

Food Waste Reduction in Washington

Bainbridge Island Climate and Energy Forum

Heather Trim Zero Waste Washington April 27, 2021

Zero Waste Washington

Works to make trash obsolete

Three strategies:

- Help pass laws
- Conduct research
- Do pilot projects



2018







Plastic pollutio



1





Concerning paint stewardship (HB 1652)

Recycling

Program starts April 2021!



Program products



- O Lacquers
- O Varnishes

6

Non-Program Products

- Aerosols
- Thinners, solvents
- Caulking compound
- Specialty coatings
- OEM and industrial paints
- O Leaking, empty, or without the original label

2 waste

Source: American Paintings Association

Overview

- The challenge
- Stop at the source
- Feeding hungry people
- Organic waste management

products com/World-Centric-TO-SC-U15R-p/world-centric-to-sc-u15b htm



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7

Policy

The challenge



Food Waste is a Pervasive Challenge



Municipal solid waste landfills are the 3rd-largest source of human-related methane emissions in the US (EPA 2018)



10

Industry's 3 largest landfill operators among California's biggest methane

WASTE DIVE

emitters: report NASA data shows Republic Se



The New York Times

By Hiroko Tabuchi April 24, 2021

Halting the Vast Release of Methane Is Critical for Climate, U.N. Says

A major United Nations report will declare that slashing emissions of methane, the main component of natural gas, is far more vital than previously thought.





Reduction strategy

- 1. Reduce organic waste (food) at the source
- 2. Make sure excess edible food \longrightarrow food rescue
- - Animal feed
 - Biogas and other technologies
 - Compost



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13

15



16

14



1.3 Billion Tons of Food Loss/Waste Globally



UN Food Waste Index (March 4, 2021)



~ 931 million tonnes of food waste was generated in 2019, 61% percent from households, 26 % from food service and 13% from retail (2 times previous estimates!)

Household per capita food waste generation broadly similar across country income Groups (high, upper-middle and lower-middle income countries)

file:///C:/Users/User/Downloads/FoodWaste%20(1).pdf

19

Roadmap to 2030: Reducing U.S. Food Waste by 50%



21

Addressing food waste by standardizing labels communicating the freshness or expiration of food

HB 2651 – Rep Beth Doglio



zero waste

ReFED Report: Americans throw away 5 billion bananas every year



• 40 recommendations

https://refed.com/food-waste/the-solutions/#priority-action-area

- Investment of \$14 b/yr. over the decade can eliminate 45 million tons/yr. of food waste
 - Result in \$73 b/yr. economic benefit: 5-to-1 return
- Reduction of 75 million tons of greenhouse gases the equivalent of taking 16 million cars off the road each year

20

Top ten solutions: GHG emissions avoided (MTCO2e)





Walmart surveyed its private label suppliers and found that they were using as many as 47 different kinds of date labels.

































Reduce food waste: storage











www.goodnewsnetwork.org/washington-man-rescues-2-million-pound-of-farmers-crops-for-food-banks/

Reducing the wasting of food in order to fight hunger and reduce environmental impacts (HB1114 Doglio, 2019)



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- Set goal for WA to reduce by 50% the amount of food waste generated annually by 2030, relative to 2015 levels.
- ٠ Requires Ecology to develop and adopt a state wasted food reduction and food waste diversion plan designed to achieve the goal.



43



44





45

47



46



Overall Statewide Disposed Waste Stream Stream Composition by Material Class



Overall Statewide Disposed Waste Stream 15 Most Prevalent Material Types

Material	Est.	Cum. Percent	Est. Tons
	Percent		
Inedible Food - Vegetative	6.6%	6.6%	305,174
Edible Food - Vegetative	6.1%	12.7%	278,572
Yard & Garden Waste - Leaves & Grass	5.7%	18.4%	260,664
Disposable Diapers	4.6%	23.0%	209,214
Compostable Paper Products	4.0%	27.0%	184,006
Animal Manure	3.5%	30.4%	159,100
Cardboard/Kraft Paper Packaging	3.1%	33.6%	143,398
Asphalt Roofing	3.0%	36.6%	139,459
Painted Wood	2.7%	39.3%	122,526
Engineered Wood	2.6%	41.8%	118,266
R/C Metals	2.4%	44.2%	108,017
Other Ferrous Metal	2.3%	46.5%	106,823
Inedible Food - Meats, Fats, Oils	2.2%	48.7%	99,891
Edible Food - Meat, Fats, Oils	2.1%	50.8%	95,918
Dimensional Lumber	2.0%	52.8%	91,815
Total	52.8%		2,422,843

49

Benefits of compost

- Mitigates climate change
 - Removal from landfill •
 - Carbon sequestration in soil system •
- Soil improvement
 - Moisture retention
 - Adds nutrients

Erosion control

- Reduces the need for chemical fertilizers. •
- Encourages beneficial bacteria and fungi
- Water quality improvement •
- Pollutants in stormwater runoff

51

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Overall Statewide Disposed Waste Stream 15 Most Prevalent Material Types



50

Access is uneven across the state







Consumer Confusion



55

57



56

Legend Total Factors Received from 0 - 0 - 1000 - 0 - 0000 - 0

58

- Logistics challenges
- Financial burden and risks impacting business models
- Regulatory challenges
- Operational issues
- Physical contamination/Chemical contamination
- Moderate to weak demand and end-markets
- Capacity and knowledge gaps
- Competition and coordination

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Lack of procurement requirements

npgreen.com ugssommater and www.carecycle.co.gov/organics/composition/radioo/compos

62

36 recommendations

- Innovation and technology advances (small- and medium-scale facilities, co-digestion and waste slurrification)
- Grants and government support linked to climate change
- Expand organic and high-value crop markets, government procurement standards and increase renewable natural gas
- Legislative action in other states provides models
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63

Landfill bans in other states

- Ban yard waste:
 - Arkansas, Delaware, Illinois, Indians, Maryland, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, N Carolina, Ohio, Pennsylvania, Rhode Island, S Carolina, S Dakota, W Virgin, Wisconsin. Partial: Florida, Georgia, Iowa, Nebraska
- Ban food waste from all sources:
 - Vermont
 - Maryland (Study of how to improve composting infrastructure and divert food waste)
- Ban commercial food waste (for large generators):

 California, Connecticut, Massachusetts, New York, Rhode Island, New Jersey

64

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Compost and Food Waste

California SB 1383, September 2016

Required Organics Waste Recycling |

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Legislative 2021

Establishing a statewide organic waste goal

SB 5286 – Sen. Mona Das

67

Budget Proviso (\$331,000): WSU

- Develop a model to estimate carbon sequestration from organic waste-derived soil amendment application to soil, and identify technologies, methods, and potential funding for carbon sequestration from Washington's organic wastes, including but not limited to the potential inclusion of these materials in carbon markets and trading.
- Assess local and state government compost usage in projects and buy-back programs
- Complete by December 31, 2022

69

Goal

Establish a state organic waste management goal by a date certain in order to:

- Promote the **comprehensive use** of compost by the state and local governments, residents, and businesses and
- Facilitate the growth of organic waste management processing statewide

68

Waste Prevention and Reduction

Thank You!

w.zerowastewashinaton.org

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