DEPARTMENT OF ECOLOGY
State of Washington

Status Update - Organics Management Laws

Northwest Bioenergy Summit

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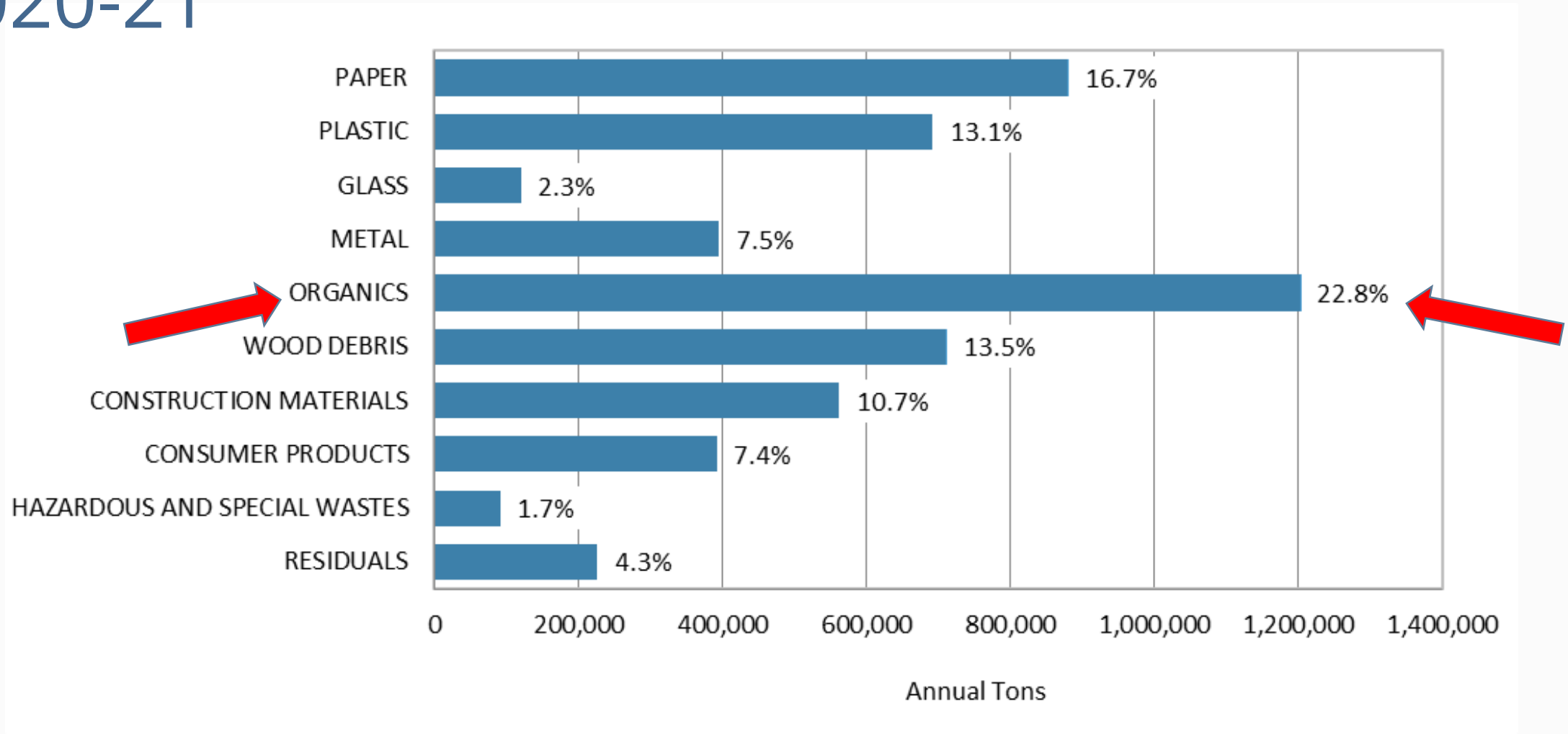
October 16, 2024

2020-2021 WASHINGTON STATEWIDE

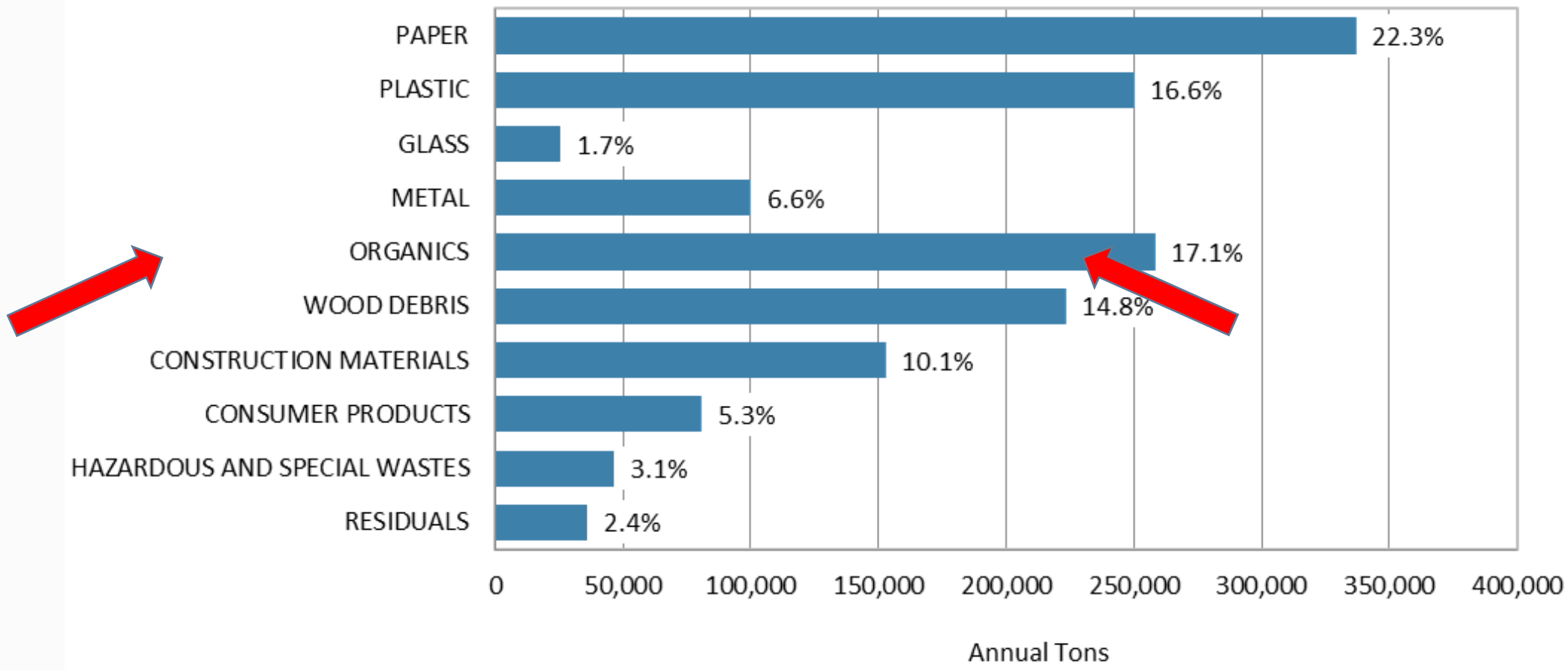
Waste Characterization Study

State of Washington Department of Ecology

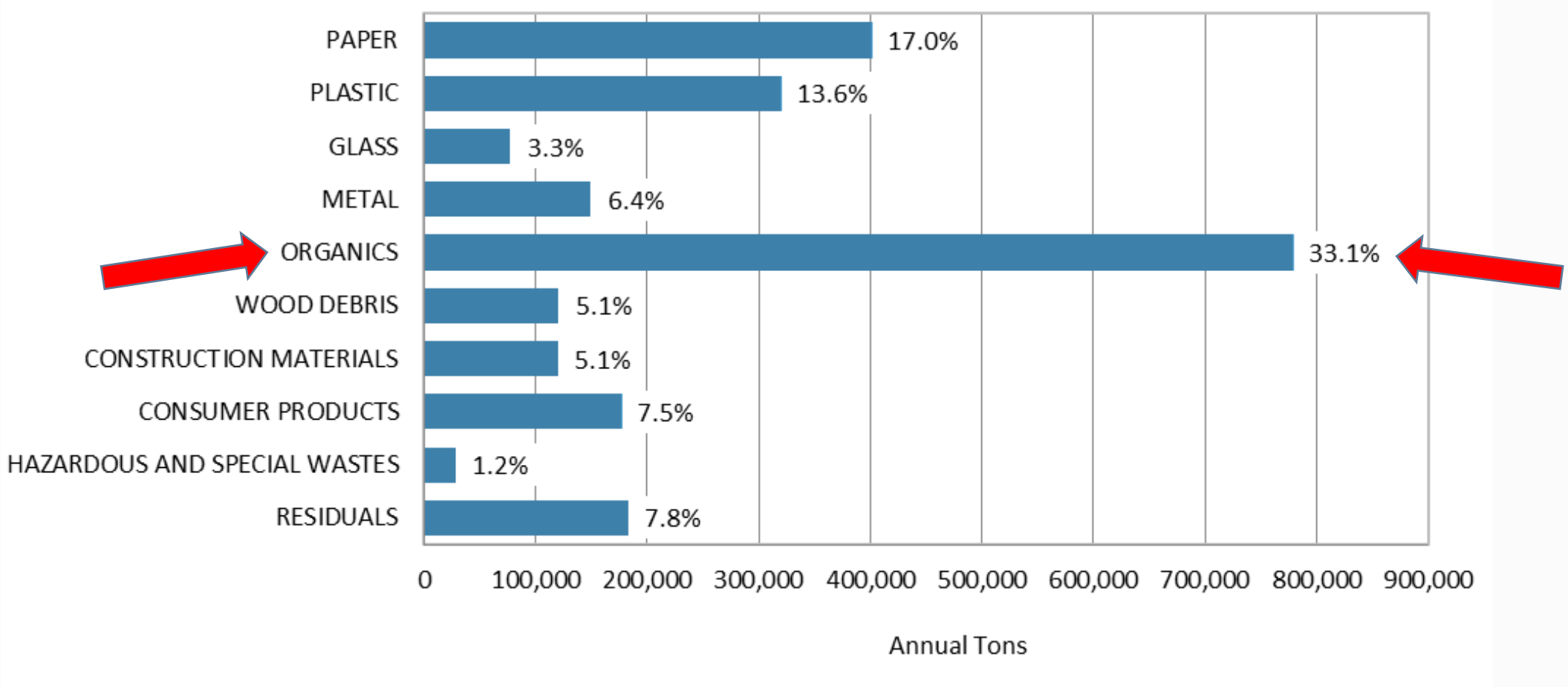
Overall Statewide Disposed Waste Stream Composition by Material Class, 2020-21



Commercial Disposed Waste Sector Composition by Material Class, 2020-21



Residential Disposed Waste Sector Composition by Material Class, 2020-21



Commercial Disposed Waste Sector - 15 Most Prevalent Material Types

Material	Est. Percent	Est. Tons
Cardboard & Kraft Packaging	7.7%	115,957
Edible Food Waste- Vegetative	7.1%	107,297
Pallets & Crates	3.6%	54,093
Other Ferrous Metal	3.4%	50,519
Compostable Paper Products	3.2%	48,079
Compostable Paper Packaging	3.1%	47,238
Engineered Wood	3.0%	45,466
Edible Food Waste- Meats/Fats/Oils	2.9%	44,308
Inedible Food Waste- Vegetative	2.9%	43,988
Packaging Film Plastic	2.9%	43,724
Painted Wood	2.9%	43,104
Dimensional Lumber	2.8%	42,455
Bulky Rigid Plastic Products	2.2%	33,486
Concrete	2.2%	33,145
Drywall	2.1%	32,117
Total for Top Materials	**52.1%**	**784,975**

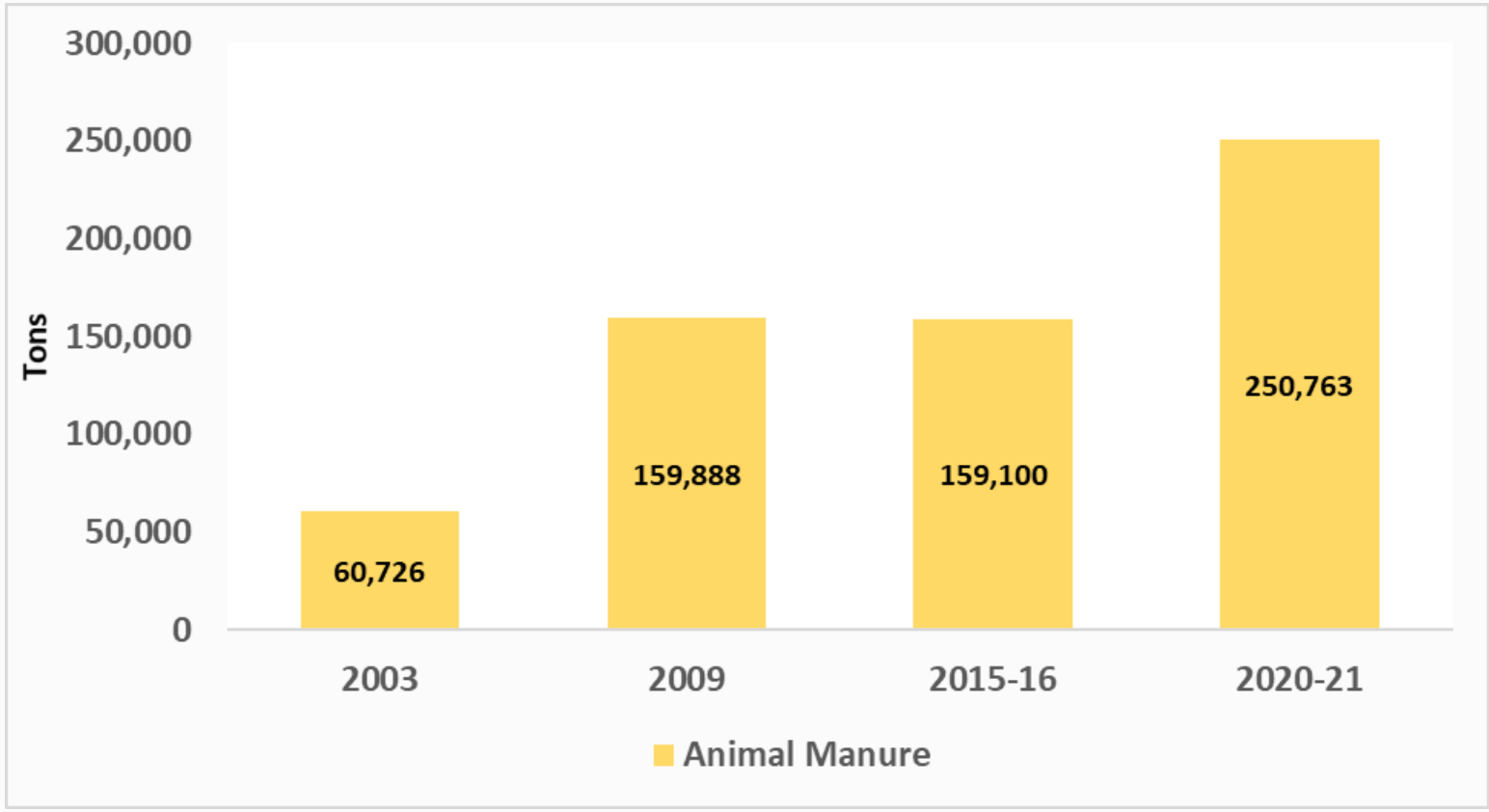
Percentages for material types may not total 100% due to rounding.

Residential Disposed Waste Sector - 15 Most Prevalent Material Types

Material	Est. Percent	Est. Tons
Animal Manure	9.7%	229,270
Edible Food Waste- Vegetative	8.2%	193,984
Inedible Food Waste- Vegetative	7.6%	179,866
Compostable Paper Products	5.1%	121,120
Cardboard & Kraft Packaging	3.2%	74,829
Painted Wood	3.1%	73,931
Packaging Film Plastic	2.9%	68,306
Drywall	2.9%	67,141
Other Ferrous Metal	2.6%	61,914
Edible Food Waste- Meats/Fats/Oils	2.6%	60,303
Compostable Paper Packaging	2.4%	56,268
Mixed/Low-grade Paper Products	2.1%	48,296
Yard/Garden Waste- Leaves and Grass	2.0%	48,084
Mixed/Low-grade Paper Packaging	1.9%	43,568
R/C Metal	1.7%	40,607
Total for Top Materials	**58.1%**	**1,367,487**

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

Pet Poop


300,000
250,000
200,000
150,000
100,000
50,000
0
Tons
60,726
159,888
159,100
250,763
2003
2009
2015-16
2020-21
Animal Manure

Overall Statewide Disposed Waste Stream

15 Most Prevalent Material Types, 2020-21

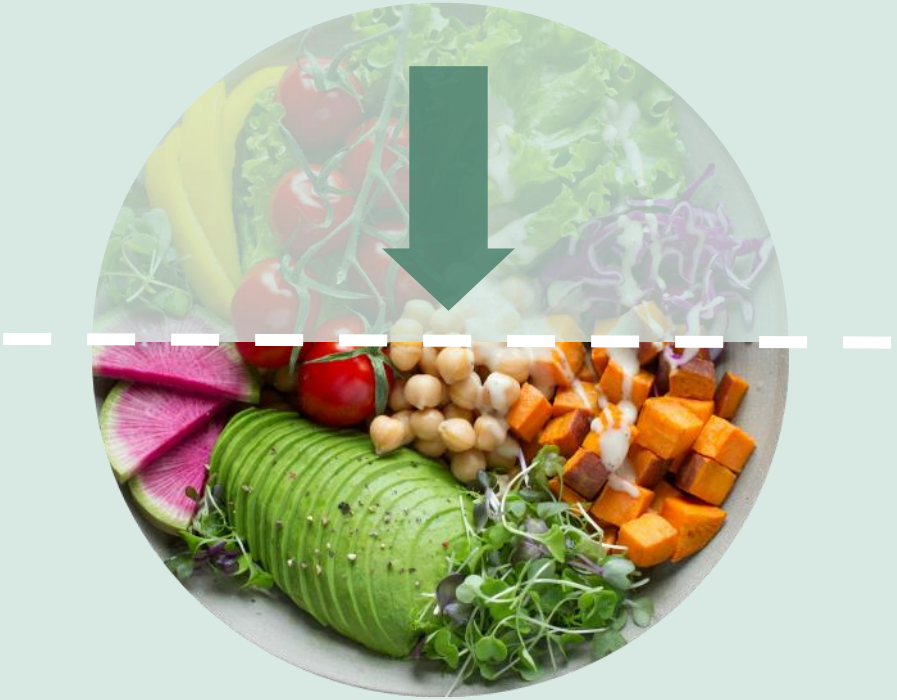
Material	Est. Percent	Est. Tons
Edible Food Waste- Vegetative	6.4%	336,564
Cardboard & Kraft Packaging	5.2%	276,196
Painted Wood	4.8%	253,958
Inedible Food Waste- Vegetative	4.8%	250,860
Animal Manure	4.8%	250,763
Compostable Paper Products	3.4%	180,366
Other Ferrous Metal	3.3%	174,364
Drywall	3.2%	167,785
R/C Metal	2.6%	139,654
Yard/Garden Waste- Leaves and Grass	2.5%	132,218
		992
		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
Total for Top Materials	**51.5%**	**2,714,561**

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

Edible food waste – vegetative 6.4% 336,564 tons

Context: By 2030, Washington aims to…

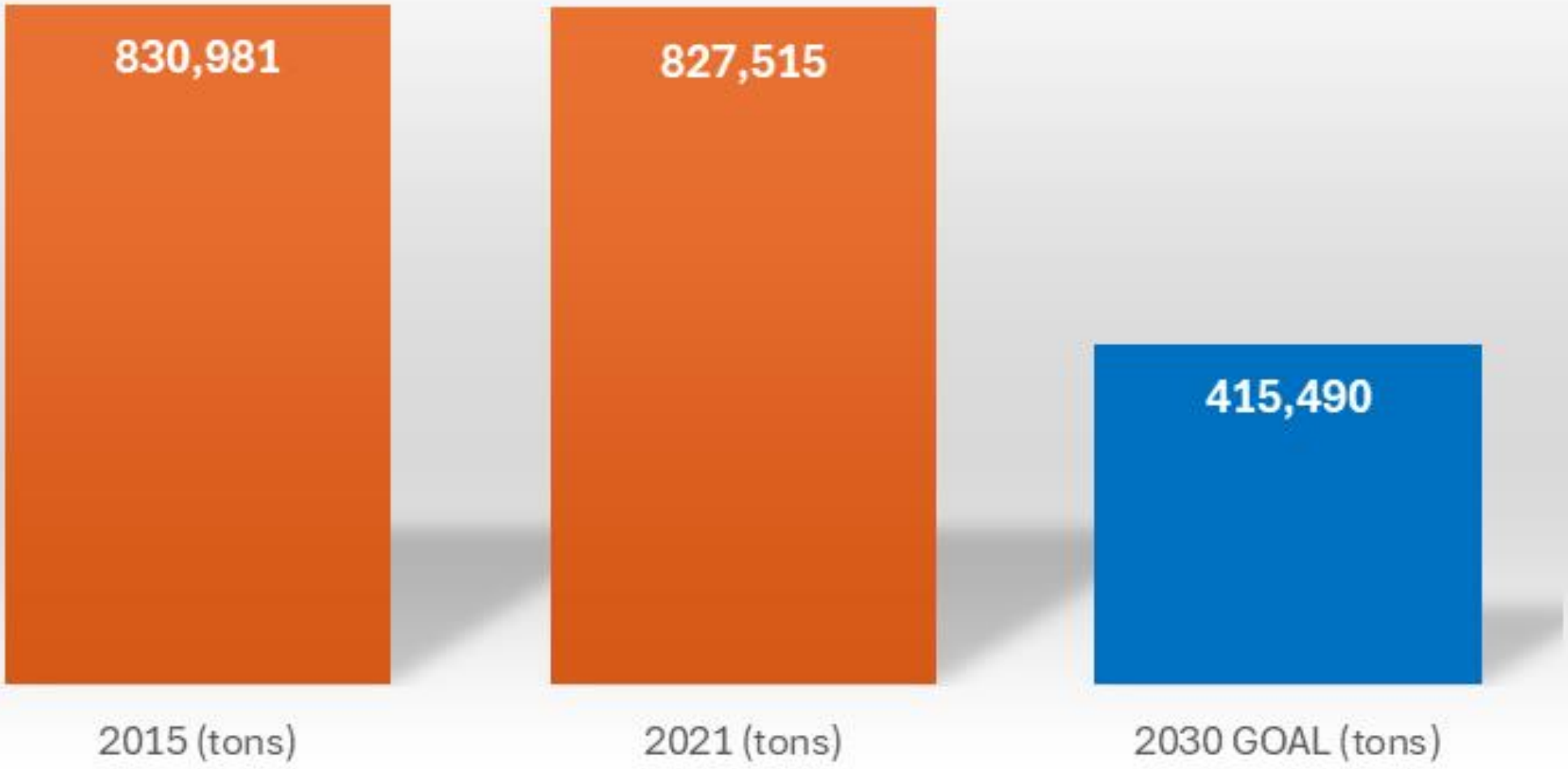
Reduce food waste to landfill by 50%*



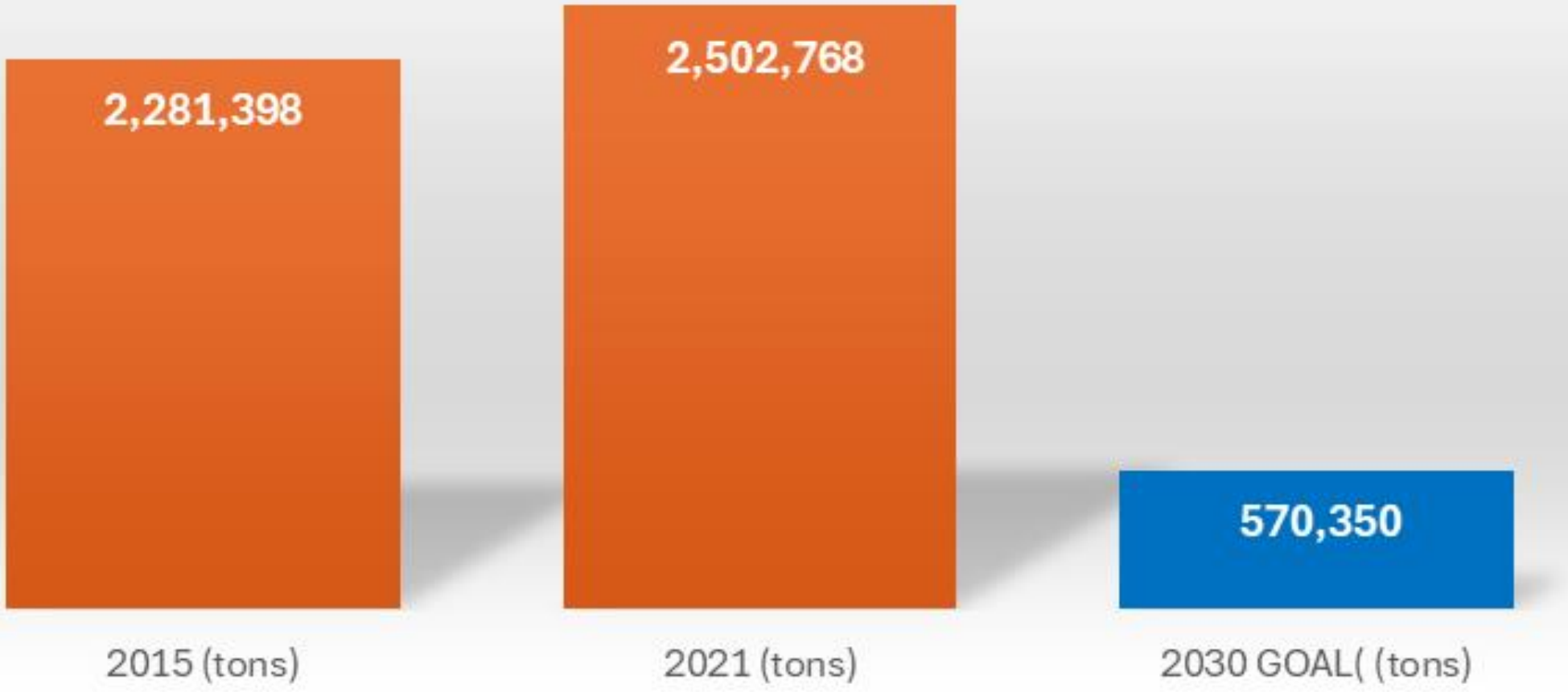
Reduce organic waste to landfill by 75%*

* compared to 2015 levels

Food Waste Disposed in WA Landfills



Organic Material Disposed in WA Landfills



OML "Buckets"

1

Funding

- Five new grant programs

2

Collection & Management

- Business Organics Management Areas (BOMA)
- Organics Recycling Collection areas (ORCA)

3

Prevention

- WA Center for Sustainable Food Management
- Good Samaritan Laws

4

Market Development

- Compost procurement ordinances
- Compost reimbursement program

5

Processing

- Organics Processing Facility Siting
- Compostable Product Labeling

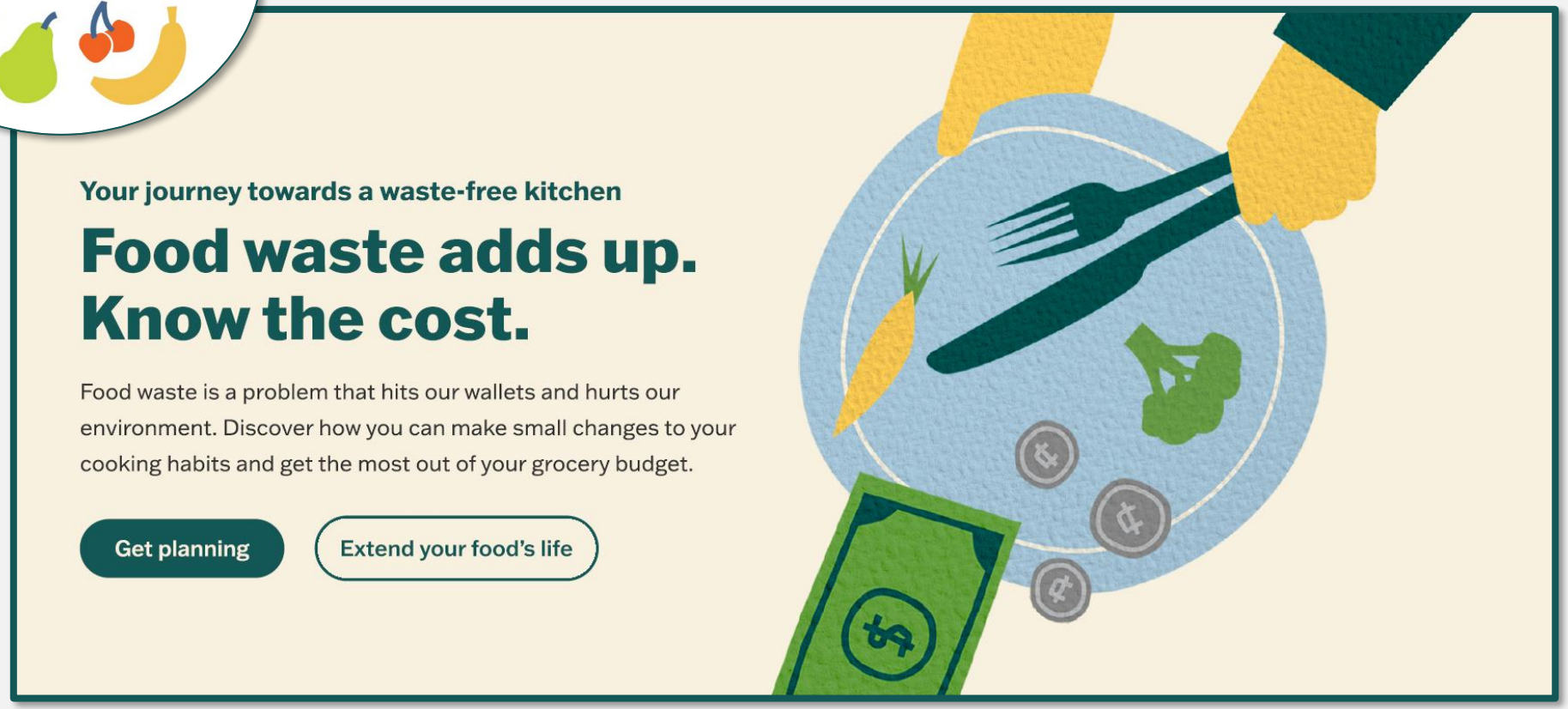
6

Research

- Recommendations on the Compostable Product Usage (HB 1033)
- Assessment of Product Sticker Technologies
- Adequacy of funding for local solid waste management
- Assessment & Opportunities for Edible Food Recovery

Improving data & tracking
Driving research
Inspiring learning & action
Advancing equity
Building partnerships
CENTER FOR
Sustainable
Food Management

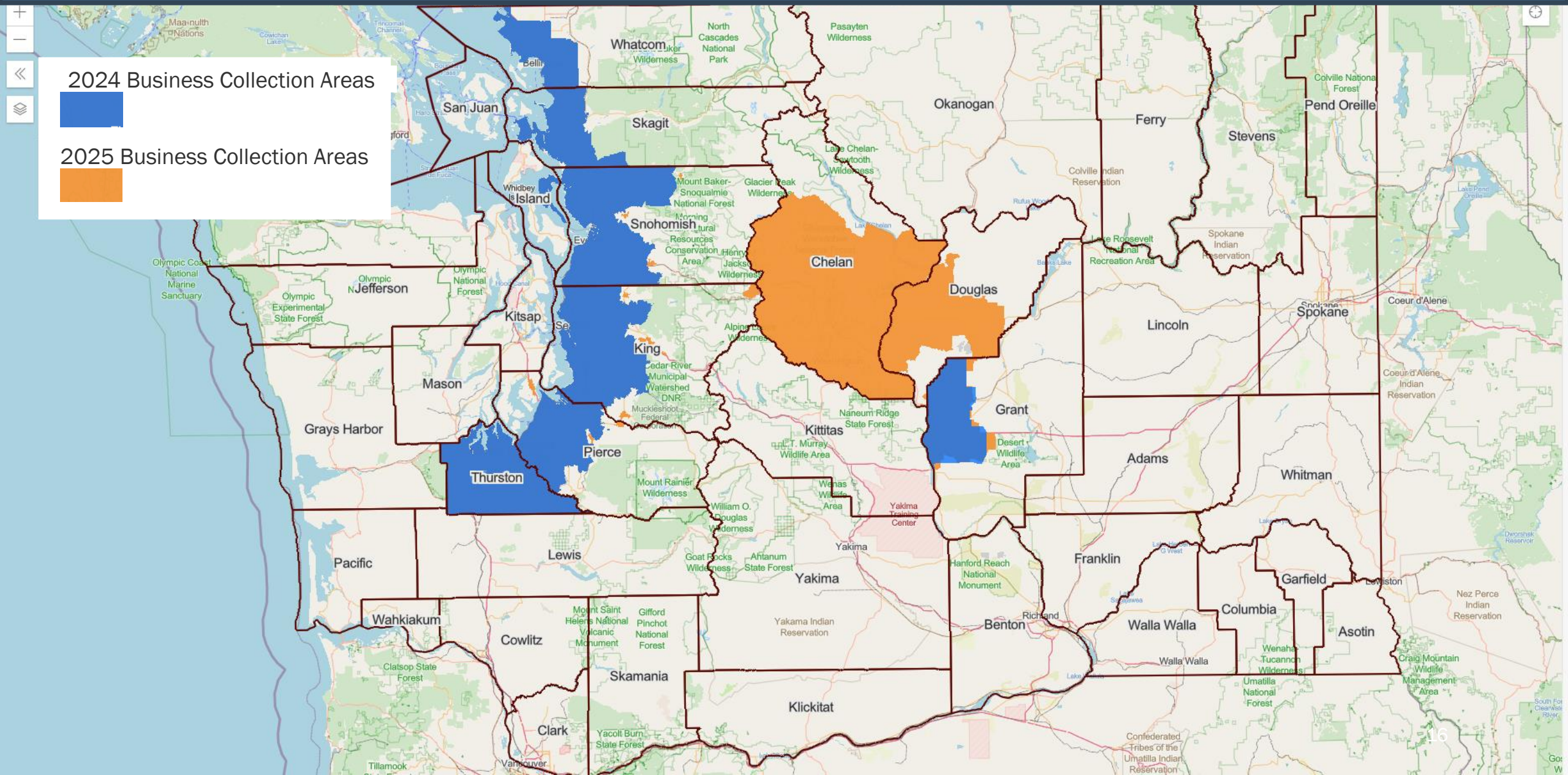
UseFoodWell.org



AprovechaLosAlimentos.org

2025 Business Collection Requirements

ORANGE indicates additions to the map as compared to 2024



Organic Collection Recycling Areas (ORCA)

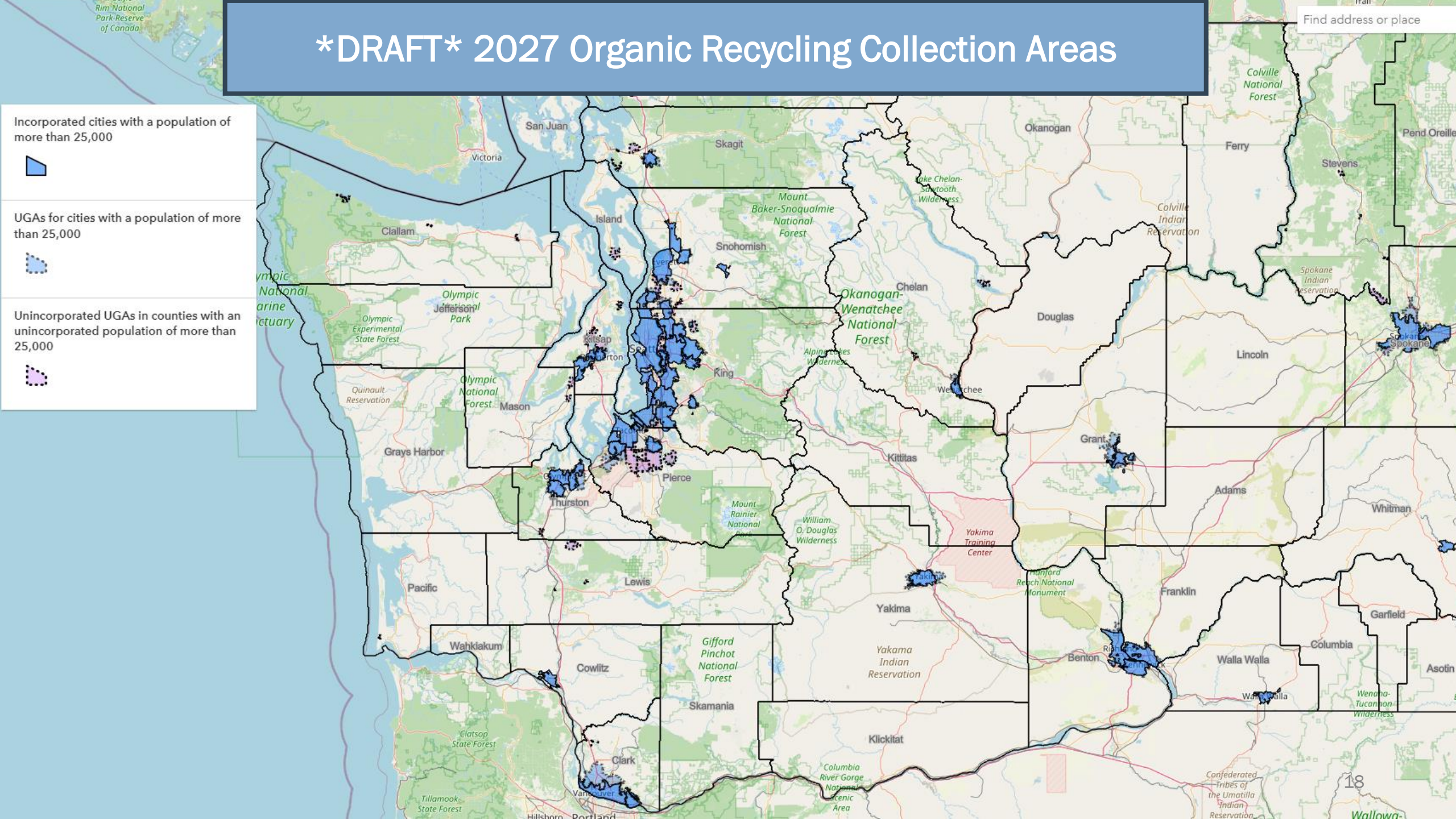
April 2027:

Year-round collection for source-separated organic solid waste services **is available** to all single-family residences and nonresidential customers

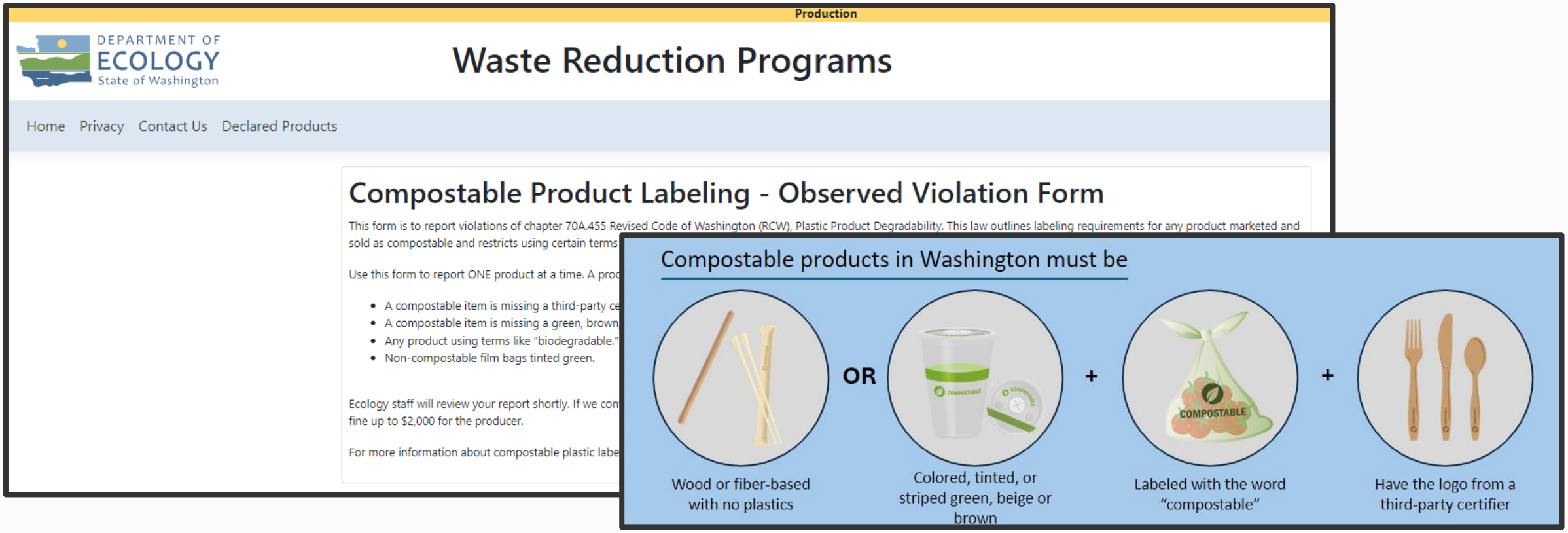
April 2030:

Nonelective collection is provided for both food and yard waste

DRAFT 2027 Organic Recycling Collection Areas

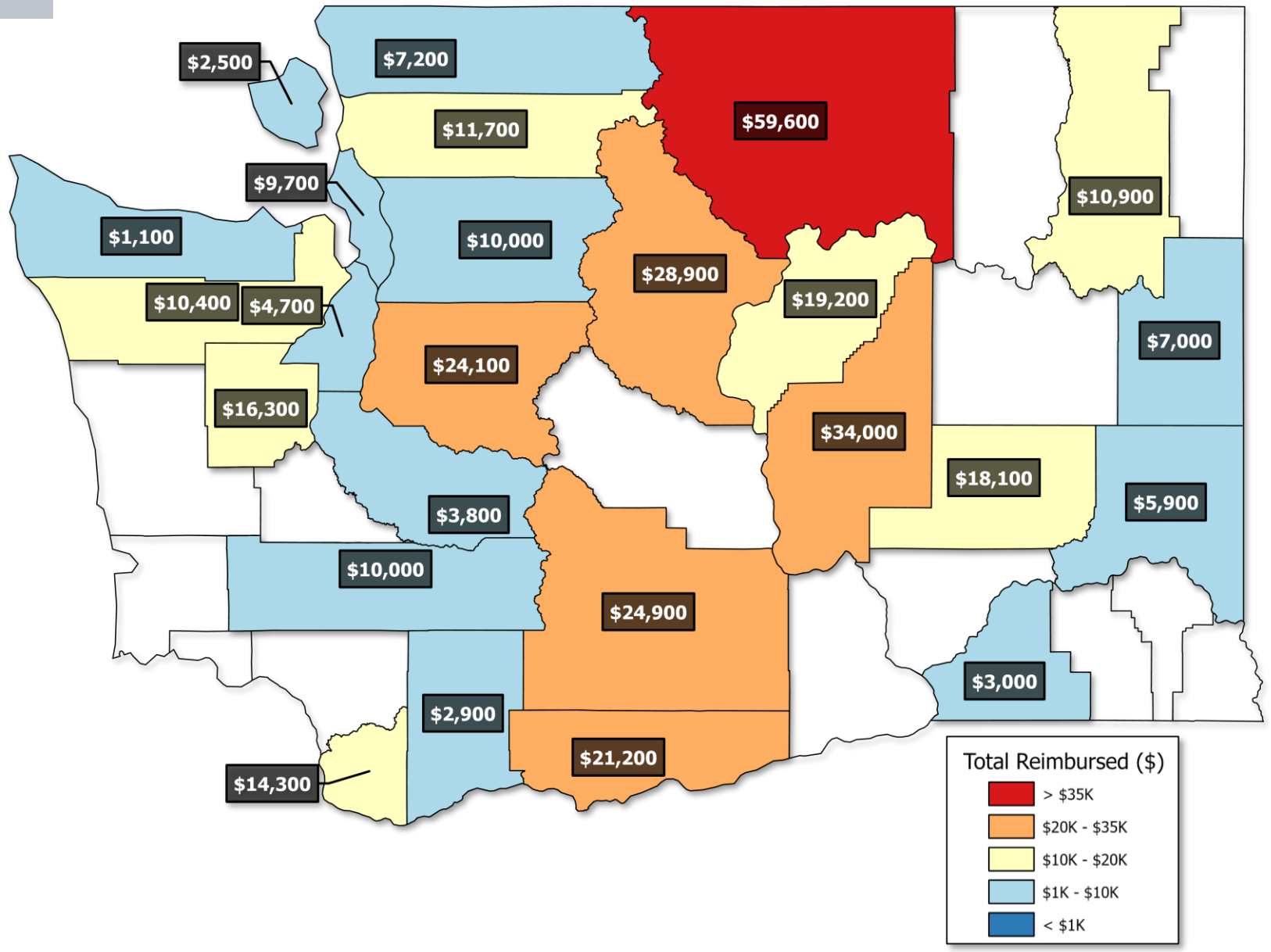


Compostable Product Labeling



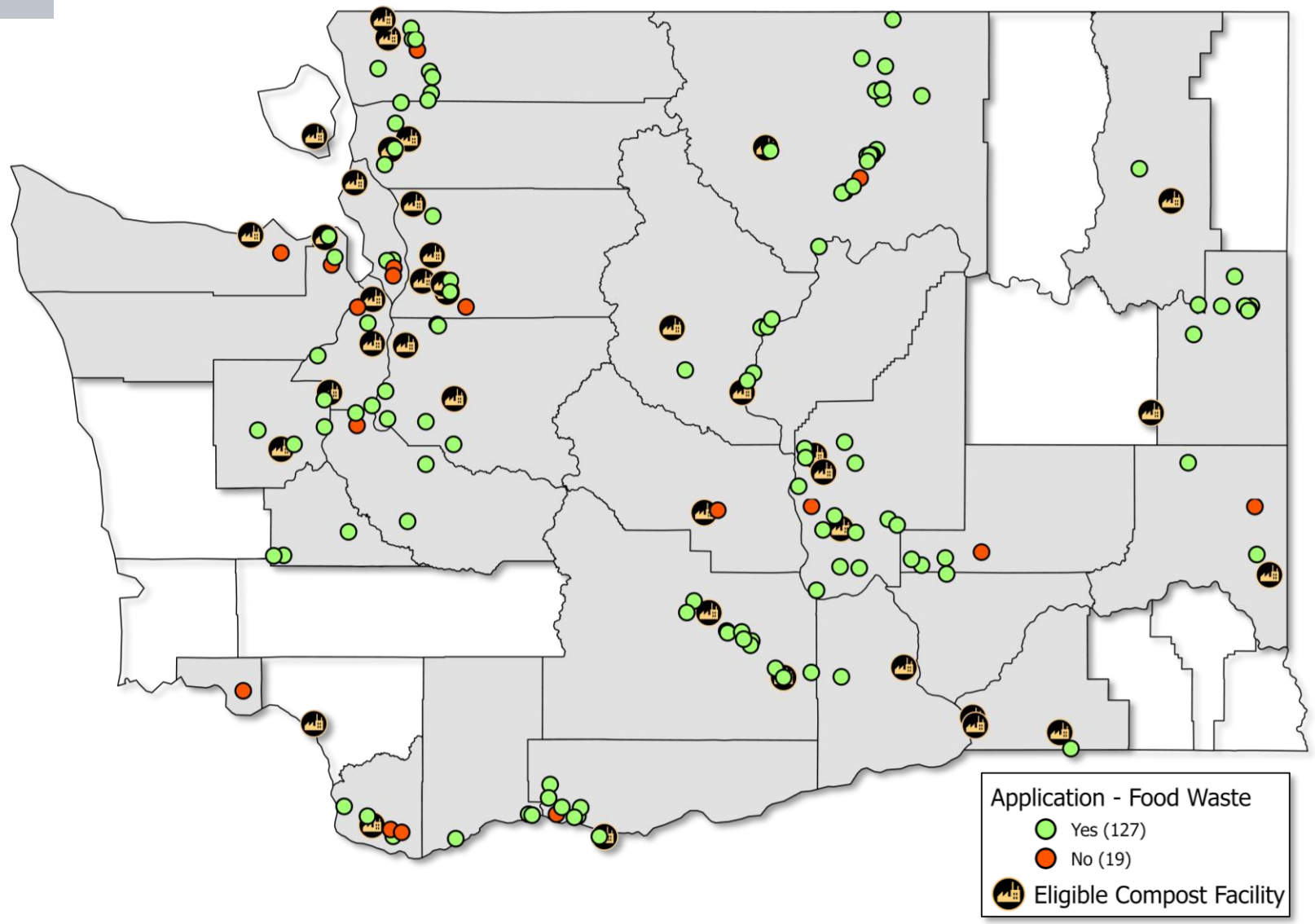
To Date: 27 observations submitted 20 violations confirmed

WSDA Compost Reimbursement Program - FY2024

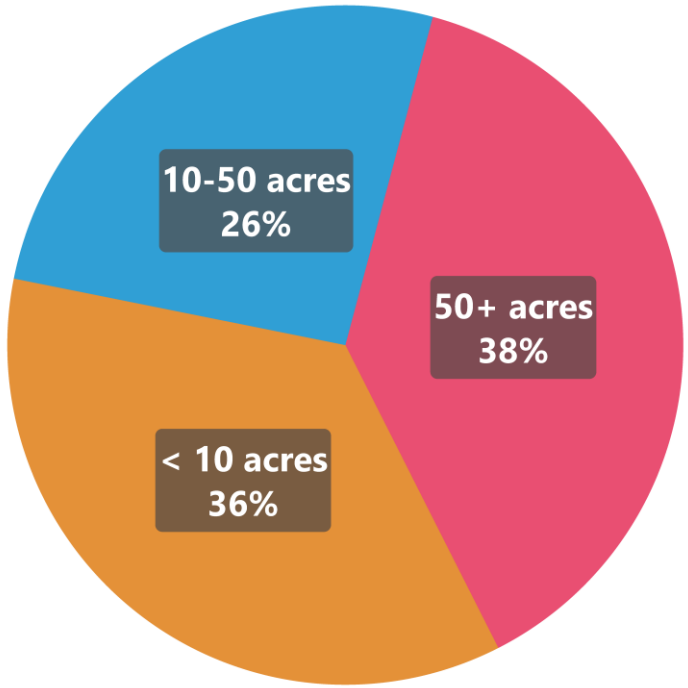


FY2024	Overall Total	Per Farm Average
Funding Distributed	$361,272	$4,301
Compost Purchased (Yards)	9,917	118
GHG Emission Reduction (Metric tonnes)	880	10.5

WSDA Compost Reimbursement Program - FY2025



Applicant farm size distribution



Current Research

- Business Food Donation Workgroup: Legislative report due Sep. 1, 2025
- Produce Sticker Technologies Study (With WSDA): Legislative report due Sep. 1, 2025
- Compost Market Study
- Statewide Food Rescue Map
- Food Data Hub

Upcoming Rulemaking

RCW 70A.205.540

Create new or amend existing rules that establish permit requirements for organic materials management facilities that address contamination associated with incoming food waste feedstocks and finished products.

Rulemaking will begin December 2024

Looking ahead to 2025

- Rulemaking for food & organics grant programs
- Business requirements continue to change: 4 yd^3/week
- Compost procurement ordinance annual reporting begins
- Model ordinances
- Organic recycling collection areas waivers

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Other Management Systems

- (Dairy) Anaerobic Digesters operating and taking food waste: **4**
  - All in NW Region
  - Primarily manage dairy manure and a small amount of food processing waste

- Wastewater Treatment Plant adding yard trims to biosolids: **5**
  - 2 in NW Region; 2 in SW Region; 1 in Eastern Region

- Animal Feed: diverting roughly 1,494,583 tons food waste

- Food waste conversion using insects (Beta Hatch)

Barriers to Expansion

- Existing compost facilities:
    - Equipment costs*, Increasing operational costs (Title V), Space limitations, seasonal variabilities, site and contamination complexities of including food waste, Costs to reduce contamination and transport finished compost
- Market realities
- Siting new facilities
    - Cost, apple maggot, public opposition, location
- Anaerobic digesters are expensive to build and operate
    - Low return for renewable natural gas from food feedstock
    - Additional permits needed to incorporate food
    - Contracts to guarantee food streams

Thoughtful Management

- Focus more money on preventing organics generation
- Composters are in business to make a soil amendment not to be an alternative disposal site
- Determination of acceptable feedstocks is a facility decision
  - Not everything can or should be composted
- Siting new facilities takes time to do it right
- Allow time for research projects to answer questions

Summary

- Organics is largest component in our disposal system
- Too much reliance on compost facilities to manage organics
- Too much focus on end of pipe management
- Not enough focus on prevention

- Diversification of organics management systems must be supported
- We cannot compost our way out of our food waste problem.