# EPA Sustainable Materials Management Web Academy

Preventing Food Waste Upstream:
A Source Reduction Approach – Part
III

March 14<sup>th</sup>, 2019

epa.gov/smm/sustainable-materials-management-web-academy

## Our Speakers





J. Cody Lillstrom
Boulder County Resource
Conservation Division



FRC Participant Awardee



Scott Ferguson
Tennessee State Parks



Tim Oliveira
Boulder County Sheriff's
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FRC Endorser Awardee

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## Disclaimer

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## EPA mission:

To protect human health and the environment.









1970-2017: Cut air pollutants by 73%



93% compliance with drinking water standards.



>9 million tons of virgin materials avoided.



# Preventing Food Waste Upstream: A Source Reduction Approach — Part III

March 14<sup>th</sup>, 2019

Sustainable Materials Management Web Academy



U.S. Environmental Protection Agency







epa.gov/sustainable-management-food/united-states-2030-food-loss-and-waste-reduction-goal





# Food Recovery Hierarchy

#### **Source Reduction**

Reduce the volume of surplus food generated

#### **Feed Hungry People**

Donate extra food to food banks, soup kitchens and shelters

#### **Feed Animals**

Divert food scraps to animal feed

#### **Industrial Uses**

Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

#### Composting

Create a nutrient-rich soil amendment

Landfill/ Incineration Last resort to disposal

#### **ŞEPA** 食物回收等級

減少來源 減少食物的剩餘量

給飢餓的人們 將多餘的食物捐給食物庫貧民廚房和庇護中心

> 給動物 將食物餘渣轉為動物食料

工業用途 是供廢油脂和食物餘渣 用來回收和製造能源

理肥 削造營養豐富的泥岀

填埋/焚燒 最後一招是 填埋

#### Jerarquía de Recuperación de los Alimentos

#### Reducir la fuente

Reducir el volumen excedente de comida generada

#### Combatir el hambre en la población

Donar la comida sobrante a bancos de alimentos comedores comunitarios o refugios

Alimentar a los animales
Utilizar las sobras de comida para

#### tinar las sobras de comida

y el aceite usado para su aprovechamiento energético

#### Composted

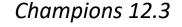
crear un abono ric en nutrientes

incineració Disposición a basurero

# The Business Case for Reducing Food Loss & Waste: \$1 invested \$14 saved!



https://champs123blog.files.wordpress.com/2017/03/report\_-business-case-for-reducing-food-loss-and-waste.pdf



# Food Loss Prevention Tip Sheets

epa.gov/sustainable-management-food/food-loss-prevention-options-grade-schools-

#### manufacturers-restaurants

#### **Food Loss Prevention Options for Manufacturers**

Before is a list of ideas and activities that manufacturers may consider implementing to help prevent food.

Loss and assets. Contact your local EPA representative for log sheets, signs, and other tools.

- Perform a food waste audit. See what's being thrown out and why. Pick a day and be there at the waste bin with a few volunteers, buckets, a log sheet, and a weight scale. Record the following:
  - What is being thro
     Weight or number
  - Weight or number
     The reason the for
  - The expiration date
  - # Whether the food
  - The most-wested a
- Sized on the results, com

low sold or otherwise toss

- ☐ Clarify date labelling and include:
  - Improve readabilit
  - Clearly label or def
  - Make "sell by" dat
     Use more "freeze!"
  - · Remove "best belt
  - uafety is not a core flow Make sure all print low
- Promote short supply cha food has to travel. This ca provisited.
- Increase regular community meeting specifically to discase sizes that may be out.
- Dualizate size requirement reduce waste.
- ☐ Send order estimates mo
- Send cuts, ends or other s



United State Workington SPA-630-F-0

#### Food Loss Prevention Options for Grocery Stores

Below is a list of ideas and activities that grocery stores may consider implementing to help prevent food loss and waste. Contact your local EFA representative for log sheets, signs, and other tools.

- Perform a food waste audit. See what's being thrown out and why. Pick a day and be there at the waste bin with volcriteers it what, a be sheet, a table, and a salety code. Record the folk-size.
  - · What is bed
  - 4 Weight or r
  - 4 The reason
  - The expirat
  - · Whetherth
  - Identifythe

Greed on the result low sold or others.

- Carify date labelli chain to clearly lab
  - options might inclu
    - Use more\*
  - Remove 'b
  - safety is no
- Call a meeting to 4
- Store practices will

#### Purchasing Tips

- Take an accurate i
- District or odd
- Send order extimationings.
- Start or increasers
- Revise your supply program.
- Otange contracts: packaging such as:

**\$EPA** 

#### **Food Loss Prevention Options for Universities**

Below is a list of ideas and activities that university food services may consider implementing to help prevent food loss and weets. Contact your local EPA representative for loss sheets, sinns, and other tools.

- Perform a food wante audit. See what's being thrown out and why.
  - Pick a day and be there at the dish return live with a few volunteers, buckets, big sheet and a weight scale. Record what is being thrown out, have much is being discarded and the reason the fixed is being disposed (jank students for detailed reason why they dish finish their boot).
  - In the kitchen, have only one food waste trash can and provide each staff member a small
    container to \$1 with food waste at their station. Before they empty their container, have staff
    unlight and record the amount, type and reason the waste is being discarded on a log sheet
    located near the trash can.
  - Use this information to adjust mersus, purchasing and portion size.
- Call a meeting to discuss food waste prevention strategies with kitchen staff and/or interested student groups. Get their thoughts and kless.

#### hep and Storage Tips

- Reduce botch sizes. Exich cooking is preparing must abuse of time and storing them for future use.
- Provide cook-to-order instead of bulk-cooking either all day or toward the end of the day.
- Replace a buffet line with a cook-to-order line. This allows you to prepare only what is ordered to missingle influence.
- Use wrotter serving containers toward the end of the day for the remaining portions of prepared
- Use leftowers from the day before. Sould one day can be used for beef size the next day.
- ☐ Train staff on knife skills to make more efficient knife cuts to use more of the food being prepared.
- ☐ Use as much of the food as possible. Cook up carrot givens and don't pref cucumbers or potatoes.
- Reconstitute stalky vegetables that have willed by increasing them in warm asser (100%) for 15
- Freeze surplus and near-to-spoil fresh fruits and veggles instead of throwing them assoc.
- Finish preparation at the line. On not finish the food item until it's ready to go on the line so you can more easily use leftour ingredients in different recipes later on.
- Different foods like different storage conditions. Refresh staff on storage techniques for different foods (e.g., don't store tomatoes and lettuce in the same container or near each other).
- Use see-through storage containers to allow staff to see what is available and to keep an eye on freebrees.



United States Sevironmental Protection Agrecy (SIDSP) Whithington, DC 20160 ENS-516-F-65-C01-D For more information, including who your local DPA representative is, visit: 1004-7 mm, east-10-7 biodictory



Vegetable Trimmings

Base for soups, sauces

and stocks

# Food Recovery Challenge

#### Participants:

- □ Track and measure their surplus food.
- Move toward their food recovery goals.

#### Endorsers:

- Educate on the sustainable management of food.
- ☐ Conduct Food Recovery Challenge outreach.





# Track your source reduction in the Food Recovery Challenge

Food Waste Prevention and Recycling - Detailed Activities

SPECIFIC ACTION	TOTAL AMOUNT	ESTIMATE % FOOD	UNIT (TONS/LBS)	TOTAL TONS	TOTAL FOOD TONS
Source Reduction through purchase, storage and handling		100%	Tons		
Source Reduction through over-preparation and plate waste		100%	Tons		
Other Source Reduction Activities		100%	Tons		
Donation to Feed people		100%	Tons		
Animal Feed		100%	Tons		
Other Donations/Reuse		100%	Tons		
Composting - mixed organics (Please estimate % food)		100%	Tons		
Composting - Food Only		100%	Tons		
Anaerobic Digestion w/beneficial use of digest (Please estimate % food)		100%	Tons		



# 2017 Source Reduction Achievements epa.gov/foodrecoverychallenge

- 1000+ participants and endorsers
  - -Prevented 18,000 tons of wasted food.
  - -Saved \$31 million in avoided tipping fees.





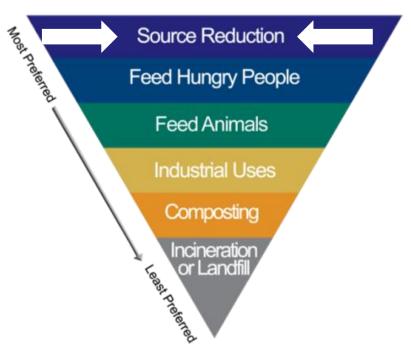
# CUT FOOD WASTE GOAL! CUT FOOD WASTE GOAL! IN HALF BY 2030

- 1) Measure your wasted food and set goals.
- 2) Participate in the Food Recovery Challenge.
- 3) Implement source reduction.



#### Food Recovery Hierarchy





### EPA.GOV/SUSTAINABLE-MANAGEMENT-FOOD/HOW-PREVENT-WASTED-FOOD-THROUGH-SOURCE-REDUCTION

epa.gov/sustainable-management-food/forms/contact-us-about-sustainable-management-food

Sustainable Materials Management

# Food Recovery Challenge



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## Next SMM WEBINAR

Waste Reduction Model (WARM) April 25<sup>th</sup>

Register at: epa.gov/smm





