

Combating Food Insecurity Through Campus Food Recovery Kitchen Curriculum

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Session II, 11:00 a.m. – 12:05 p.m.

“I alone cannot change the world, but I can cast a stone across the waters to create many ripples.”

Mother Teresa

By the end of the session attendees should be able to:

- Learn about Food Waste and Food Insecurity
- Gain information on recovered food
- Learn how to implement becoming a recovery kitchen
- Integrate recovered food production into their curriculum.
- Bring awareness to alternative methods that will increase educational participation and decrease food insecurity throughout the campus

Background

- Born and raised in Orange County
- 15+ years in the Hospitality Industry
- Associate Degree – Culinary Institute of America, Hyde Park, NY
- Bachelor's Degree – CSU, Long Beach – Hospitality Management
- Master's Degree – CSU, Pomona – Hospitality Management
- Ph.D. Candidate – Iowa State University – Hospitality Management
- Program Coordinator at OCC
- Advisory Board Member for Waste Not OC Coalition

In the Context of our Food System, What does Sustainability Mean?

- Being aware of wasting food and setting a good example to others
- Continual growth and supply of food while making a positive impact on the environment for future generations
- Giving back more than you take
- Make conscious decisions
- More nutrition than hunger and waste
- Regenerative food production

“In order to do Good, You Actually Have to Do Something.”
– Yvon Chouinard, Patagonia

- Create interest and excitement in students
- Sharing knowledge with everyone
- Reaching out
- Being a good example
- Start small
- Education about food sustainability, food recovery and accessibility
- Incorporating sustainability into curriculum

Food Waste

- 1.4 billion tons food wasted worldwide each year
- 38 million tons in the United States
 - 20 billion pounds from the food service industry
- U.S. Food Production
 - 50% of U.S. land
 - 80% of freshwater consumption
 - 10% of energy budget
 - 16% to country's methane emissions
- 40% of food in America is uneaten
 - 20 pounds of food per person every month

Hunger and Food Insecurity in America

- Food Insecurity
 - Defined by the World Health Organization as lacking access to sufficient, safe, nutritious food to maintain a healthy and active life – every day.
- Federal programs
 - Supplemental Nutrition Assistance Program (SNAP)
- Worldwide - 1 in 9 people are undernourished
 - 821 million people
- 1 in 6 Americans is at risk for hunger

Affects of Food Waste and Food Insecurity

- A healthy diet
 - affects physical and mental health
 - academic performance
 - future economic productivity
- Insufficient diet creates significant social, environmental, and economic consequences
- Hungry children
 - earn \$260,000 less on average
 - are 50% more likely to miss days of school

Orange County Statistics

- Population – 3.19 million (2017)
- 64% of jobs pay less than the “Housing Wage”
- Over 300,000 people are food insecure
 - 10.6% of the population
- 16.3% of children are not guaranteed three meals a day
- 35% of the families are above the poverty line
 - Not eligible for federal nutrition programs




Did You Know:

There are **over 400**
food pantries located in
Orange County,
California

Bill Emerson Good Samaritan Act

1996



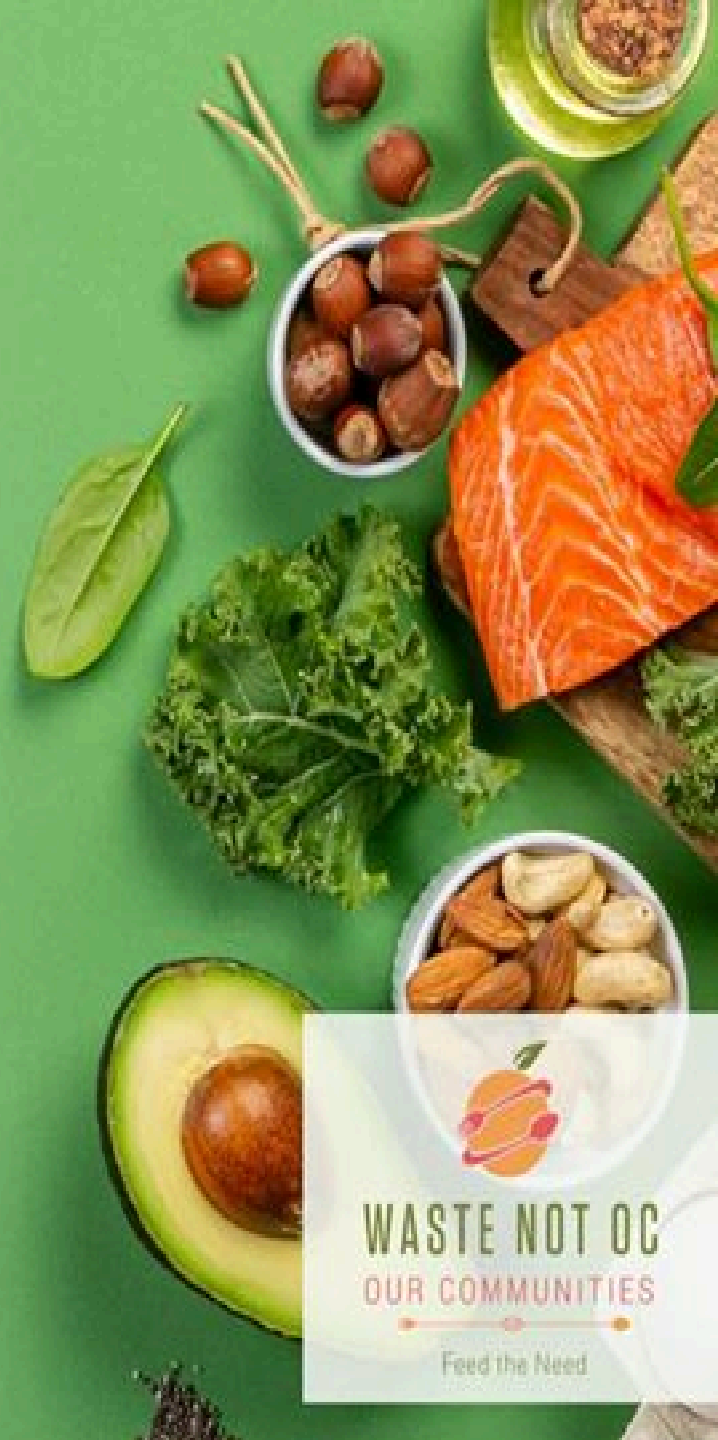
Any food facility may
donate food to a food
bank or to another
nonprofit charitable
organization for
distribution to persons
free of charge




WASTE NOT OC
OUR COMMUNITIES

Feed the Need

A food facility that donates food will not be liable for any damage that results from the consumption of the donated food, regardless of compliance with any laws relating to the packaging, labeling, or storage after the donation





No food facility that donates wholesome food shall be subject to civil or criminal liability or penalty for violation of any laws, regulations, or ordinances



WASTE NOT OC
OUR COMMUNITIES

Feed the Need

A food facility must handle and store the food to be donated in a safe and sanitary manner. Food to be donated must be maintained in the same manner as food to be sold



WASTE NOT OC
OUR COMMUNITIES

Feed the Need

SB 1383

- “Requires the department, in consultation with the state board, to adopt regulations that achieve the specified targets for reducing organic waste in landfills”
- Established 50% reduction in statewide disposal of organic matter by 2020
 - 75% by 2025
- Currently → Food waste accounts 17-18% of total landfill disposal.
 - Target no less than 20% of disposed edible food is recovered for human consumption by 2025

75% Reduction by 2025

- Reducing, recycling and/or composting
- Organic matter diversion specifications
 - Current decomposition in landfills which produces super pollutant methane
- 1. Edible food to hungry families rather than discarded
- 2. Composting
 - Produced soil amendments → revitalizing farmland, reducing irrigation demand, increases long-term carbon storage
- 3. Anaerobic Digestion
 - Clean, renewable energy source
 - Form of bioenergy, biofuels or renewable natural gas

FOOD

Outreach

- Environmental Health Inspectors
- Foodservice Sales Representatives
- Trade/Service orgs.
- WNOC Outreach Teams

RECOVERY

Logistics

- Best Practices for Food Handlers
- Build upon current resources/partners
- Food Recovery Software

Innovation

- Food Recovery Kitchen
 - Repurpose
 - Repackage
- Culinary Training Program for: V.A., Probation Department, and E.D.D.



Identify Food Insecurity

- Screening Questions
- Greater than 60K clients surveyed at Children's Hospital of OC and (15) Family Resource Centers

Pantry Support

- Needs Assessment / Provide Resources
- Food Safety Training specific to food recovery

Direct to Nearest Pantry

- WNOC google map with over 200 pantries
- Incorporated into 211-OC website
- Enter zip code for nearest pantry

FOOD INSECURITY

Orange Coast Community College

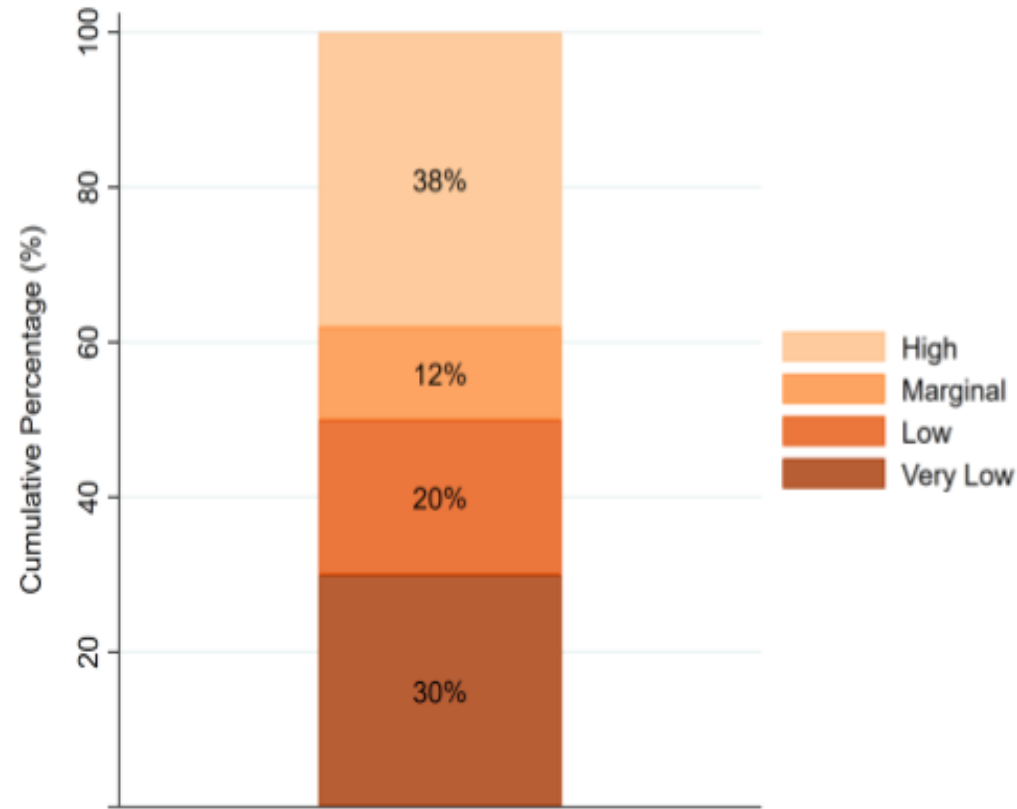
- Student population – approx. 23,000
 - 1 in 5 students are food insecure

Overall Basic Needs Insecurity Rates*:

- 72% of students at OCC experienced at least one form of basic needs insecurity in the past year
 - Food, housing, homelessness
- 51% food insecure in the past 30 days
- 12% of food insecure student utilize SNAP benefits

*According to the 2018 #RealCollege Survey School Report prepared by the Hope Center for College, Community, and Justice at Temple University

Figure 1. Food Security Among Survey Respondents at Orange Coast College



Source: 2018 #RealCollege Survey

Notes: According to the USDA, students at either low or very low food security are termed food insecure. For the full list of questions used to measure food security, see our full report available at www.hope4college.com. Cumulative percentage may not add up to 100 due to rounding error.

Figure 2. Food Insecurity Among Survey Respondents at Orange Coast College



Source: 2018 #RealCollege Survey

Pirate's Cove Pantry

- Grand Opening – January 22, 2018
- Food Partners
 - Second Harvest Food Bank
 - OC Food Bank
 - Trader Joe's
 - Mother Market
 - Grocery Outlet
 - And more
- Includes
 - Housing referrals
 - CalFresh food-buying assistance program

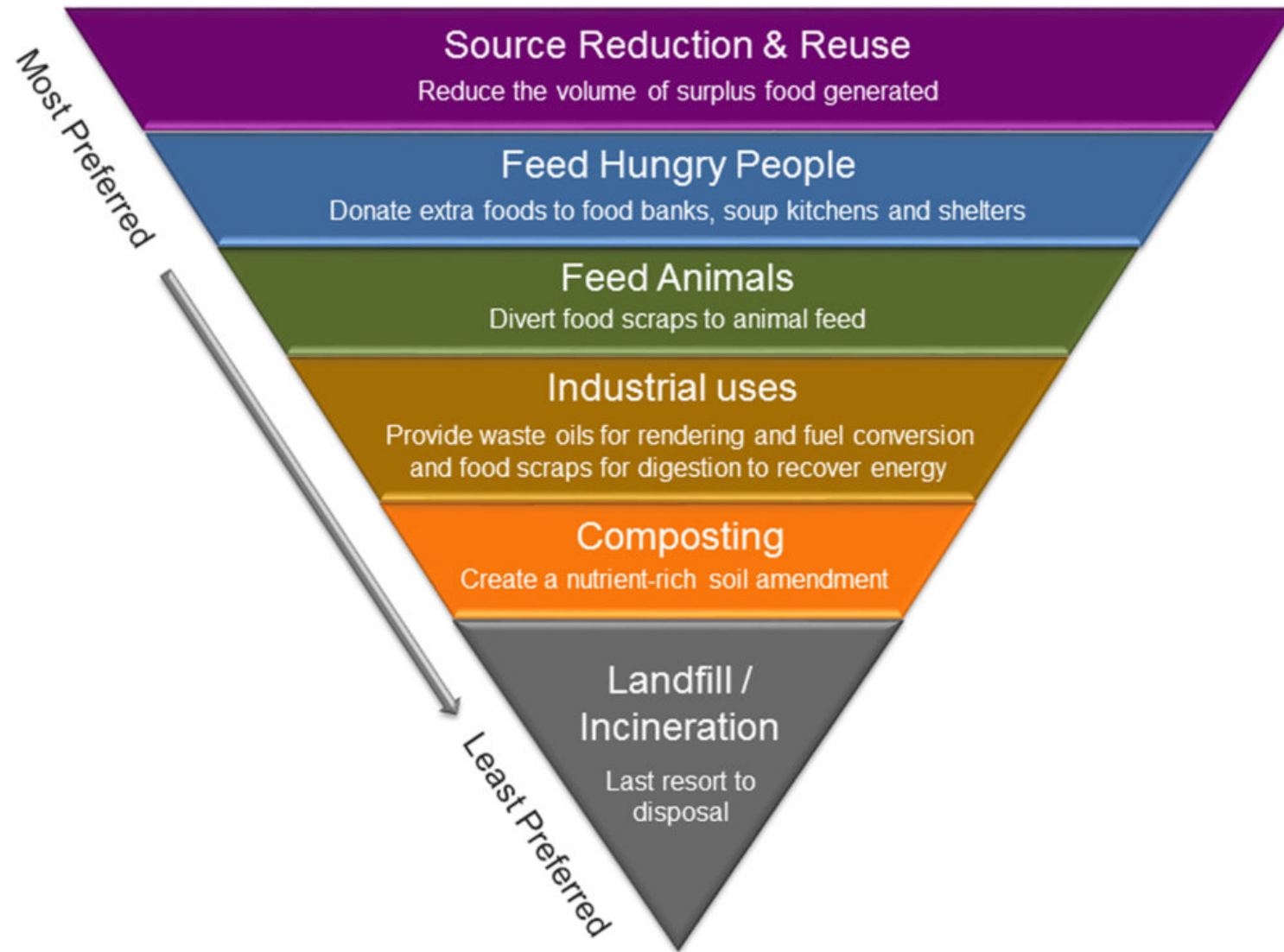


Pirates Cove Statistics

- Since January 1st, 2019
 - Performed 50,895 check-ins
 - unduplicated count at 4,283
- August 19, 2019 – Present
 - 98,340 LBS of recovered food
 - 10,674 LBS of food waste
 - 4,802.05 LBS re-recovered food donated back by OCC Food Recovery Kitchen



Food Recovery Hierarchy



Goals

1. Increase awareness, collaboration and communication among the campus to ideally combat hunger among our student body.
2. Practical application of handling and processing recovered food in culinary, food service management and sustainable food management courses
3. Decrease campus food insecurity
 - Educate the campus on the definition of what food insecurity and food waste
 - Increase the quality of food produced and supplied to campus parties

Now what?

- Develop and implement programs:
 - Edible food waste recovery
 - Divert organics from landfills
 - Reduce methane emissions
 - Packaging reduction program
- Identify a sustainable funding mechanism
 - Support waste management programs
 - Infrastructure development to support organics diversion

OCC Food Recovery Kitchen Program

- We bring Sustainability into our Instructional Program
 - with industry advisor recommendations
- Engage Local Communities
- Reduce Environmental Impact
- Minimize Waste

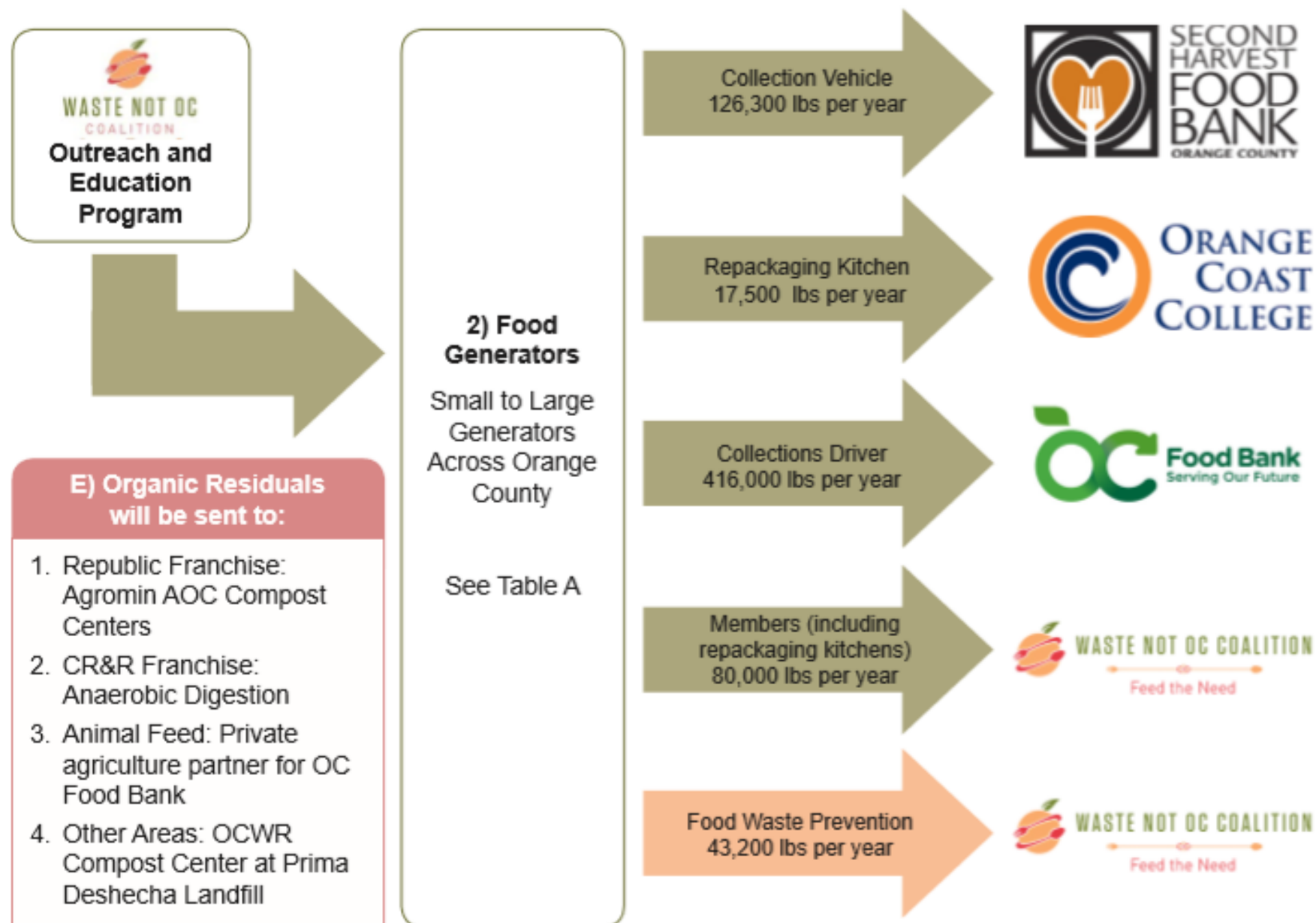
OCC's Implementation Plan 2019

January

- Food Waste Prevention and Rescue Grant Program, FW3 (FY 2018-19)
 - Waste Not OC
 - Second Harvest Food Bank
 - OC Food Bank
 - Orange Coast College
- Awarded \$492,220.58
 - OCC receiving \$150,000 in kitchen equipment for production/recovery kitchen



Waste Not OC, Inc. Edible Food Recovery Grant - Proposed Flow Chart Using Grant Funds



OCC's Implementation Plan 2019

- Prior Spring 2019 – no implementation
- Spring: Trash sorting

Landfill

Items that are acceptable to dispose of in this container are as follows:

- foil wrappers
- plastic wrappers
- condiment packets
- plastic bags
- hygiene/first aid products
- styrofoam
- pens/pencils



Please do not include: recyclables, composting, chemicals, batteries, cartridges, liquids

Recyclables

Items that are acceptable to dispose of in this container are as follows:

- glass bottles and jars
- metal (aluminum and tin)
- ceramic
- food trays
- milk cartons
- plastic plates and utensils
- styrofoam
- plastics #1-#7
- paper & cardboard products
- receipt paper



Please do not include: food products, chemicals, plastics or foils without recycling symbol, batteries, cartridges, liquids

Organics

Items that are acceptable to dispose of in this container are as follows:

- plants/vegetation
- fruits and vegetables
- bread
- fish
- meat (raw, cooked)
- bones
- dairy
- FOG (fats, oil, and grease)
- compostable bags
- paper bags
- coffee grounds/filters
- tea bags
- napkins/paper towels



Please do not include: metals, plastics, chemicals, batteries, cartridges

OCC's Implementation Plan 2019

- June
- Bio-technology Funding in Foodservice
 - Awarded \$160,000
- EcoVision – CityPod Composter
- Training for Students
 - New -Sustainable Food System Course



Fall 2019 OCC's Implementation Plan

- Implementation of Food Recovery in FSM 151 – Kitchen Production Management (1 lab section)
- Current student enrollment
 - Culinary, Foodservice Management, Nutrition & Dietetics and Baking & Pastry
- Future Enrollment
 - Sustainable Food Management
- Utilization of recovered food in curriculum
 - decrease food cost
 - increase awareness
 - increase educational quality
 - decrease food insecurity

FSM 151 - Kitchen Production Management

- Fall 2019 – Pilot
 - Utilize recovered food provided by the local food banks and/or the campus pantry
 - Re-purpose the items into manageable full balanced dishes
 - packaged either in single use containers or vacuumed packed for ease of access by the students
 - Batch Cookery & Cook Chill
- Acquire recovered food from Pirates Cove – 95%
 - Large packaging
 - Limited space
 - Product Identification & utilization
- August 19, 2019 – Present
 - 98,340 LBS of recovered food
 - 10,674 LBS of food waste
 - 4,802.05 LBS re-recovered food donated back by OCC Food Recovery Kitchen









Thanksgiving Food Recovery 980LBS in 1 day!



Bringing into Curriculum Sustainable Food Management

- 1. The success of this program will come from the collaborative support from the entire campus.
- 2. Necessary to adopt this program to meet the compliance objectives of SB 1383
- 3. Potential to become a leader in the areas of food insecurity, waste reduction and food recovery
- 4. Further its commitment to local and environmental engagement

Sustainable Food Management Curriculum

Course 1: Sustainable Food Systems

Course 2: Sustainable Quantity Food Production

Course 3: Sustainable Food Service Operations

Course 4: Food Recovery Production Management

Course 5: Sustainable Facility Management

Course 6: Root to Stem & Hoof to Snout

Training Opportunities for All

- Workshops with the Community, ROP & Middle School and the Community
 - Low-income, disabled and first generation
 - One-day (eight hour) training
- Participants will learn to cook a full balanced nutritious meal using foundational techniques
 - by utilizing every part of the product
 - practice proper food safety and sanitation
 - learn efficient use of resources within the community
 - acquire knowledge that expands their understanding about sustainability and recovered food
 - be encouraged to collaborate to create change and pass on their skills in their community

Looking Ahead.....

- Spring 2020
 - FSM 151 Kitchen Production Management
 - 2 Lab sections offered
- Collaborating across curriculum
 - Foodservice Management
 - Culinary Arts & Baking and Pastry
 - Nutrition and Dietetics
 - Horticultor
 - Biology
 - Architecture
 - Environmental Studies
- Fall 2020
 - Start of new Sustainable Food Management Certificate and Associates Degree Program
- Collaboration with Campus Foodservice
 - Combating decrease sales accusations