

We Are Food:

School Food Waste & Recovery



UPLAND UNIFIED
SCHOOL DISTRICT



UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UC Cooperative Extension

Meet the Presenters



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UUSD Farm to School



Extended Learning



Farm to Cafeteria



Sustainability



San Bernardino County Environmental Education



- Part of University of California Cooperative Extension (UCCE)
- Educating the public by sharing peer-reviewed research from UC and other universities
- Presentations on a wide variety of topics including composting, sustainable landscaping, and resource conservation
- UCCE also includes EFNEP, 4-H, Master Gardeners, Master Food Preservers, and Academic Advisors



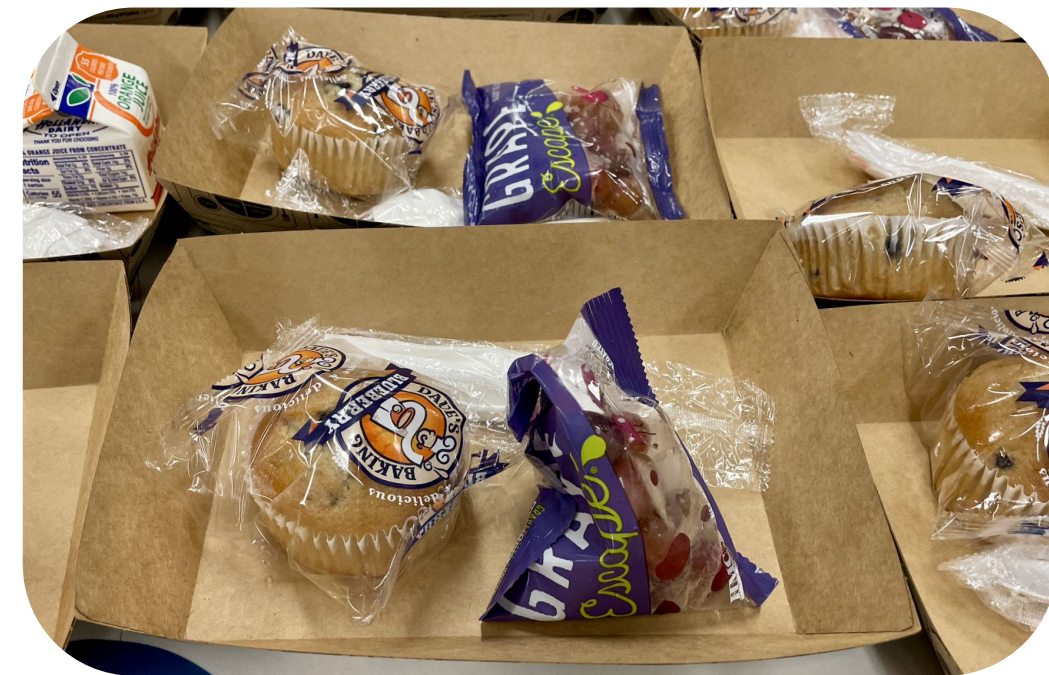


Let's Share: Poll

Where are you most interested in food waste and edible food recovery?

- ☐ Home
- ☐ School
- ☐ Community
- ☐ Business / organization
- ☐ Other

If other, type it in the chat.



Workshop Outline

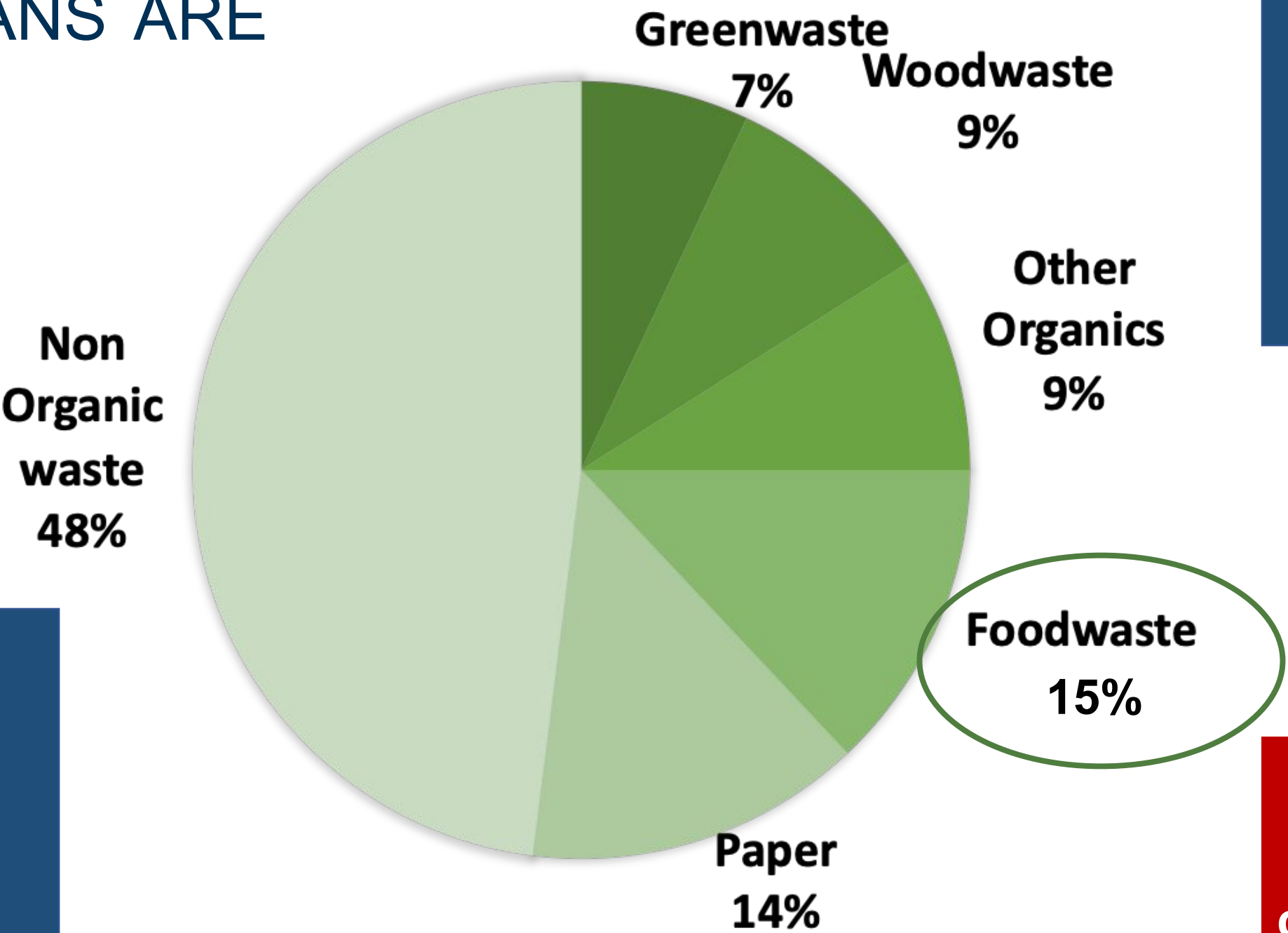
- Senate Bill 1383 background
- Food waste in the US
- Food systems flowchart
- School waste audit benefits
- School waste audit process
- Waste audit examples and results
- What can school districts do?
- Breakout room discussions

Senate Bill 1383: Organic Waste & Edible Food Recovery

1 IN 5 CALIFORNIANS ARE
FOOD INSECURE



CALIFORNIA THROWS
AWAY MORE THAN 6
MILLION TONS OF FOOD
WASTE EVERY YEAR!



CALIFORNIA DISPOSED
OF APPROXIMATELY **24**
MILLION TONS OF
ORGANIC WASTE IN
2018

Landfilled organic waste
emits methane gas which
contributes to climate change

SB 1383 Requirements

2020

50 PERCENT REDUCTION IN LANDFILLED ORGANIC WASTE
(11.5 Million Tons of Organic Waste Disposal Allowed)

2022

REGULATIONS TAKE EFFECT

2025

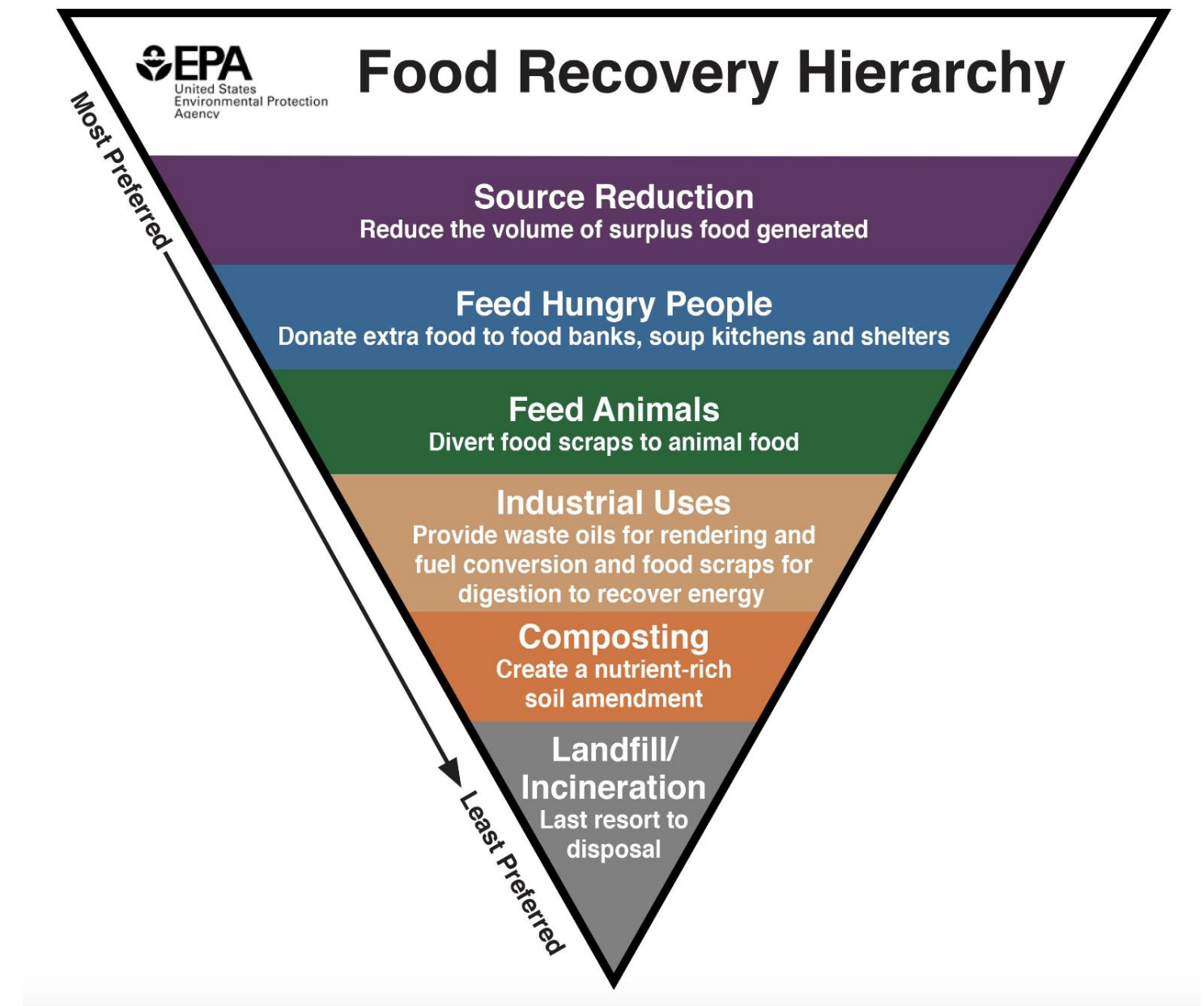
75 PERCENT REDUCTION IN LANDFILLED ORGANIC WASTE
(5.7 Million Tons of Organic Waste Disposal Allowed)

2025

**20 PERCENT OF CURRENTLY DISPOSED EDIBLE FOOD MUST
BE RECOVERED FOR HUMAN CONSUMPTION**

Food Waste in the US

- Over one-third of the food produced is never eaten, over 133 billion pounds per year.
- Food waste is the most common material landfilled or incinerated, over 20% of municipal solid waste.
- In 2015, USDA and EPA set a goal to cut food waste by 50% by 2030.
- Reducing food waste can increase food security, promote resource and energy conservation, and reduce greenhouse gas emissions.



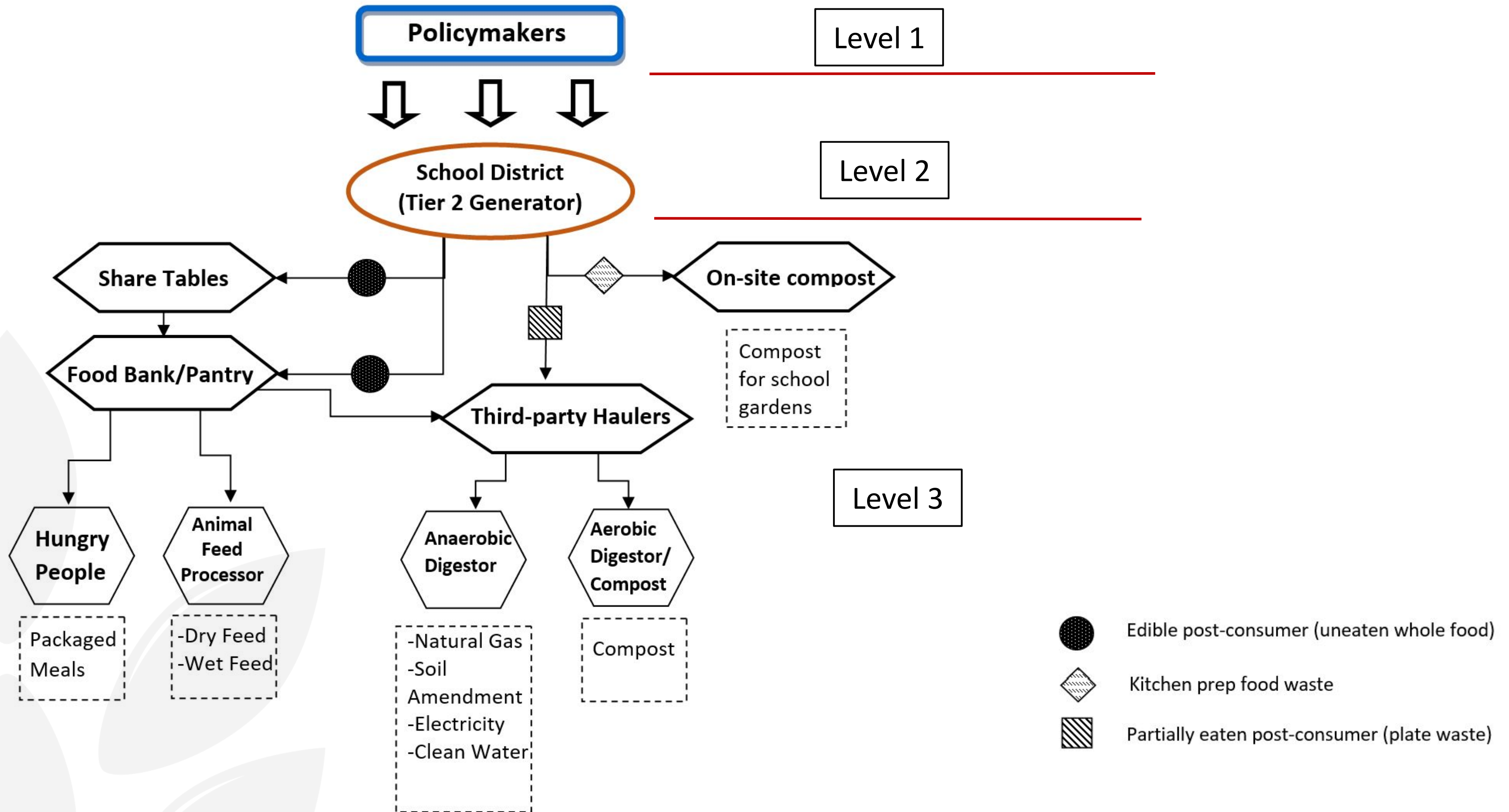
School Food Waste in the US

- World Wildlife Fund analyzed food waste in 46 schools in 8 states in 2019.
- Each school produced about 39 pounds of food waste and 29 cartons of milk waste per student per year.
- National school food waste is estimated to be 1 billion pounds per year and milk waste 45 million gallons per year.
- School food waste represents lost nutrition for students as well as wasted resources.



[World Wildlife Fund, Food Waste Warriors: A Deep Dive into Food Waste in US Schools, 2019](#)

Food Systems Flowchart





Benefits of Performing School Waste Audits

- Estimate the size of the waste problem
- Understand the specifics of the waste problem
- Engage and educate students and the entire school community
- Increase awareness of the impacts of waste
- Develop a waste reduction strategy
- Measure progress reducing waste

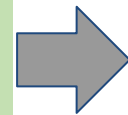


Waste Audit Process



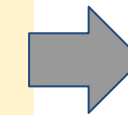
Before Audit

- Coordinate with nutrition services director, cafeteria manager, and custodial staff
- Form an audit team
- Observe meal service to plan audit setup
- Determine data to collect
- Gather supplies (containers, trash bags, gloves, scale, etc.)



Audit Day

- Set up audit stations
- Collect waste
- Interview students (optional)
- Sort waste into containers
- Weigh and count waste items and record data
- Clean up



After Audit

- Enter data in spreadsheet or database
- Analyze data
- Create summary report
- Develop and implement strategy to reduce waste
- Schedule follow-up audits

High School Lunch Waste Audit

Student led

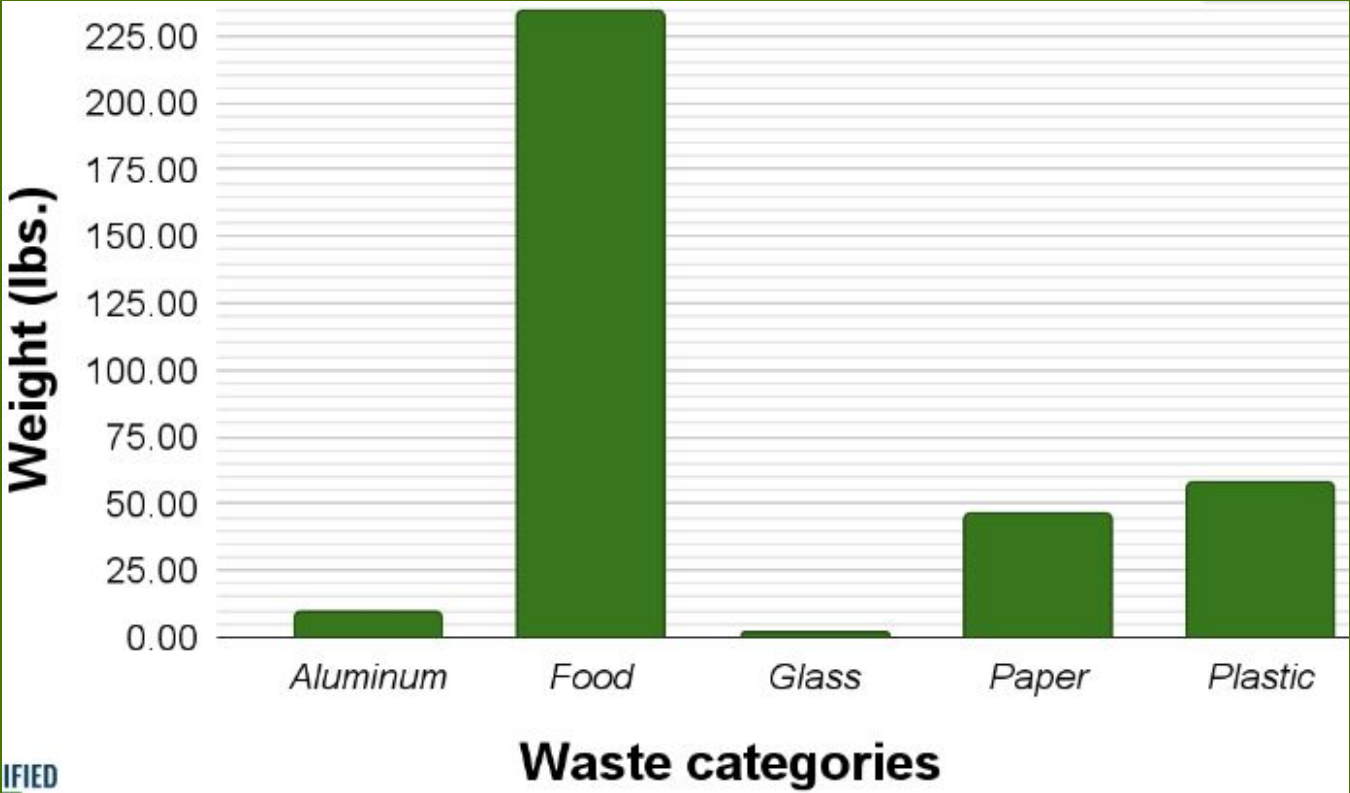
Student in the Gardening, Recycling, Organizing (GRO) club identified the issue of food waste on campus and began taking wasted produce home to compost.

Planning

Farm to School and GRO worked with Community Composting for Green Spaces to identify the best practices and methods for a waste audit at UHS.

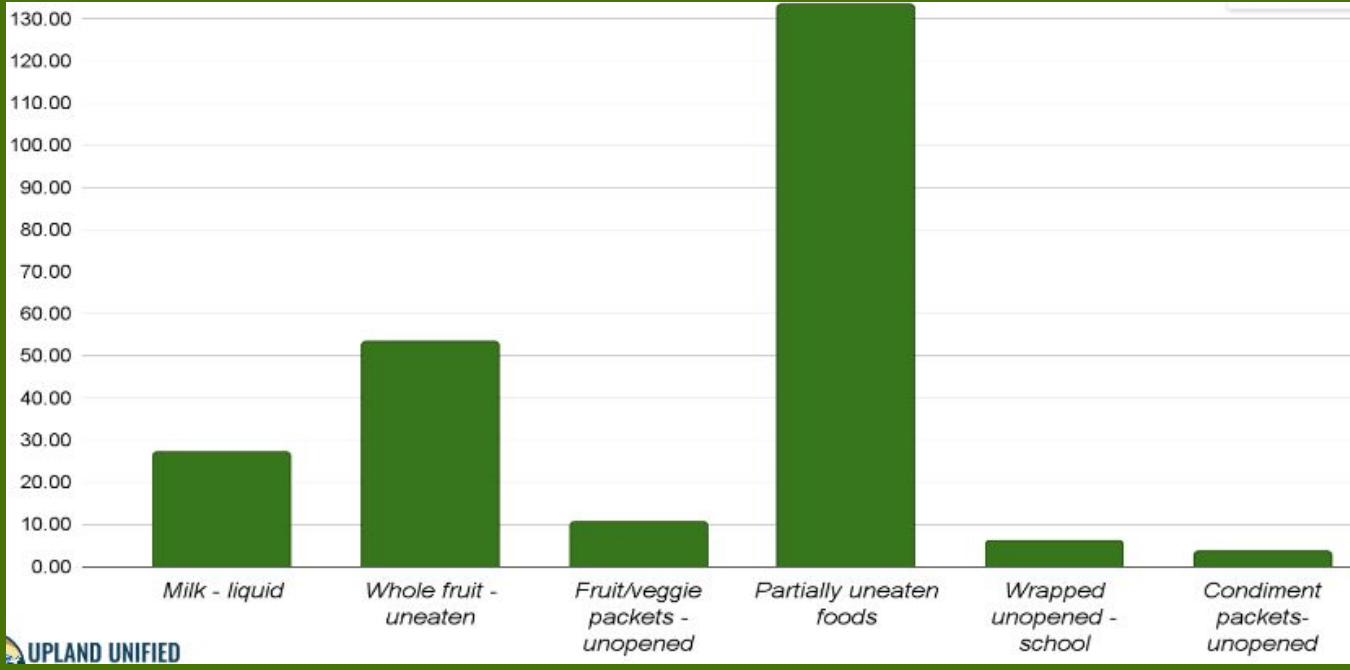
Implementation

Project implementation and planning began with student input and a visual audit to identify the most- used spaces and trash cans during lunch. A waste audit was conducted at UHS on March 9th. 90 trash cans were audited and the contents were separated and weighed into 31 categories.



348 total pounds of waste was created during ONE lunch service during ONE day at UHS. That's 62,640 pounds of total waste per school year, of which 42,075 pounds, or 67% is compostable.

90 trash cans; waste sorted, counted and weighed into 31 categories.

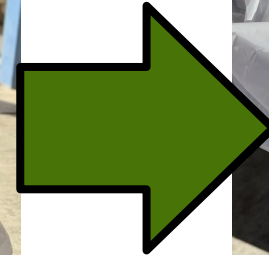


Elementary Breakfast Waste Audits

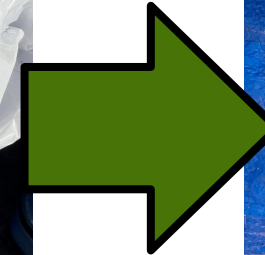
Model #1



Waste collected at table



Waste sorted



6 lbs. of edible food recovered

34.2 lbs. of waste, including 327 non-food items, produced during one breakfast!

Model #2



**15 lbs. of waste produced by the cafeteria during meal preparation
474 pieces, or 33.85 lbs. of waste produced during one elementary school breakfast!**



**More individually wrapped items = More waste!
Often times not recyclable**

Opportunities for K-12

SB 1383 Education



In our gardens

Nutrient cycling, composting, soil building, nutrition, wellness



In our classrooms

Nutrition, wellness, local economy, sustainability, environmental education



In our cafeterias

Waste audits, local farmer connection, food recovery, waste reduction



In our community

Students teaching their families!

Nutrition Services Takes Action



**Recipe Development &
New Menu Items**

Share Carts



Waste Audits



**Pasture- Raised
& Organic Beef**



**Organic Farm
and Garden-
fresh produce**



**Biodegradable
packaging**





Let's Share: Discussion

What experiences are you having with food waste in your school or community?

- ❖ Breakout room #1: School
- ❖ Breakout room #2: Community

QUESTIONS?



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