Wasted Food

Shifting the Tide

Feeding people and saving the planet

while fulfilling the intent of the law

Mary Harrington September 2018
Three is a Magic Number

Three Washington State agencies

1. **Ecology** - Solid Waste Management Program: 
   Working to reduce wasted food & food waste

2. **Agriculture** - Food Assistance: Increasing the 
   availability of nutritious & safe food through 
   partnerships

3. **Health** - Food Safety Program: Making sure food 
   donation is legal & safe
Three is a Magic Number

Working together to help…

1. **People** - fewer hungry people and more jobs

2. **Farms and Businesses** - less waste and lower costs

3. **Planet** - resources conserved and lower GHG emissions
On a Global level

- Close to **30% of the Earth’s agricultural land** is used to grow food that is not eaten

- The **carbon footprint** of food produced and not eaten is **3.3 gigatons**
That’s 3.3 billion tons

DID YOU KNOW?

If food waste were a country, it will be the third largest emitter of greenhouse gas, after USA and China.
Globally, each year...

- **1.3 billion tons (or 1/3)** of all food produced is wasted.

- **1 trillion dollars** worth of lost or wasted food.

- Over **66 Trillion gallons of fresh water is used** to irrigate food that is not eaten (enough to fill Lake Chelan 13.67 times)
On a National Level

• **63 million tons** of food wasted each year:
  o 52 million tons landfilled
  o **10 million tons left unharvested**

• **80 million acres** used to grow food not eaten.

• **25% of all fresh water** used in agriculture falls on food that is not eaten.

• **$218 billion dollars** spent to grow food that is not eaten.

*from ReFed 2016*
Hunger in the U.S.

50 million or 1 in 6 Americans struggle with hunger including 5 million seniors and 13 million or 1 in 5 kids.

25 million Americans could be fed each year if just 15% of U.S. food waste was captured.
In Washington State

• Ecology estimates **779,555 tons of food disposed** in 2016 (16% of total waste stream)*

• 374,490 tons total estimated edible at disposal

• **191,746 tons edible food estimated disposed from commercial sector.**

This would fill over 3,800 rail cars, making a train that would stretch for 36 miles, the distance from Yakima to Ellensburg.

*Source: 2015-2016 Washington Statewide Waste Characterization Study*
Wasted Food/Hungry People

According to WSDA, in 2017, 1.16 million people in WA struggled to put food on the table.
Some causes of wasted food

- Overproduction
- Product damage
- Lack of cold-chain infrastructure
- Rigid food-grading specifications
- Changes in customer demand
- Market fluctuations
- Confusion related to interpretation of federal, state, and local food recovery and diversion rules

from “Characterization and Management of Food Loss and Waste in North America”- commission for Environmental Cooperation, 2017
Ugly Fruits and Vegetables …

… that dream of being tasted not wasted!
SHB 2411
A bill to reduce wasted food to fight hunger and reduce environmental impacts

- **Recommended that Ecology, DOH, and WSDA work together to develop a plan to reduce food waste by 50% by 2030**
- **January 2018 testimony at the Capitol:**
  - **Supported by local governments and environmental groups**
    - City of Olympia reported that most collected food waste came from the commercial sector (e.g., schools, groceries, hospitals, restaurants)
  - **Appreciated but not supported by grocers or State agencies**
    - Rep from the NW Grocers Association: “We can only donate what we are allowed to donate by the local health departments or other regulatory agencies that tell us ‘Yes that is an edible item that you are allowed to send on to a food bank’ or ‘No that is not something you can’ and that’s not a decision we can make.”
We found common ground

- **RCW 70.95(4) Waste reduction must become a fundamental strategy of solid waste management.** It is therefore necessary to change manufacturing and purchasing practices and waste generation behaviors to reduce the amount of waste that becomes a governmental responsibility.

- **RCW 69.80.010** Purpose: The purpose of this chapter is to promote the free distribution of food to needy persons, prevent waste of food products, and provide liability protection for persons and organizations donating or distributing such food products.

- **040: Information and referral service for food donation program.** The department of agriculture shall maintain an information and referral service for persons and organizations that have notified the department of their desire to participate in the food donation program under this chapter.

- **RCW 43.23.290 - Food assistance programs - WSDA**
What is Washington State Department of Agriculture doing?

INCREASING THE AVAILABILITY OF NUTRITIOUS & SAFE FOOD THROUGH PARTNERSHIPS
FOOD ASSISTANCE
Washington State Department of Agriculture
1. Best Practices

2. FA Website - Donations Section & Guides [agr.wa.gov/Donations.aspx](agr.wa.gov/Donations.aspx)

3. FA Strategic Plan & Federal Commodities Forecast
Resources & Next Steps

1. WSDA FA State and Federal Funding
2. FA Advisory Committee
3. FA General Information:
   (360) 725-5640 or foodassistance@agr.wa.gov
4. Website:
   agr.wa.gov/FoodProg/
What is the Washington State Department of Health doing?

WORKING ON WAYS TO MAKE SURE FOOD DONATION IS LEGAL & SAFE
Working with Partners to Reduce Confusion About What Can Be Donated

A 50 State Survey identified split-authority states may have **mixed messages** regarding food donations:

- **WSDA**: food warehouses (like food banks)
- **LHJ**: food establishments (like food pantries & meal programs)
Working with Partners to Reduce Confusion About What Can Be Donated

Joint project between DOH, WSDA and DOE to create consistent guidance for donors:

Food Rescue Donation Guide for Businesses (Food Establishments & Food Processors)

Available online soon at:

www.doh.wa.gov > Community and Environment > Food > Food Worker and Industry > Charity Food Donations
Food Rescue Donation Guide for Businesses

Approximate food waste:

- **40%** Food Establishments
- **18%** Food Processors & Farms

By focusing food rescue efforts on these businesses we can make an impact to reduce food waste and hunger in our communities.

Graphic modified from Feed America
Food Rescue Donation Guide for Businesses

Emphasize *partnerships* between:

- Hunger Relief Organization
- Donor
- Regulatory Authority
- Food Establishment / Food Processor
- WSDA / LHJ
School Food Donation Guidelines

Summary
Donation of food helps reduce food waste and food insecurity concerns in communities. The intent of this is to provide food safety guidance for school programs that want to recover and provide food to needy students or donated food distributing organizations such as food banks, shelters, or soup kitchens. While helping to alleviate food waste and food insecurity concerns, donation of food has a potential risk of contamination and temperature abuse that can be minimized with appropriate control steps.

Background
On November 18, 2011, the Consolidated and Further Continuing Appropriations Act 2012 amended the Richard B. Russell National School Lunch Act which provided statutory authority for schools and other USDA nutrition programs to have food recovery and donation policies. The statute clarifies that any un consumed food may be donated to eligible local food banks or charitable organizations. The amendment defines eligible local food banks or charitable organizations to mean any food bank or charitable organization that is tax exempt under section 501(c)(3) of the Internal Revenue Code of 1986.

Available online at:
www.doh.wa.gov > Community and Environment > Food > Food Worker and Industry > School Food Donations
School Food Donation Guidelines

1. Donation plans for the participating school must be reviewed by the local health department.

2. Previously served foods may be donated with written approval from the health department.

3. Potentially hazardous foods may be donated if maintained at appropriate temperatures.
What can you do?

TO MAKE SURE FOOD DONATION IS
LEGAL & SAFE
Work with Hunger Relief Organizations

- Communicate about food rescue and recovery efforts
- Evaluate additional resources needed to increase capacity

Photo modified from Ben Faulding - https://www.flickr.com/photos/bfauld1/4719865330/
Work with Donors

Food Establishments & Food Processors

- Encourage:
  - working with regulatory authority to learn about safe food donation
  - partnering with a hunger relief organization to donate edible food
- Discuss other food waste reduction strategies:
  - Animal Feed
  - Composting
Work with the Regulatory Authority

Local Health Department or WSDA

- Communicate about food rescue and recovery efforts
- Learn about safe food donation practices and requirements
What is Washington State Department of Ecology doing?

WORKING TO REDUCE WASTED FOOD & FOOD WASTE
Solid Waste Agencies

Food Banks & Meal Programs

Surplus Edible Food
2014 Thurston County Top Ten Trash Chart

These 10 items represent 62% of all trash

- **Food**: 16.9% (30,000 tons)
- **Wood Waste**: 9.2% (15,000 tons)
- **C & D Debris**: 7.2%
- **Mixed Paper**: 5.2%
- **Film & Bag Plastic**: 5%
- **Carpet & Padding**: 4.5%
- **Compostable Paper**: 3.8%
- **Textiles**: 3.7%
- **Cardboard**: 3.3%
- **Yard Waste**: 3.1%

43% of this food (12,500 tons) was edible before it was tossed.
Businesses throw away a lot of food

19% of commercial waste in Thurston County
11,000 tons total – 5,600 tons of edible food
The bottom-line business case for prevention

Selling imperfect produce
Creating new products
Reducing waste management costs
Avoiding cost of food not sold
Schools throw away lots of food

70% of what a typical elementary school throws away is food
Preventing wasted food at school

“Pile High Patrol”
It’s all you can eat, not all you can take!

Replacing trays with plates and bowls

Replacing trays with plates and bowls

Slicing fruit like apples and oranges

Kids eat more if they have recess **BEFORE** Lunch
Preventing wasted food at school

Condiments can increase consumption.

2” instead of standard 4” pans
San Diego
Unified School District
*Source Reduction*

**FEED the BUDGET**

2 to 3%
in food cost savings

$350,000 - $400,000
in annual food cost savings
Thurston Food Rescue

Leveraging Thurston County and WA Department of Ecology resources to strengthen the local food donation infrastructure to reduce waste, combat climate change, and fight hunger.
Thurston Food Rescue was an LSWFA (fka CPG) – Mini Me - grant program

Used CPG monies over two grant cycles to:
1. Increase the capacity of the Thurston County Food Bank to collect, re-pack, and distribute perishable edible food.
2. Develop and administer a mini-grant program to expand the program to six more agencies and to nine locations.
Thurston Food Rescue

9 locations countywide including the Food Bank downtown
Thurston Food Rescue
Success Stories

Catholic Community Services of Western Washington
Senior Services for South Sound
ROOF Community Services
YWAM Faith Harvest Helpers
Thurston County Food Bank
The Salvation Army
Hidden Creek Community Church
turningpoint CHURCH
Thurston Food Rescue Equipment

- Commercial freezers and refrigerators
- Blast chillers
- Stainless steel work tables
- Lots of shelving units and loading carts
- Bin carts for storage and display
- Mobile insulated food carriers
- Scales, vacuum food sealers, thermometers, and lots more…
Thurston Food Rescue Facility upgrades

• Electrical upgrades to install commercial freezers and refrigerators

• Expansion of a walk-in cooler

• Renovations to increase storage space and improve access for food deliveries
Creating ready-to-eat meals
Who is participating?

- Schools
- Hospitals
- Restaurants of all kinds including chains like Red Robin & Chipotle
- Casinos
- Colleges
- Coffee shops including Starbucks
Rescuing School Food

9 tons rescued & donated in 2016 by 34 local schools

Share tables for uneaten food
Preventing Milk and Carton Waste

A typical elementary school wastes the equivalent of 400 to 500 full cartons of milk a week or about 900 to 1,100 gallons per year. 80 to 90% of this waste is eliminated at schools using milk dispensers.
Milk Dispensers and Durable Cups
MILK does a body good, but only if you **DRINK IT!**

Please take milk **ONLY** if you want it!*

*Thank you!

*Milk is NOT required when you take a main entrée and ½ cup of fruit or vegetables

San Diego Unified School District
Making a difference

The equivalent of 121,120 meals

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<tr>
<th>YEAR</th>
<th>POUNDS</th>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>29,120</td>
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<tr>
<td>2014</td>
<td>52,816</td>
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<tr>
<td>2015</td>
<td>60,578</td>
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<tr>
<td>2016*</td>
<td>193,918</td>
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</tbody>
</table>
Food Rescue in your community

Getting started

Do your homework and a bit of trashy sleuthing and schmoozing

• Get to know your City and County solid waste staff and your local Solid Waste Advisory Committee.

• Review your County’s solid waste management plan and its goals – to receive state funding, it needs to be in the plan.

• Learn to “talk trash” – for solid waste professionals it’s all about tons diverted from disposal.
Food Rescue in your community
Getting started

Prepare a draft proposal – start small

• Prioritize what you need to rescue perishable nutrient-dense edible food that’s now headed to the landfill.

• Strengthen your organizational capacity to collect and share data. We obsess over data.

• Vet your project with public health!

• Reach out to the Ecology, Agriculture, and Health and other community organizations for help.
Sell the service

Tout the benefits of rescuing food

• **Lowers costs** - the most expensive way to manage surplus food is to landfill it.

• **Helps families in need** - 1 in 5 Washingtonians relies on their local food bank.

• **Conserves resources** - food waste is the single largest item, by weight, in the garbage – and is a major contributor to climate change.

• **Reduces dumpster diving** - donating food helps keeps their property clean
How to get the bread and cheddar Ecology grants

Learn your acronyms

**LSWFA - Local Solid Waste Financial Assistance grants** awarded to counties and some cities based on population - non-competitive, but projects must be a local plan.

**PPG - Public Participation grants** - open to non-profits - preference for organizations that serve low income communities and have not received PPG funding during the previous grant cycle.
How to get the bread and cheddar

Other sources

County and city grants for example, King County issued an RFP for projects to prevent and reduce wasted food.
How to get the bread and cheddar

Other sources

Climate action groups

Save the Food - Save the World

### Top 10 solutions to climate change

Total gigatons of CO2-equivalent emissions that could be reduced by 2050

<table>
<thead>
<tr>
<th>SOLUTION</th>
<th>PLAUSIBLE SCENARIO</th>
<th>DRAWDOWN SCENARIO</th>
<th>OPTIMUM SCENARIO</th>
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<td>Refrigerant Management</td>
<td>89.74</td>
<td>96.49</td>
<td>96.49</td>
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<td>Wind Turbines (Onshore)</td>
<td>84.60</td>
<td>146.50</td>
<td>139.31</td>
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<td>Reduced Food Waste</td>
<td>70.53</td>
<td>83.03</td>
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<td>Plant-Rich Diet</td>
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<td>Tropical Forests</td>
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<td>Educating Girls</td>
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<td>Family Planning</td>
<td>59.60</td>
<td>59.60</td>
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<td>Solar Farms</td>
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<td>60.48</td>
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<td>Silvopasture</td>
<td>31.19</td>
<td>47.50</td>
<td>63.81</td>
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<tr>
<td>Rooftop Solar</td>
<td>24.60</td>
<td>43.10</td>
<td>40.34</td>
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Source: Project Drawdown
Use Ecology’s Food Rescue Toolkit

Includes...

• Essential questions to ask your agency and a potential partner

• Sample MOU & Equipment lease

• Data reporting forms

• Sample outreach material

• Federal & State *surplus* application
**Measure data**

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### Food Recovery Definitions

**Incoming**
All Food Recovery donations that are initially diverted from a landfill are considered “incoming.”
All recovered foods are weighed and recorded as “incoming.” (Purchased-for-donation groceries, commodities, canned, gleaned, and/or agency purchased foods are not “incoming” foods.) Round to the nearest pound when weighing incoming foods.

**Incoming Summary**
A report that totals incoming data for perishable, fresh and/or frozen foods donated for the Food Recovery program. (An Incoming Summary report self-populates and cells cannot be changed.)

**Donor**
A school, store, farmers market, restaurant, coffee shop or other type of vendor that contributes food that would have otherwise ended up as garbage in a landfill.

**Perishable, Fresh, and/or Frozen**
Fresh, cooked, and/or frozen foods. (*Examples:* fruits, vegetables, nuts, legumes, meats, poultry, seafood, pasta, rice, soup, pizza, pastries, and baked goods.)

**Protein**
Fresh, frozen, cooked, and/or prepared meats, poultry, fish, shrimp, muscles, oysters, tofu, beans, lentils, nuts, peanut butter, and eggs.

** Produce**
Fresh, frozen, cooked, and/or prepared fruits or vegetables including apples, berries, tomatoes, broccoli, radish, cauliflower, carrots, lettuce, cabbage, peas, melons, etc.

**Dairy**
Fresh and/or frozen milk (flavored or not), yogurt, butter, whip and sour cream, ice cream, puddings, cheeses of all varieties, etc.
### Incoming Pounds By Food Type - 2016

<table>
<thead>
<tr>
<th>FOOD TYPE</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>ANNUAL TOTAL</th>
<th>ANNUAL $ VALUE</th>
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<tbody>
<tr>
<td>Protein</td>
<td>1,237</td>
<td>1,770</td>
<td>1,242</td>
<td>1,348</td>
<td>1,553</td>
<td>1,330</td>
<td>2,046</td>
<td>1,688</td>
<td>12,212</td>
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<td>Produce</td>
<td>1,944</td>
<td>4,108</td>
<td>2,258</td>
<td>7,258</td>
<td>5,257</td>
<td>5,394</td>
<td>3,172</td>
<td>2,938</td>
<td>32,368</td>
<td>$55,996.81</td>
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<td>Bonus Foods</td>
<td>235</td>
<td>2,572</td>
<td>1,866</td>
<td>4,475</td>
<td>5,531</td>
<td>5,559</td>
<td>5,474</td>
<td>4,963</td>
<td>30,674</td>
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<td>Dairy</td>
<td>318</td>
<td>407</td>
<td>244</td>
<td>113</td>
<td>795</td>
<td>599</td>
<td>267</td>
<td>261</td>
<td>3,003</td>
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<td>Grains</td>
<td>1,579</td>
<td>5,368</td>
<td>6,232</td>
<td>4,892</td>
<td>5,608</td>
<td>6,234</td>
<td>6,070</td>
<td>6,279</td>
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<td>Combo Foods</td>
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<td>606</td>
<td>780</td>
<td>1,597</td>
<td>1,082</td>
<td>1,392</td>
<td>1,351</td>
<td>1,358</td>
<td>8,606</td>
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<td><strong>Total All Foods</strong></td>
<td><strong>5,774</strong></td>
<td><strong>14,831</strong></td>
<td><strong>12,621</strong></td>
<td><strong>19,682</strong></td>
<td><strong>19,846</strong></td>
<td><strong>20,507</strong></td>
<td><strong>18,380</strong></td>
<td><strong>17,486</strong></td>
<td><strong>129,126</strong></td>
<td><strong>$223,387.89</strong></td>
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### Incoming Pounds By Donor Type - 2016

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<tr>
<th>DONOR TYPE</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>ANNUAL TOTAL LBS</th>
<th>ANNUAL $ VALUE</th>
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<td>8,364</td>
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<td>10,830</td>
<td>11,135</td>
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<td>602</td>
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<td>558</td>
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<td>957</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Other</td>
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<td>4,937</td>
<td>2,770</td>
<td>9,274</td>
<td>8,522</td>
<td>7,365</td>
<td>4,790</td>
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Three *is* a magic number
Food rescue is a win-win-win partnership

1. The environment wins
   – *resources are conserved, reductions in GHGs*

2. Businesses, schools, and institutions win
   – *opportunities to reduce costs and give back to their communities*

3. Local communities win
   – *nutritious food rescued to serve people in need*
   – *lower food costs for food banks and meal programs*
Wasted food ear worms

to keep the song alive...

“Hey Dude, don’t waste that food while so many are going hungry. Remember that when you throw food away, it decays and warms the planet.”

“Imagine there’s no food waste. It’s easy if you try – no hungry folks among us, and all of us can thrive…”
Thinking outside the produce box

*Imagine a world where we...*

- **Love our ugly fruit & vegies** – and imperfect produce is all the rage.

- **Win the dating game** – and no food is thrown out before its time.

- **Banish “food waste” from our lexicon** – and there’s only food to feed people and animals, and food scraps to feed the soil.

- **Establish food rescue as a core service** – and an integral and integrated part of our organics management programs.

- **Reframe our purpose** – and we are seen as key partners in strengthening local economies, fighting hunger, combating climate change, and nourishing more resilient communities.
You are not alone
Questions?

Department of Agriculture
Kim Eads  
(360) 725-5651  
keads@agr.wa.gov

Department of Health
Emily Hovis  
360-236-3334  
Emily.Hovis@doh.wa.gov

Department of Ecology
Mary Harrington  
(360) 407-6915  
mary.harrington@ecy.wa.gov

Peter Gutchen  
(360) - 407-6612  
peter.guttchen@ecy.wa.gov