# Food Waste Reduction Strategies for NC Dining

# Welcome!

The webinar will begin shortly.

















# Food Waste Reduction Strategies for NC Dining

 Special thanks to the US EPA Sustainable Materials Management for supporting our campaign

FOOD WASTE STOPS WITH ME

- Duration: 75 minutes
- Q&A at the end
- Please use the chat box for both comments and questions

# Our Speakers

Christine Wittmeier, NC Organics Recycling Specialist

NC Division of Environmental Assistance and Customer Service

Jessie Massie, Taproom Executive Chef Sierra Nevada, Mills River, NC

Melissa McKnight, Food Connection Board Chair and Executive Chef, Omni Grove Park Inn, Asheville, NC

Kari Wouk, Head of Public Science Events

NC Museum of Natural Sciences, Raleigh, NC

Q&A at end



# Serve Smart:

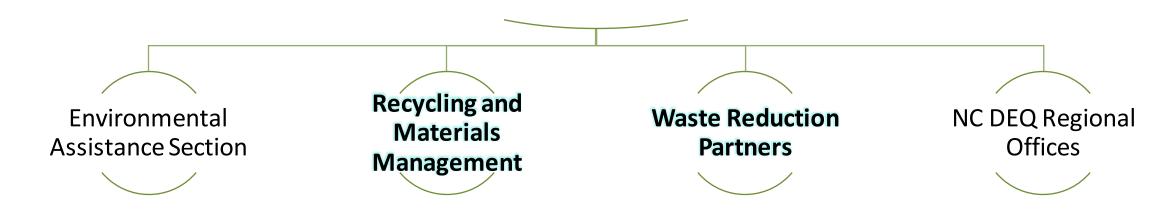
Food Waste Reduction Strategies for NC Dining

NC DEQ Resources
June 25, 2024





# Division of Environmental Assistance and Customer Service (DEACS)



### Waste Reduction Partners

- Free, on-site assessments to NC businesses and government entities:
  - Examine opportunities
  - Research donation outlets and potential service providers
  - Share best practices



WasteReductionPartners.org





## Recycling and Materials Management Section (RMMS)



- Grant funding
- Recycling data and trends
- Education and outreach
- Statewide campaigns

- Recycling markets
- Best practices
- Meetings, tours, events





# Recycling Education and Outreach

### Free Graphic Design Support

- Signage
- Social Media
- Handouts
- Stickers/Magnets











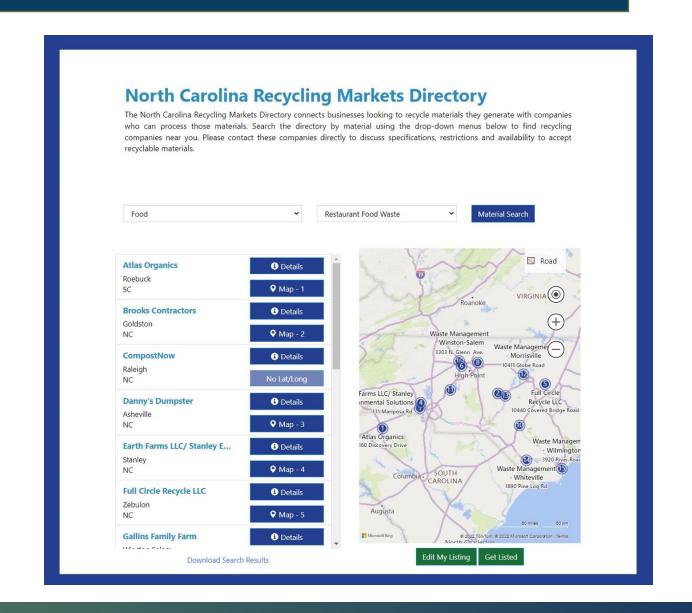


# Recycling Markets Directory



NORTH CAROLINA
RECYCLING
MARKETS DIRECTORY

recyclingmarkets.deq.nc.gov



### NC Green Travel Initiative

- Recognizes travel-oriented businesses that demonstrate excellent environmental stewardship.
- Currently 245 members and growing!
- Sustainable Travel Resources
- Frequently Asked Questions
- Contact <u>ncgreentravel@deq.nc.gov</u>



Solid	Waste Reduction and Recycling
5 pt 📗	A solid waste assessment has been performed
5 pt 🔲	50% of solid waste assessor recommendations have been implemented
5 pt 🗌	Goods, equipment and materials no longer needed are donated to food pantries, soup kitchens or reuse/ resale organizations
2 pt 🔲	Recycling containers are clearly marked and located adjacent to waste containers
5 pt 🔲	We recycle at our restaurant. Please list all materials recycled or composted to score one point per material
	Paper/cardboard Food and beverage containers Food Scraps Pallets
	Plastic bags and wrap Fryer grease Other (specify) Score
- =	We donate excess food from our restaurant to food pantries, soup kitchens, or homeless shelters We do not use Styrofoam takeout containers or plates
2 pt 🔲	We have bulk soap dispensers
2 pt	We use high-efficiency hand dryers or recycled-content paper towels in restrooms
5 pt 🔲	We have reused building materials and/or repurposed buildings
4 pt 🔲	We compost uneaten food and kitchen prep scraps on-site or use a compost service
2 pt 🔲	Vendors deliver in returnable packaging
2 pt 🔲	We encourage our customers to use reusable coffee mugs/beverage containers
2 pt 🔲	No table covers are used
2 pt 🔲	Reusable tablecloths and napkins are used
2 pt	Bulk condiments are used
3 pt 🔲	Drinking straws are not offered to customers except when necessary
5 pt 🗌	We are tracking the greenhouse gas emissions associated with the food we serve
	Calculator: https://watchmywaste.com.au/food-waste-greenhouse-gas-calculator/
2 pt 🔲	We have at least one plant-based meal option available
	ions of Recycling Containers. Staff work areas. Specify locations
3 pt 🔲	Public or customer areas. Specify locations
3 pt 🔲	Signs are posted, directing users to recycling areas.
4 pt 🔲	All recycling containers are located adjacent to waste containers
Descr	ibe Other Waste Reduction and Recycling Activities



# Use the Food NC



**Usethefood.nc.gov** 





### Food Waste Reduction Grant

### Two million in organics projects since 2010.

- Over 683,000 T diverted
- 58 jobs created
- New Food Waste Reduction Grant!
  - 23 projects estimated to divert 36,066 tons annually.
  - Eligible entities include:
    - Food rescue organizations
    - Local governments
    - Compost facilities and haulers
  - Next round likely open September 2024.

#### Food Waste Reduction Grant

REQUEST FOR PROPOSALS
N.C. Department of Environmental Quality
Division of Environmental Assistance and Customer Service

The purpose of this grant program is to help local governments, non-profits, and businesses reduce the amount of wasted food being disposed in landfills. The Division of Environmental Assistance and Customer Service (DEACS) administers the Food Waste Reduction (FWR) Grant through the Solid Waste Management Outreach Program.

With the release of this Request for Proposals (RFP), DEACS is seeking proposals that request grant funding to support food waste reduction through the expansion of food donation networks or compost operations, including collection and hatuling. Proposals must be received by DEACS by 5:00 p.m. on Thursday, January 19th. Applicants should carefully read this entire RFP prior to submitting a proposal. Please address any questions about this grant program to Christine Wittmeier at 919-707-81217 or at christine witnesser@accear.gov.

#### Available Funding:

Maximum funding: Applicants can submit grant proposals for a maximum award of \$80,000

Grant funding will be paid through reimbursements of the grantee's expenditures. Ten percent of the grant award will be withheld until after the grantee submits an approved final report.

#### Cash Match Requirement:

Required Cash Match: FWR Grant winners must provide a cash match equal to or exceeding 20 percent of the requested grant funding. For example, a grantee requesting a \$10,000 grant must provide at least \$2,000 of matching funds for a total project cost of \$12,000.

Calculating Cash Match: To determine the necessary cash match for any grant project, first determine the total budget associated with the project and then use the following equation: total project budget +6 = required cash match

Local governments may use distributions from the \$2 per ton Solid Waste Disposal Tax to cover cash match requirements. In-kind contributions will not be accepted in lieu of cash match.

#### Use of Funds and Description of Grant Program:

Grant funds must be used to develop food waste reduction infrastructure by expanding food donation networks or composting operations, including collection and hauling. Excess food donation occurs through food banks, food panties, or nonprofit organizations in which packaged food, prepared food and/or produce is distributed to households or individuals in need. Composting operations occur at permitted or exempt compost facilities and include the collection of food scraps from generators or designated drop-off sites.

Successful applicants will demonstrate how the grant project will increase the tons of wasted food diverted from landfill disposal. Examples of approved uses of FWR Grant funds include site development costs, construction of facilities to handle wasted food, equipment or vehicle purchases, and equipment installation costs.

1



### Use the Food NC Resources







#### Prepared Food Recovery for Food Donors





Given concerns about the environmental impacts of food waste and the fact that food insecurity is an increasing problem, many people in the food service industry are looking to better understand when and how it is able to donate food for human consumption that would otherwise be wasted. You may find that more foods can be donated than you originally thought. We hoppe this

This guide provides Standard Operating Procedures (SOPs) for donating leftover prepared food. The goal of these SOPs is to create consistent standard operating procedures to remove confusion surrounding the varying interpretations for how to manage leftover prepared food, ultimately reducing food waste.

environmental impacts of food waste and the fact that food insecurity is an increasing problem, many people in the food service industry are looking to better understand when the food service industry are looking to better understand when the food service industry are looking to better understand when the food service industry are looking to better understand when the food service in the food deporter.

- Packing and Transport
   Labeling
- Multiple Day Rescue Method

The table below outlines the guidelines for donated food based on who prepared the food, type of food, and other details.

#### **Prepared Food Donation Guidelines**

	DONORTYPE	FOOD PREPARATION	STORAGE	PACKAGING
Can be Donated	Permitted or licensed donor type only     Restaurant     Bakery     Educational Institution	Food in prep areas or coolers     Foods on a buffet that are temperature controlled and protected by sneeze guard	TCS*     foods that     have been     held below     41°F     See SOPs     for more     details	Commercially wrapped items with no damage to packaging
Cannot be Donated	Items prepared in individual's home, community group, or non-certified kitchen	Dishes put out on the buffet table for customer self-service	Food held under Time as a Public Health Control**	

<sup>\*</sup>TCS foods refers to foods that require time/temperature control for safety

\*\*Time as a Public Health Control is an approach used where foods normally kept under
temperature control are not and uses time as the parameter instead. If these foods are held at
room temperature, they must be discorded after 4 hours.

#### Why Not? In home/non-cer kitchen: We have way of confirming

stomer self-service s type of buffet vice introduces the of contamination

me as a Public Health ontrol: Given the fficulty of monitoring ne parameters with ese types of food, ese foods may not be

### New Self-Assessment Guide for Businesses

### **ACCESSING DONATION NETWORKS IN NC**

#### WHAT TYPE OF SURPLUS FOOD IS APPROPRIATE TO DONATE?

Most food banks prefer shelf stable foods like canned vegetables, uncooked pasta, unopened sauces, and bread that has not exceeded its sell by date. However, some charities that feed needy people can accept fresh food surplus that has not yet been served, provided that is donated promptly and handled safely. For example, caterers and university dining halls that prepared more trays of food than were needed at a meal can donate the unserved travs. Food that has been served to a consumer cannot be donated. These food scraps would be appropriate for composting.



#### LIABILITY PROTECTION- FEDERAL AND STATE

and local laws and regulations. Direct donations from the donor to needy individuals are not protected under the Although these protections preempt state law such Emerson Act. The other type of donations that are not by a person or organization that knew the donation could have harmful health impacts. Intentional misconduct is when a person donates "with knowledge" that the more Information, see the <u>Legal Fact Sheet for North</u> NC Statute 99B-10. Carolina Food Donation.

The Food Distribution improvement Act (FDIA) was signed into law in January 2023 and builds on the Emerson Act OUTLETS by expanding liability protection in two additional ways. First, liability protection is extended to donations offered by non-profits to recipients at a Good Samaritan reduced price (allowing the non-profit to recover no more than its

The Bill Emerson Good Samaritan Food Donation Act costs for processing and delivering the food) rather than (Emerson Act) was signed into law in 2006 to encourage only if the food is received for free. Second, donors may the donation of groceries and food for distribution to now give to needy individuals directly and qualify for those in need. The law protects donors from civil and liability protection, whereas previously protection was criminal liability provided that the donations are made to available only if food was given to non-profits to distribute a non-profit organization which then donates the food to the food. These additional protections will facilitate food needy recipients. The donated food must be "apparently" distribution by increasing the scope of protection and wholesome" or "apparently fit grocery product" and meet potential recipients. For more information, see the Federal all quality and labeling standards imposed by federal, state Liability Protection for Food Donation Legal Fact Sheet.

that states cannot provide less protection than the protected involve those involving "gross negligence" Emerson Act, the State of North Carolina provides or "intentional misconduct." Gross negligence involves additional immunity for donated food under NCGS 99B-"voluntary and conscious conduct, including failure to act" 10 by providing protection from civil damages or criminal penalties for the donation of food to a non-profit unless the injury is caused by gross negligence, recklessness or intentional misconduct of the donor, tracking some of the donation could harm the health of another person. For language of the Emerson Act. For more information, see

#### **HOW TO FIND DONATION**

MealConnect

### FOOD SCRAPS TO LIVESTOCK

### AND POULTRY

manufacturing byproducts can be beneficial in some cases, but there are parameters to follow to ensure that this practice is safe for the animals and humans. Restrictions on feeding food scraps to animals are in place because disease outbreaks have been attributed to these practices. Households are allowed to feed their own food scraps to their own animals but feeding foods scraps from restaurants, grocery stores and food manufacturers requires following federal and state regulations.

For example, feeding food scraps to hogs is legal in North Carolina, but the owner must have a "garbage feeding license" from the United States Department of Agriculture (USDA) which has multiple requirements including heating food scraps to 212°F prior to feeding. More information about the Swine Health Protection Act can be found at this USDA Fact Sheet.

to cows, sheep, and goats in order to prevent mad cow can be found at Animal Agriculture I NC State Extension

(FDA) regulations, facilities that produce human food and help. Visit the following website - Meet Our Staff - Feed beverage products may have an easier time sending food Milling, NC State Extension, or contact the following mills byproducts to animals. This includes by-products from bakeries, breweries, and candy-manufacturers.

Fortunately, the Harvard Food Law and Policy Clinic has an extensive Guide entitled, Leftovers for Livestock; A Legal Guide for Using Excess Food as Animal Feed, that helps to navigate the laws associated. This guide explains what type of surplus food is suitable to feed animals and the laws that are set up to protect the health and safety of those animals.



North Carolina State University Livestock and Poultry Agents are another great resource. Businesses that have food scraps or byproducts that are sultable for animal feed can look up their county extension office for assistance It is also prohibited to feed mammalian protein scraps and connections to interested farms. NC extension agents

For food manufacturers with by-products that may be Because they follow Food and Drug Administration suitable for poultry feed, NCSU Feed Milling Staff can

- Bakery Feeds , Marshville NC
- Deal-Rite/Union Grove Milling, Union Grove NC
- G&M Milling, Statesville NC
- Bartlett Milling, Statesville NC
- Diamond Pet Food, Gaston SC
- Carolina Prime Pet, Lenoir NC.

SELE-ASSESSMENT GUIDE FOR NC BUSINESSES 17

16 HOW TO REDUCE FOOD WASTE

Self-Assessment Guide for NC Businesses

### Christine Wittmeier

Organics Recycling Specialist
Recycling and Materials Management Section
Christine.Wittmeier@deq.nc.gov
919-707-8121









# Ingredient optimization and waste management

# Reduce waste from the start

- Train employees from day one on proper receiving and storage of ingredients.
- Create and maintain a clean, organized facility where everything has a place.
  - Standardize procedures and recipes.
  - Have a plan for optimal product utilization.
  - Have a contingency plan for when things go awry.



# Purpose in processes

- Write recipes with accurate yields using line ready pans.
- Mise en Place: Everything in its place.
- Create shelf to sheet inventory sheets.
- Know what you have inventory everyday.
- Utilize history to make accurate prep calls.



# Prep organization

Before



**After** 





# Everything in its place...



Items placed with ○
corresponding label in

→ prep coolers,
basement coolers, &
dry storage.



# Bulk ingredient organization

**Before** 



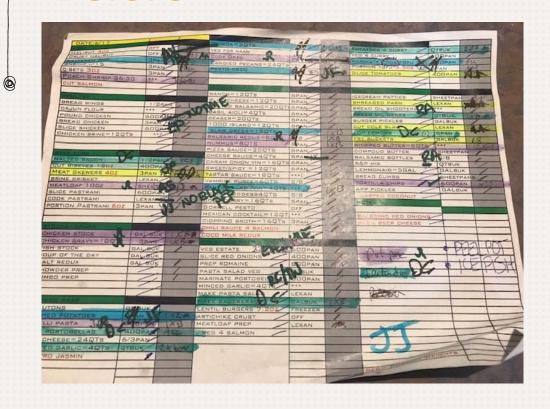
**After** 





# Prep sheets

### **Before**









# Master Walk Thru

Counting Unit
Shelf Life
Recipe Yield

Mon Tue Wed Thu

Updated 4/23/23						Mon	Tue	Wed	Thu	Fri	Sat	Sun
					Date:	1-May	2-May	3-May	4-May	5-May	6-May	7-May
					Prep Team							
ltem	Wrap	ST	SL	Unit	Yield	Count						
Estate Herbs	Wrap	Hot	1	9th	(1) 9th Pan	57	1					
		Apps	Days	400		(3)						

Previous Count Usage Previous Prep Call

Count



# Prep lists

Wrap or Lid?

Recipe Yield

**Line Ready Vessel** 

**Prep Call** 



Employee Initials

Adjustment to Prep Call

Day / Date:							
	ар						
Item	Wrap	Contai	ner	Yield	Amt to Prep	Sign Off	Adjust
Kids Cheese Sauce		1/2 400	Pan	pars			
Smoked Cheddar Crumble	w	6th 600	Pan	(6) 6th Pans	(2x)	(JM)	(11 pans)
Benton's Tomato Jam	)	6th 400 Pan		(7) 6th Pans		)	
Blue Cheese Dressing		6th 600 Pan		(4) 6th Pan			
Pozole Verde		6th 600 Pan		(5) 6th Pans			
Pale Ale Beef Gravy		3rd 600 Pan		(6) 3rd Pans			
Cavatappi Pasta (1bag= 1X)	w	HTL 400	) Pan	(1) HTL Pans			
Jicama Slaw		3rd 600	Pan	(2) 3rd Pans			
Audition Greens Blend	w	HTL 400 Pan		(1) HTL Pan			
Trout, Greens (Arugula or Mizuna)	W	HTL 400	) Pan	(1) HTL Pan			



# consistency

**Plating Guides** 

#### mr - blue cheese dressing

Recipe Type: \Mills River\Mills River Prep Recipes Prep Time: 15 Minutes Status: Finalized Original: 10/27/2020
Yield: 5 3rd Pan (6 inch) Shelf Life: 7 Days Export? Yes Revision: 04/10/2023

# Ingredients	Code	Specs	Amt Unit
Cheese, Blue Cheese Crumbles			15 lb
2. Milk, Buttermilk			2 gal
3. Mayonnaise			2 gal
4. Spice, Garlic Powder			10 Tbsp
5. mr - black pepper ground (from peppercorns)			10 Tbsp
6. Salt, Kosher Salt			10 Tbsp
7 Vinegar White Distilled Vinegar			1 cup

#### Procedures

Combine all ingredients in a 22 quart cambro and mix thoroughly with large immersion blender, making sure there are no hidden pockets of seasoning.

2. Pan and label.

#### **Allergens**

Dairy, Egg, Soy

#### Applications:

# Recipe Type	Recipe Code	Recipe	Amount Unit
1. \\Mills River\Mills River Plating Guides		MR - Torpedo Wings (1lb)	2 fl oz
2. \\Mills River\Mills River Plating Guides \Mills		MR - Blue Cheese Dressing, Add Blue Cheese	2 fl oz
River Modifier Plating Guide		Dressing (2 fl oz)	

### **Standardized Recipes**



#### MR - Torpedo Wings (1lb)

 Recipe Type:
 \\Mills River\Mills River Plating Guides
 Prep Time:
 480 Seconds
 Status:
 Not Set
 Original:
 07/18/2022

 Yield:
 1 each
 Shelf Life:
 1 Days
 Export?
 No
 Revision:
 07/18/2022



Serviceware:	Qty	Name				Notes
	1	Coupe Bowl				
# Ingredient	S		Code	Specs	Amt Unit	Procedures
1. Chicken, Chic	ken Wing	s French	(1	6 each)	16 oz wt	Fry wings 6-7 minutes until juices run clear.
2. mr - torpedo hot sauce		L	Utensil: 2oz Ladle Gluten		<ol> <li>Place into a mixing bowl and toss with torpedo hot sauce.</li> <li>Ladle and swipe blue cheese around the right side of the plate.</li> <li>Plate wings in a mound to the front left and tuck celery behind the wings.</li> </ol>	
3. snbc - celery,	sliced 1/4	inch	(1	2 each)	1 1/2 oz wt	
4. mr - blue che	ese dress	ing	L	tensil: 2oz adle airy, Soy, Egg	2 fl oz	Total Prep Up - 8 Minutes

#### Allergens

Gluten, Dairy, Soy, Egg

#### Modifiers

No Blue Cheese Dressing, SOS - Blue Cheese Dressing, No Torpedo Hot Sauce, SOS - Torpedo Hot Sauce, Extra Celery, Extra Torpedo Hot Sauce

#### Station

Hot Apps

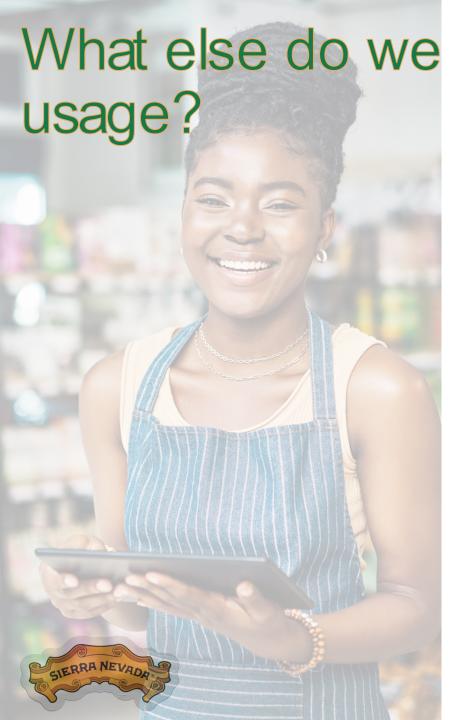
# training

# **All Kitchen Employees Complete**

- FIFO first in, first out
- Knife Skill
- Food Safety
- Kitchen Organization
- Zero Waste







# What else do we do to Maintain accurate food

Prep the Right Amount-prepping less frequently eliminates waste of ingredients and resources from prepping too many times in a short period of time.

Scrape Pans— eliminate unnecessary waste by using a spatula to remove product from containers.

Keep waste logs — this helps to increase order & inventory accuracy by allowing us to see actual usage versus waste.

# Inspect what you expect

# Utilize Technology to Check for Accountability

- Restaurant software that follows product from the moment it arrives to the moment it hits the table.
- Inventory at minimum monthly and weekly when necessary.
- Verify your actual usage against what was sold through the POS to track inaccuracies and verify potential waste issues.

You can't correct a problem you don't know is there.



# **Zero Waste**

99.7% diversion

- Platinum Zero Waste certified
- Reduce, Reuse, Recycle
- \$250K net savings















# Thank you

# Prepared Food Donation



Melissa McKnight, Food Connection Board Chair and Executive Chef, Omni Grove Park Inn, Asheville, NC

# Food Reuse & Rescue

Melissa McKnight Banquet Chef, Omni Grove Park Inn Board Chair Food Connection





Reducing waste. Easing hunger.



# Current & Ongoing Facts

# Bill Emerson Good Samaritan Act of 1996

- Provides limited liability protection for people who make good faith donations to non-profit organizations.
- Good faith "apparently wholesome food".
- "person" including individual, corporation, partnership, organization, association or government entity

# Food Donation Improvement Act of 2022

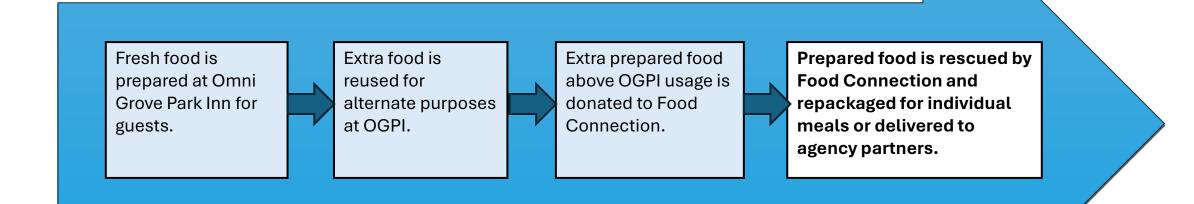
- Boosts the liability protection for those that donate food directly to people in need
- North Carolina ranks 9th in the country for food insecurity.
- Only 3.4% of surplus food is donated.

Omni Grove Park Inn lifetime Partner since 2017

47,433 meals

Diverted from the landfill 24 Tons

### Flow of food from restaurant to donation.



# Food Connection Lifetime Established in 2014

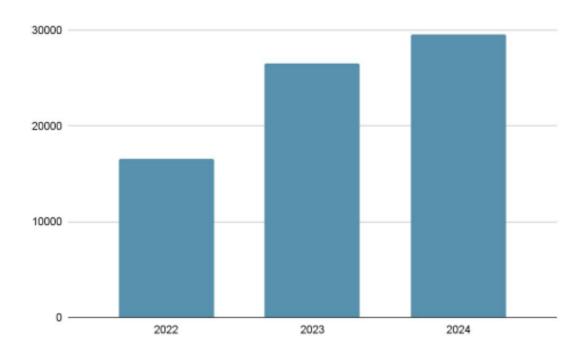
674,916 meals

Rescued/Diverted from landfill 292 Tons

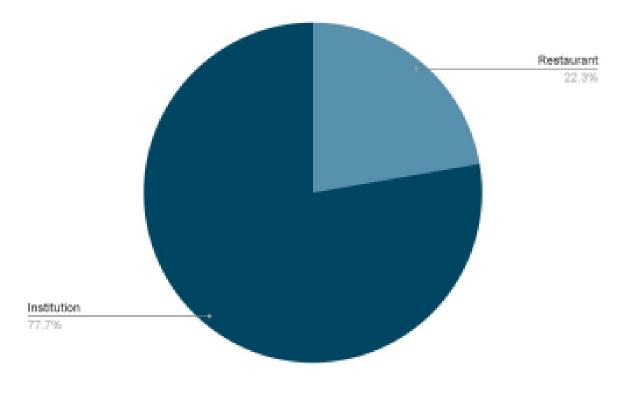
### Where is the food rescued from?

Ridgecrest continues to be our largest institutional food donor with 9,360 lbs of food donated in Q1 2024.

OGPI continues to be our largest restaurant food donor with 4,012 lbs of food donated in Q1 2024.

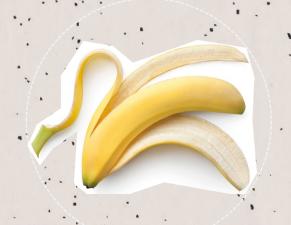


#### **Institutional Donors 77.7% Restaurant Donors 22.2%** Asheville Academy 12 Bones Pack's Tavern Asheville School Catering by Corey Rabbit Rabbit Celine & Company Blue Ridge Assembly Sage & Spice Givens Highland Farm **Dining Innovations Smash Events** Montreat Conference Center **Everyday Gourmet** Starbucks Ridgecrest 3x per week LongHorn The Venue UNCA Steakhouse Warren Wilson College Omni Grove Park Inn





celebrating nature | advancing science



# Compost at the NC Museum of Natural Sciences

Karl Wouk, Head of Public Science Events

# Deciding:



### What Can We Do to Have the Greatest Positive Environmental Impact?

Organic items sent to the landfill break down VERY slowly, and when they do, they create methane, a greenhouse gas 84 times more potent than CO2

60% of waste stream is compostable

Composting saves 35% of usable land taken up by landfills

Creating one ton of compost is equivalent to removing 19 cars from the road for two weeks

Using compost reduces or replaces the need for herbicides and fertilizers

# Implementing :

### How Do We Do It?

Worked with local commercial composter

Funded by our Friends of the Museum by Museum Store roundups.

First implemented "back of house" at Café

Exhibits designed bins

Public launch with CompostCon event

Constant education



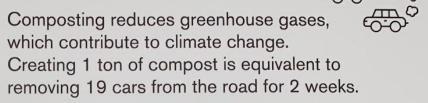




# Composting= Conservation



### **We Compost.**



### **You Can Help!**

- 1. Sort your cafe waste into the correct bins.
- 2. Consider composting at home.
- 3. Learn more at naturalsciences.org/compost.



# Chicks are hot, and dudes are cool.

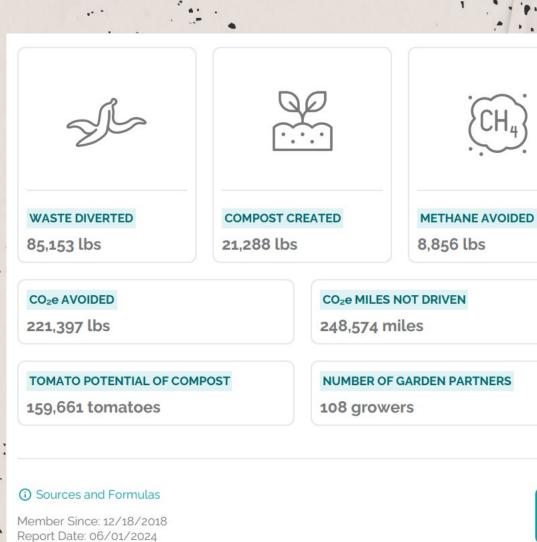
Did you know that the sex of a baby sea turtle is determined by the temperature in its nest?

Rising temperatures mean that too many sea turtles are born female. This creates dangerous instability in the sea turtle population.





# Impact





# Zero Waste Events

BugFest





# Lessons Learned



### **Education is Key**

Visitors do not understand compost

Visitors do not understand compostable products

Visitors do not understand commercial compost

Visitors do not look up

Visitors want to do the right thing!

## **Q & A**

Christine Wittmeier, NC Organics Recycling Specialist

NC Division of Environmental Assistance and Customer Service

Jessie Massie, Taproom Executive Chef Sierra Nevada, Mills River, NC

**Melissa McKnight,** Food Connection Board Chair and Executive Chef, Omni Grove Park Inn, Asheville, NC

**Kari Wouk,** Head of Public Science Events NC Museum of Natural Sciences, Raleigh, NC **Moderator:** 

Jan Hardin, Solid Waste Manager, Waste Reduction Partners, NC

# Food Waste Reduction Strategies for NC Dining

# Thanks for attending! Thanks to our speakers!

Please complete the evaluation upon leaving the webinar.

Materials will be posted on the Use the Food NC website.



Jan Hardin: <a href="mailto:Jhardin@wrpnc.org">Jhardin@wrpnc.org</a>

Christine Wittmeier: Christine.Wittmeier@deq.nc.gov















