



# Missouri Missouri Recycling Association Meeting



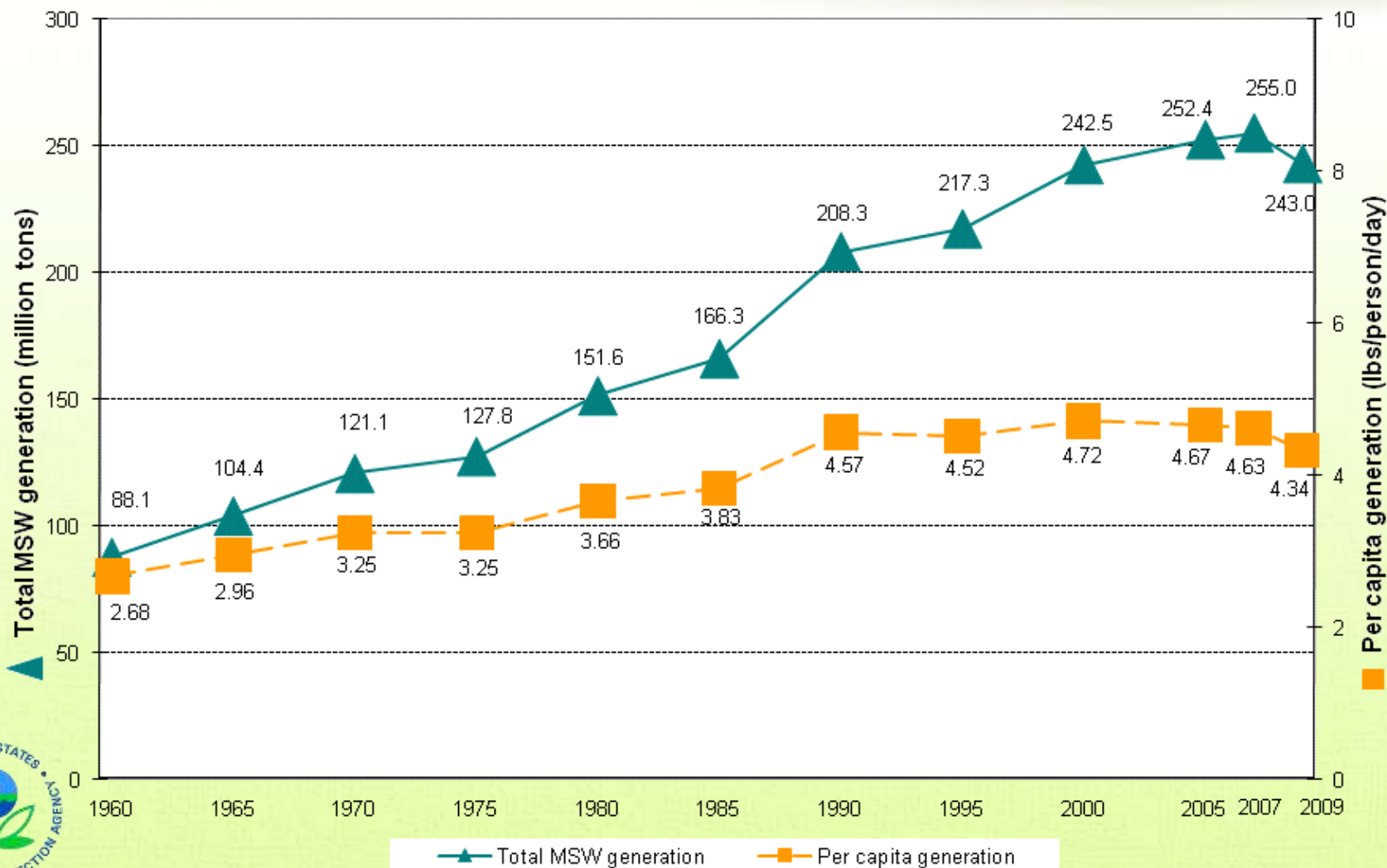
Jim Callier

U.S. Environmental Protection Agency – Region 7  
September 17, 2013



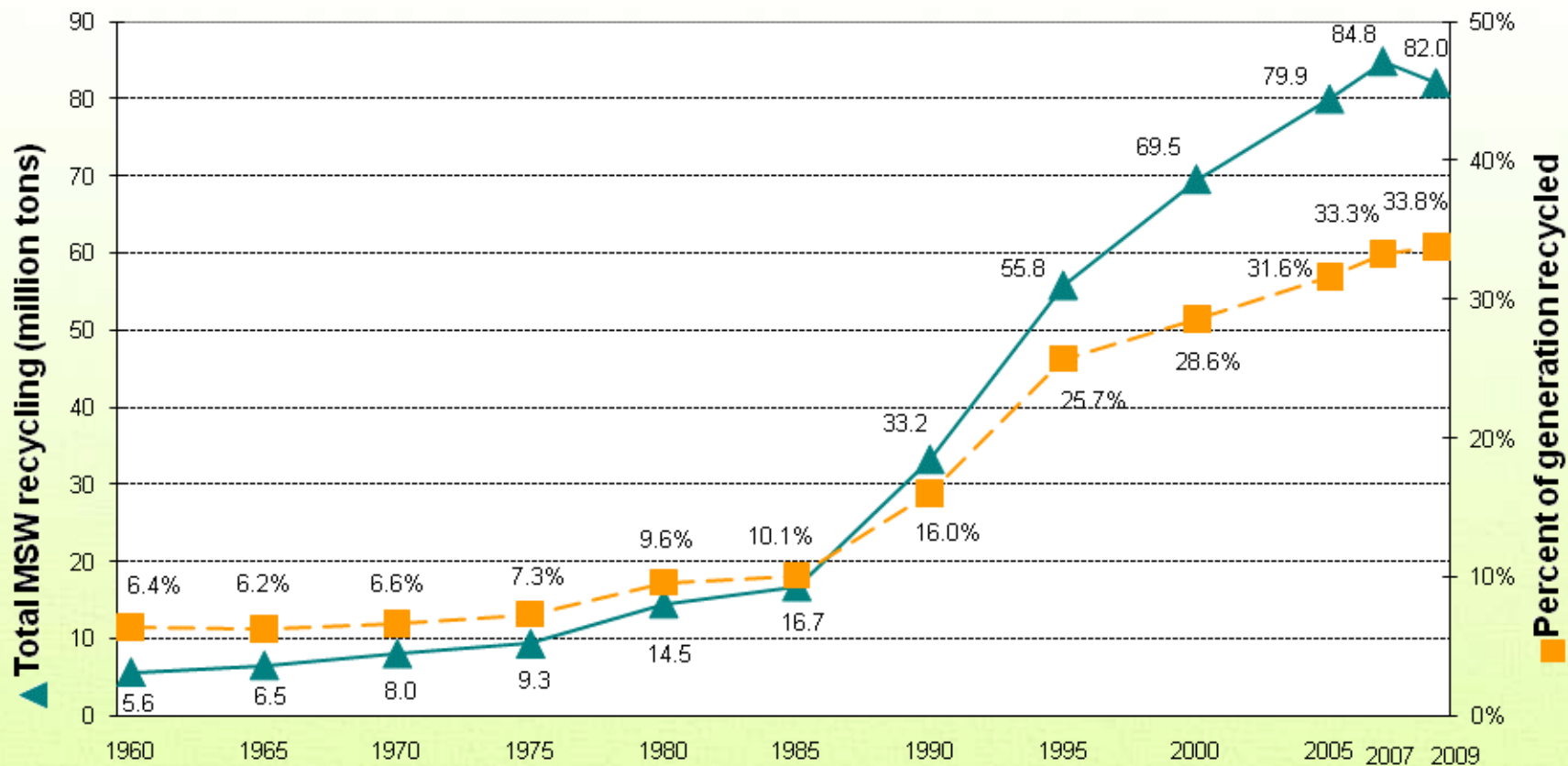
# Municipal Solid Waste Generation Rates

1960 to 2009



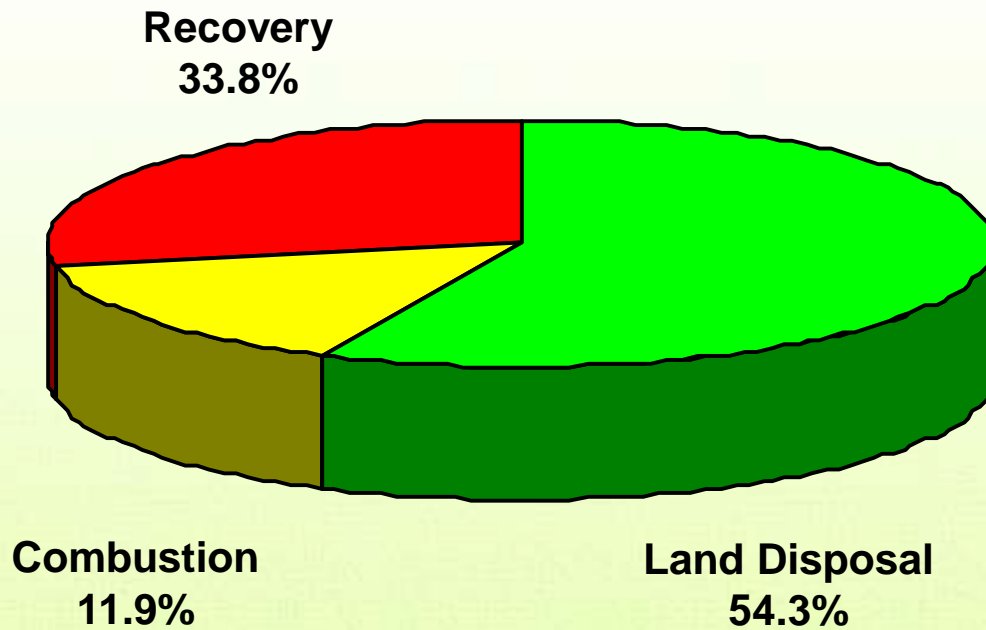
# Municipal Solid Waste Recycling Rates

1960 to 2009



▲ Total MSW recycling    ■ Percent recycling

# How Waste is Managed



Neg. = less than 5,000 tons or 0.05 percent.



# The Plan

## Sustainable Materials Management



**A NATIONAL APPROACH**

# EPA Sustainable Materials Management



- 🌳 Food Waste – Food Recovery Challenge
- 🌳 Electronics
- 🌳 State and Local Governments
- 🌳 Federal Government – Federal Green Challenge
- 🌳 Measurement





# Sustainable Food Waste Management Through the Food Recovery Challenge

Feed People Not Landfills



# The Food Waste Problem

**Americans waste enough food to fill the Rose Bowl every day.** (Bloom 2007)





# So, what exactly is food waste?



Prepared, served or cooked too much

Not used in time

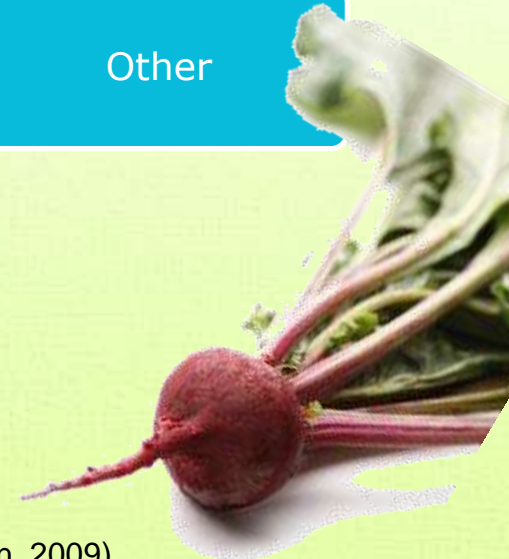
Other

Total Food and Drink Waste

Avoidable

Possibly Avoidable  
(e.g. beet tops, stale bread for croutons)

Unavoidable  
(e.g. banana peels)

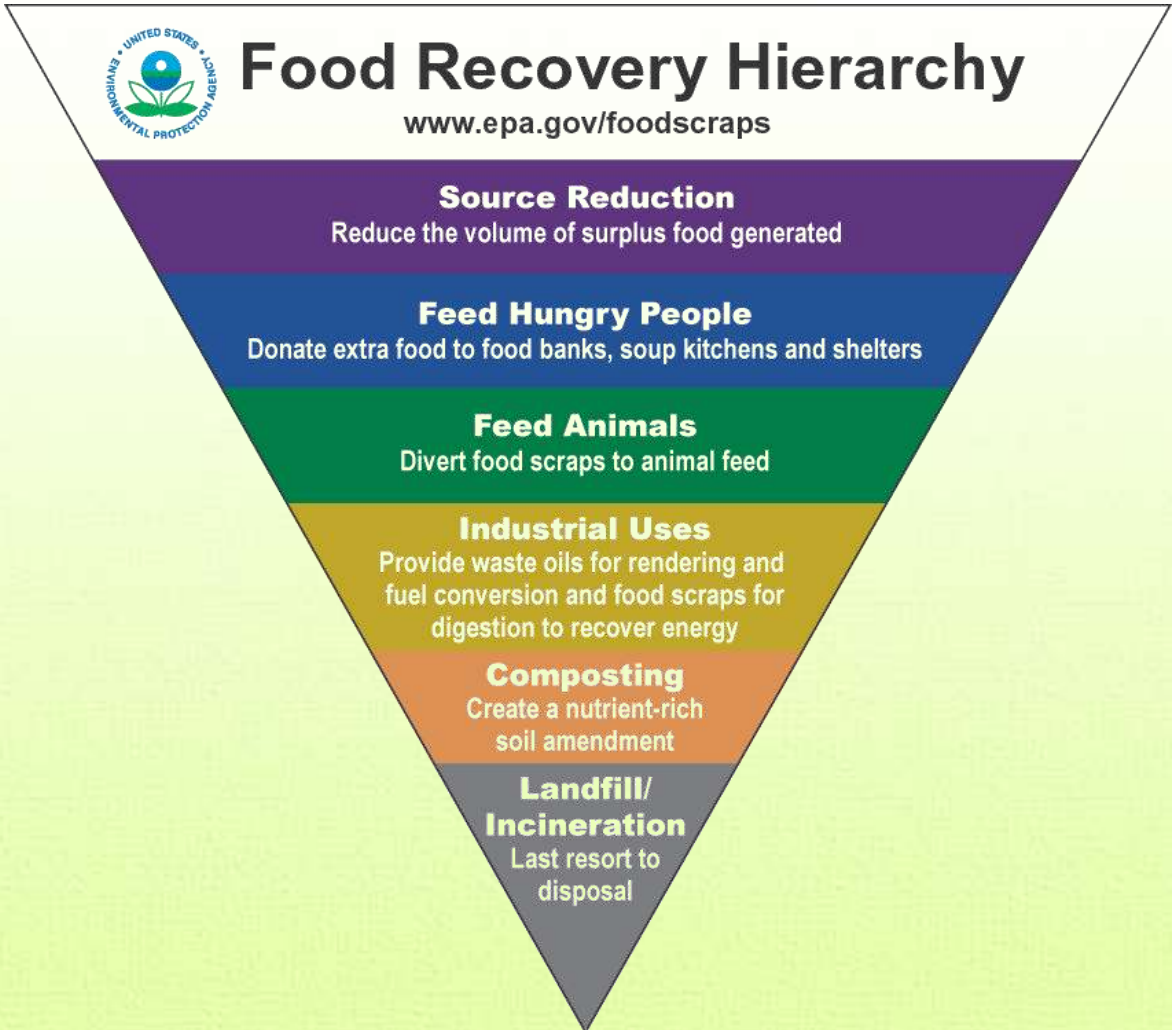


# So how can you reduce your food waste and save money?

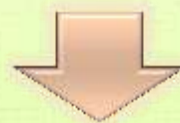


## Food Recovery Hierarchy

[www.epa.gov/foodscraps](http://www.epa.gov/foodscraps)



# One tool to reduce food waste is EPA's Food Recovery Challenge (FRC)



**Cost Savings and Brand Recognition**  
**Supporting Your Community**  
**Reducing Environmental Impact**



# The FRC is a great tool to help you reduce your food waste.

- ✓ The FRC is a FREE, simple tool.
- ✓ You'll receive free technical assistance from regional EPA staff.
- ✓ Standardized metrics allow for easy comparison.
- ✓ Opportunity to learn about best management practices.
- ✓ Be recognized for your innovative work with food waste



# Therefore, reducing your food waste can

- ✓ Reduce your costs
- ✓ Improve your image
- ✓ Feed your communities
- ✓ Protect your environment.

# WasteWise Program



U.S. Environmental Protection Agency  
- Region 7  
Jim Callier





# To be covered

- 🌳 What is WasteWise?
- 🌳 Who can join?
  - 🌳 Partners vs. Endorsers
- 🌳 Why become a Partner or Endorser?
- 🌳 What are the benefits and requirements?
- 🌳 How do I join?



# What is WasteWise?



- Free, flexible, voluntary EPA partnership program
- Assists and recognizes organizations who reduce waste — benefiting the organization's bottom line and the environment





# Who Can Join WasteWise?

- Any type of organization
  - Can join as an Endorser, Partner or Both.
- Partners – make decisions that affect the amount of waste from their facilities
- Endorsers – encourage potential partners to join WasteWise



# The WasteWise Approach

Three pronged approach to waste reduction:

 **Waste prevention**





 **Recycling**

 **Purchasing and/or manufacturing recycled content products**





# Benefits of Waste Reduction

## **Cost Savings**

-  Avoided disposal costs
-  Purchasing savings
-  Raw materials cost savings for manufacturers
-  Recycling revenue

## **Environmental Benefits**


-  Waste reduction benefits
-  Climate benefits (greenhouse gas emission reductions)

## **Good PR**






# Benefits of WasteWise

## **Free Technical Assistance**

-  Individual attention
-  Helpline
-  Resources and Publications

## **EPA Recognition**

-  Awards
-  Case studies, articles, and Web site success story features
-  Use of WasteWise logo

## **Climate Profile**

## **Re-TRAC database**

# ABC Company example to be created/inserted

Waste Management Activity	GHG Emission Reductions (MTCE)
Waste Prevention	77.57
Recycling	28,261.41
<b>TOTAL</b>	<b>28,338.98</b>

These are equivalent to:



The annual GHG emissions from this many passenger vehicles

52  
18,979  
19,031



This many acres of standing forest (based on CO2 sequestration per tree)

2  
723  
725



The annual emissions from the energy consumption of this many households (based on annual emissions per household)

25  
9,146  
9,171



This many gallons of gasoline (based on CO2 emissions per gallon)

32,282  
11,762,223  
11,794,505



This number of propane cylinders used for home barbecues (based on CO2 emissions per pound of propane)

11,850  
4,317,717  
4,329,567



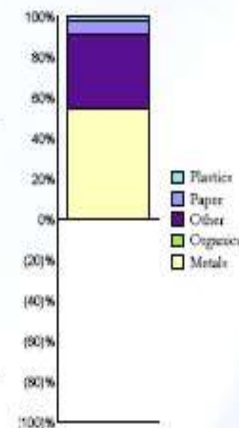
Tons of waste recycled instead of landfilled (based on CO2E emissions per ton of waste landfilled)

98  
35,733  
35,831

■ = Waste Prevention ■ = Recycling ■ = Total

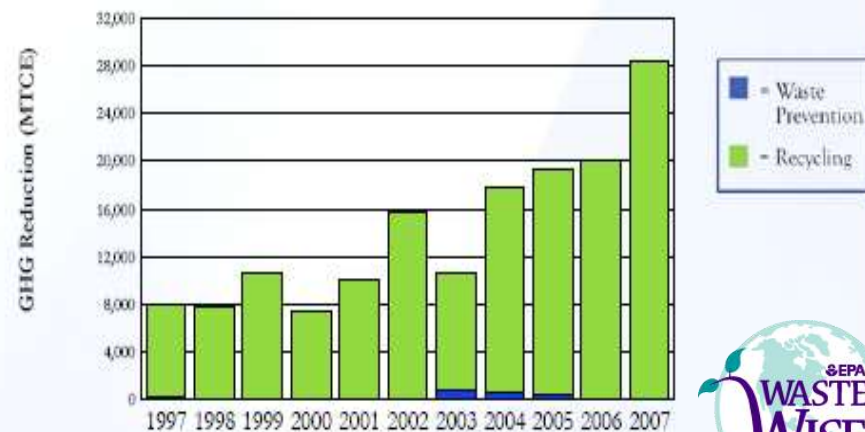
## 2007 GHG Emission Reductions by Commodity

Commodity	Amount of Waste Prevented and Recycled (pounds)	GHG Reductions (MTCE)
Other	254,980,706	10,440.25
Metals	24,249,096	15,594.22
Paper	4,208,340	1,753.77
Plastics	2,629,492	552.71
Organics	705,980	-1.97
<b>TOTAL</b>	<b>286,773,614</b>	<b>28,338.98</b>



## 2004 - 2007 GHG Emission Reduction Progress

Activity	2004	2005	2006	2007
	GHG Reductions (MTCE)			
Waste Prevention	563.86	491.55	103.92	77.57
Recycling	17,290.58	18,873.94	20,061.57	28,261.41
<b>Total</b>	<b>17,854.44</b>	<b>19,365.49</b>	<b>20,165.49</b>	<b>28,338.98</b>





# Why Should I Be an Endorser?

- Compatibility with Mission, Goals, Business Effort
  - Governments / Solid Waste Agencies
    - Helps promote waste reduction and offer additional incentives
  - Recyclers
    - Helps emphasize and communicate the value in waste reduction > Collect more materials
- Further Demonstrate Environmental Stewardship



# Suggested Endorser Activities

- **Conduct a WasteWise membership drive**
  - Recognize WasteWise partners
- **Feature WasteWise in your publications**
  - Distribute WasteWise publications
  - Advertise your support for WasteWise
- **Offer WasteWise presentations at conferences and meetings**
  - Use the WasteWise logo
- **Sponsor a waste reduction awards program**
  - Provide technical assistance



# Active Missouri WasteWise Partners

- ABB Inc.
- Anheuser-Busch  
Chiefs
- City of Kansas City  
Materials
- City of Lee's Summit
- City of St. Peters
- Covidien Mallinckrodt  
Univ.
- DataServ LLC
- Elliott Lodging
- Faultless Starch/Bon Ami  
Course
- Hallmark Cards  
Kansas City
- MEMC Electronic
- MO American Water
- Monsanto
- NW Missouri State
- Quaker Oats
- SCI Engineering Inc.
- Shoal Creek Golf





# Active Missouri WasteWise Partners

- 🌳 Spartech Corp
- 🌳 St. Louis Metallizing Co.
- 🌳 St. Louis Cardinals
- 🌳 Univ. of Missouri at Columbia
- 🌳 Univ. of Missouri at Kansas City
- 🌳 Wells Fargo



# WasteWise Contacts



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## National EPA WasteWise Program

[www.epa.gov/wastewise](http://www.epa.gov/wastewise)

Helpline  
1 (800) EPA-WISE



# Thanks From All of Us!



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