Zero Waste Policy Action Updates in WA

WSU Extension Sustainability Series

Heather Trim
Zero Waste Washington

October 19, 2021

Zero Waste Washington

Works to make *trash* obsolete

Three strategies:

- Help pass laws
- Conduct research
- Do pilot projects

Seven Focus Areas

Producer responsibility

Excess packaging

Reuse/Repair

Recycling

Innovation

Plastic pollution

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2018

Secure Drug Takeback Act

(HB 1047 – Rep Strom Peterson)

- 10 years in the making
- First in the nation
- Program started **November 2020!**

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Concerning paint stewardship

(HB 1652)

Program starts
April 2021!

Program products

Program Products

- Latex paints
- Oil-based paints
- Sealers
- Stains
- Lacquers
- Varnishes

Non-Program Products

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

Source: American Paintings Association

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Reusable Bag Bill for Washington State

(2020: SB5323 – Sen Das

(HB1205 – Rep Peterson)

Zero Waste Washington |Surfrider Foundation | Seattle Aquarium |Puget Soundkeeper Alliance |Environment Washington

No thin plastic carry-home bags

www.seattlepi.com/local/article/Plastic-bags-banned-in-Seattle-2412950.php

#BYOBAG

Goal: Bring your own bag

Ecology toolkit

DEPARTMENT OF ECOLOGY State of Washington

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Home | Air & Climate | Water & Shorelines | Waste & Toxics | Spills & Cleanup

Washington's single-use plastic bag ban

Reducing & recycling waste

- 2021 plastics law
- About 1-800-RECYCLE
- **Plastic bag ban**
- Plastics study
- Electronics (E-Cycle)
- Organic materials
- Paint stewardship
- Enacting legislation
- Mercury lights
- Recycling Development Center
- Residential commingled

Gov. Jay Inslee ends delay. Bag ban effective Oct. 1, 2021 +

Plastic bags are a major contaminant in Washington's recycling facilities, waterways, roadways, and environment. Washington's Plastic Bag Ban will reduce pollution by prohibiting single-use plastic carryout bags and charging a fee for acceptable bags in business establishments beginning in January 2021.

Overview

- Organics challenge
- Organic waste management
- Policy - organics
- Plastics/Recycling challenge
- Policy - recycling

www.usecoproducts.com/World-Centric-TO-SC-U15B-p/world-centric-to-sc-u15b.htm

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WA 2021 Session: Zero Waste bills

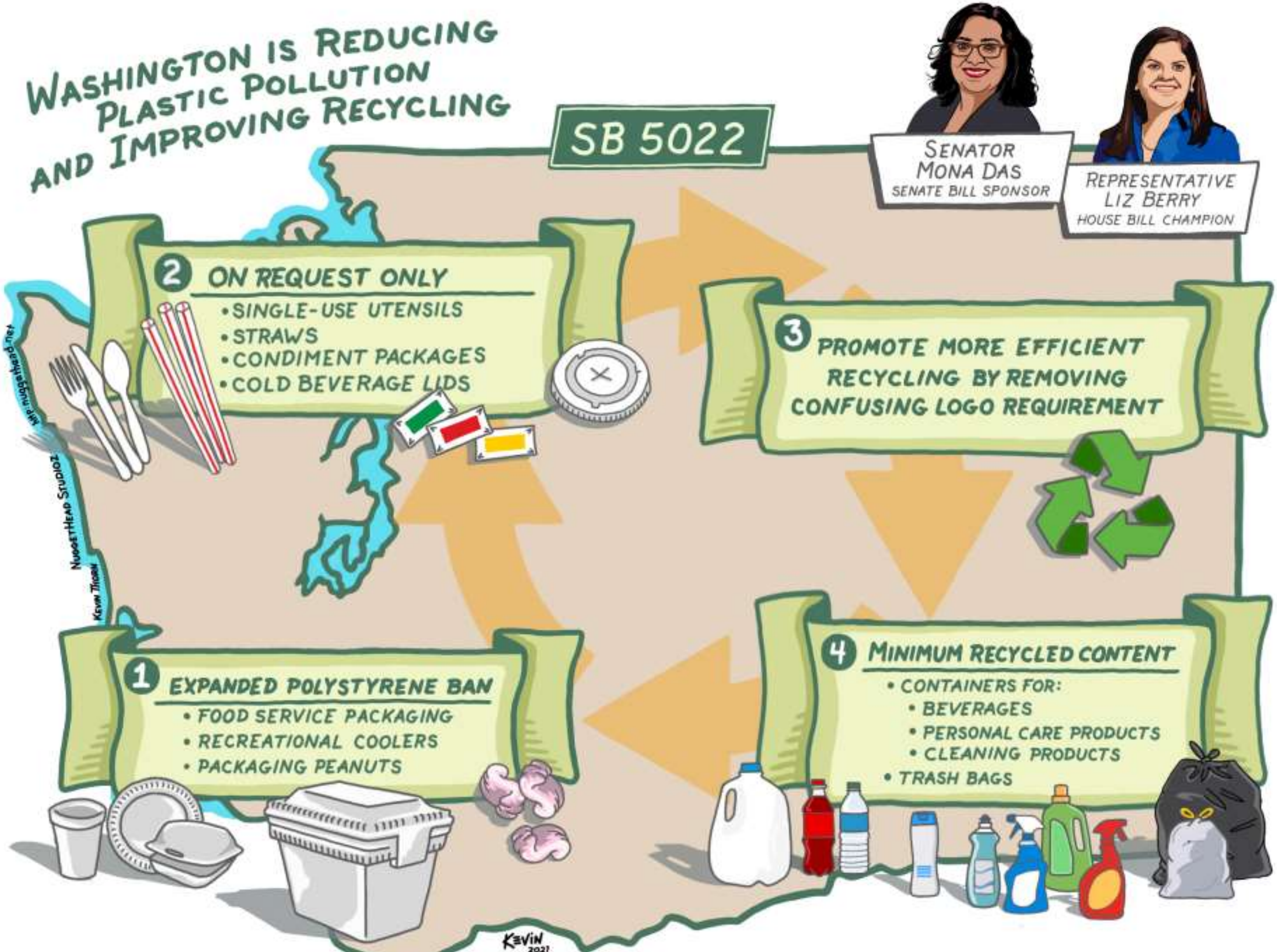
Bills that moved forward;

- Plastics and Recycling (PSSB 5022)
- Lead in school water (HB 1139)
- Fluorinated gas (HB 1050)
- Drug takeback fixes (HB 1161)
- Industrial symbiosis (SB 5345)
- Wheat straw in bags (HB 1145)

Bills that did not make it

Right to Repair (HB 1212)

- Compost/Organic Waste (SB 5286)
- Fireworks (HB 1059)
- Garbage to swine (SB 5300)
- Wind turbine blades recycling (SB 5174)


WASHINGTON IS REDUCING PLASTIC POLLUTION AND IMPROVING RECYCLING
SB 5022
SENATOR MONA DAS
SENATE BILL SPONSOR
REPRESENTATIVE LIZ BERRY
HOUSE BILL CHAMPION
2 ON REQUEST ONLY
• SINGLE-USE UTENSILS
• STRAWS
• CONDIMENT PACKAGES
• COLD BEVERAGE LIDS
3 PROMOTE MORE EFFICIENT RECYCLING BY REMOVING CONFUSING LOGO REQUIREMENT
1 EXPANDED POLYSTYRENE BAN
• FOOD SERVICE PACKAGING
• RECREATIONAL COOLERS
• PACKAGING PEANUTS
4 MINIMUM RECYCLED CONTENT
• CONTAINERS FOR:
• BEVERAGES
• PERSONAL CARE PRODUCTS
• CLEANING PRODUCTS
• TRASH BAGS
NUGGETHEAD STUDIOZ
KEVIN THORN
KEVIN 2021

2022

- Packaging EPR*
- Organics/methane
- Right to Repair
- Batteries EPR*

**Extended Producer Responsibility*

The organics challenge

Food Waste is a Pervasive Challenge

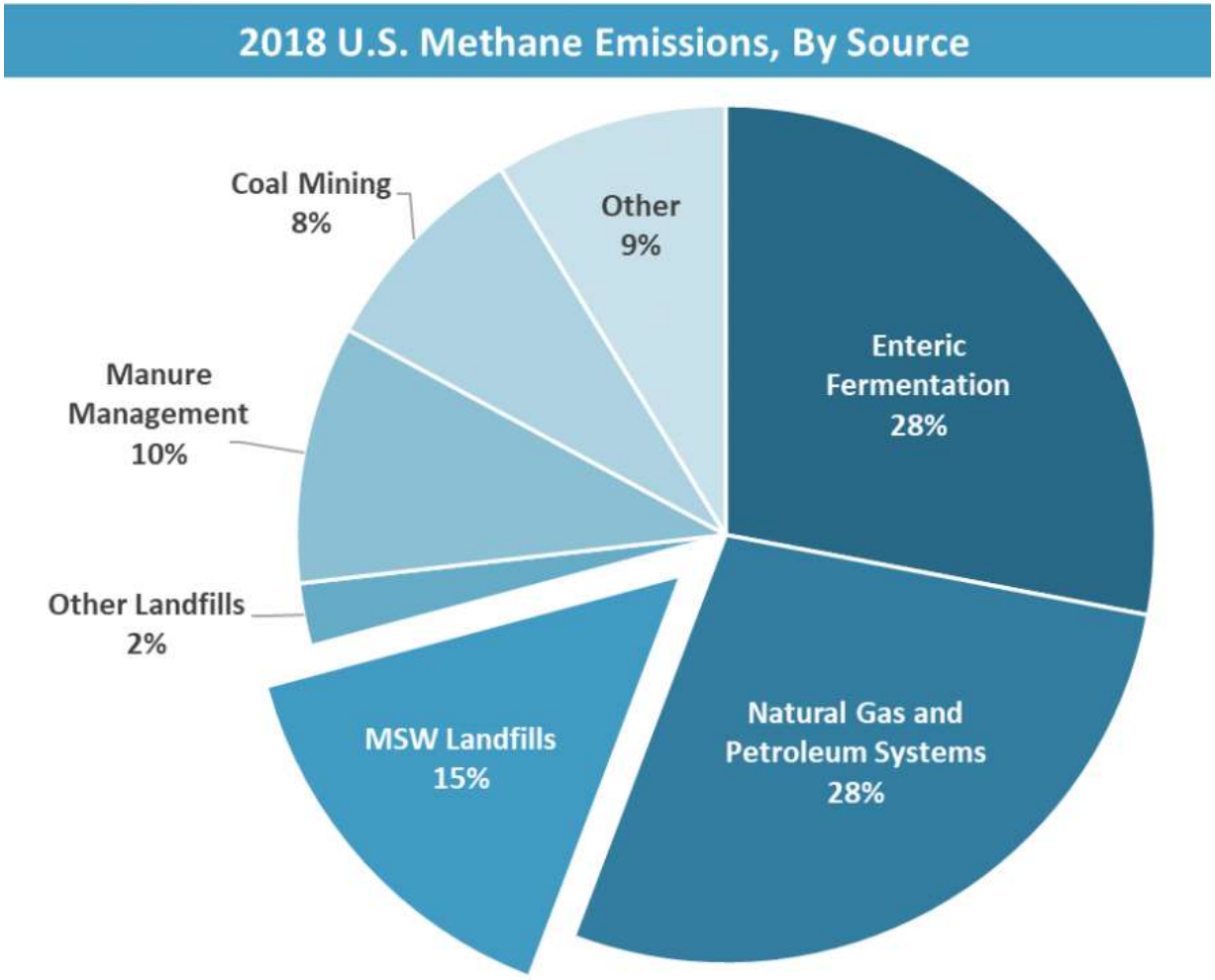
72B lbs of food goes to waste every year in the U.S.

$218
billion worth of food is thrown away each year

21%
of landfill volume is food waste

21%
of fresh water is used to produce food that is never eaten

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



Note: All emission estimates from the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018*. U.S. EPA. 2020.

www.epa.gov/lmop/basic-information-about-landfill-gas

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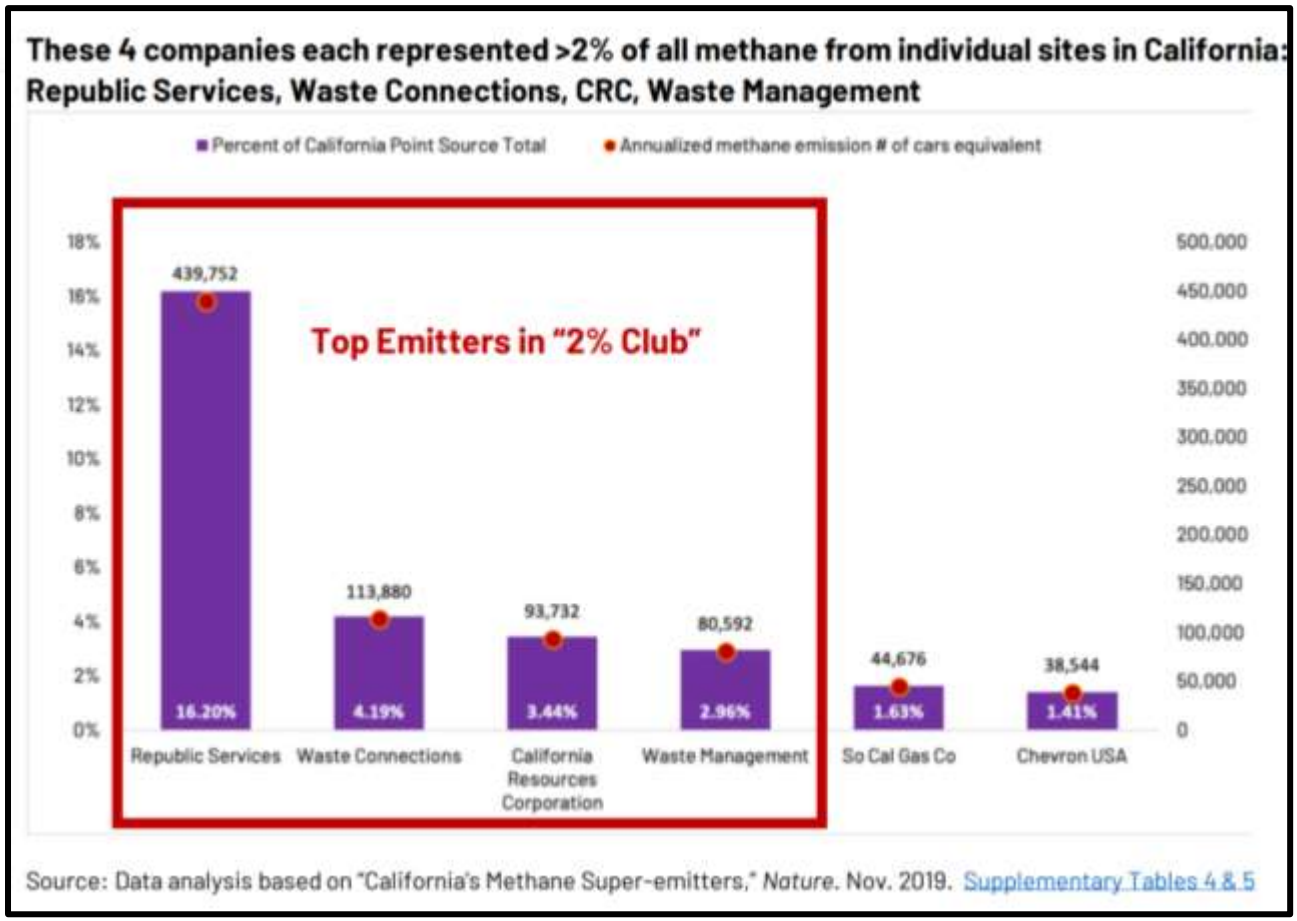
Industry's 3 largest landfill operators among California's biggest methane emitters: report

WASTEDIVE

NASA data shows Republic Services, Waste Connections and Waste Management among the state's "super-emitters."

Published Jan. 23, 2020

E.A. Crunden
@eacrunden



https://truvaluelabs.com/wp-content/uploads/2020/01/CalifTopMethaneEmittersResearchBrief.pdf
https://www.wastedive.com/news/super-emitters-methane-landfills-nasa-republic-california-waste-management/570850/

The New York Times

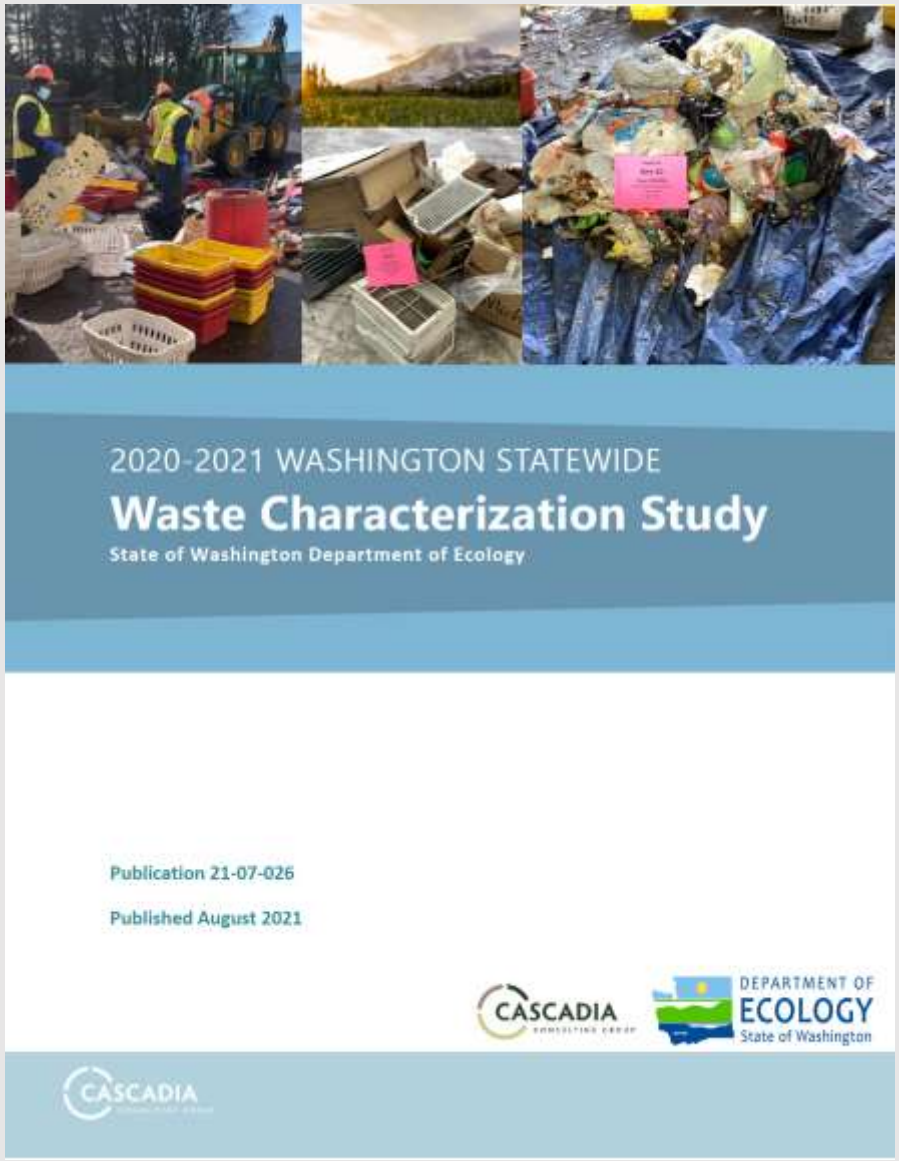
By Hiroko Tabuchi
April 24, 2021

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.

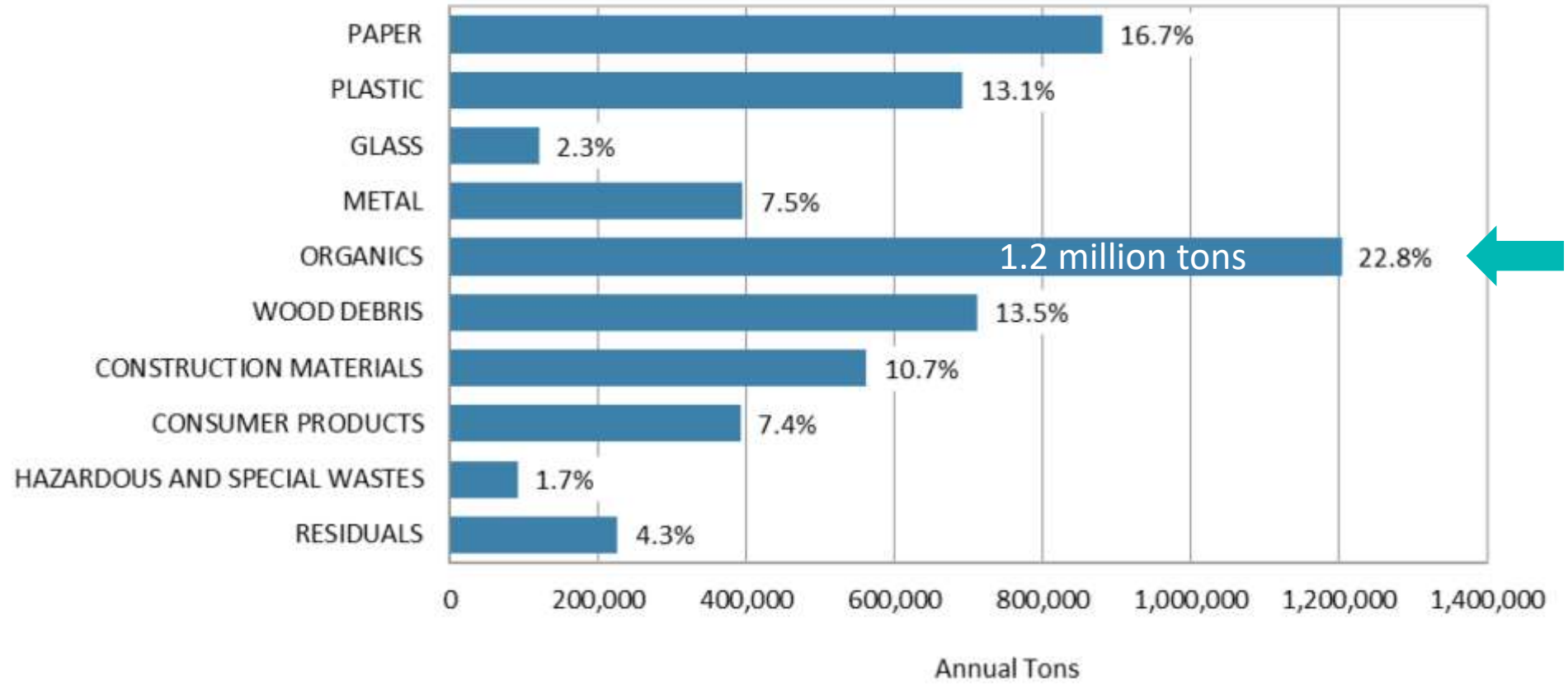
https://www.nytimes.com/2021/04/24/climate/methane-leaks-united-nations

2020-2021 Washington Statewide Waste Characterization Study



DEPARTMENT OF ECOLOGY State of Washington

Overall Statewide Disposed Waste Stream Composition by Material Class (annual tons)



Overall Statewide Disposed Waste Stream 15 Most Prevalent Material Types

Material	Est. Percent	Est. Tons
Edible Food Waste- Vegetative	6.4%	336,564
Cardboard & Kraft Packaging	5.2%	276,196
Painted Wood	4.8%	253,958
Inedible Food Waste- Vegetative	4.8%	250,860
Animal Manure	4.8%	250,763
Compostable Paper Products	3.4%	180,366
Other Ferrous Metal	3.3%	174,364
Drywall	3.2%	167,785
R/C Metal	2.6%	139,654
Yard/Garden Waste- Leaves and Grass	2.5%	132,218
Packaging Film Plastic	2.4%	123,992
Engineered Wood	2.1%	112,899
Edible Food Waste- Meats/Fats/Oils	2.1%	109,571
Compostable Paper Packaging	2.0%	107,175
Bulky Rigid Plastic Products	1.9%	98,194
Inedible Food Waste- Meats/Fats/Oils	.5%	23,932

Percentages for material types may not total 100% due to rounding.

DEPARTMENT OF ECOLOGY
State of Washington

Overall Statewide Disposed Waste Stream
15 Most Prevalent Material Types

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Percentages for material types may not total 100% due to rounding.

Edible food = 8.5%

Inedible food = 5.3%

TOTAL: 13.8%

Benefits of compost

- Mitigates **climate change**
  - Removal from landfill
  - Carbon sequestration in soil system

- **Soil** improvement
  - Moisture retention
  - Adds nutrients
  - Reduces the need for chemical fertilizers.
  - Encourages beneficial bacteria and fungi

- **Water quality** improvement
  - Pollutants in stormwater runoff
  - Erosion control

www.cnn.com/2020/12/03/us/microplastics-tire-rubber-chemicals-killing-coho-salmon-scn/index.h

Reduction strategy

1. **Reduce** organic waste (food) at the source
2. Make sure **excess edible food** → food rescue
3. Remaining **inedible food, green waste and other organic waste** →
   - Animal feed
   - Biogas and other technologies
   - Compost

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A worker dumps pre-consumer food waste before being fed to black soldier fly larvae at the Enterra Feed Corporation in Langley, British Columbia, Canada, March 14, 2018. (Reuters)


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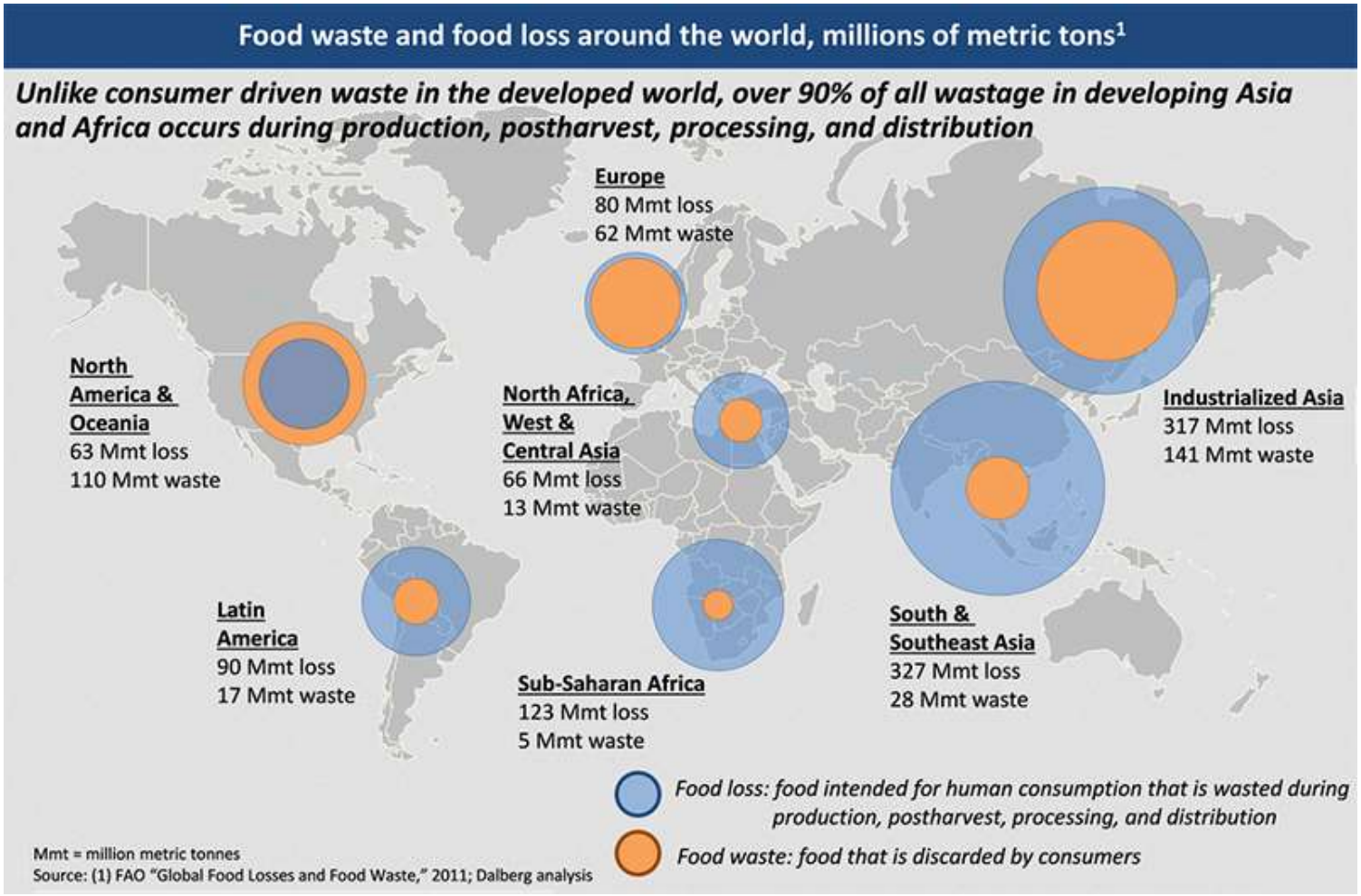
1.3 Billion Tons of Food Loss/Waste Globally



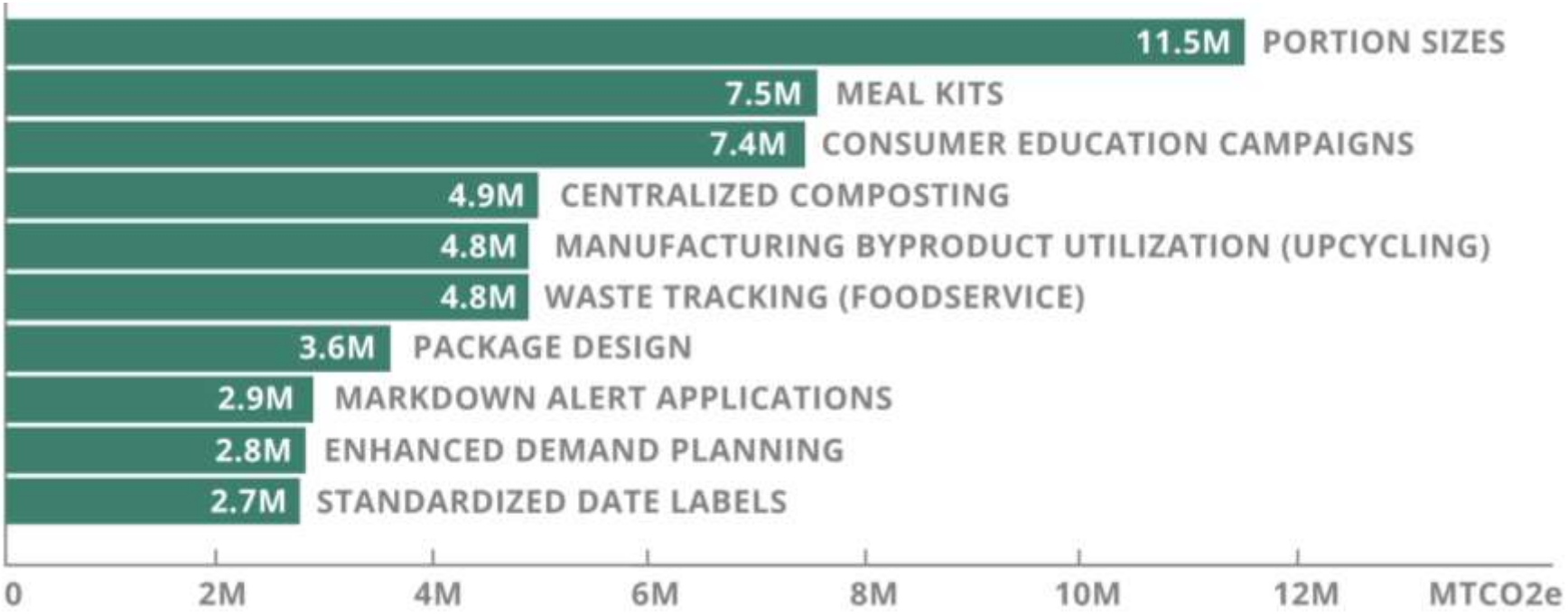
CHLPI CENTER for HEALTH LAW and POLICY INNOVATION HARVARD LAW SCHOOL

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

https://refed.com/

ReFED Rethink Food Waste

Top ten solutions: GHG emissions avoided (MTCO2e)



https://refed.com/

ReFED Rethink Food Waste Through Economics and Data

2020

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

HB 2651 – Rep Beth Doglio

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Food date labels used by the food industry, including "pull by," "sell by," "best by," "use by," and "best before" dates vary widely.

Consumer confusion regarding food date labels is well documented and accounts for ~20% of consumer waste (WRAP 2011).

https://www.foodmanufacture.co.uk

Reducing the wasting of food in order to fight hunger and reduce environmental impacts

(HB1114 Doglio, 2019)

- Set goal for WA to reduce by 50% the amount of food waste generated annually by 2030, relative to 2015 levels.

- Requires Ecology to develop and adopt a state wasted food reduction and food waste diversion plan designed to achieve the goal.

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Ecology Report

Focus on: Food Waste Prevention

WHY IT MATTERS

Wasting food does not make sense – for people or for the environment.

It's unthinkable that 1 in 6 people in Washington faces food insecurity while studies show that over 370,000 tons of edible food are disposed of annually in the state.

Wasting food is also bad for the environment. When organic material like food ends up in a landfill, all the resources used to grow and deliver the food are also wasted. When food is disposed, methane, a greenhouse gas more potent than carbon dioxide, is emitted from the landfill.

The **Use Food Well Washington Plan** provides actionable recommendations that can help build a more resilient food system in Washington and reduce food waste by 50% by 2030.

Washington steps up to fight hunger, reduce waste

The Food Waste Reduction Act (RCW 70A.205.715) was passed by the legislature in 2019 and commits Washington State to reducing food waste by 50% by 2030. The Department of Ecology (Ecology) and partnering agencies are tasked with developing a plan and report to meet this goal. The coronavirus pandemic directly impacted the planning process, resulting in a delay of the plan and report. This document details the impacts, priority recommendations featured in the plan, and an updated timeline of the planning efforts.

Partnerships and impacts on the planning process

The Food Waste Reduction Act (RCW 70A.205.715) requires Ecology to consult with the departments of Agriculture, Health, Commerce, and the Office of the Superintendent of Public Instruction to develop and adopt a state wasted food reduction and food waste diversion plan designed to achieve the 50% food waste reduction goal.

The partnership established five working groups in September 2019 to research waste reduction and diversion opportunities in the areas of food safety, hunger relief, food business, food waste collection and conversion, and education and behavior change.

In the wake of the coronavirus pandemic, collaboration planning efforts were paused in March 2020. Most planning leaders were pulled away to front-line hunger relief and food rescue as food supply chains were disrupted. Early reports showed more than 2 million Washingtonians experienced food insecurity during the peak crisis response.

Similarly, agency subject matter experts and planning partners were pulled away from food waste planning to work on keeping grocery store shelves stocked, feeding children through backpack-type programs, or redirecting food from the business and hospitality sector to beneficial uses where it was most needed. As a result, Ecology and its partners intend on delivering the plan and report to the legislature by the end of 2021.

Contact information

For more information, please contact the following:

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Department of Health
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Bianca Smith
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360-725-6057

Special accommodations

To request ADA accommodation, including materials in a format for the visually impaired, please call Ecology at 360-407-7285 or visit https://ecology.wa.gov/accessibility.

People with impaired hearing may call Washington's Relay Service at 711. People with a speech disability may call TTY at 877-833-6341.

Use Food Well Washington Plan Progress Report

The **Use Food Well Washington Plan** currently includes over twenty recommendations across three strategies to prevent, rescue, and recover food and food waste for beneficial uses.

The recommendations were formed through the subject matter expert engagement process, research, literature review, and through analysis of the best available data. While there is still much to learn about Washington's food system, it is clear there are actionable priority recommendations that will help build momentum towards reducing food waste by 50% by 2030. A list of preliminary priority recommendations were identified based on research and stakeholder review. All recommendations will continue to be evaluated as work on the plan continues.

Preliminary Priority Recommendations

- Federal action to support standardized date labeling, increase markets for off-grade produce, and increase tax incentives for edible food donations.
- State action to create the Washington Center for Sustainable Food Management.
- State action to increase and sustain funding for grants focused on food waste prevention, rescue, and recovery.
- State action to increase access to cold chain and transportation infrastructure for the hunger relief sector.
- State action to increase access to value-added food processing hubs and community kitchens across the state.

Planning timeline

- **September-December 2020:** Collaborate online with planning partners. Continue research and mapping of recommendations, including an economic analysis.
- **January-March 2021:** Finalize the quantitative and qualitative components of each recommendation, maximize buy-in from subject matter expert groups and planning leaders, and prepare for public comment.
- **Spring 2021:** Complete plan and engage the public for review and comments.
- **Summer 2021:** Consider and respond to public comments and conduct a second economic review. Finalize plan and conduct a final partnering agency review.
- **October 2021:** Complete final plan.
- **December 2021:** Deliver the report to the Legislature.

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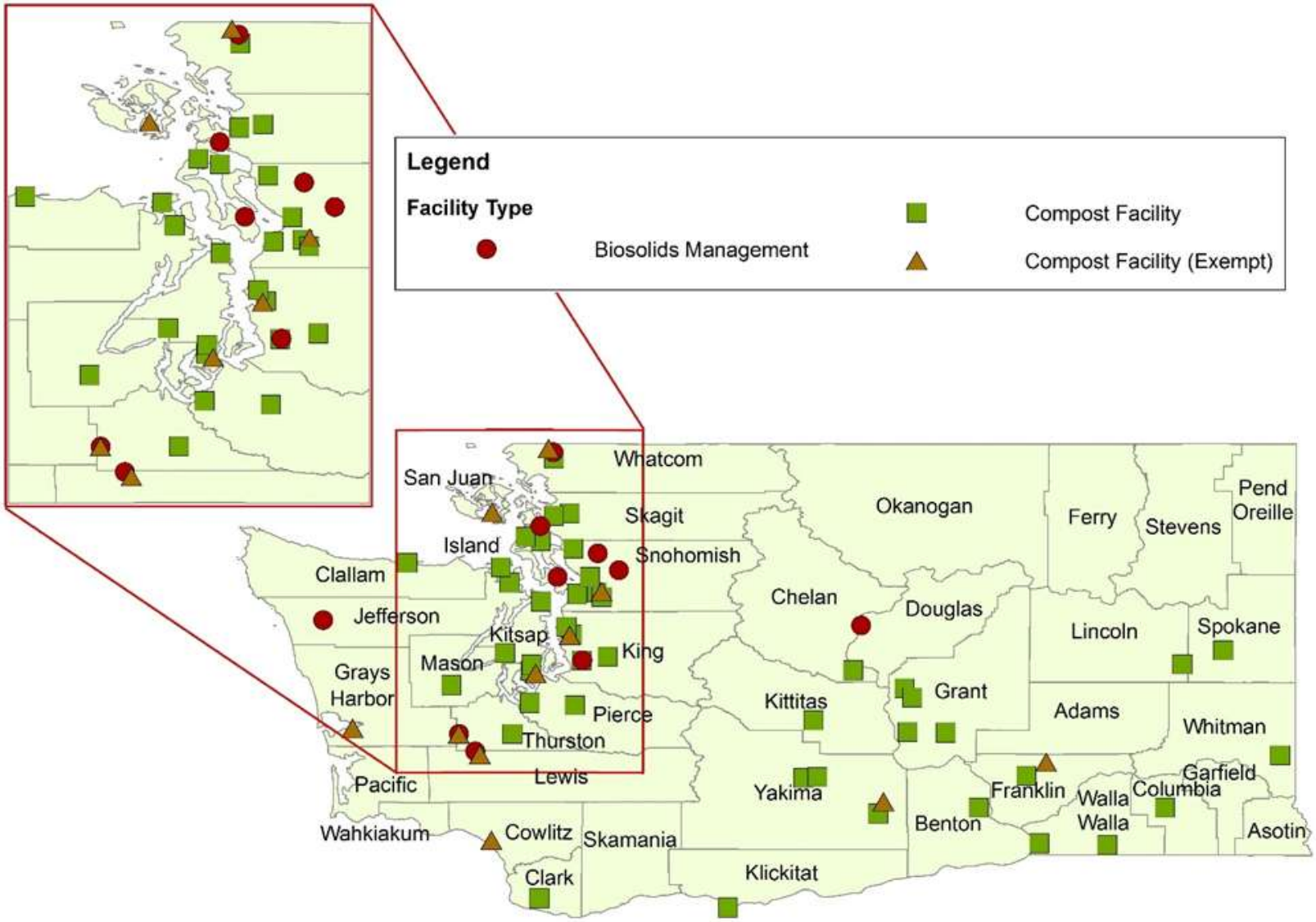
New Report


Improving Organic Materials Management in Washington State
An Assessment of the Barriers and Needs of Organic Waste Management Facilities in Washington State
Zero Waste Washington
May 2021


Legend
Facility Type
Biosolids Management
Compost Facility
Compost Facility (Exempt)
Whatcom
San Juan
Skagit
Island
Snohomish
Clallam
Jefferson
Kitsap
King
Mason
Grays Harbor
Pierce
Thurston
Lewis
Pacific
Wahkiakum
Cowlitz
Skamania
Clark
Okanogan
Ferry
Stevens
Pend Oreille
Chelan
Douglas
Lincoln
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Whitman
Yakima
Franklin
Walla Walla
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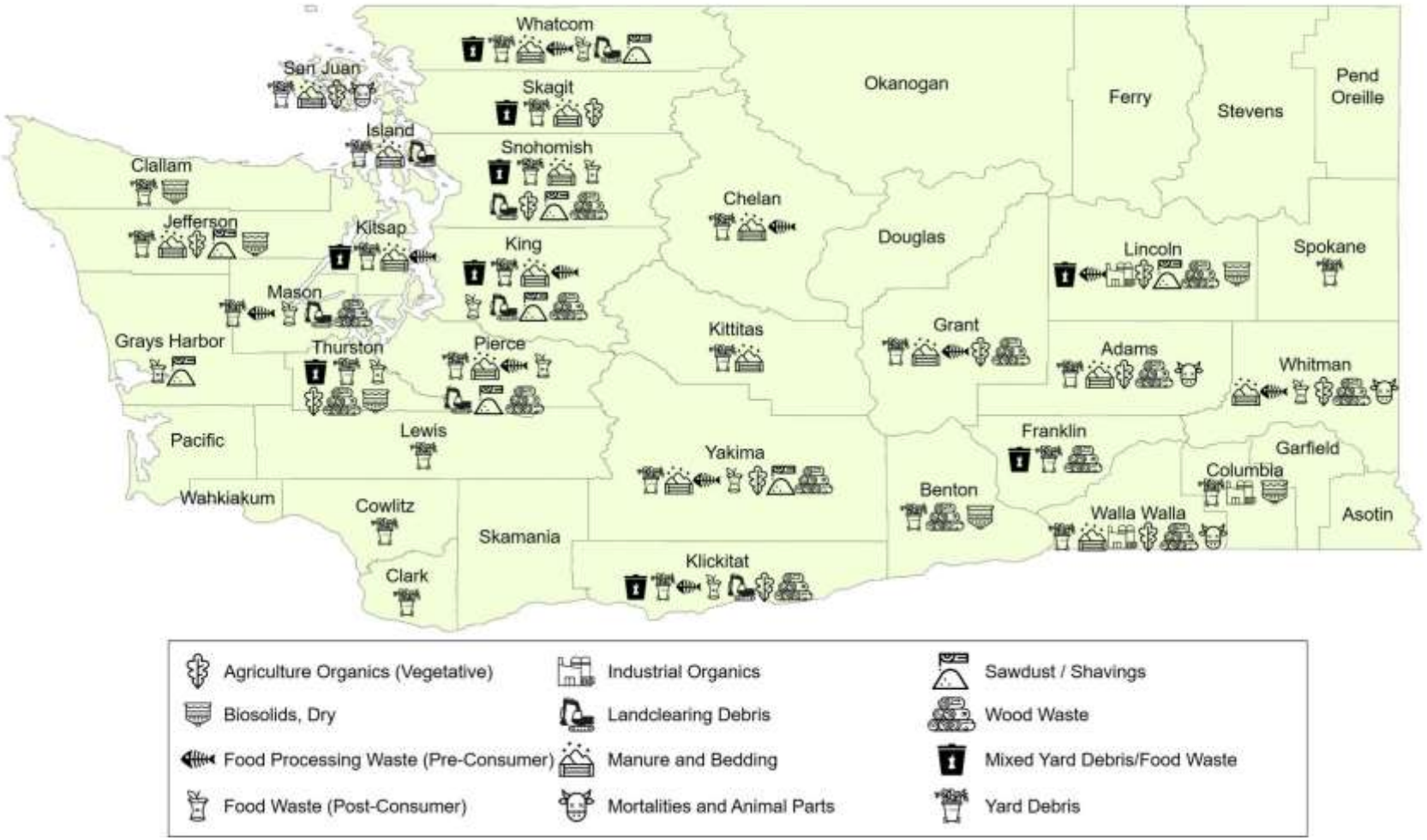
Garfield
Benton
Asotin
Klickitat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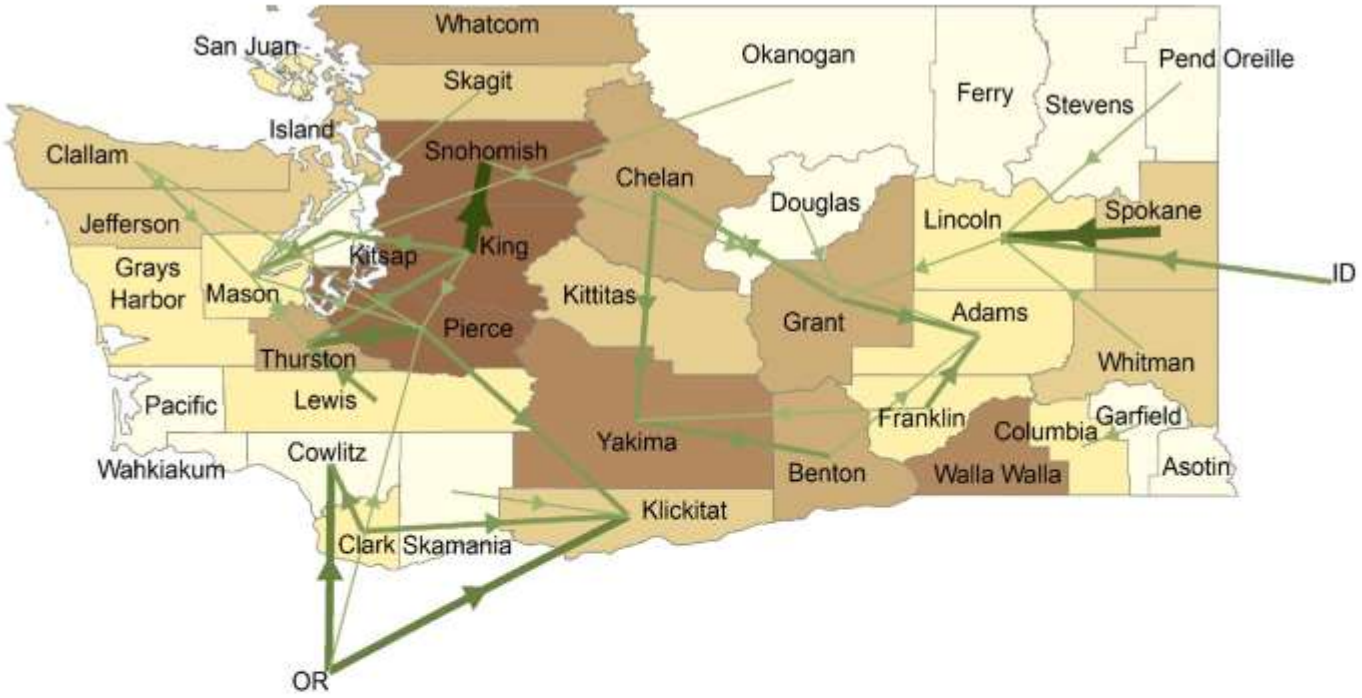
Pend Oreille
Chelan
Douglas
Lincoln
Spokane
Kittitas
Grant
Adams
Whitman
Yakima
Franklin
Garfield
Columbia
Benton
Walla Walla
Asotin
Klickitat
Agriculture Organics (Vegetative)
Biosolids, Dry
Food Processing Waste (Pre-Consumer)
Food Waste (Post-Consumer)
Industrial Organics
Landclearing Debris
Manure and Bedding
Mortalities and Animal Parts
Sawdust / Shavings
Wood Waste
Mixed Yard Debris/Food Waste
Yard Debris



Legend

Total Feedstock Received from Local Sources by County during 2018 [tons]

- 0
- > 0 - 1,000
- > 1,000 - 10,000
- > 10,000 - 50,000
- > 50,000 - 100,000
- > 100,000

Total Shipped Feedstock (County to County) during 2018 [tons]

- > 0 - 1,000
- > 1,000 - 10,000
- > 10,000 - 50,000
- > 50,000 - 100,000
- > 100,000

Barriers

- 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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www.thenewstribune.com/news/local/article234316267.html

Clopyralid

https://weedwise.conservationdistrict.org/2020/herbicide-residue-in-manure-hay-and-compost.html
https://grabngrowsoil.com/blog/composters-beware-herbicides/

Lack of procurement requirements

https://hpigreen.com/tag/stormwater and www.calrecycle.ca.gov/organics/compostmulch/toolbox/compostblankets

Policy Road Map

Capacity & Markets Expansion

- Connect RNG facilities to pipelines & e-grid
- Fund pilot strategies, such as co-digestion
- Expand markets for organics products
- Incentivize anaerobic digestion
- Foster community-based composting

Performance Improvement

- Industrial symbiosis: Use excess steam for apple maggot
- Increase (training) requirements
- Update the state's manual

Standards Improvement

- Update toxics list
- Set standards for digestate application
- Make spreading equipment available
- Require compostable foodservice products to be distinguishable

Systemic Changes

- Price GHG emissions
- Foster biogas markets
- Ban organics in landfills
- Ban clopyralid and other herbicides
- Expand renewable portfolio
- Increase landfill tipping fees

Innovation Support

- Create an innovation center
- Incentivize anaerobic digestion projects
- Encourage new technologies
- Fund facilities that manage food waste
- Fund purchase of products

Collaboration Improvement

- Establish policy working group
- Require education in contracts
- Define compostable products
- Improve data

Permitting Revision

- Coordinate permits
- Establish VOC emissions testing standards
- Increase funding for training & monitoring
- Define standard odor measurement methods
- Proactively define zoning for organics facilities
- Focus compliance on key performance indicators

Contractual Processes Improvement

- Standardize government contracts
- Set bid preferences for RNG for heavy duty vehicles
- Incentivize & sanction for better source separation
- Pilot Pay-As-You-Throw based on weight not volume

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**

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Compost and Food Waste

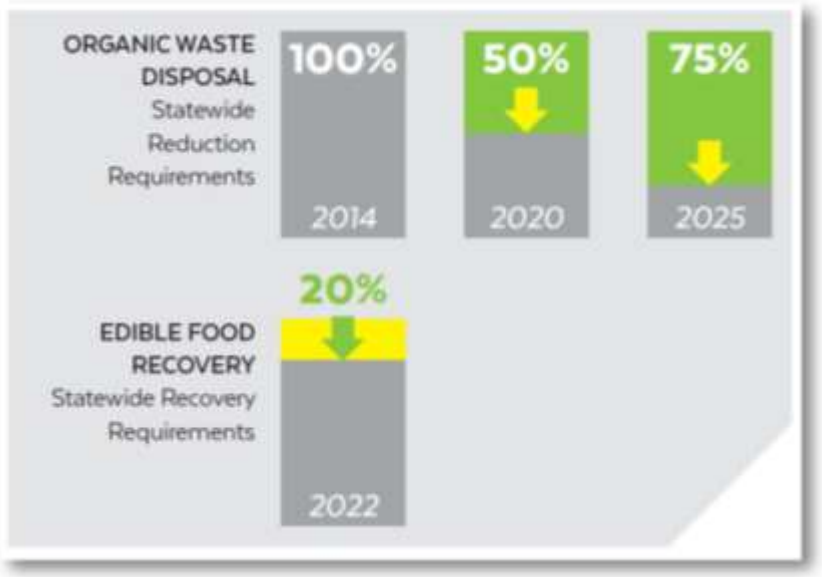
California SB 1383, September 2016

Short-Lived Climate Pollutants Reduction Act establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants in various sectors of CA's economy.

Reduce below 2013 levels by 2030 :

- methane by 40%
- hydrofluorocarbon gases by 40%
- anthropogenic black carbon by 50%

Bill also addressed livestock and dairy, biomethane, and biogas



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Establishing a statewide organic waste goal

SB 5286 – Sen. Mona Das

Strengthen WA's Good Samaritan Law

- **Allow the sale of food at a discounted price:** Broaden language to protect nonprofit organizations that sell food at a discounted price and the donors that donate to these nonprofits.

- **Encourage direct donations from restaurants:** Modify language to include donations made by food service establishments and retailers directly to individuals.

- **Emphasize food safety:** Change the definition of apparently wholesome food to replace "quality and labeling standards" with "safety and safety-related labeling" to clarify that donated food must meet all federal, state, and local food safety requirements.

WA Good Samaritan Food Donation act: https://apps.leg.wa.gov/rcw/default.aspx?cite=69.80.031

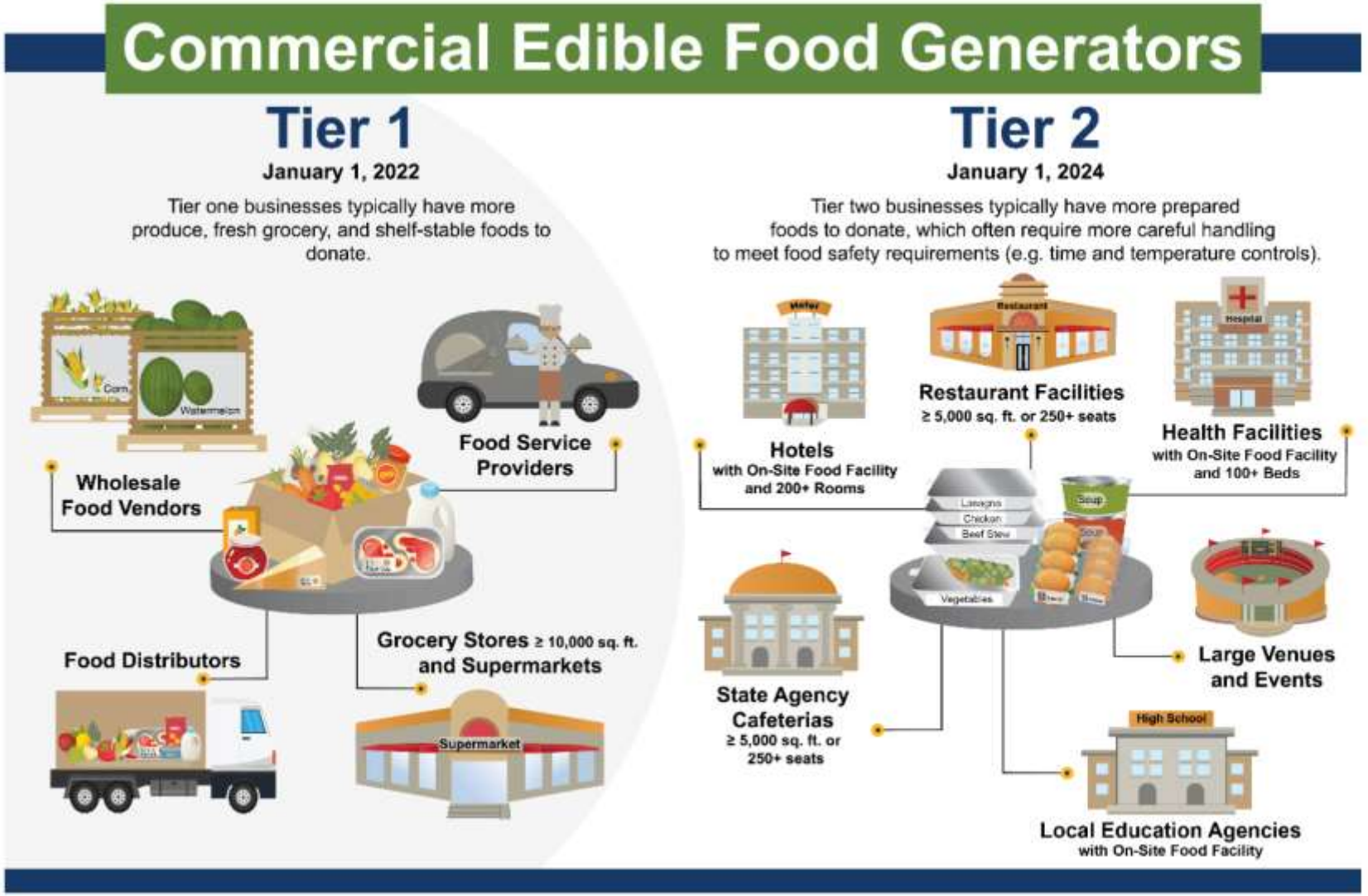
Mandate food scrap recycling

CA Mandatory Commercial Organics Recycling: Businesses that create organic waste must arrange for organic waste recycling services, and local governments must implement a commercial organics recycling collection program. – *California AB 1826 (2014)*

MD Organics Recycling – Waste and Diversion: Effective January 2023 commercial generators of >2 tons of food scrap must either reduce, divert to food rescue organizations, farms for animal feed operations, or compost or anaerobically digest the residuals. In 2024, the threshold lowers to generators >1 ton. - *Maryland HB264 (2021)*

NJ 865: Requires large food waste generators to separate and recycle food waste

CA 1383 Edible food tiers: Commercial edible food generators must recover for human consumption the maximum amount of their edible food that they would otherwise dispose of in landfills by making written agreements with food recovery organizations or services to accept this food instead



file:///C:/Users/User/Downloads/2021May5IDSB1383EdibleFood%20(1).pdf

Improve school food waste in schools: Require 20-min seated lunch minimum Require recess before lunch

Washington state schools can't seem to squeeze in recommended 20-minute student lunch, audit finds

The Seattle Times

Aug. 30, 2019 By Keerthi Vedantam

Washington State Auditor's Office said scheduling lunches could be the key to improving health and behavior in K-12 students.

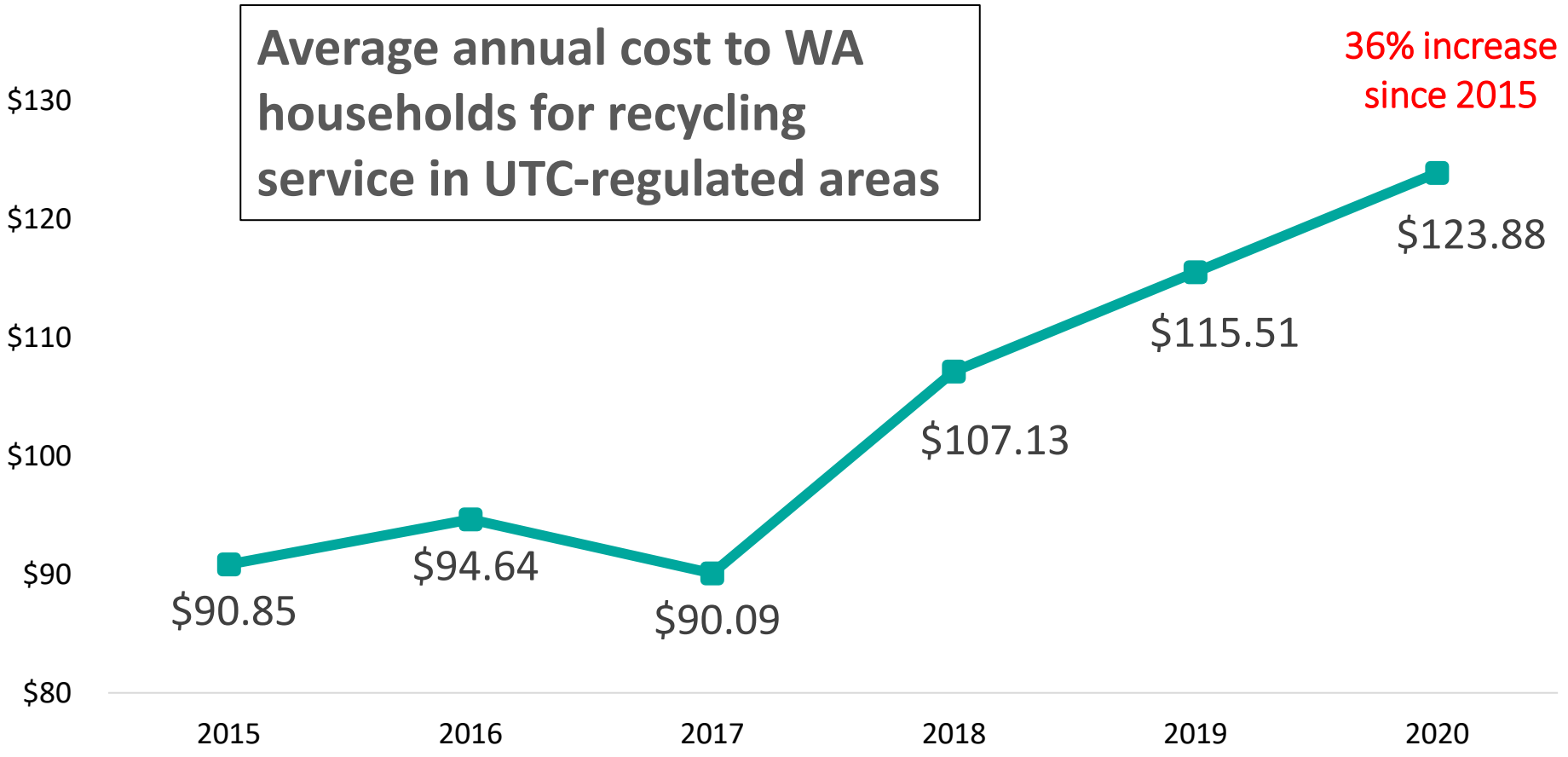
The audit found students at **almost all of the 31** Washington schools observed didn't sit for 20 minutes to eat during lunch. **Seventeen of those schools scheduled** 20 minutes of sitting, but only one followed through.

In 2016, the Alliance for a Healthier Generation issued a 20-minute seating schedule for schools, and **five states (not Washington) require it.**

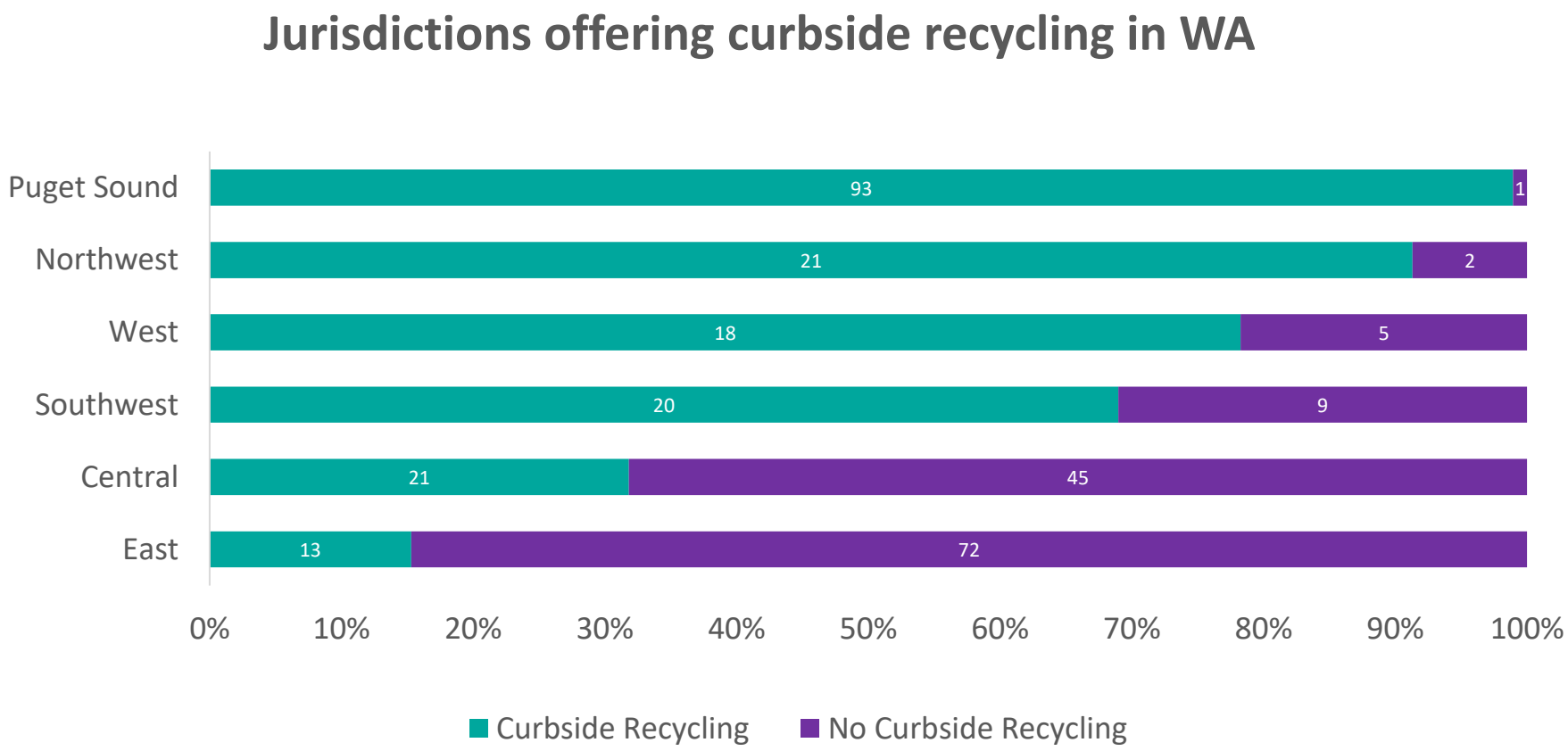
www.seattletimes.com/education-lab/washington-state-schools-cant-seem-to-squeeze-in-recommended-20-minute-student-lunch-audit-finds/
https://sao.wa.gov/performance_audit/schools-can-influence-student-eating-habits-through-lunch-scheduling-practices/

The plastics/recycling challenge

Washington residents: rising costs and shrinking services

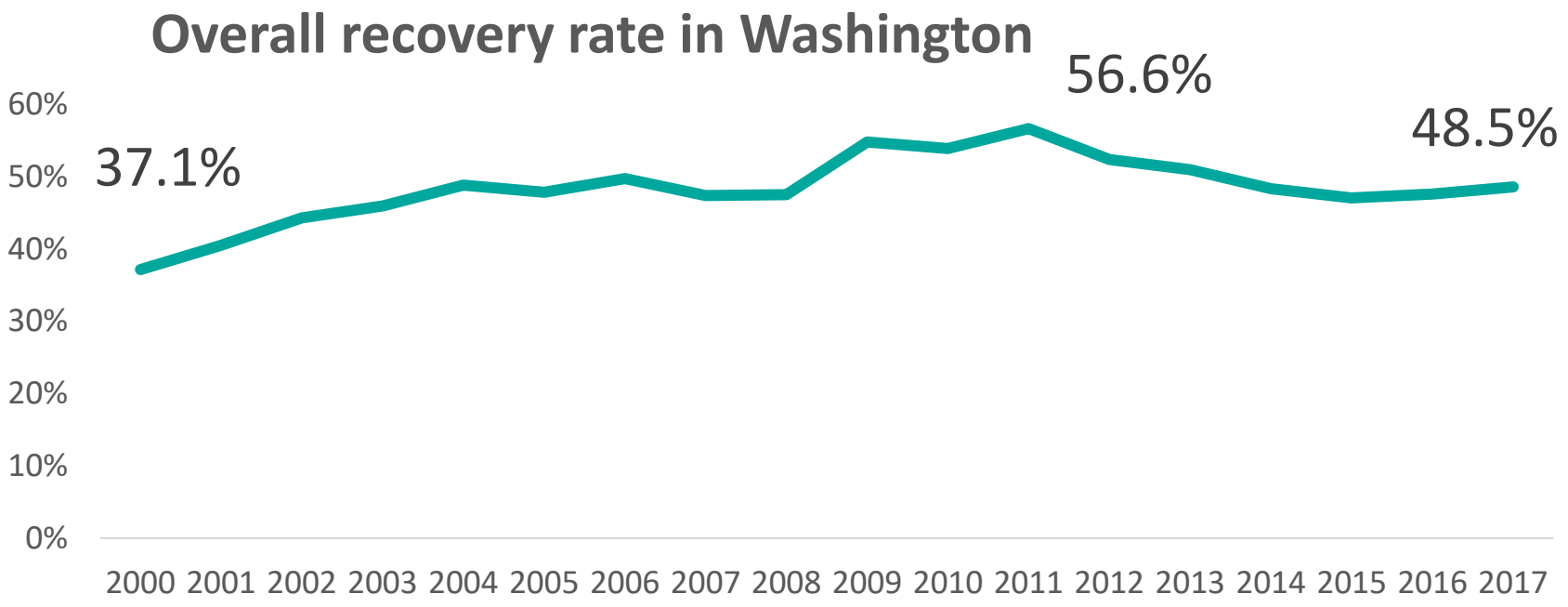


Access to recycling is uneven across the state

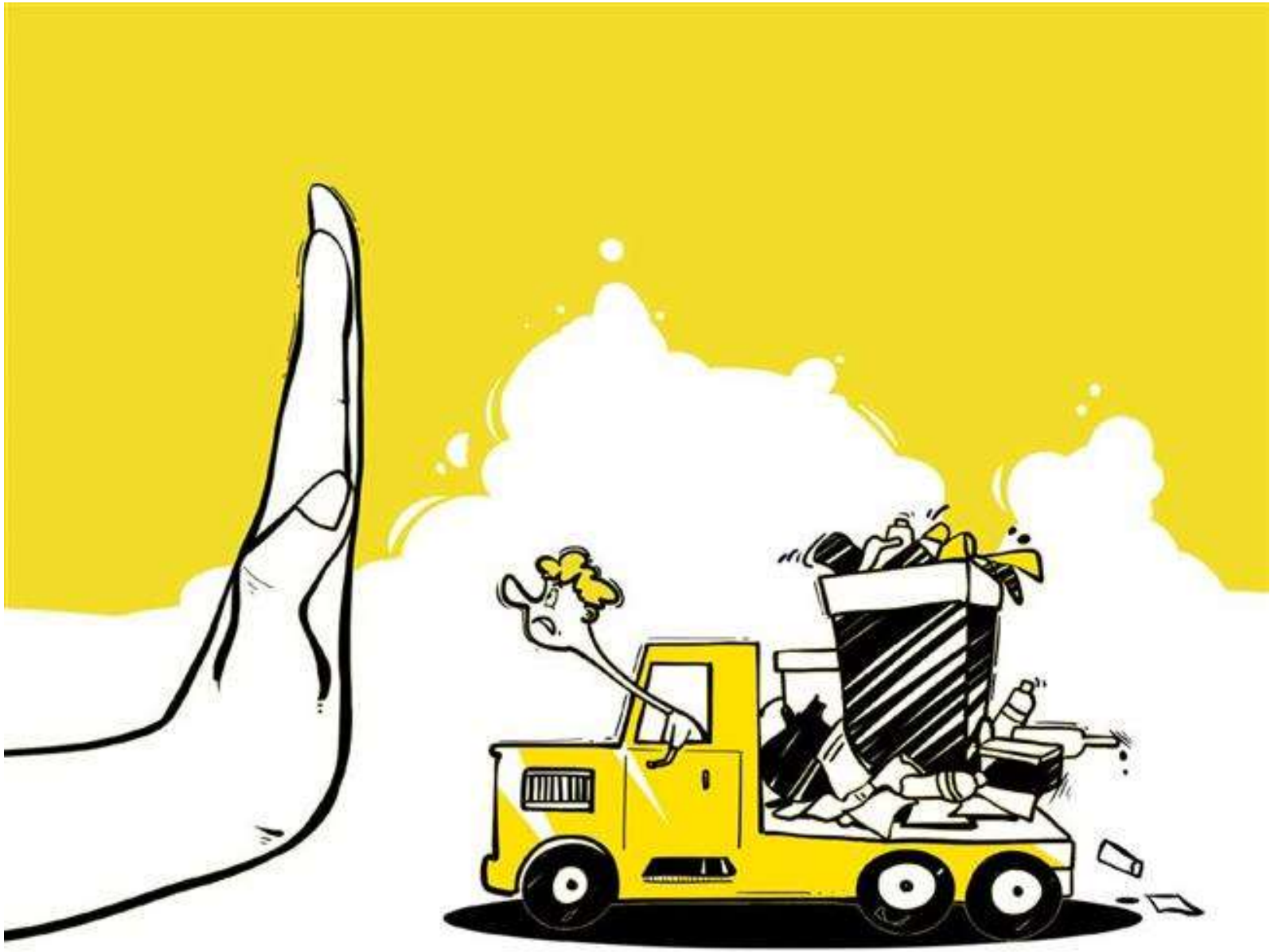


Source: Zero Waste Washington

WA's recycling rates are low and stagnant



Source: Washington Department of Ecology



Shanghai Daily

60% of waste

https://commons.wikimedia.org/wiki/File:Bales_of_PET_bottles_2.jpg

https://thecruisepeople.wordpress.com/tag/cargo-passenger-services/

Bans

- 24 types of commodities
  - 0.05% contamination standard
- Imports

zero waste washington


a film by JIU-LIANG WANG
塑料王国
PLASTIC CHINA
OFFICIAL SELECTION 2017
sundance
film festival

Blue Sky

https://www.cnn.com/2015/09/04/asia/china-beijing-blue-sky-disappears-after-military-parade/index.html

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https://www.smartcitiesdive.com/ex/sustainablecitiescollective/testing-numbers-recycling-recyclables/1026231/

Holding value

- Aluminum
- Glass
- #1: PET bottles
- #2 plastics

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Energy Saved
Recycled vs Virgin Material

95% ALUMINUM

88% PLASTIC

75% COPPER

60% PAPER

60% STEEL

34% GLASS

www.isri.org/docs

ISRI Institute of Scrap Recycling Industries, Inc.

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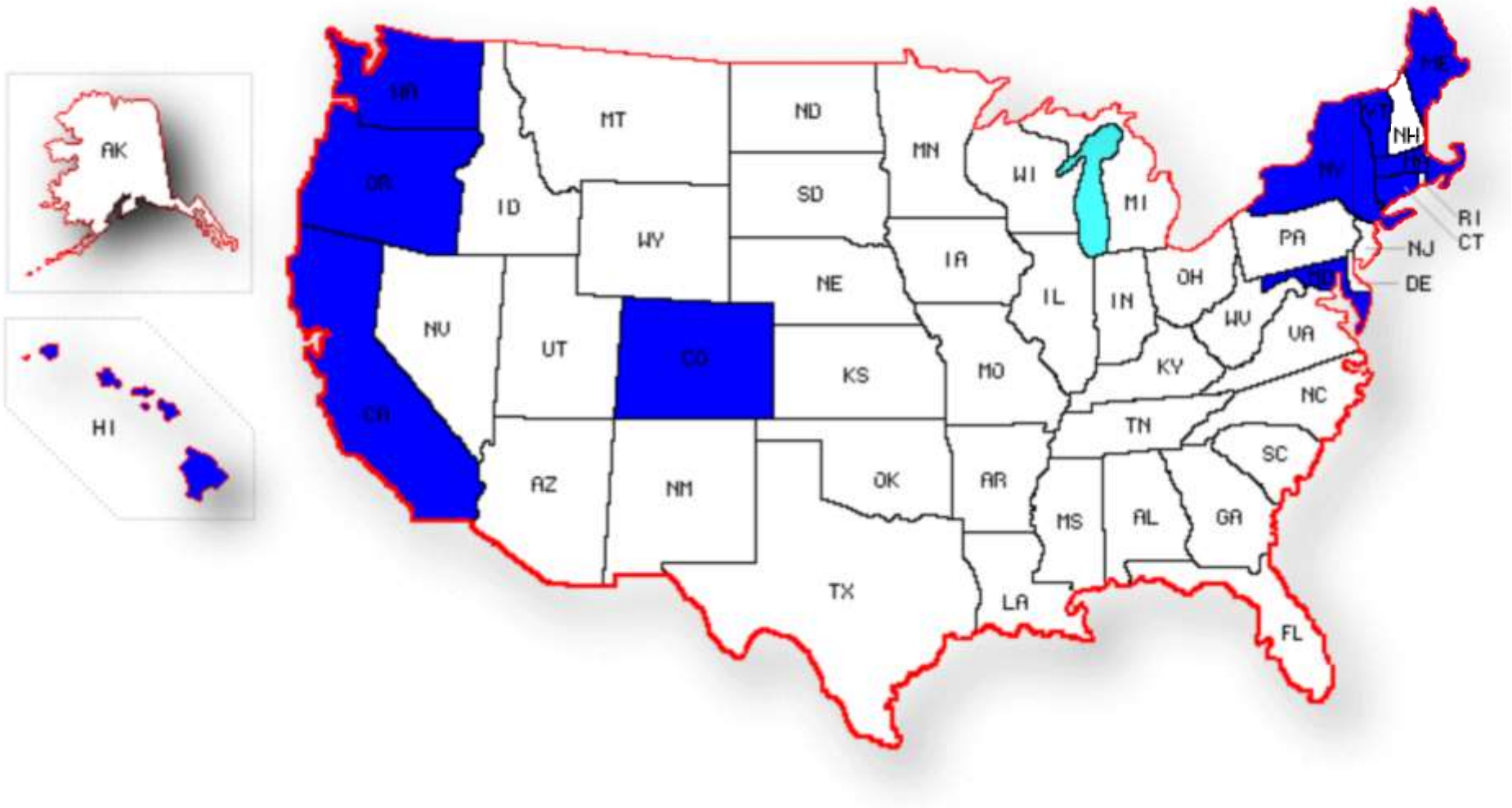
Packaging Product Stewardship

Build markets and restore our recycling system, creating jobs

Producer responsibility for packaging and pap products (PPP) is widespread

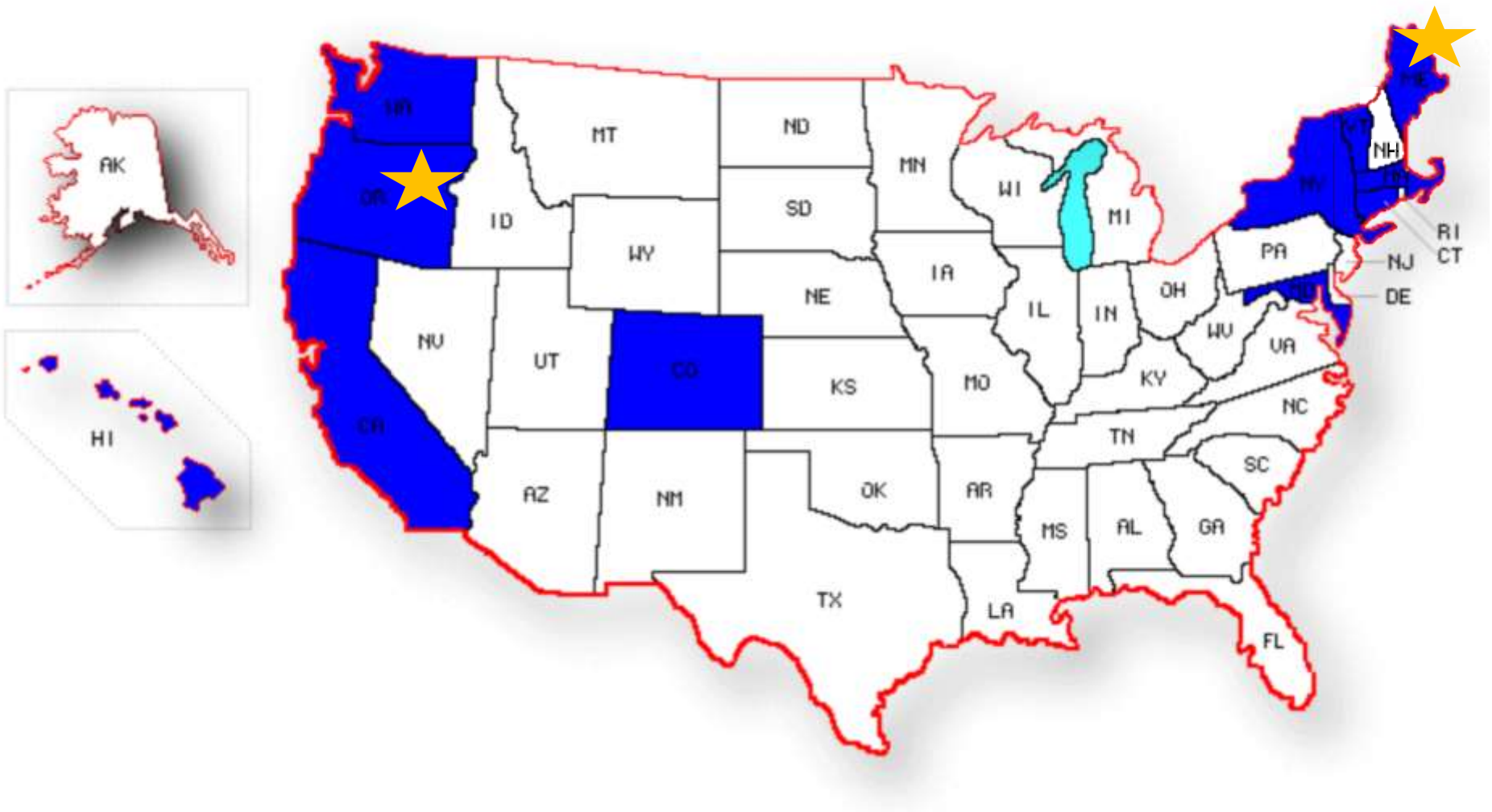
Producer responsibility for packaging is in place throughout Europe and Canada and is being adopted globally

11 states



California, Colorado, Connecticut, Hawaii, Maine, Maryland, Massachusetts, New York, Oregon, Vermont and Washington

11 states



California, Colorado, Connecticut, Hawaii, Maine, Maryland, Massachusetts, New York, Oregon, Vermont and Washington

Manufacturers and brand owners pay for program that manages packaging and paper products at end of life

RECYCLEBC™

85% recovery rate of packaging materials (2020)

Recycle BC's recovery rate is determined by dividing collected tons by steward-reported tons

Includes: 90% recovery rate for paper, 52% for plastic, and 85% for metal

https://recyclebc.ca/about-recyclebc/program-overview/annual-reports/

Shifts cost from ratepayer to manufacturer

www.nerdwallet.com

All packaging and printed products must be reusable, recyclable, or compostable no later than January 1, 2030

Benefits

- Save Washington households money.
- Creates universal access to convenient and consistent recycling services across state.
- Makes recycling simple and easy with a single statewide list of accepted items.
- Includes reuse/refillable target
- Creates more jobs, in WA.
- And more!

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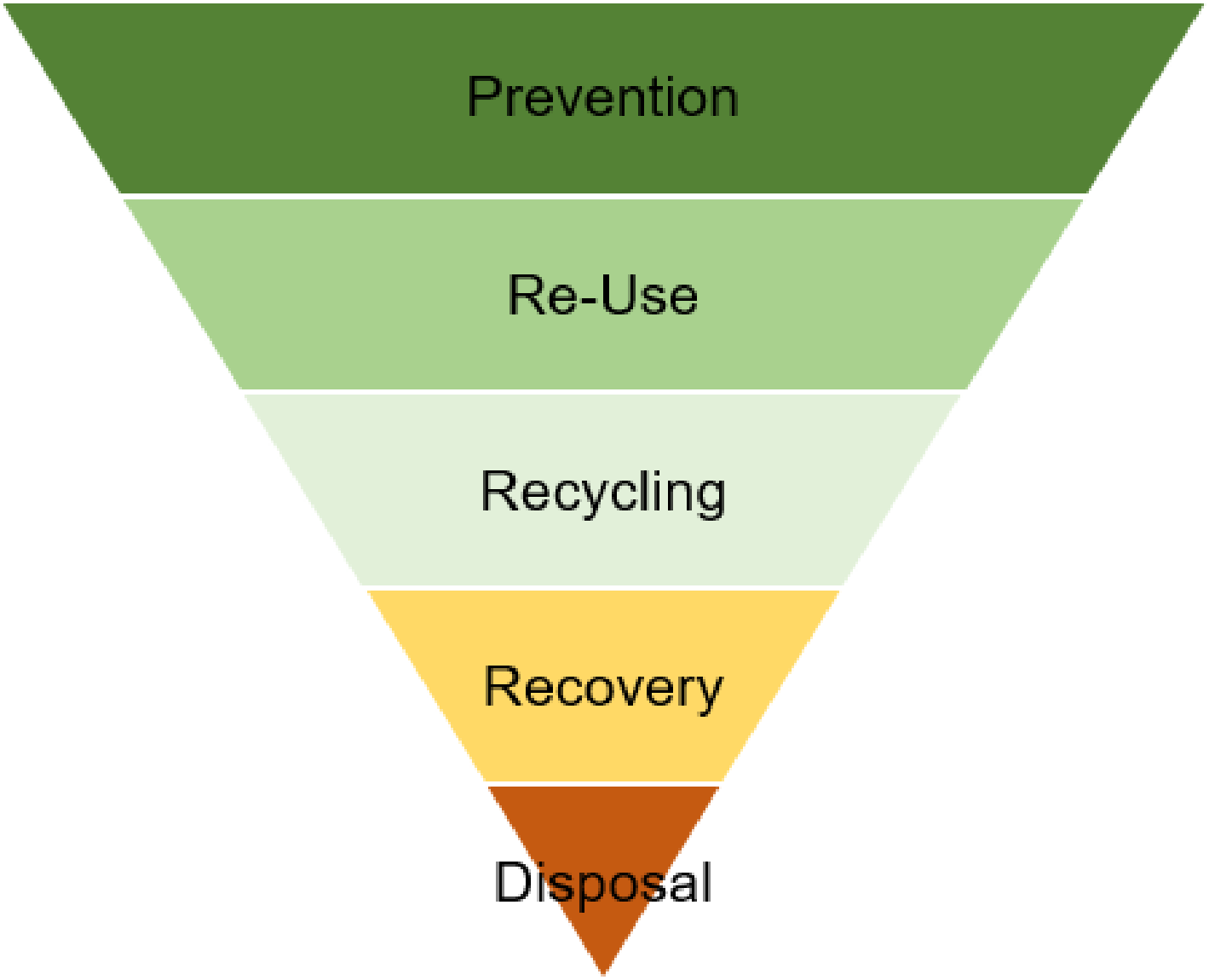
Waste Prevention and Reduction



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Thank You!
Zero Waste Washington
www.zerowastewashington.org