.laura@epa.gov</u>)
     for more information



#### **EPA Webpages**

/foodwaste/index.htm

http://www.epa.gov/waste/conserve

#### **Food Waste Basics**

More food reaches landfills and incinerators than any other single material in municipal solid waste (MSW). In 2010 alone, more than 34 million tons of food waste was generated, with only three percent diverted from landfills and incinerators for composting.

#### How Can I Divert Food From Landfills?

- Source Reduction/Prevention
   Preventing food waste before it is created
- Feeding People
   Donating fresh, wholesome food to those in need
- Feeding Animals
   Feeding safe, fresh food scraps to animals like pig farms
- <u>Industrial Uses</u>
   Rendering fats, oils, and grease and turning it into products or biofuel
- Composting
   Turning food waste into a valuable soil amendment
- Anaerobic Digestion
   Turning food waste into renewable energy and a valuable soil amendment

#### Why Divert Food Waste From Landfills?

Reducing the amount of food wasted has significant economic, social & environmental benefits:

#### Federal Green Challenge Home

Join Now!

**Using Your EMS** 

Regional Information

Energy

Waste

Water

#### Federal Green Challenge - Waste

#### On this page:

- · Federal Green Challenge Waste Goals
- · Reducing Your Waste Footprint
- Case Studies

http://epa.gov/fgc/waste.html

Federal Green Challenge Waste Goals

#### Food Recovery Hierarchy

Source Reduction
Feed Hungry People
Feed Animals
Industrial Uses
Composing
Industrial Uses
Landfil

#### Additional Information for...

- · Grocery Stores and Supermarkets
- · Colleges and Universities
- Stadiums and Venues



#### Resources & Partnership Programs

- Best Management Practices for Hospital Waste (PDF) (308 pp. 2.7MB)
- Comprehensive Procurement Guidelines
- · Computers for Learning



## Laura Moreno moreno.laura@epa.gov 415-972-4240

#### REGIONAL CONTACTS

FEDERAL GREEN CHALLENGE EPA.GOV/FGC/REGIONAL.HTML

FOOD RECOVERY CHALLENGE
EPA.GOV/FOODRECOVERYCHALLENGE
/CONTACT.HTM

Sustainable Materials Management

**Food Recovery Challenge** 



Changing how we think about our resources today for our children's tomorrow







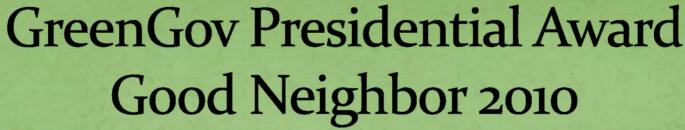
Martinsburg, WV VA Medical Center Waste Watchers Program

## Martinsburg Green Kitchen Project





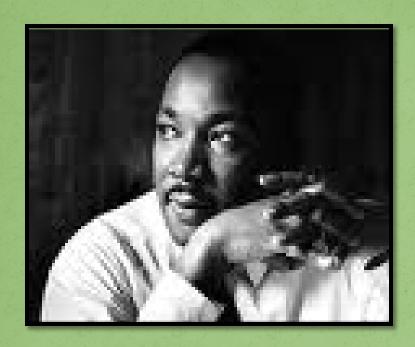
- 1. Energy
- 2. Water
- 3. Local food
- 4. Waste
- 5. Process Improvement



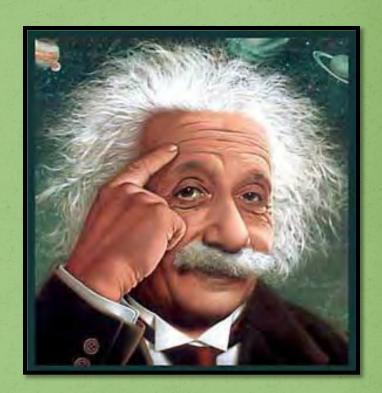








I have a dream...

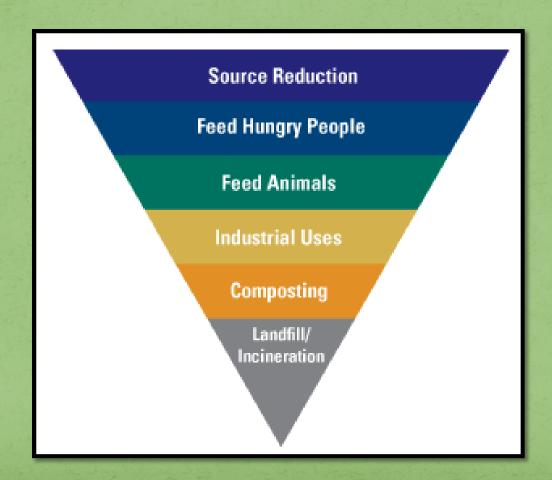


...where there is a will, there is a way.



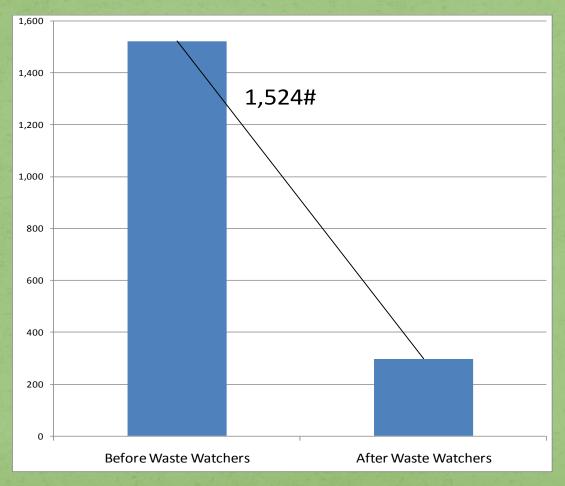


**EPA Food Waste Recovery Hierarchy** 



#### Landfill: before and after







#### Food Waste Over Time



#### **NFS Pre-Consumer Waste in Pounds**



## Source Reduction: Saving to Begin With







Source Reduction
Feed Hungry People
Feed Animals
Industrial Uses
Composting
Landfil/Incineration



## Food Donation Program



## 1996 Bill Emerson Good Samaritan Federal Food Donation Act 2008





## Composting













## Staff Making a Difference, Not Just a Living





It's kind of fun to do the impossible.
- Walt Disney

## Waste Not, Want Not



The Food Donation Program of the South Texas Veterans Health Care System-Nutrition and Food Services Department in San Antonio, Texas

Dorian Wilkins Foster, MS, RD, LD

# What's the Deal with Throwing Away Good Food?

- Background in cooking
- Previous service with the US Peace Corps
- Trained at the Houston VA Internship Program
- Working at the San Antonio VA Hospital since 1993, first clinical, then administrative dietitian
- Non-select Menus with Cook-Chill System
- Always asking WHY and WHY NOT?











## Thinking Outside the Garbage Can...

- Joined national VA Nutrition and Food Services GEMS committee and learned about changes in legislation regarding food donation by federal facilities
- Discussed with chief of service and food service staff who would be involved
- Contacted local food bank to discuss what programs they had running in the area



## Second Servings

- National program/movement by food banks around the country to utilize prepared foods from facilities with safe food handling practices (ie-hotels, resorts, grocery stores, restaurants) for shelters
- First hospital in the San Antonio area to participate







"Now concentrate on the swinging pocket watch...You are getting sleepy...very sleepy..."

- Talking others into the idea
- Formal proposal to Front Office/Director of Facility
- Wow-easier than expected

# Getting Started and Keepin' On Keepin' On

- Our process
- How our food service staff has felt about it
- Things that have worked...and things that have not!



#### **Donation Amounts**

- > From Oct 2010-Sept 2011
  - 14,795 pounds (or ~11, 550 meals)
- From Oct 2011-Sept 2012
  - 16, 587 pounds (or ~12, 960 meals)
  - Increase from donated "juice"
  - In addition, a facility-wide food drive added an extra 2,654 pounds of food and 33 cases of water
- Counts toward our facility recycling efforts, but mostly feels really, really good to NOT throw away nutritious foods and drinks



### Future Plan



- Going to a mainly select menu which should cut down food waste (donation)
- Continue to hold food drives several times a year ("How to Lose Weight for the Holidays")
- Look for creative ways to utilize all types of items
- Encourage other facilities to get involved

# Thank you, Thank you very much -Elvis Presley

Questions (other than the meaning of life)?

My contact info: Dorian.Foster@va.gov

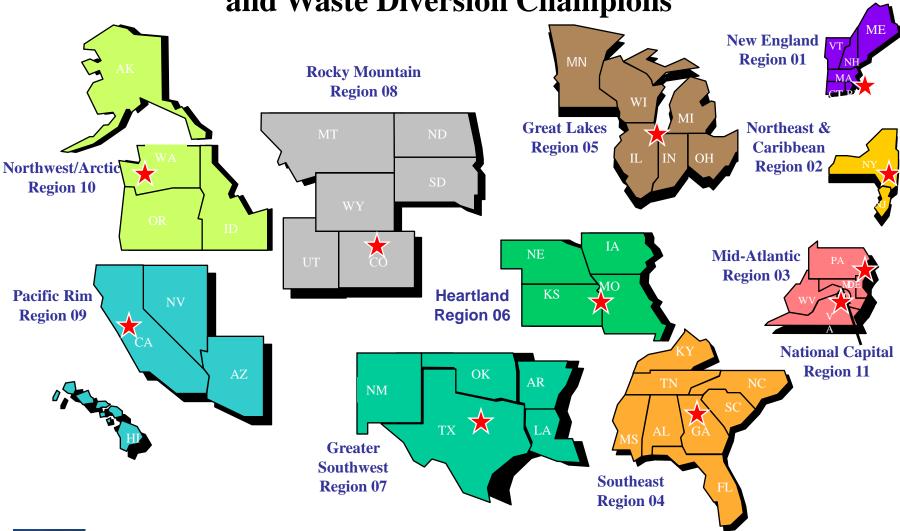


GSA Public Buildings Service Office of Facilities Management & Services Programs



# Waste Diversion through Composting

Network of Solid Waste / Recycling Coordinators and Waste Diversion Champions





# GSA's Strategic Sustainability Performance Plan

(www.gsa.gov/sustainability)

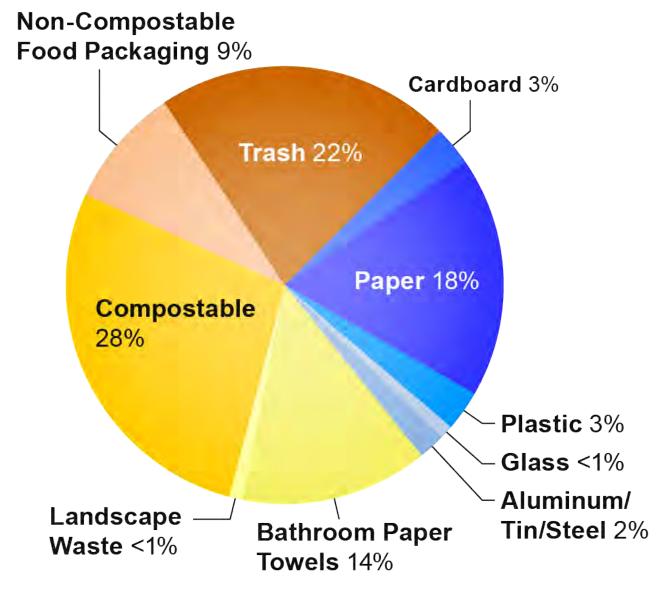
By FY2015, GSA will divert at least 50% of its non-hazardous solid waste, excluding construction and demolition debris, from landfills and incinerators through reuse, recycling, composting, and other methods.

**Solid Waste Diversion** 

Amount reused + recycled + composted + sold/donated (tons)

Total amount of waste generated (tons)

### **GSA Landfilled Waste Stream** (% by weight)<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> Based on 2012 GSA Solid Waste Audits.

### Sample Contract Language & Guidelines

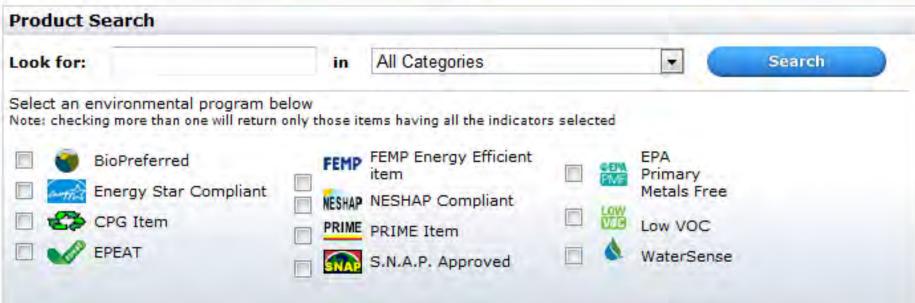


Sample custodial contract language. To reduce the amount of material being disposed of in landfills, the Contractor is required to compost, to the greatest extent possible, yard waste generated by the Contractor's operations. The Contractor shall not compost material onsite unless authorized by the CO or their designee. The Contractor shall utilize an approved recycling or composting facility or compost the material at the Contractor's own facility. Where applicable, the Contractor shall work with on site cafeterias and wet stands to recover and compost all possible materials.

**GSA/HHS Sustainability Guidelines** for Federal Concessions and Vending Operations, www.gsa.gov/portal/content/104429







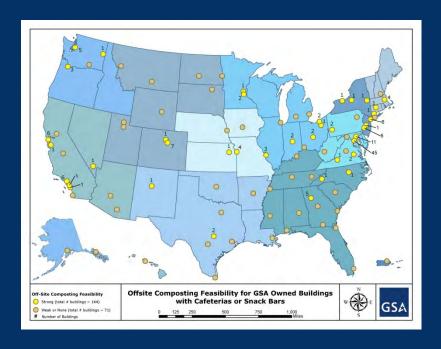
**GSAAdvantage!:** https://www.gsaadvantage.gov/advantage/main/start\_page.do

**SFTool:** www.SFtool.gov

## Is Food Waste Composting Feasible?



- Market research
  - Offsite commercial composting
  - Onsite composting equipment
  - State and local regulations
- Food waste collection
  - Cafeterias
  - Logistics and service costs
- Building design, space use, & location



## **Locations where GSA Composts Food Waste**



#### West:

- California 16 buildings
- Washington (Auburn, Seattle, Portland)
- Colorado (Boulder, Denver)

#### Midwest:

- Illinois (Chicago)
- Michigan (Battle Creek)
- Minnesota (St. Paul)
- Ohio (Cleveland)

#### Northeast/Mid-Atlantic:

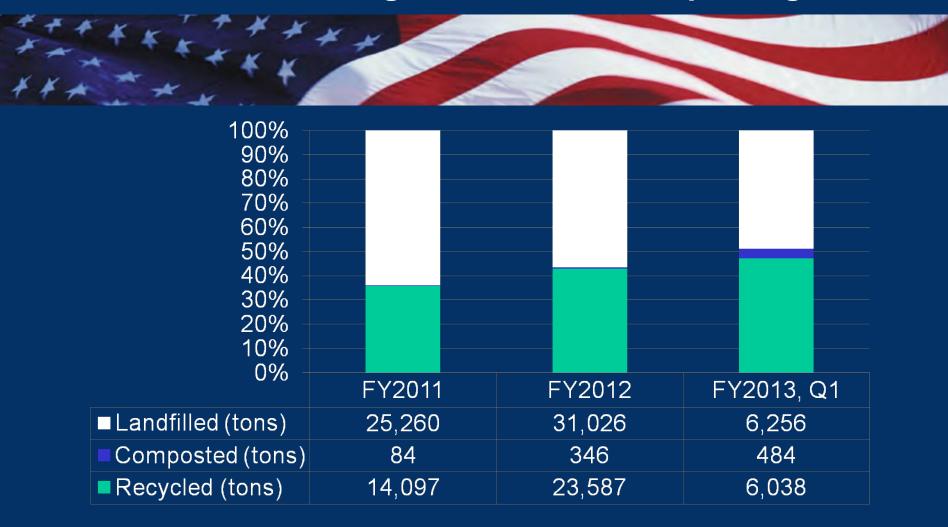
- New Hampshire (Manchester)
- Massachusetts (Boston)
- Pennsylvania (Pittsburgh)
- Maryland (Woodlawn)

#### South:

- Kentucky (Louisville)
- Louisiana (New Orleans)



# **Increase in Weight Diverted to Composting**



### **Communicating Benefits and Challenges of Composting**





- Manage at the local level
- Start with pilot projects
- Education, communication, and multi-stakeholder participation to manage the learning curve and workload

# **GSA Pacific Rim Region Case Study: Appraisers Building**



- May 2012: Composting program initiated
  - Composting includes food scraps, plants & flowers, compostable plates, soiled napkins, paper towels
  - Compost bins located in each kitchenette and break room area
- 11% increase in waste diversion (FY2011, 45%; FY2012, 56%)
- Recology offers an incentive program:
  - higher waste diversion = higher discount rate
- Negotiated with the custodial contractor to provide compost bags at no extra cost to the Government

# **GSA Pacific Rim Region Case Study: Los Angeles**



Implementing a food composting program at the Los Angeles Federal Building has decreased disposal costs as a result of:

- Combined landscape debris with food compost
- Reduced trash service frequency
- Diverted 432 tons of organic waste in FY2012

FY2012	G&M	Trash Company
Cost / month	\$500	\$235
Total Cost/ year	\$6,000	\$2,820

AVOIDED COSTS = \$3,180

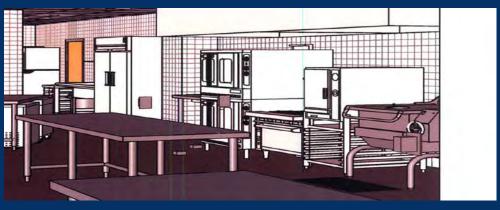
# **GSA Pacific Rim Region Case Study: 300 N. Los Angeles**



- LEED Gold or higher
- Food pulper
- Compostable plates and utensils
- Compost station in dining area



Compost & recycling station



Pulper in the kitchen prep area

# **GSA Pacific Rim Region Case Study: San Francisco**





**Kitchenette** 



Cafeteria – Dining Area

# **GSA Pacific Rim Region: Next Steps Forward**



- Market Research
- Internal Audit
- Feasibility
- Cost Analysis
- Existing Contracts
  - Negotiate with the current waste hauler
    - Incentive programs
    - Local City Ordinances





### For more information:

Lena Kofas lena.kofas@gsa.gov | 202.208.3578

Lupe Novoa guadalupe.novoa@gsa.gov | 415.522.3124

www.gsa.gov