

Food Waste Reduction

Workshop for North Coast Small Business Development Center

Tuesday, November 30, 2021

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Food Waste Reduction Workshop

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5:30-7:30PM

Schedule

5:30 Introductions

- What is your biggest source or cause of food waste?
- How much do you have budgeted for garbage/recycling/food waste hauling?
- What percent do you estimate is food waste?
- Are you informed about California's organic waste reduction laws?

5:50 Magnitude of the Food Waste Problem:

- Hungry people; Tons-to-the-landfill; GHG emissions; Significant Costs

6:00 Laws aimed at Food Waste Reduction

6:15 Hierarchy for Food Waste Problem Solving

6:35 Reducing Other Material Types You Waste

6:45 How to track & reasons to track your progress

6:50 Waste Reduction During the Pandemic

7:00 Closing Summary of next steps

Magnitude of the Food Waste Problem

An estimated 40% of food in the United States goes to waste.

This is the equivalent of us tossing \$165 billion into landfills each year. (NRDC 2017)

In California, we throw out around 5.6 million tons of food every year, which accounts for 18% of the state's waste stream.

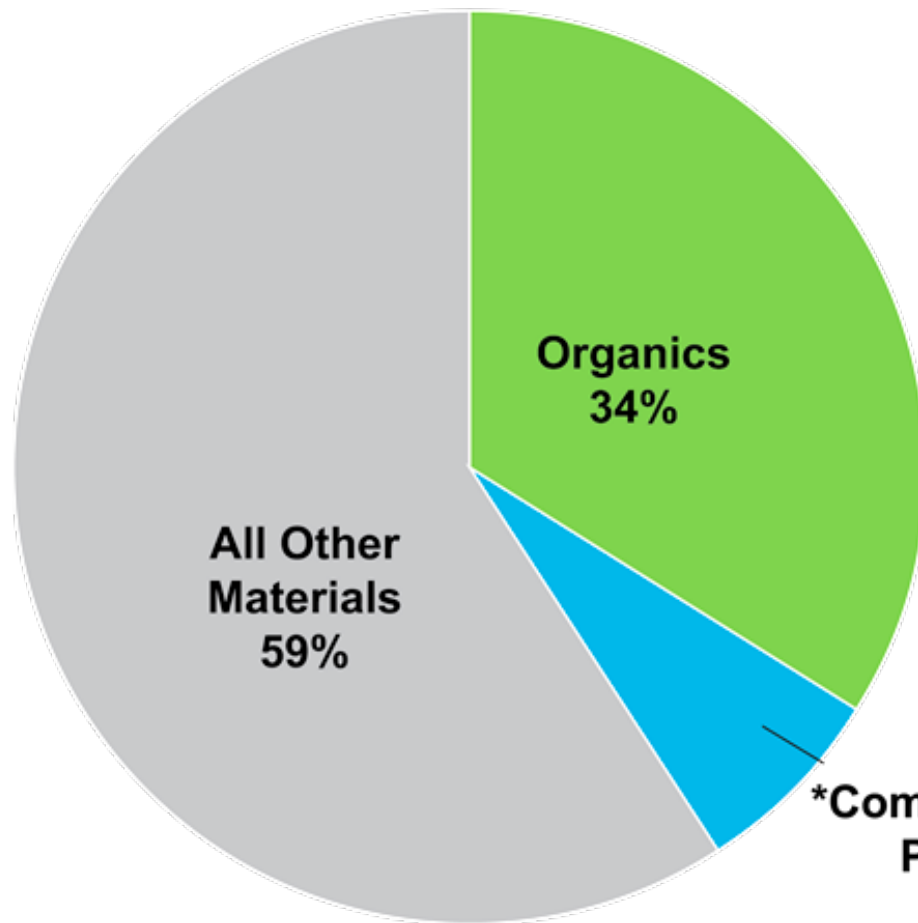
Food rotting in landfills is one of the biggest contributors of methane emissions, a greenhouse gas that's at least 25 times more powerful than carbon dioxide.

Food insecurity affects 1 in 8 Californians, 1 in 4 children, and at the same time 40% of food available in the U.S. is never eaten. In California, food makes up the largest portion of total waste sent to landfills.

LOOK FOR MORE CURRENT

Organics in California's Overall Disposed Waste Stream 2014

Data from CalRecycle's 2014 Waste Characterization Report



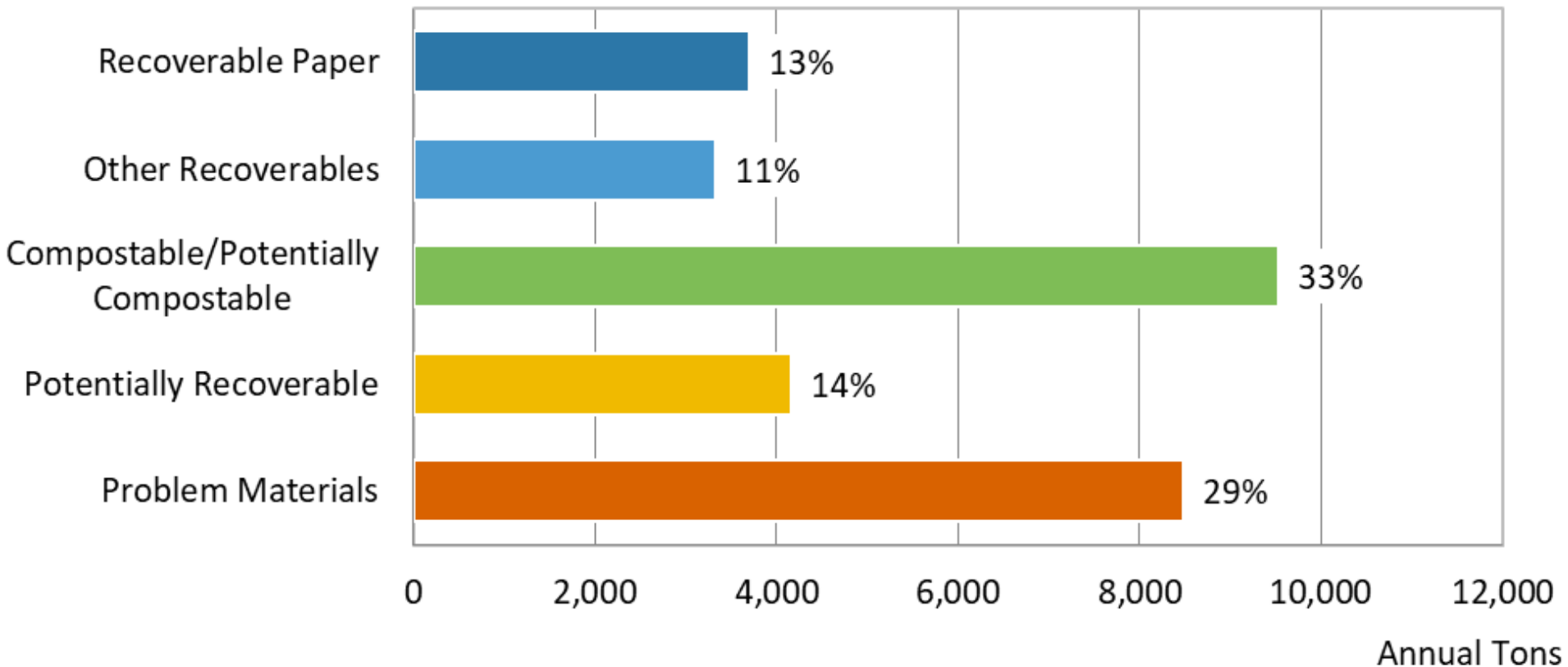
Organics Include

- Food Waste
- Landscape Trimmings
 - Leaves
 - Grass
 - Trimmings
 - Branches
 - Stumps
- Non-Hazardous Wood Waste
- *Compostable Paper

*Compostable paper includes food-soiled paper and other compostable paper

2020-21 HWMA Waste Characterization Study

Figure 8. Overall Material Composition by Recoverability Group, Commercial Cascadia, October 2021



Laws Aimed at Food Waste Reduction

California's Organic Waste Recycling Laws

CA AB 1826 - MANDATORY COMMERCIAL ORGANICS RECYCLING

- **Requires California businesses that generate more than 2yd³ of solid waste per week to arrange for organic waste recycling services**
 - ❖ 2yd³ solid waste/week = all trash + recycling generated onsite
 - ❖ Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.
- **Requires local jurisdictions to implement an organic waste recycling program to divert organic waste generated by businesses.**

CA SB 1383 – SHORT-LIVED CLIMATE POLLUTANT REDUCTION STRATEGY

- **Requires 75% reduction in statewide disposal of organic waste by 2025**
- **Goal that no less than 20% of edible food must be recovered for human consumption by 2025**

CA Tax Benefits for Donating Food

- **Food donations are eligible for a tax deduction if donations are made to a 501(c)(3) non-profit organization / private charity.**

Food Waste Reduction Alliance Survey:

44% of manufacturers, 41% of restaurants, & 25% of retailers identified fear of liability as their primary barrier to food donation.

Bill Emerson Good Samaritan

Food Donation Act (1996)

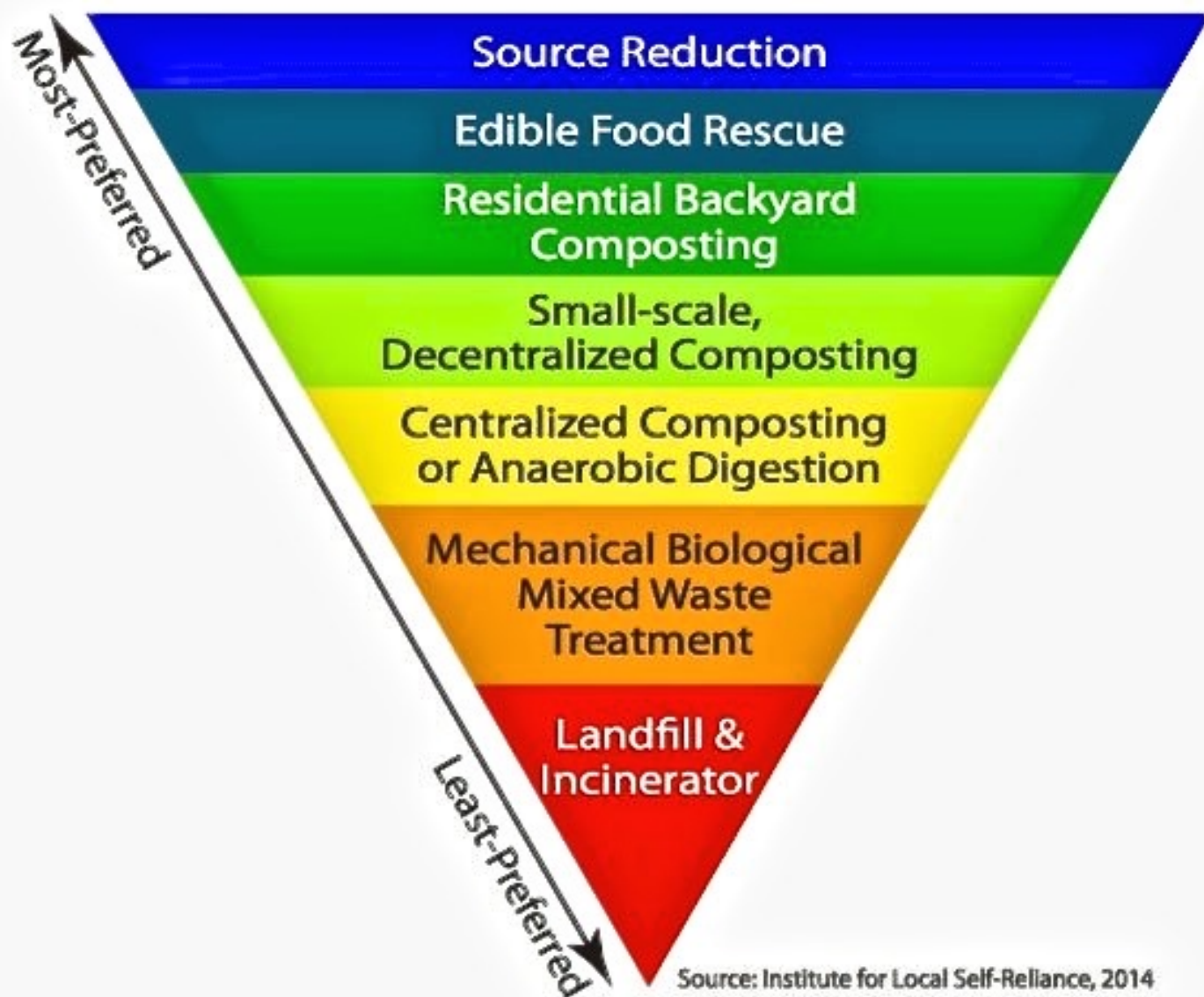
Exempts those who make good faith donations of food and grocery products to nonprofits that feed the hungry from liability for injuries arising from the consumption of the donated food.

The California Good Samaritan Food Donation Act (2019)

Designed to more explicitly state the types of food donations that are protected & expands liability protection to donations made by food facilities, which are subject to food safety regulations and inspections.



Hierarchy For Reducing & Recycling Food Scraps And Other Organic Discards



Source: Institute for Local Self-Reliance, 2014

Logical Hierarchy to Food Waste Problem Solving

- 1. Waste Prevention Strategies (Source Reduction) – changes in **Purchasing, Prep, Storage, Packaging, Portions.** Reuse – Business to Business support & materials exchange**
- 2. Edible Food Rescue – Who, where, when and how to deliver leftover food to people.**
- 3. Deliver Food Scraps to Farm Animals.**
- 4. Residential backyard and small-scale, decentralized composting.**
- 5. Centralized municipal or industrial composting and food digestion facilities (**Roadmap for regional approach currently being developed**).**
- 6. Haul to Landfill Disposal.**

Goal 3:

Waste Prevention

Arcata's Top Priority for Sustainable Materials Management

Least understood ZW strategy.

Does not treat or manage discarded materials.

Personal responsibility, business systems, physical infrastructure and I.T. are needed.

Biggest Bang for the Buck: upstream, proactive decision-making, purchasing, design.(PDPD)

Therefore, conserves natural resources, energy, reduces negative environmental impacts.

Examples: Provide checklists to require, request, negotiate with suppliers; install more water bottle refill stations; restaurants serve smaller portions; adopt take-back & reuse.



Good Example of Switching to Less Wasteful Food Service



Bad Example of Packaging



Food Serviceware

1st: Reusable—refillable/washable/returnable



2nd: Fiber/Paper that is compostable

Green Plastic Terminology	Term decoded	Additional Facts
Bio-based	Some or all of the plastic was derived from a renewable resource (corn and cellulose being most common).	Bio-based plastics can have identical chemical and physical properties to petroleum-based plastics.
Biodegradable	Some microbe, somewhere, is capable of degrading the plastic into smaller pieces.	By definition, virtually everything is biodegradable. Time scale and conditions are the important considerations.
Compostable	According to ASTM, biodegradable to carbon dioxide and water in an aerobic industrial composting facility within 180 days.	Compostable does not mean that the plastic will breakdown in your backyard composter, in the roadside ditch, floating at sea, or in a landfill.
Recyclable	Possible to segregate by resin type (#1-7), transport to a manufacturer to chip, wash, melt, and reform into a new product such as a park bench or plastic siding.	Some plastic resins (#1-7) never get recycled. According to the US EPA ~9% of plastic produced each year is recycled. Due to Humboldt's isolated location, recycling rates are expected to be lower than the national average.

The table above summarizes the plastics industry's marketing terms to appeal to environmentally conscientious consumers.



STORAGE CHART

PREVENT CROSS-CONTAMINATION



- ← **TOP SHELF**
Vegetables, Fruits & Ready-to-Eat (RTE)
- ← **NEXT SHELF DOWN**
Fish
- ← **NEXT SHELF DOWN**
Solid Pork & Solid Beef
- ← **NEXT SHELF DOWN**
Ground Beef, Ground Pork & Ground Fish
- ← **BOTTOM SHELF**
Poultry - Whole Birds & Ground Turkey

Software Applications

To Reduce Food Waste and Increase Materials Reuse

One of the fastest growing types of new software applications are for materials reuse and food waste reduction.

Software applications ("Apps") perform a variety of options, including:

- **Notification alerts to schools, food pantries, and individuals of edible excess food leftover from events or a load of reusable materials are available;**
 - **Notices about food expiration and produce spoil dates;**
 - **Mapping locations and pick up arrangements for food**
- ❖ **HSU now uses an app to alert students who need food.**

This is the wave of the future and local food manufacturers, stores, restaurants, events, are urged to learn about the new I.T. infrastructure that helps reduce food waste.

- **You will be provided with links to recent articles about the development of waste reduction software applications, and links to several of the available Apps.**

Goal 6:

Increase Food and Organics Waste Prevention and Reuse

Greatest percentage of materials currently disposed in Arcata.
Tasks intended to reduce individual food waste, and all of Arcata's food-selling, food-serving, and food production businesses.

The U.S. EPA Food Recovery Hierarchy summarizes the priority order for reducing food waste:

1. Food Waste Prevention
2. Feed Hungry People
3. Feed Animals
4. Industrial Uses
5. Composting
6. Landfill or Incineration

Examples:

Business Pledge Drive, smaller portions, support development of decentralized composting and vermicomposting services. Assist with Arcata's siting and permitting process for facilities.



What is “right-sizing?”



What are the ways that you reduce costs ?

- ✓ **Reduce regular purchases of single-use** paper and plastic packaging, food service, etc. when you replace with washable/reusable service.
- ✓ **Bulk purchases** if you have the ability to safely store, or purchase cooperatively with allied or neighbor businesses.
- ✓ **"Right-sizing"**: the process of monitoring how much volume is not used in your garbage container over time, and gradually reducing the size of your dumpster and the frequency of collection.
- ✓ **Often increased efficiencies and customer loyalty** develop with your commitment to Zero Waste.

