

Reducing Food Loss and Waste: A Workshop on Impacts

Impacts of Reducing Food Loss and Waste on the Environment

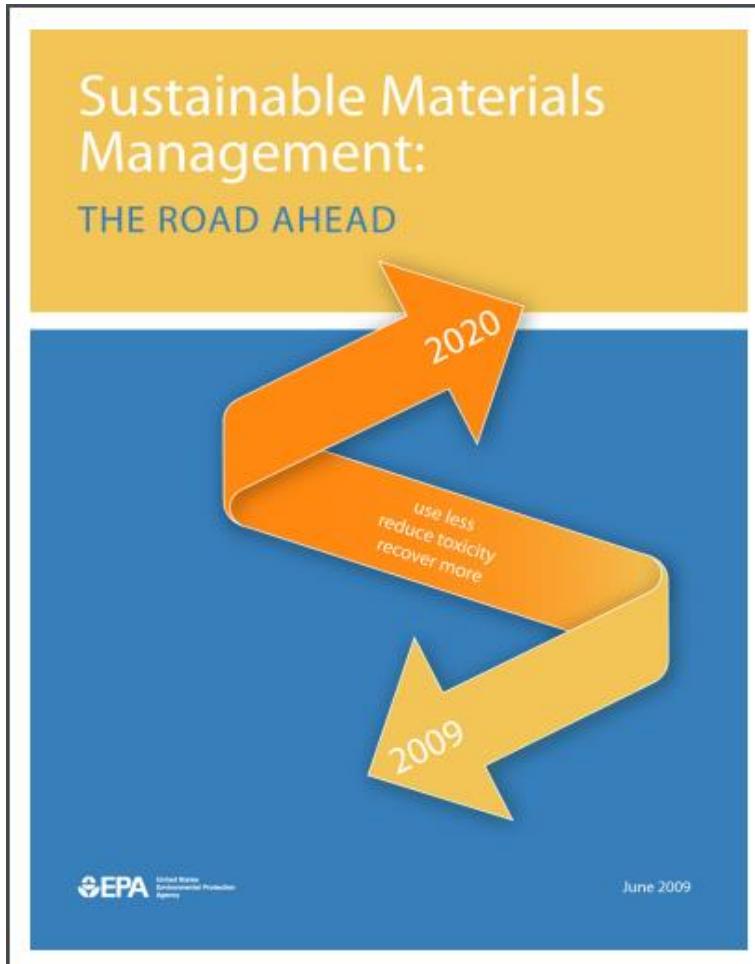
October 17, 2018

Lana Suarez

Sustainable Management of Food

US Environmental Protection Agency

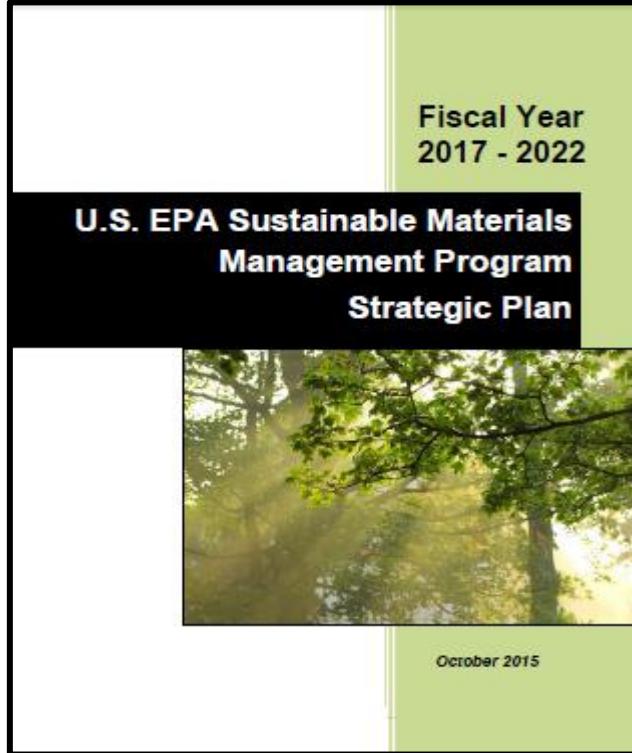
Sustainable Materials Management



“An approach to serving human needs by using/reusing resources productively and sustainably throughout their life cycles, generally minimizing the amount of materials involved and all associated environmental impacts.”

Sustainable Materials Management: The Road Ahead, EPA (2009)

Sustainable Materials Management



Built Environment (buildings, roads, bridges, infrastructure)

Sustainable Management of Food

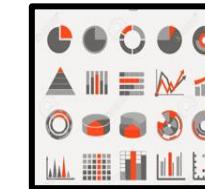
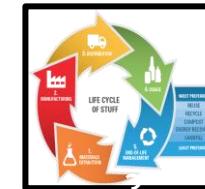
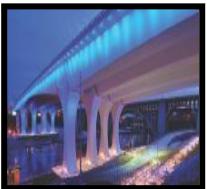
Sustainable Packaging

Sustainable Electronics Management

Life-Cycle Thinking

Measurement

International Efforts





Food Recovery Hierarchy

www.epa.gov/foodscraps

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

Waste Reduction Model (WARM)



Environmental Topics Laws & Regulations About EPA

Search EPA.gov

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<https://www.epa.gov/warm>

Waste Reduction Model (WARM)

EPA created the Waste Reduction Model (WARM) to help solid waste planners and organizations track and voluntarily report greenhouse gas (GHG) emissions reductions from several different waste management practices. WARM calculates and totals GHG emissions of baseline and alternative waste management practices—source reduction, recycling, anaerobic digestion, combustion, composting and landfilling.

Basic Information about WARM



Documentation



Related Programs

- [Sustainable Materials Management](#)
- [WasteWise](#)
- [ENERGY STAR](#)
- [Climate Change](#)

Other Tools

The screenshot shows the WARM software interface. At the top, there's a menu bar with 'File', 'Edit', 'View', 'Scenario', 'Characteristics', 'Information', and 'Help'. Below the menu is a toolbar with icons for 'New', 'Open', 'Save', 'Print', and 'Exit'. The main window has a title bar 'Waste Reduction Model (WARM)'. Below the title bar are four tabs: '1 Scenarios' (highlighted in orange), '2 Further Characteristics', '3 General Information', and '4 Calculation'. A status bar at the bottom of the window displays 'Please enter data in short tons (1 short ton = 2,000 lbs.) and refer to the User's Guide if you need assistance'. The 'Scenarios' tab contains sections for 'Baseline Scenario' and 'Alternative Scenario' with various input fields for tons generated, tons recycled, tons landfilled, tons combusted, tons composted, and tons anaerobically digested. The 'General Information' tab includes sections for 'Baseline Scenario' and 'Alternative Scenario' with dropdown menus for 'Material' (Aluminum Cans, Aluminum Ingots, Steel Cans, Copper Wire, Glass, HDP) and 'Tons Generated'. The 'Further Characteristics' tab contains sections for 'Baseline Scenario' and 'Alternative Scenario' with dropdown menus for 'Tons Source Reduced', 'Tons Recycled', 'Tons Landfilled', 'Tons Combusted', 'Tons Composted', and 'Tons Anaerobically Digested'. The 'Calculation' tab contains sections for 'Baseline Scenario' and 'Alternative Scenario' with dropdown menus for 'Tons Generated', 'Tons Recycled', 'Tons Landfilled', 'Tons Combusted', 'Tons Composted', and 'Tons Anaerobically Digested'. A 'User Guide' link is located in the bottom right corner of the software window.



Our country has a goal: **Cut wasted food in half by 2030**

Learn how to do your part: www.epa.gov/foodrecovery

How much food is wasted in the U.S.?

Percentage of food that goes uneaten each year:

31%

Percentage of waste thrown away that is food:

22%

Cost of the food that goes uneaten each year:

\$161.6 BILLION

Amount of food waste that is composted:

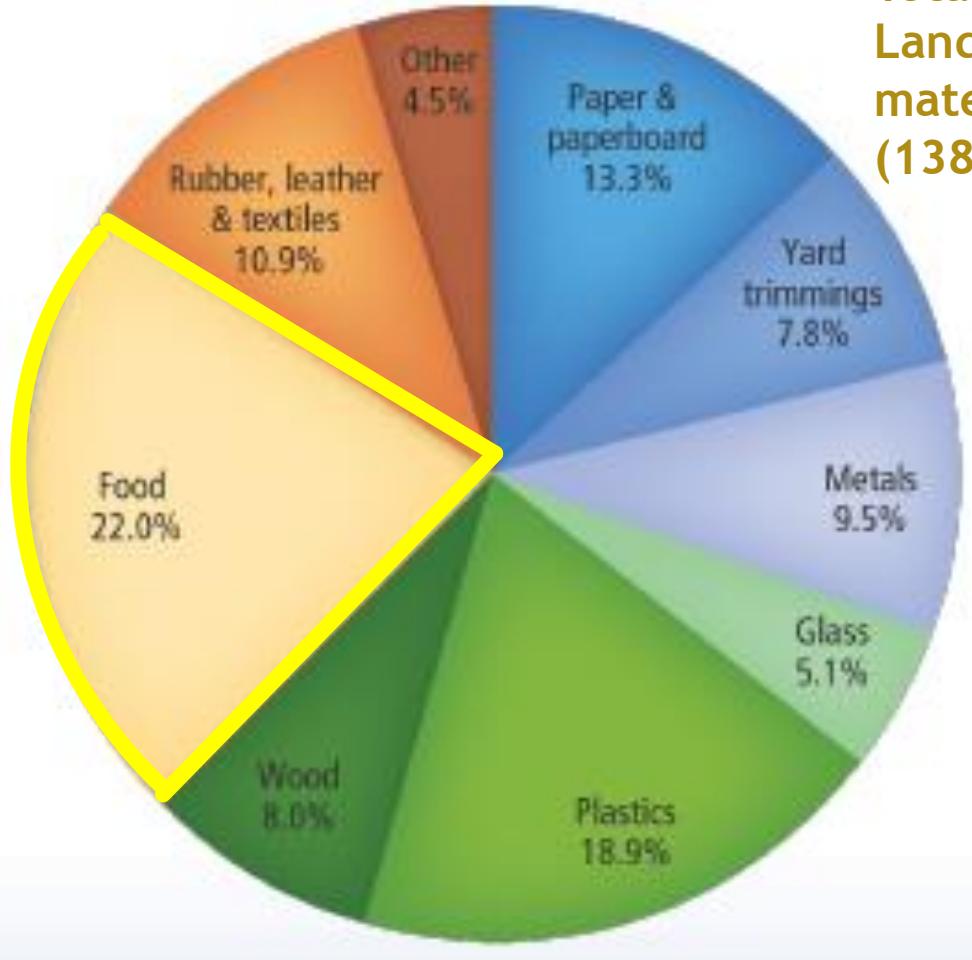
2.1 MILLION TONS

Number of Americans from households that don't always have enough to eat:

40 MILLION

EPA's Facts and Figures Food Waste Estimates

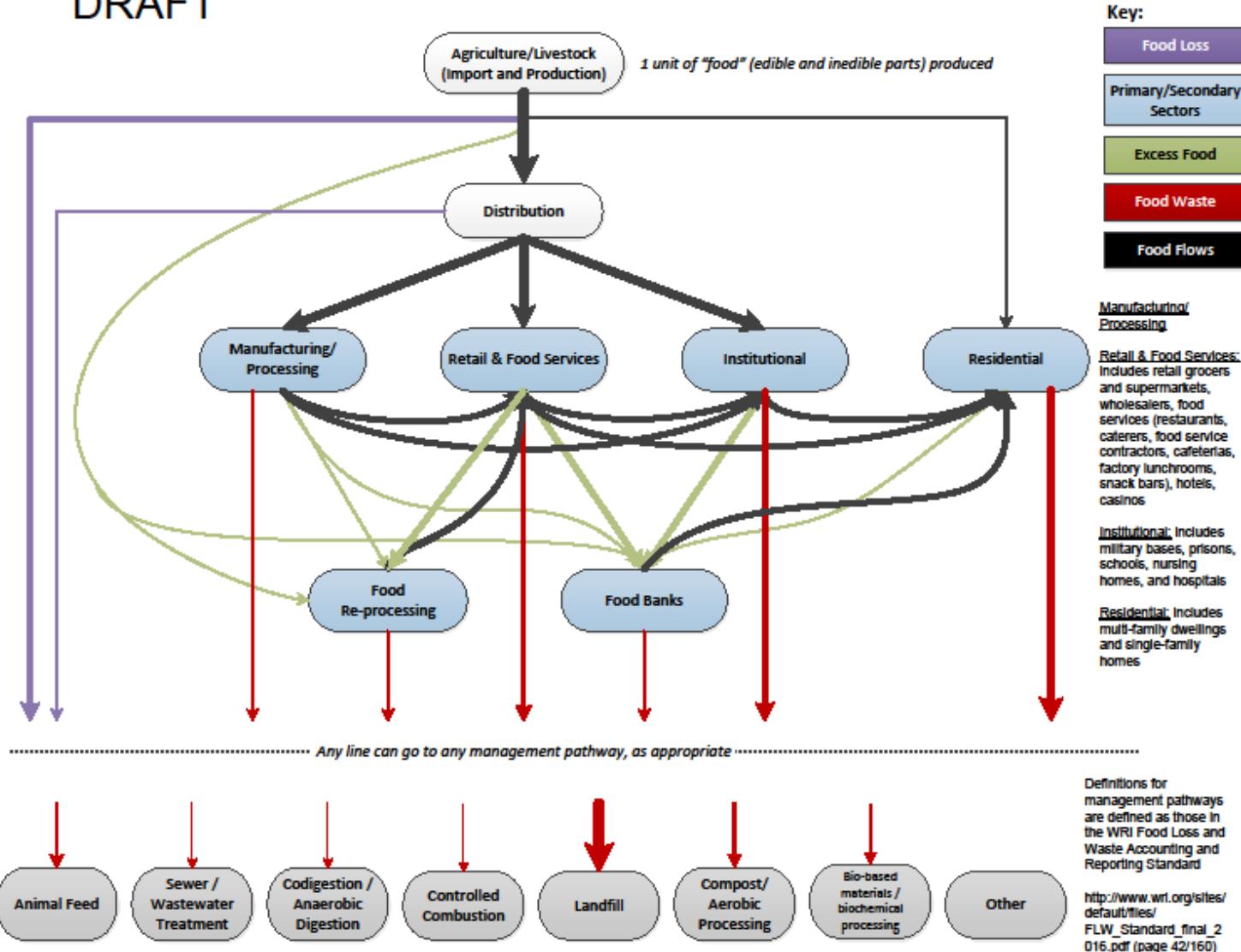
Total MSW Landfilled (by material), 2015 (138 million tons)



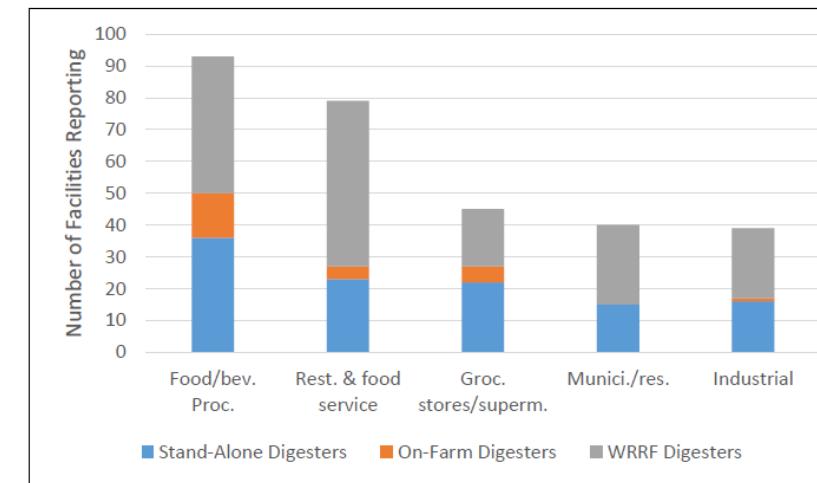
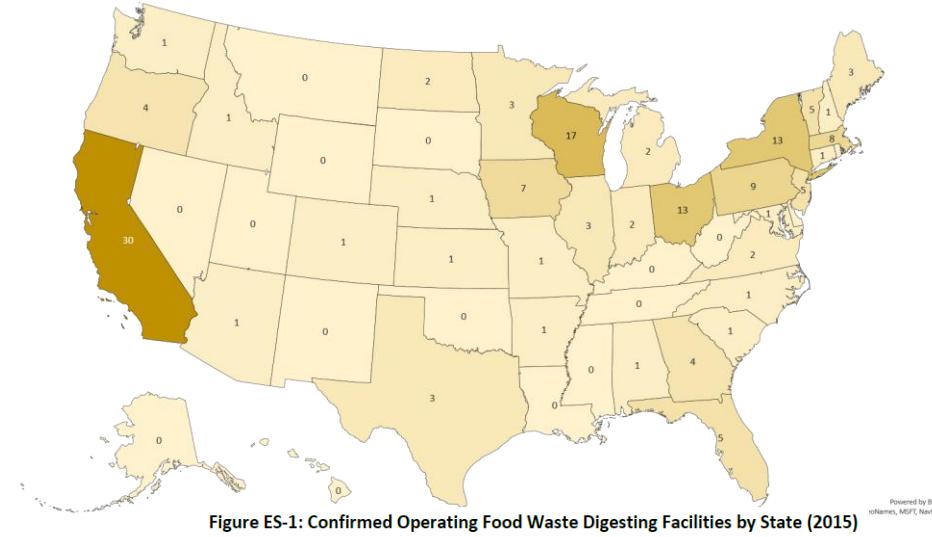
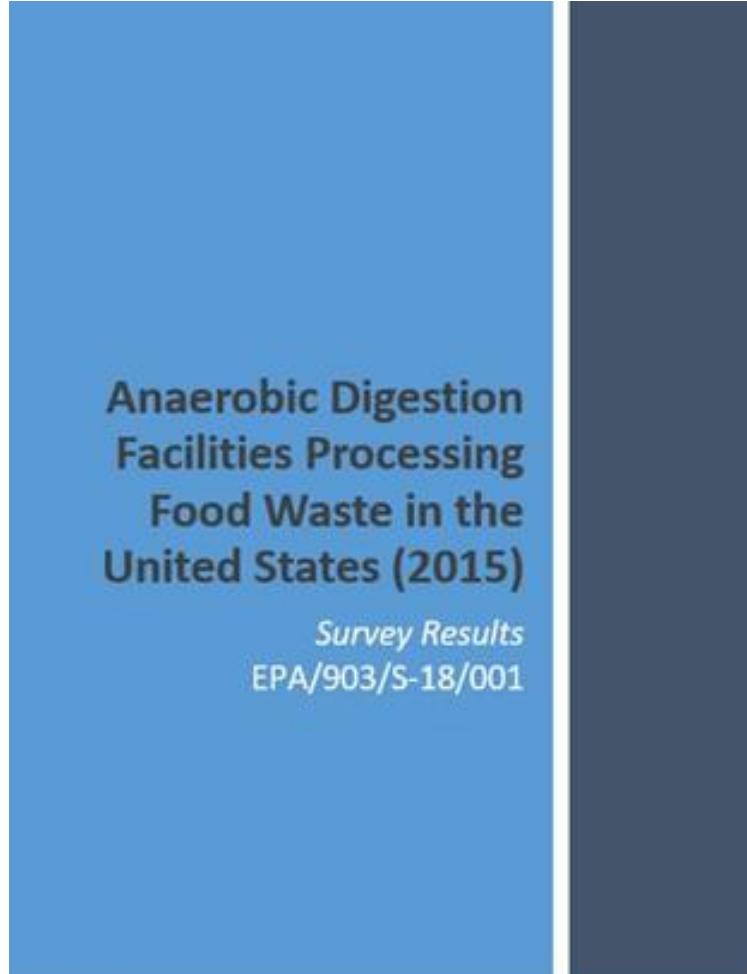
<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data>

SMF Measurement Improvement

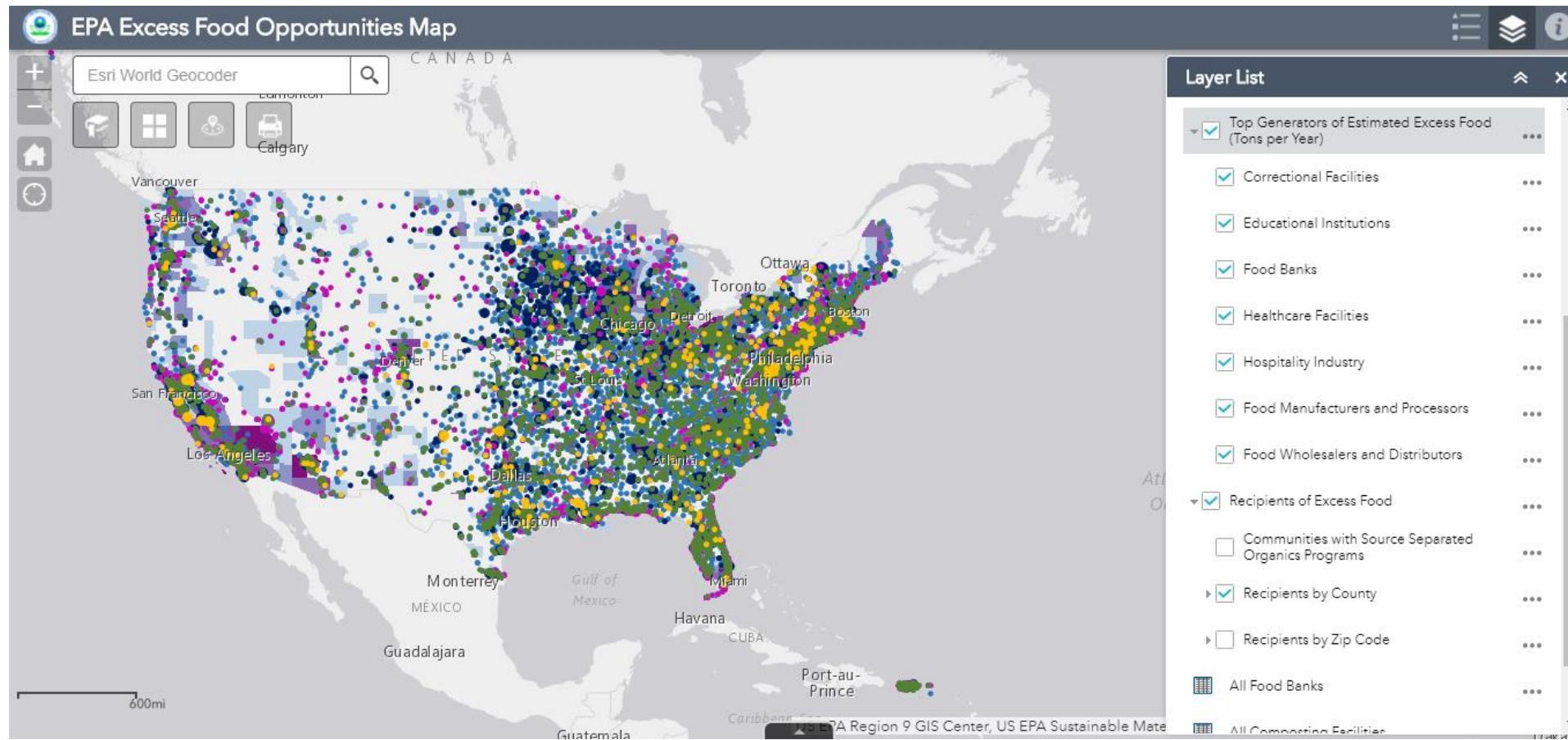
DRAFT



Anaerobic Digestion Data Collection Project



Excess Food Opportunities Map

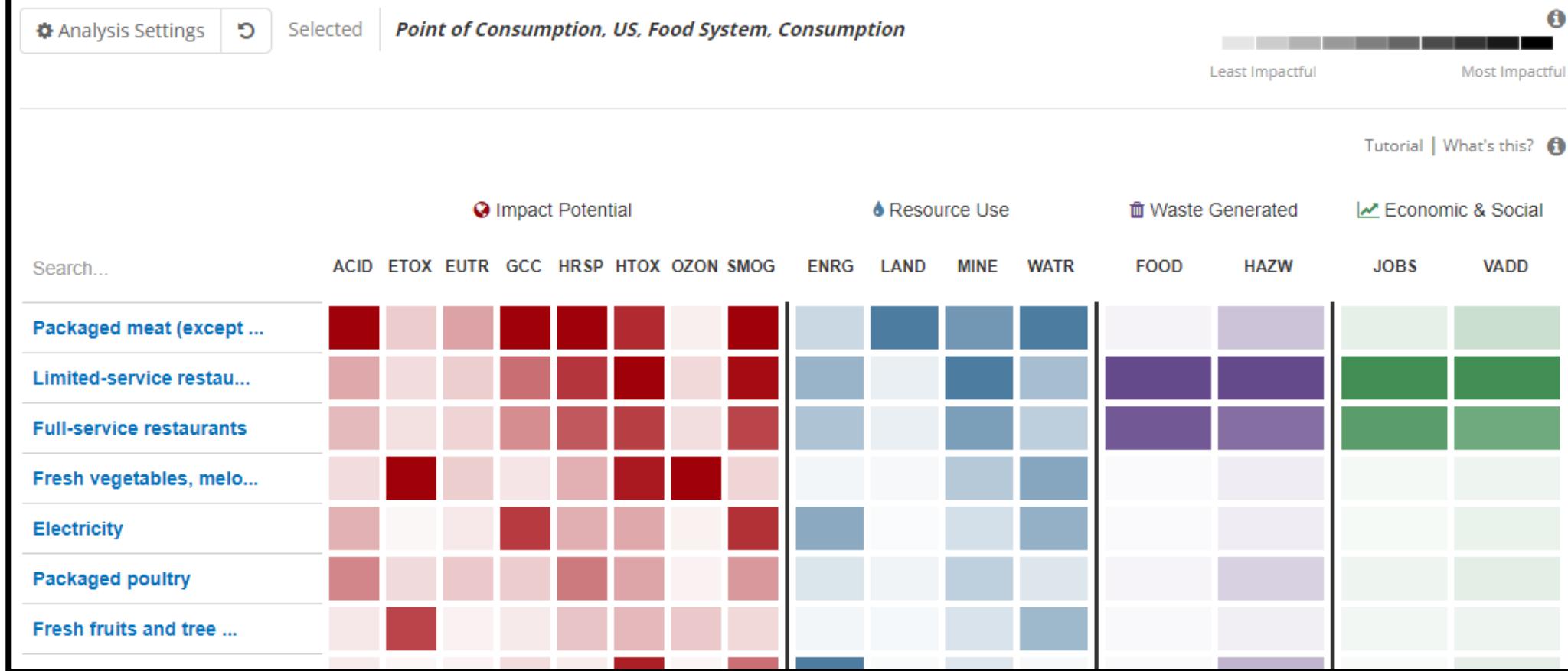


<https://www.epa.gov/foodmap>

SMM Prioritization Tool Suite

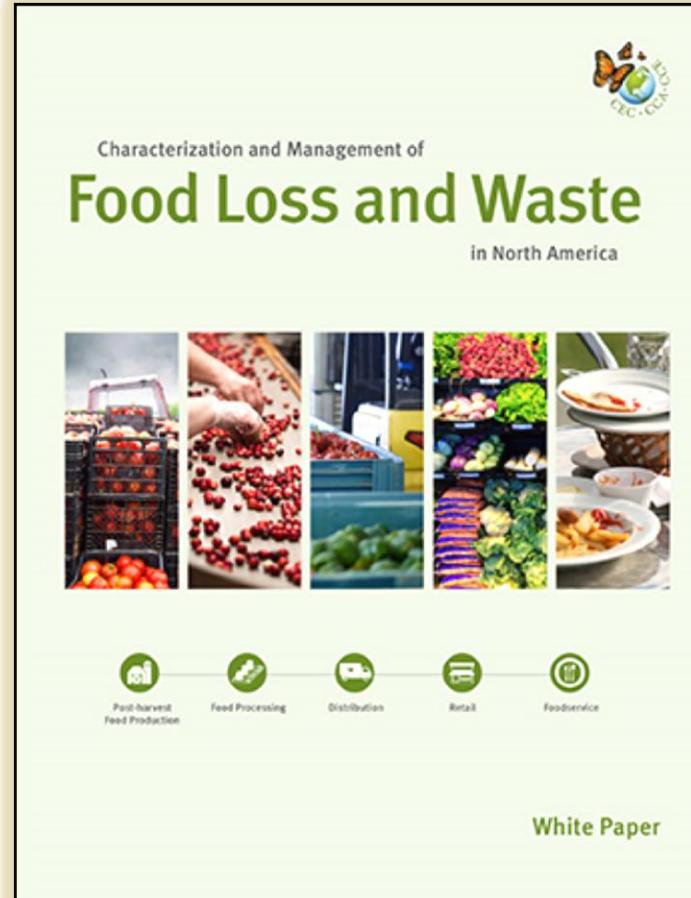
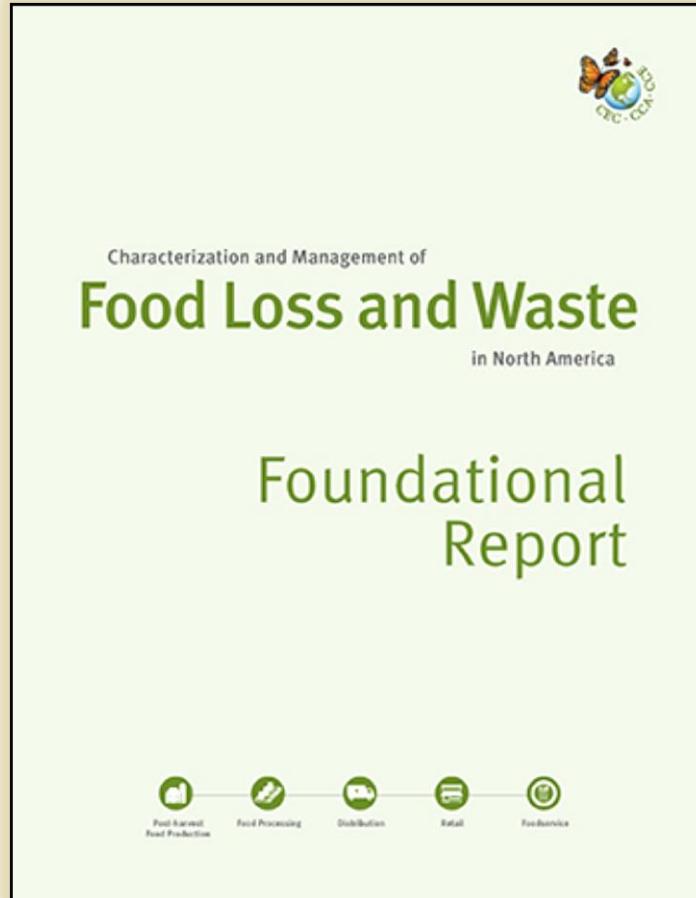
Potential Areas of Opportunity: US

The heatmap below shows goods & services (down the left side) ranked by overall environmental, human health and socioeconomic impacts (across the top) based on the selected analysis settings. Click a good or service name to learn more about it, click an indicator name to sort by that indicator, and check out the comparison analyses below the heatmap. Click a "What's this?" link for more information.

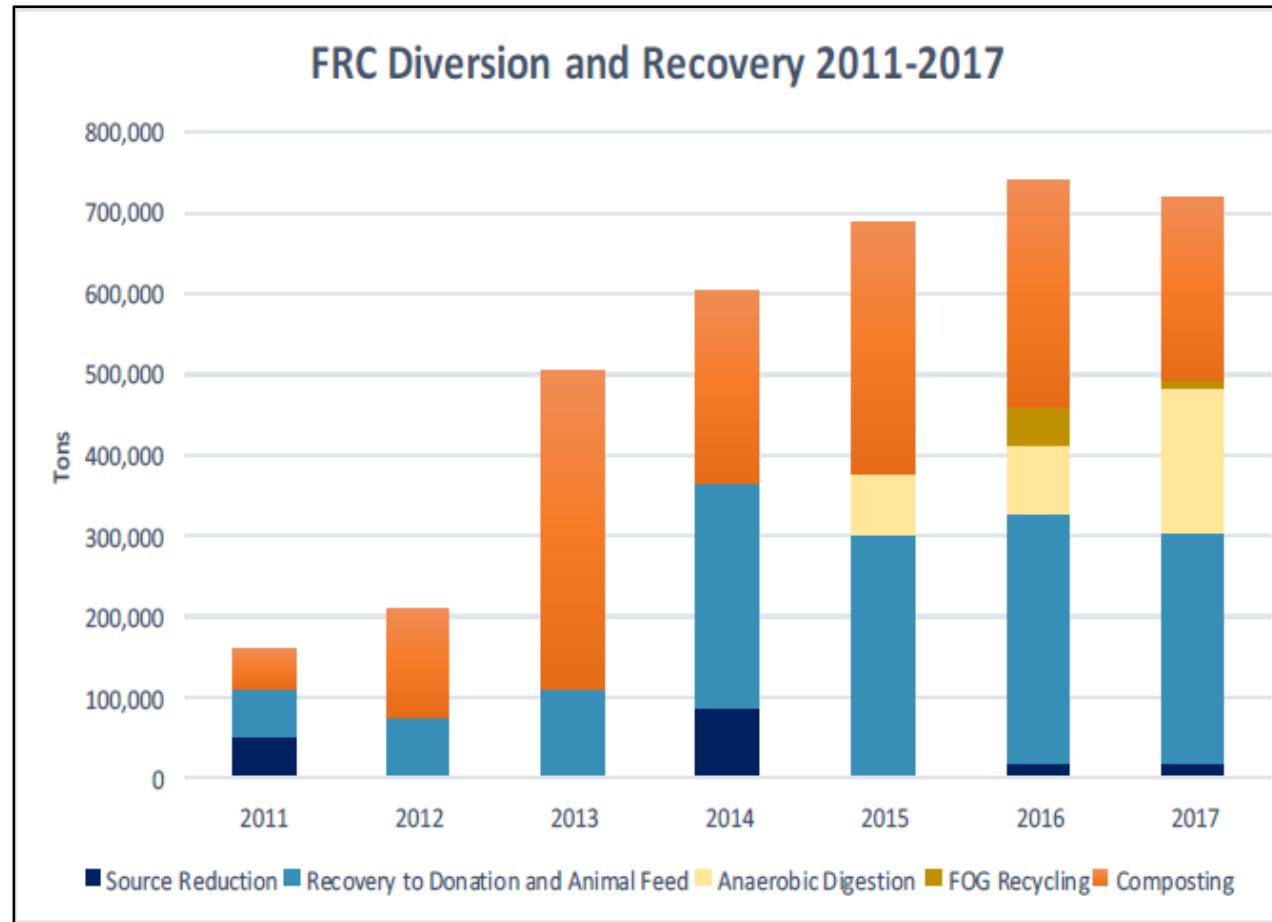
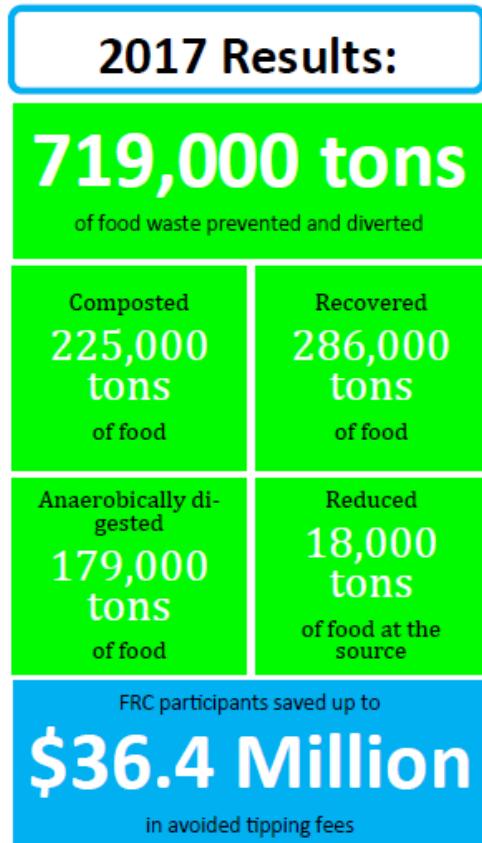


Screenshot: Food System Results from National SMM Prioritization Tool

CEC Food Loss & Waste Projects



Food Recovery Challenge



U.S. Food Loss and Waste 2030 Champions

 Ahold Delhaize			 BON APPÉTIT MANAGEMENT COMPANY food service for a sustainable future™	
 CONAGRA • BRANDS •		 General Mills Making Food People Love		 MARLEY SPOON
 MOM MOM's Organic Market				 Unilever
			 WHITSONS® Culinary Group	

<https://www.epa.gov/sustainable-management-food/united-states-food-loss-and-waste-2030-champions>

Thank you!

Please visit our website:

<https://www.epa.gov/sustainable-management-food>

Follow us @EPAland using #nowastedfood

Join the Food Recovery Challenge

<https://www.epa.gov/sustainable-management-food/food-recovery-challenge-frc>



Center for Food Loss
and Waste Solutions

<https://furtherwithfood.org>