

The Maryland-National Capital Park and Planning Commission Prince George's County Planning Department pgplanning.org

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M-NCPPC Prince George's County Planning Department

Presentation to the Prince George's County Council

April 23, 2019



# What is food waste?

Food waste is food that is not consumed by humans and discarded.

Food discarded while it is still edible is considered *wasted food*.

Food that is no longer appropriate for human consumption, usually called *food scraps*, may be reusable in a variety of ways.



# Where does food waste happen?

At every stage of the food supply chain from farm to fork:

- Fields/orchards/vineyards
- Processing and packing
- Storage and distribution
- Retail outlets
- Restaurants/cafeterias
- Homes











# **Root causes of wasting food**

Unavoidable losses due to natural causes during production

FHUOY BY MAR 1

Rejection for not meeting industry's cosmetic standards



BEST IF USED BY: 24APR17 16115 Confusing date labels



- Oversized portions at restaurants
- Fear of liability to donate



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#### Excessive

**40%** of all food produced in the U.S. is wasted

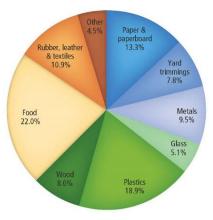
62.5<sup>million</sup> of all food waste is generated annually





## **Environmental impacts**

Food is the largest component of landfills amounting to 22 percent



#### Food waste is responsible for:

- 9% of greenhouse gas footprint
- 21% of water use
- 28% of cropland

Wasting food means wasting resources



FOOD WASTE 6 In Prince George's County, MD

## **Economic impacts**

\$218 billion
Spent per year on wasted food
1.3% of U.S. GDP

\$450

annual cost of wasted food per person



## **Social impacts**

- While 40 percent of food is wasted, millions suffer from food insecurity, including 14.4 percent of Prince George's County residents.
- 25 percent of food calories intended for human consumption is not consumed.

If 30 percent of food waste is recovered, it would feed all food insecure Americans





# National efforts to reduce food waste

#### **Federal food waste policy**

- Laws for liability protection, tax incentives, and encouragement for food donations
- Regulations on feeding food scraps to animals
- 2018 Farm Bill includes key measures to:
  - Prevent food waste
  - Increase food recovery
  - Promote food waste recycling
  - Better coordinate food waste reduction efforts—establishes a Food Loss and Waste Liaison
- Proposed legislation on food date labeling, food recovery, and food donations



# National efforts to reduce food waste

#### **Federal government initiatives**



Most preferred

#### **Food Recovery Hierarchy**

Source Reduction & Reuse Reduce the volume of surplus food generated

Feed Hungry People Donate extra foods 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 Least preterred

Last resort to disposal

EPA and USDA launched many initiatives to reduce food loss and waste, including:

- Food Recovery Challenge
- U.S. Food Waste Challenge
- U.S. 2030 Food Loss and Waste Reduction Goal



# National efforts to reduce food waste

Initiatives by national organizations

Numerous national organizations work to reduce, recover, and recycle food waste in the United States, including:

- ReFED
- Natural Resource Defense Council (NRDC)
- Harvard Law School Food Law and Policy Clinic
- Food Waste Reduction Alliance
- Feeding America
- Food Recovery Network
- US Composting Council
- Institute for Local Self-Reliance (ILSR)



#### Laws and regulations related to:

- Recycling and composting
- Liability protection for food donations
- Public schools food recovery programs
- Tax credits for farms for food donations

#### Source reduction credit system

#### **Food recovery summits**



# State of Maryland's efforts to reduce food waste



Prince George's County is proud to have the East Coast's largest composting facility

A significant amount of food is wasted:

- 113,000 tons in 2015
- 48,000 tons of food waste are buried annually at the Brown Station Road Sanitary Landfill

# Food waste in Prince George's County



# Food waste in Prince George's County

## Household survey results

- Knowledge about food waste makes a difference in food discarding behaviors.
- 92% of respondents are willing to do at least five out of eight potential actions presented to them to reduce food waste.
  - More than two thirds of the respondents are interested in learning tips to reduce food waste.



### Interviews with food waste generators

# Food waste in Prince George's County



- Processors and distributors generate massive amounts of food waste and send a significant amount to the landfill.
- Grocery stores have sustainability goals and strategies to reduce food waste.
- Despite being careful, restaurants are major generators of pre- and post-consumer food waste. Fear of liability prevents them from donating. They will compost or reduce portion sizes if mandated.
- Institutions are major generators. UMD sends food waste to the composting facility.
- PGCPS do not have a policy for food waste.



## Interviews with food waste mitigators

# Food waste in Prince George's County





- Food recovery organizations rescue unharvested or surplus food from various places.
- Capital Area Food Bank plays a big role in rescuing food that is otherwise thrown away.
- Food pantries, by rescuing surplus food and giving it to the hungry, help reduce the amount of food that goes to the landfill.
- Food scrap collectors and composters turn food waste into valuable soil amendment.



# **County's efforts to reduce food waste**

The Department of the Environment (DoE) is diligently working to reduce food waste in the County.

- Over the past several years, the County has held the number one position in the state for recycling and waste diversion with an average 61 percent.
- Achieving the County's zero waste goals includes food waste diversion and composting.

**Curbside food scrap collection** will soon be launched, initially with 3,000 households and will expand to countywide in three years. The County Executive's budget includes \$200,000 for food waste bins.







# **County's efforts to reduce food waste**

#### Prince George's County Organics Composting Facility (OCF)

- The largest composting facility on the East Coast
- 8-heap Gore<sup>®</sup> system and 12-heap mega system with bunker walls
- Food scrap input is 625 tons/week
- Capacity of turning 32,500 tons of food scraps into LeafGro Gold™ annually.
- Major revenue generator for the County.







# How the County is following the EPA's Food Recovery Hierarchy to reduce food waste

#### **Food Recovery Hierarchy**

Source Reduction & Reuse Reduce the volume of surplus food generated

Feed Hungry People Donate extra foods to food banks, soup kitchens and shelters

Most preferred

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 More can be done. Education is the key for people to understand and take responsibility.

Much more can be done to rescue perfectly edible food and feed the food insecure residents.

There are many opportunities to explore use of food waste as animal feed.

Alternative energy can be created from food waste via anaerobic digestion.

The County is doing a great job! Expanding composting operations can bring more revenue.

Too much food is going to the landfill. Diverting food waste is critical to achieve the zero-waste goal, extend the landfill's life, and generate additional revenue.





# RECOVER



# **Policy recommendations**

- Policy recommendations were developed based on thorough research on national best practices and the solution ideas presented by household survey respondents and businesses that were interviewed.
- For each policy recommendation, multiple strategies are proposed, and a sample of promising practices is presented.
- Policy recommendations are organized by three major categories of the EPA's hierarchy: reduce, recover, and recycle.



# **Policy recommendations**



- Source reduction or prevention is the first step in the Food Recovery Hierarchy.
- Source reduction means reducing the volume of surplus food generated or stopping waste before it happens.
- This can be accomplished by raising awareness, which can change people's behaviors.

**Reduce** food waste by improving product development, storage, shopping/ordering, marketing, labeling, and cooking methods.

-USDA & EPA



#### Policy 1

Launch a food waste awareness campaign. Educate the public about the food waste problem and how each person can reduce it and save money.

REDUCE

REDUCE

REDUCE

Policy 2 Invite all entities across the food chain to a "food waste challenge" to encourage them to reduce food waste.

#### **Policy 3**

Educate the public about date labels and clarify that date labels indicate food quality, not food safety.



commendations Q olicy

#### Policy 4 Support County farms, increase locally-grown food supply, and encourage local food consumption, which would significantly prevent food waste.

**Policy 5** Encourage all businesses and institutions that generate food waste to perform an annual food waste audit.

Policy 6 Encoura

REDUCE

REDUCE

REDUCE

Encourage food retail outlets to reconsider their policies, operational rules, and practices to prevent and reduce food waste.



REDUCE

REDUCE

REDUCE

#### Policy 7

Encourage restaurants to reconsider their practices to prevent and reduce food waste.

Policy 8

Reduce school food waste by using no-cost or low-cost smart strategies.

**Policy 9** 

Lead by example and practice food waste reduction at M-NCPPC and County-owned and operated facilities.



# **Policy recommendations**



- When there is excess food, the best option is to recover it and make it available for food insecure people.
- When food is recovered, resources to produce that food are not wasted.
- Recovering wholesome food and redistributing it where healthy food access is a challenge will help solve the County's "food desert" problem.

**Recover** food waste by connecting potential food donors to hunger relief organizations like food banks and food pantries.

-USDA & EPA



#### Policy 1

Develop markets for products that would not have stayed in the food chain otherwise, which could also alleviate the challenge of access to healthy food in the County.

Policy 2 Encourage donation of surplus food.

**Policy 3** 

RECOVER

Facilitate collaboration of food recovery and anti-hunger organizations and help them develop partnerships with food donors, which would increase the efficiency and volume of food donations.



#### Policy 4 VFR Establish a nonprofit food rescue organization.

RECOVER

#### Policy 5

Help establish a sustainable "food runner" enterprise specialized in delivering surplus food to hunger-relief organizations.



# **Policy recommendations**



- When food is not fit for human consumption, recycling is the best option.
- Recycling food waste for other uses, including animal feed, energy, and compost, helps keep food out of landfills.
- Turning food waste into energy also contributes to the alternative energy creation efforts.

**Recycle** food waste to feed animals or to create compost, bioenergy, and natural fertilizers.

-USDA & EPA



#### Policy 1

Ban food waste at the Brown Station Road Sanitary Landfill in a tiered approach. Mandate residents and businesses separate their food waste and select alternative ways to reuse/recycle it following the EPA food waste hierarchy.

RECYCLE

RECYCLE

Policy 2 Encourage use of food scraps as animal feed.



# RECYCLE

#### Policy 3 Support and explore ways to convert food waste to energy.

RECYCLE

## **Policy 4** Establish a comprehensive composting program that includes all levels of composting.



# food... don't waste it!

Thank you! M-NCPPC Prince George's County Planning Department