



# Marion County's unique solid waste system

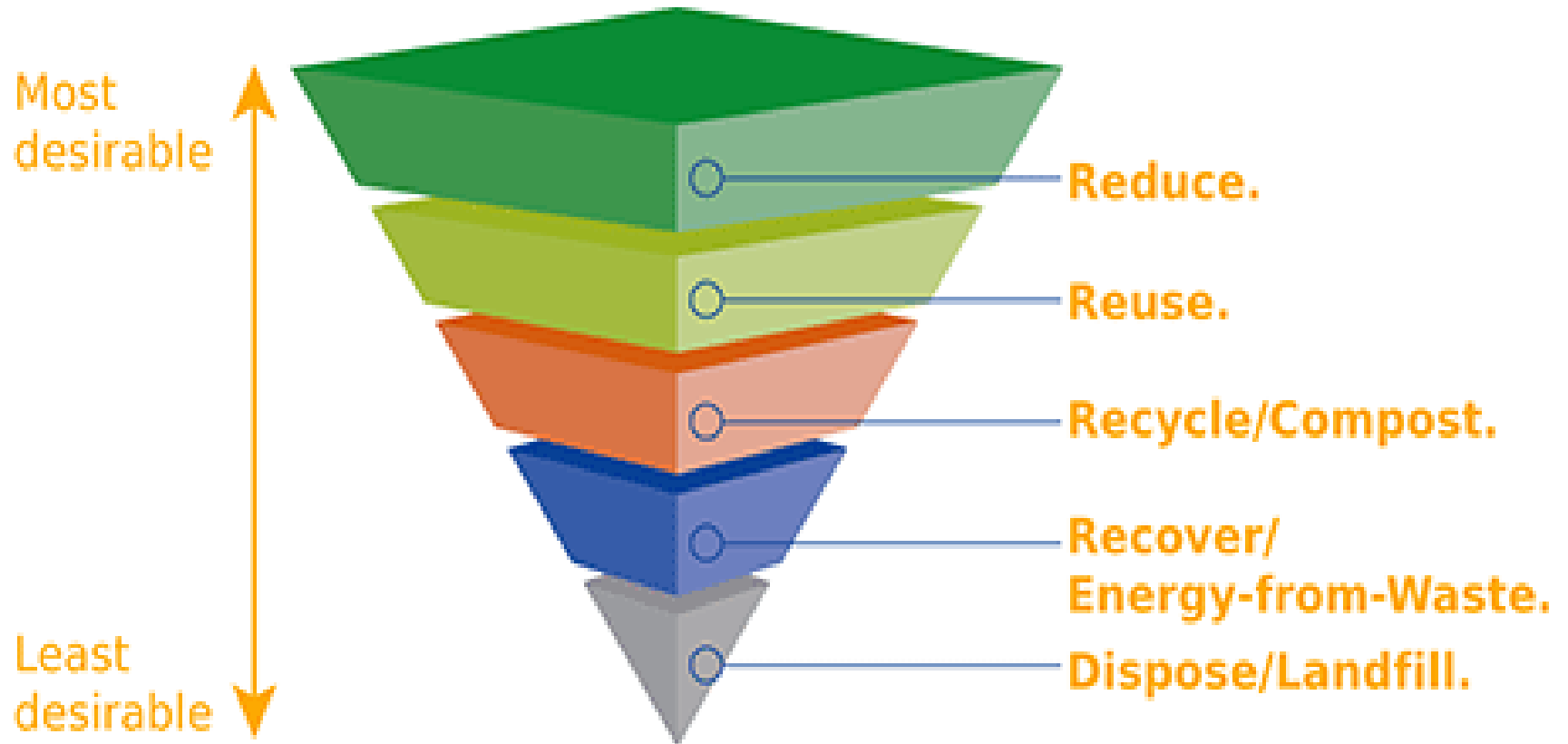
What makes us different from other  
jurisdictions in Oregon?

*May 13, 2020*



# Waste Hierarchy

Integrated Solid Waste Management





# Integrated Solid Waste Management

...is a strategic approach to sustainable management of solid wastes covering all sources and all aspects, including:

- **Generation**
- **Separation**
- **Transfer**
- **Sorting**
- **Recovery and disposal**

Waste is managed in an integrated manner, with an emphasis on maximizing resource use efficiency.



# Solid Waste Facilities & Programs

- Waste-to-Energy Facility
- Ash Landfill
- Transfer Stations
- Demolition Landfill
- Compost Facility
- Household Hazardous Waste Facility
- Recycling Programs



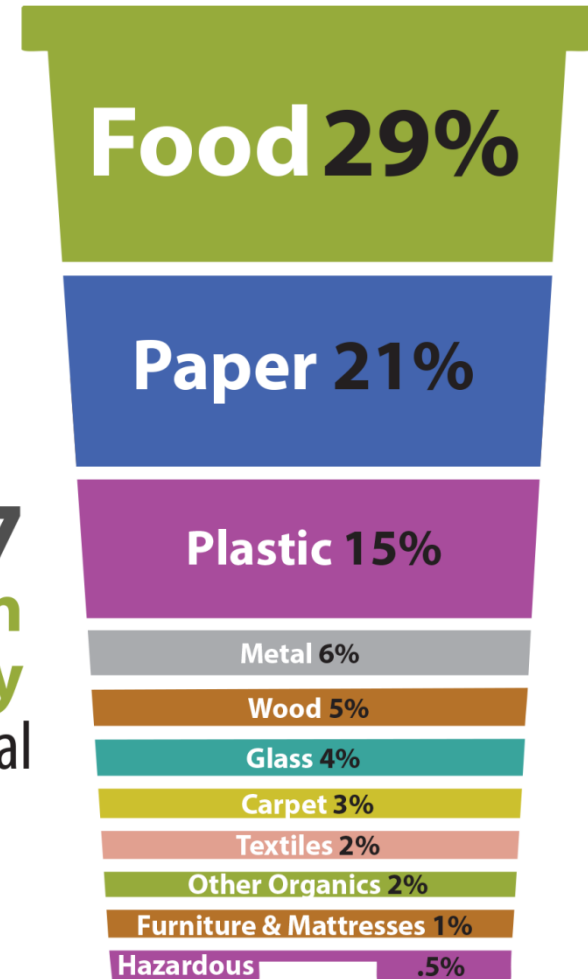


# What's in our garbage?

**2017  
Marion  
County  
Curbside  
Residential  
Waste**



**2017  
Marion  
County  
Commerical  
Waste**

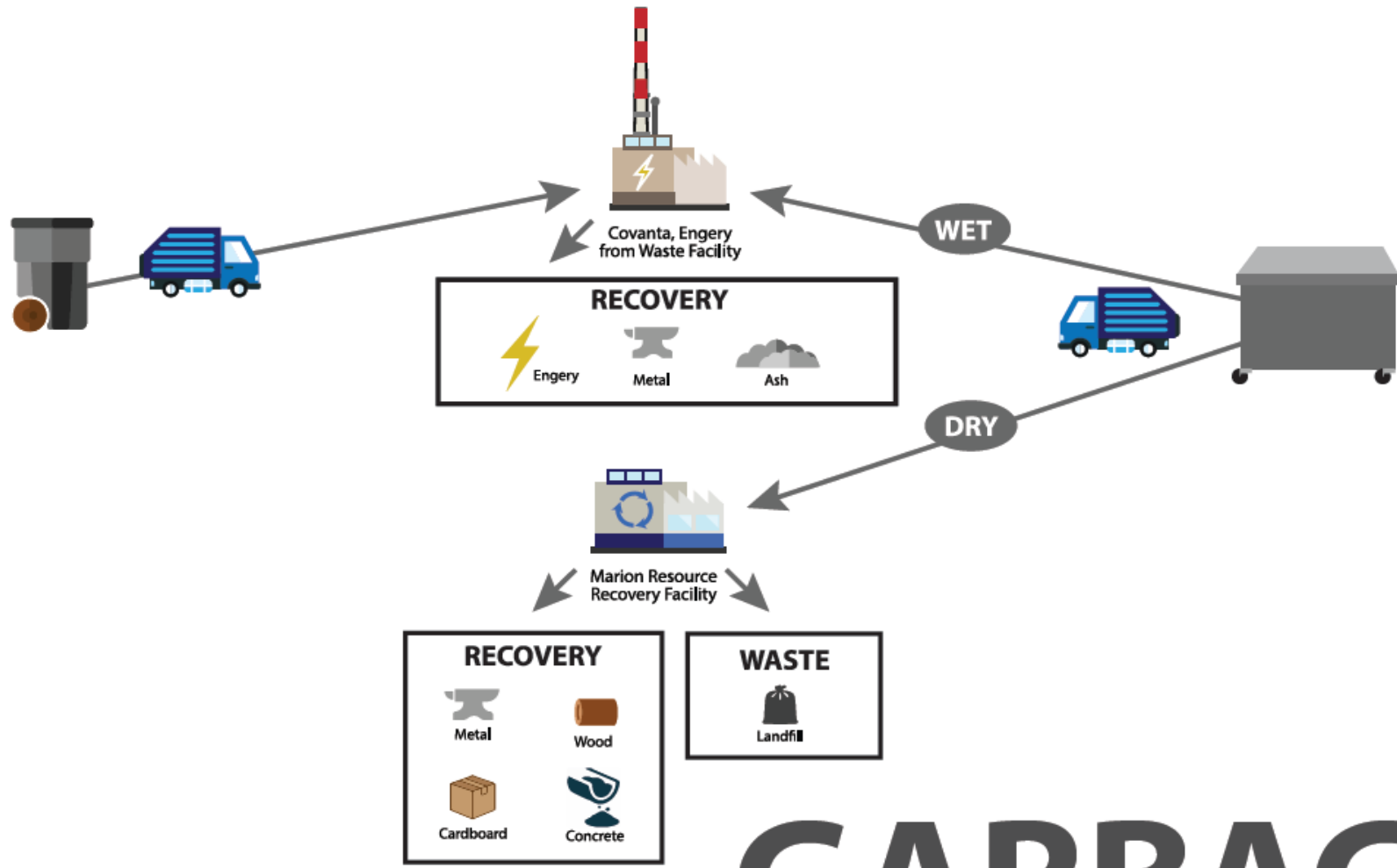




# Where does the material go?

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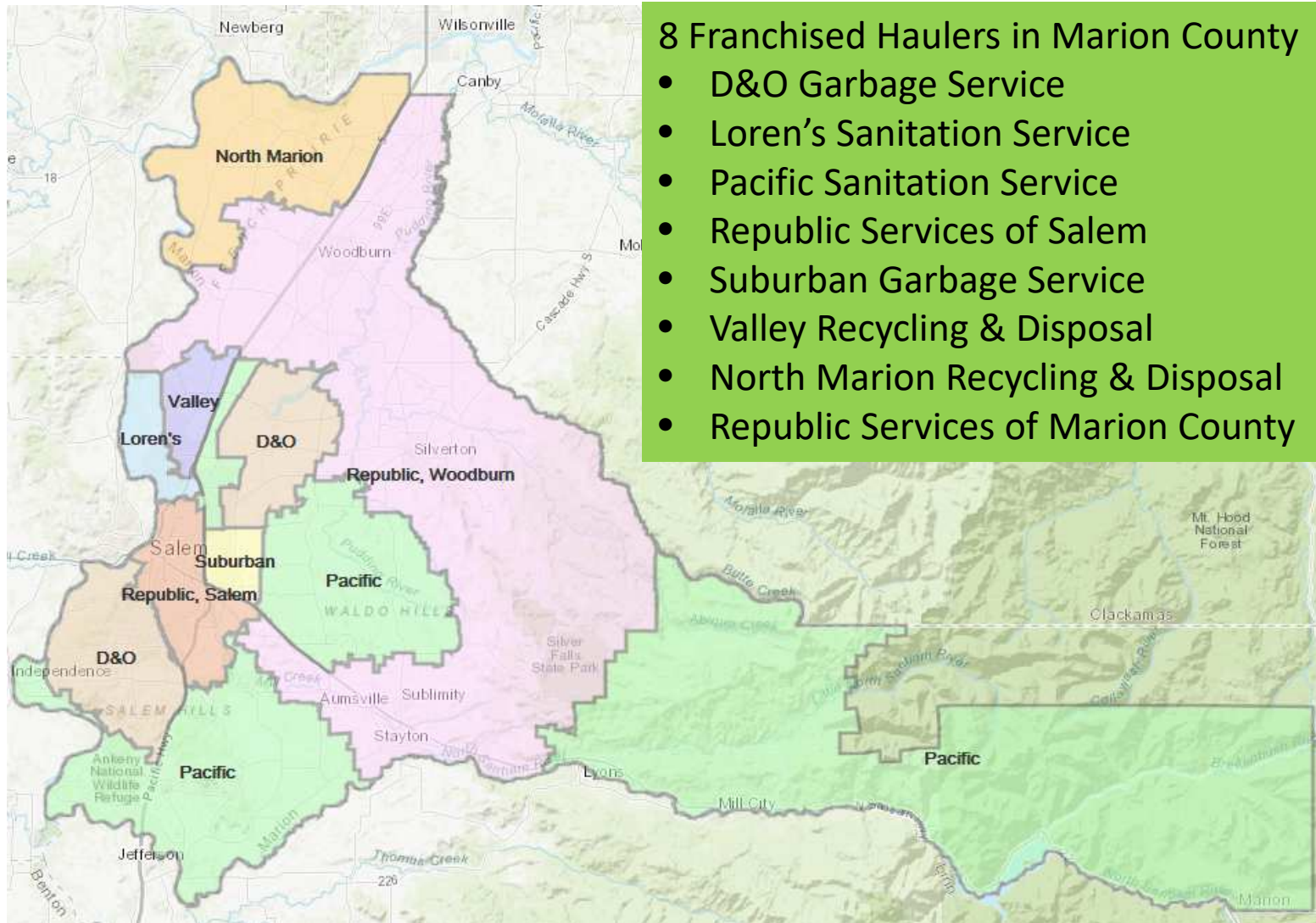


# GARBAGE



# Who are the Key Partners in the System?

## Mid-Valley Garbage & Recycling Association (MVGRA)

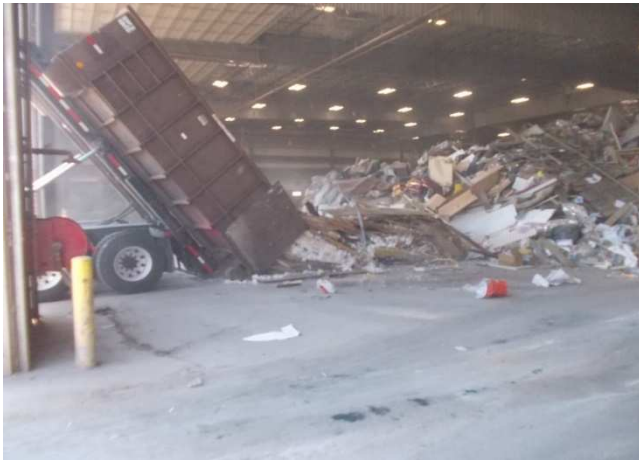






# Key Partners

## Marion Resource Recovery Facility, LLC (MRRF)



- Inbound mixed waste of ~170,000 tons per year
- Materials Recovered:
  - Electronics & batteries
  - Metal & cardboard
  - Concrete & sheetrock
  - Tires & rims
  - Process ~15,500 tons of wood waste per year



Owned and Operated by the  
Mid-Valley Garbage & Recycling  
Association

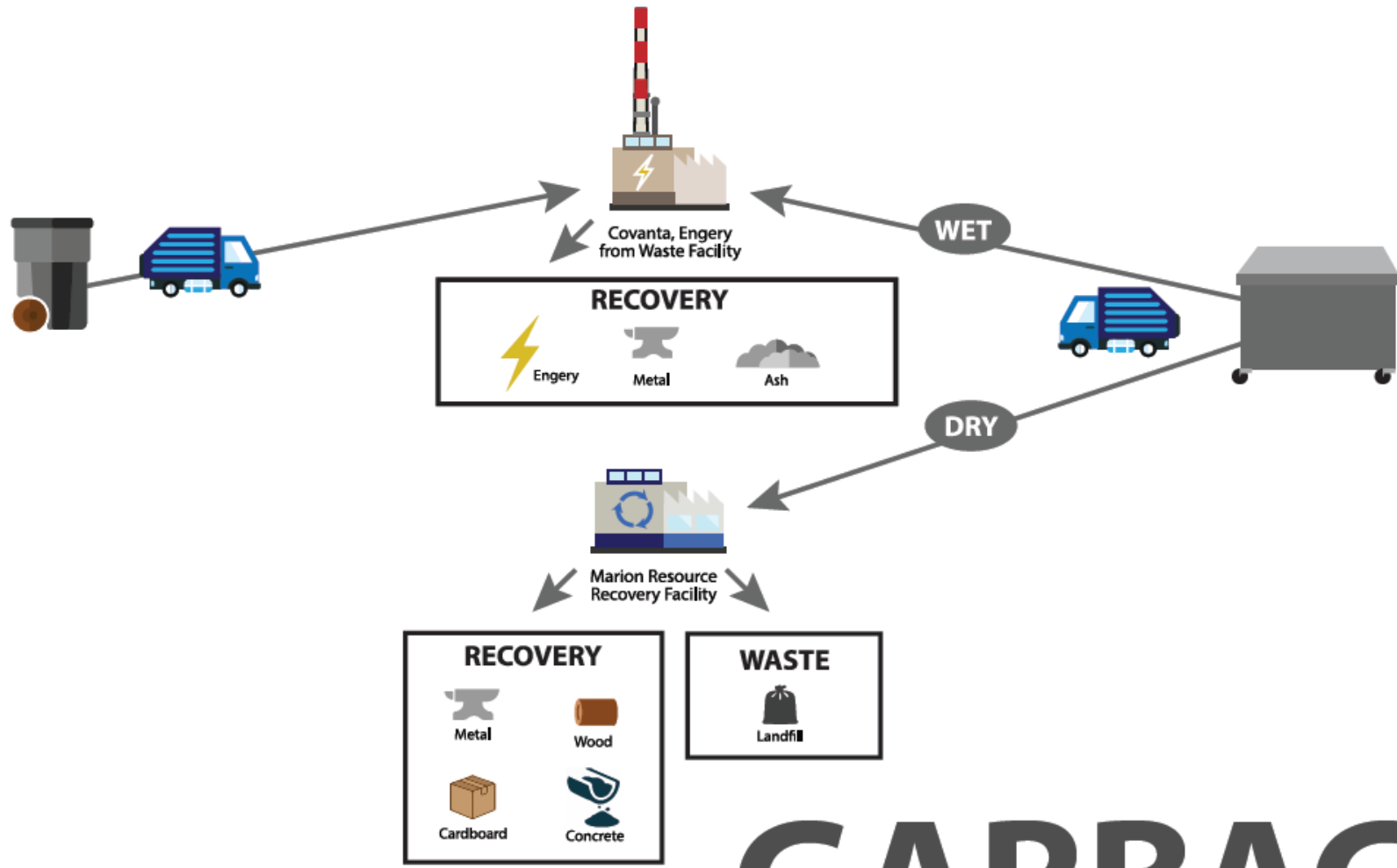




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# GARBAGE



# Key Partners

## Covanta Marion, Inc. (Brooks, OR)



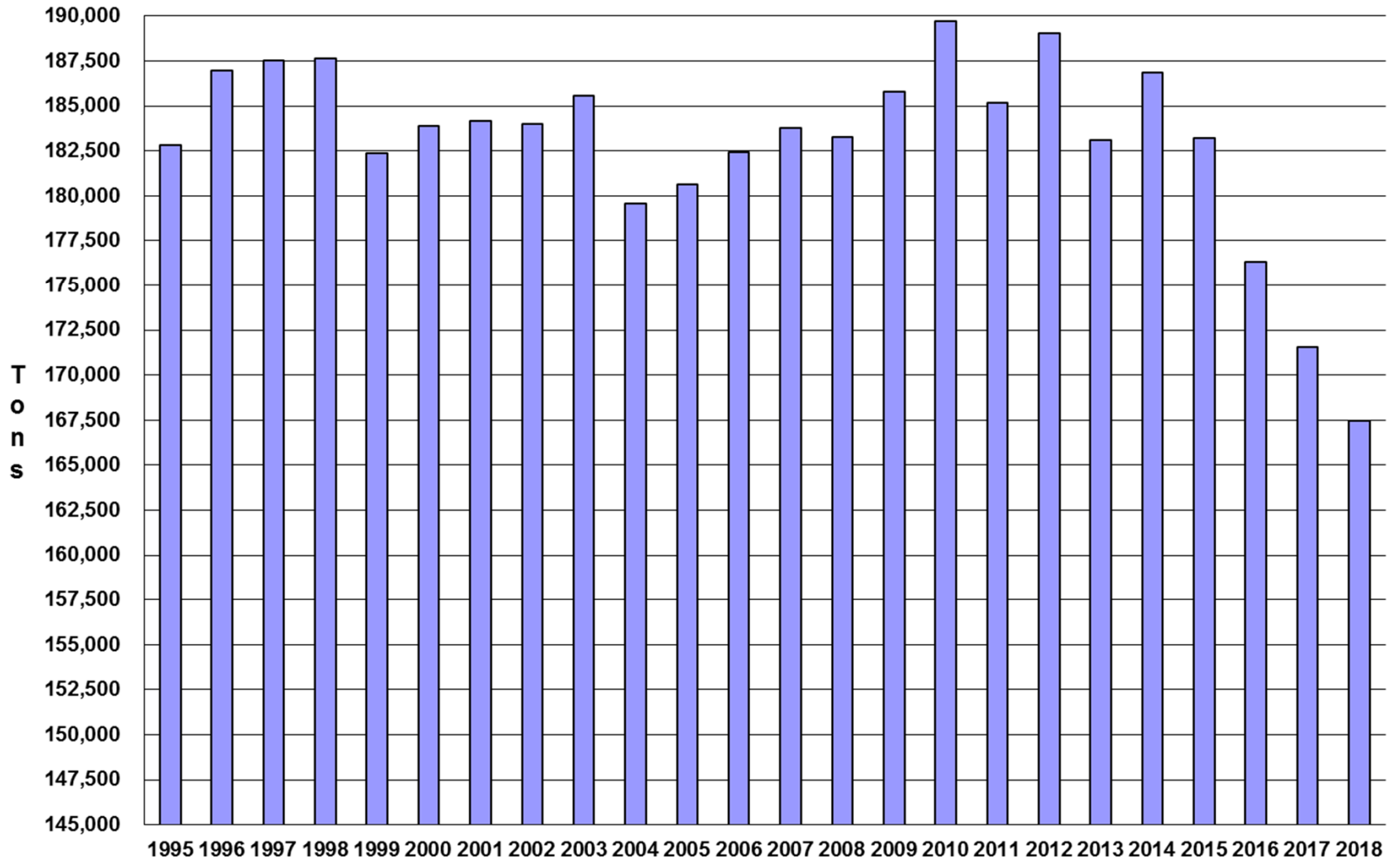
- Processes (burns) ~172,000 tons of solid (mostly residential) waste per year
- Recycles ~7,200 tons of ferrous & 375 tons of non-ferrous metals annually
- Generates up to 13 MW per Hour of electricity
- Strong Environmental Performance

Owned and Operated by Covanta



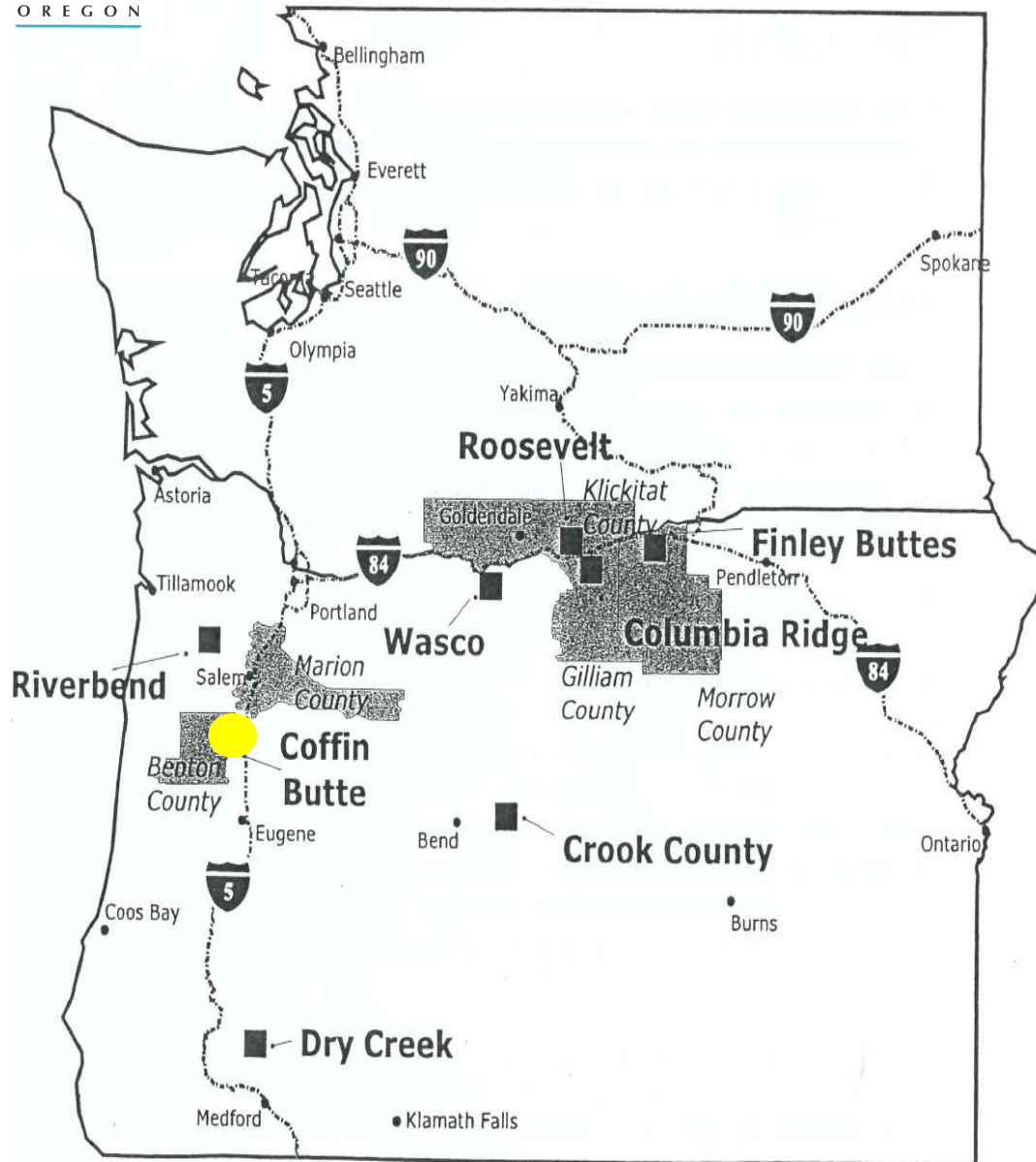
OREGON

# Covanta Marion, Inc.





# Landfill Options in the Northwest



## Coffin Butte Landfill

- Republic Services, Inc.
- ~34 years capacity

## Wasco County Landfill

- Waste Connections, Inc.
- over 100 years capacity

## Columbia Ridge Landfill

- Waste Management, Inc.
- ~121 years capacity

## Finley Buttes Landfill

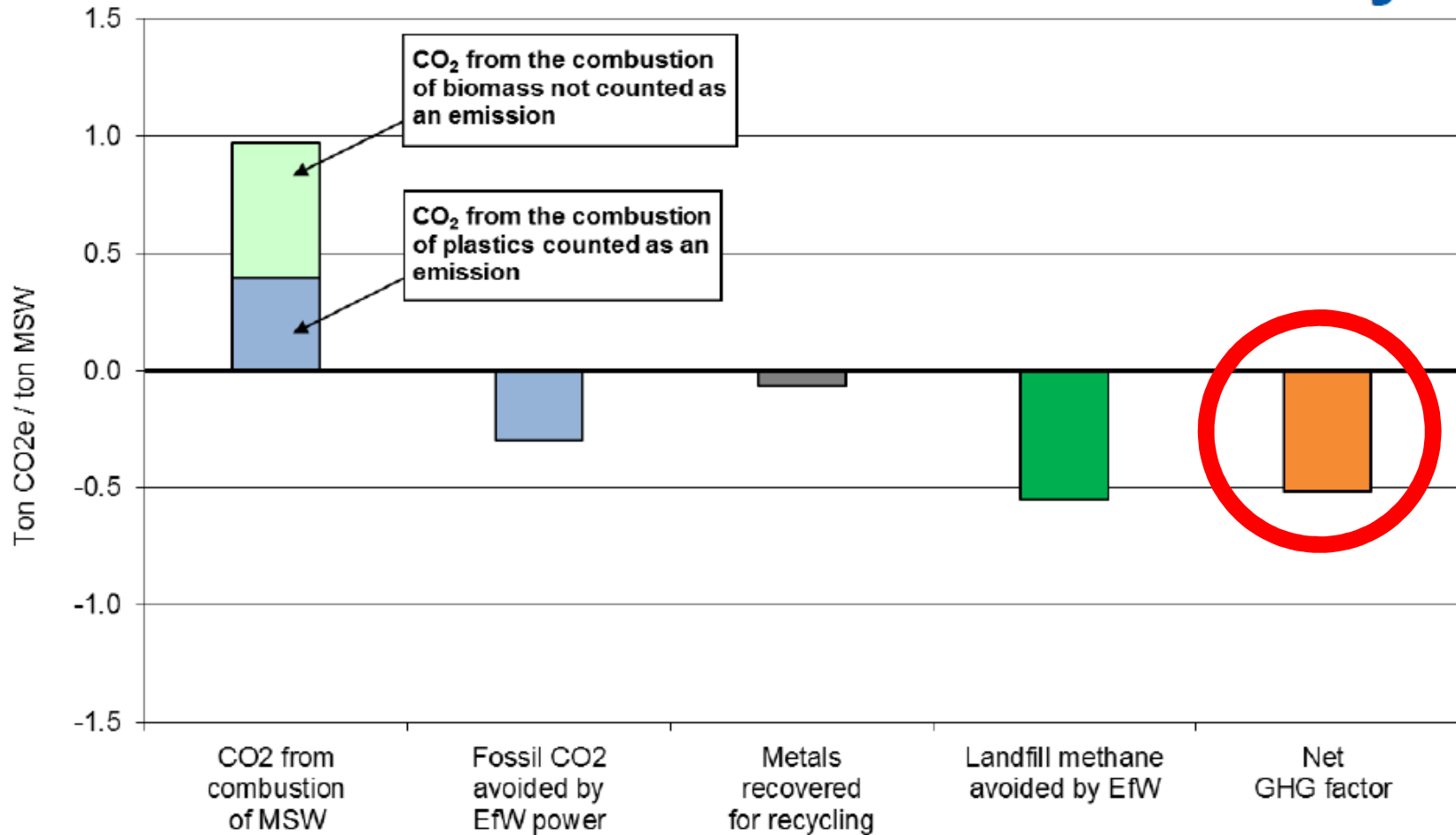
- Waste Connections, Inc.
- over 200 years capacity

 Used by Marion County



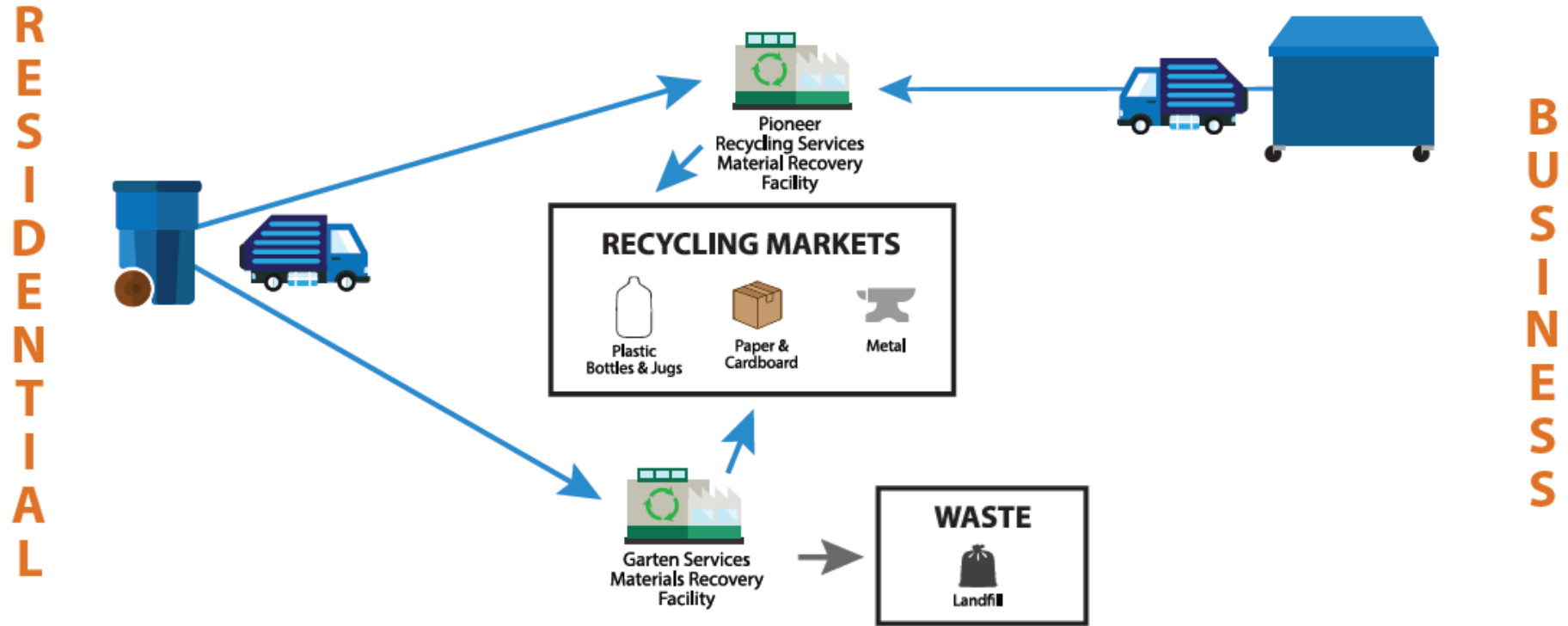
# How does Energy-from-Waste and Landfilling affect the Environment?

## The GHG Value of EfW: Marion County





# Where does the material go?



# MIXED RECYCLING





# Key Partners

## Garten Recycling



- Hand-sort and process comingled recycled material collected by haulers. (~50% of residential generation in Marion County or ~12,500 tons per year)
- Work individually with local businesses and government agencies on recycling needs.
- Maintain on-site recycling center
- Re-use store
  - Tablets and cell phones
  - Computers & electronics

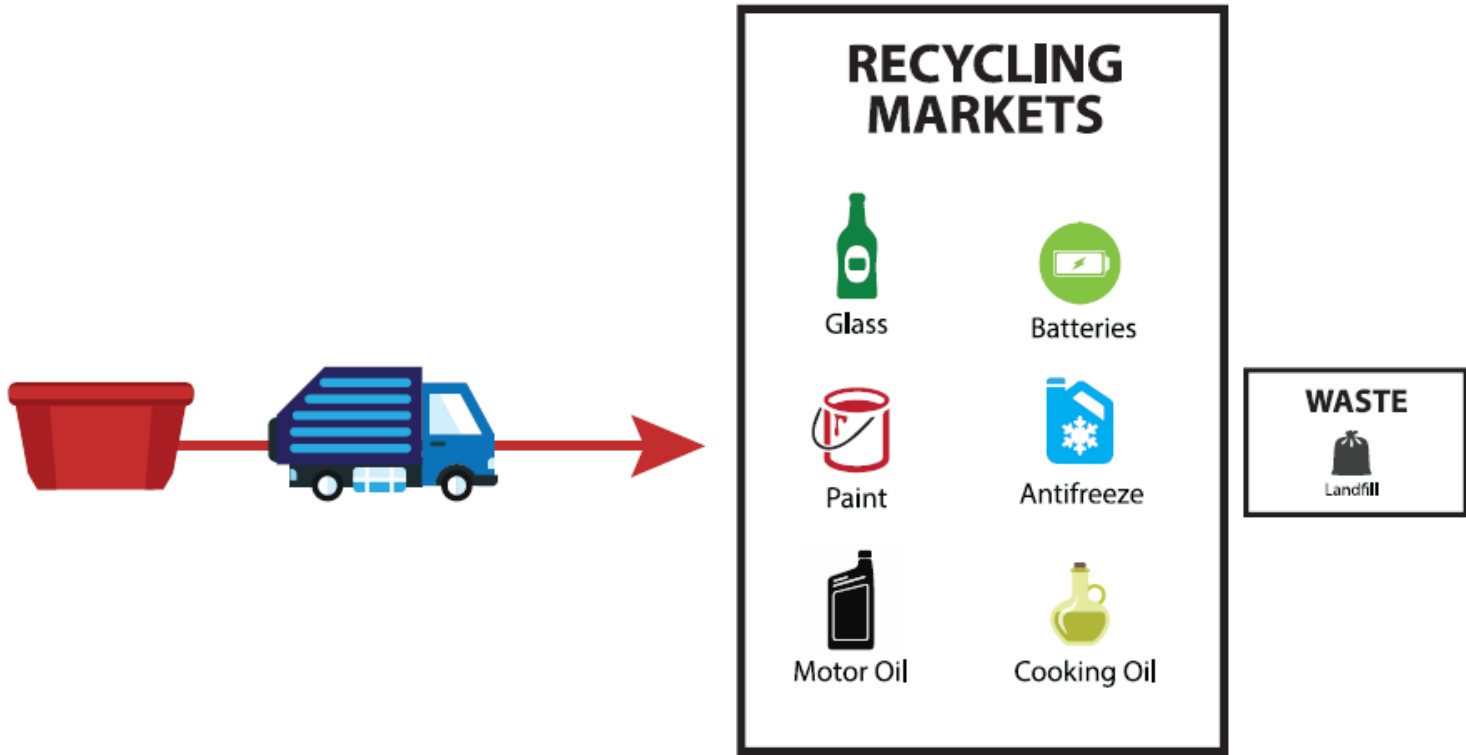
Owned and Operated by Garten Services, Inc.





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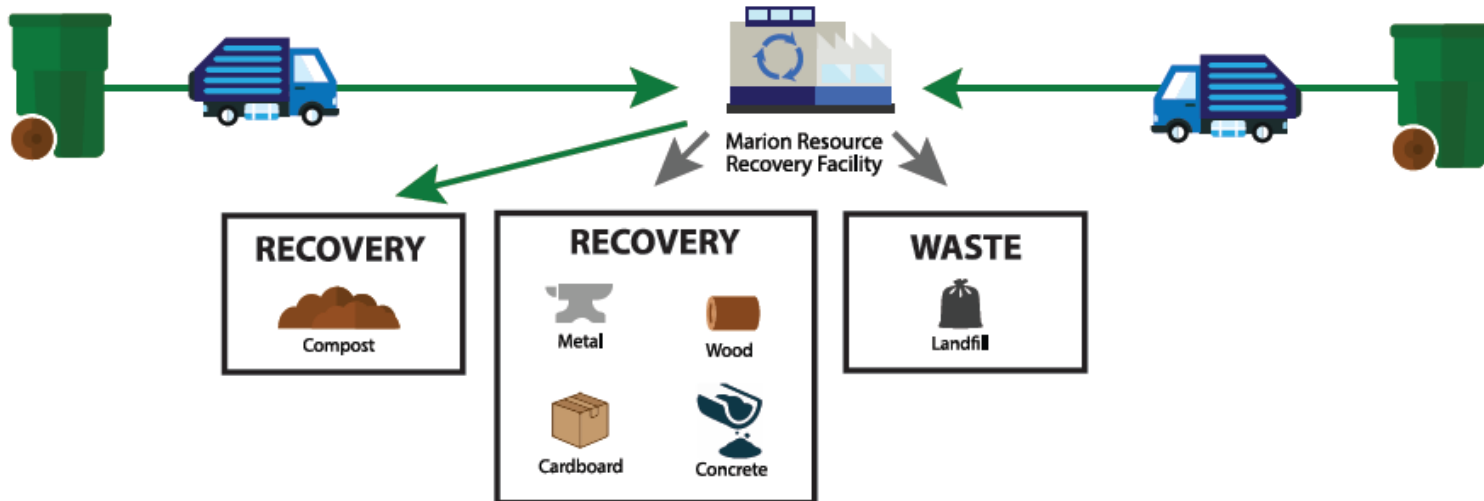
SPECIAL **RECYCLING**



# Where does the material go?

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# ORGANICS



# Solid Waste Facilities & Programs

- Waste-to-Energy Facility
- Ash Landfill
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- Household Hazardous Waste Facility
- Recycling Programs





# Key Partners

## Household Hazardous Waste (HHW)



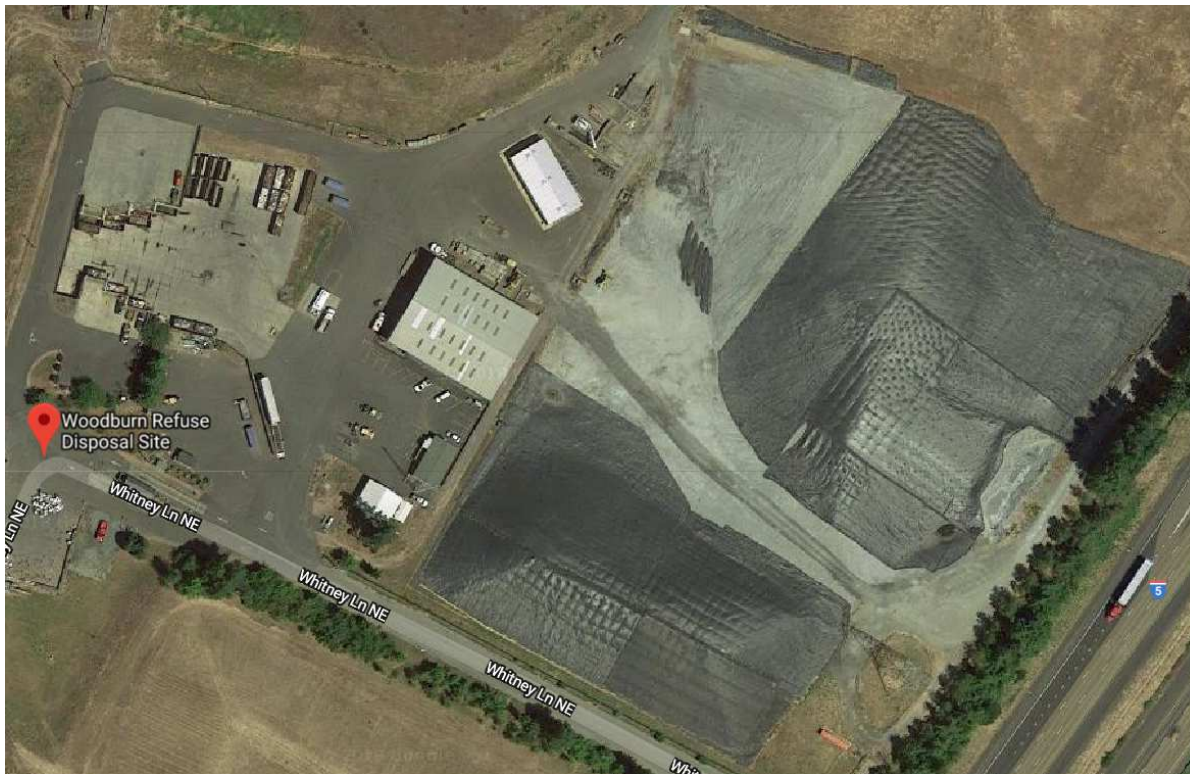
Owned by Marion County and Operated by a private hazardous waste services contractor

- ~180,000 to 220,000 pounds of waste collected annually
- Located at Salem-Keizer Recycling & Transfer Station
- Household hazardous waste is accepted free of charge from non-business residents
- Conditionally exempt small quantity generators can use the facility; however they will be charged by the pound (\$100.00 minimum)



# Who are the Key Partners?

## North Marion Recycling & Transfer Station



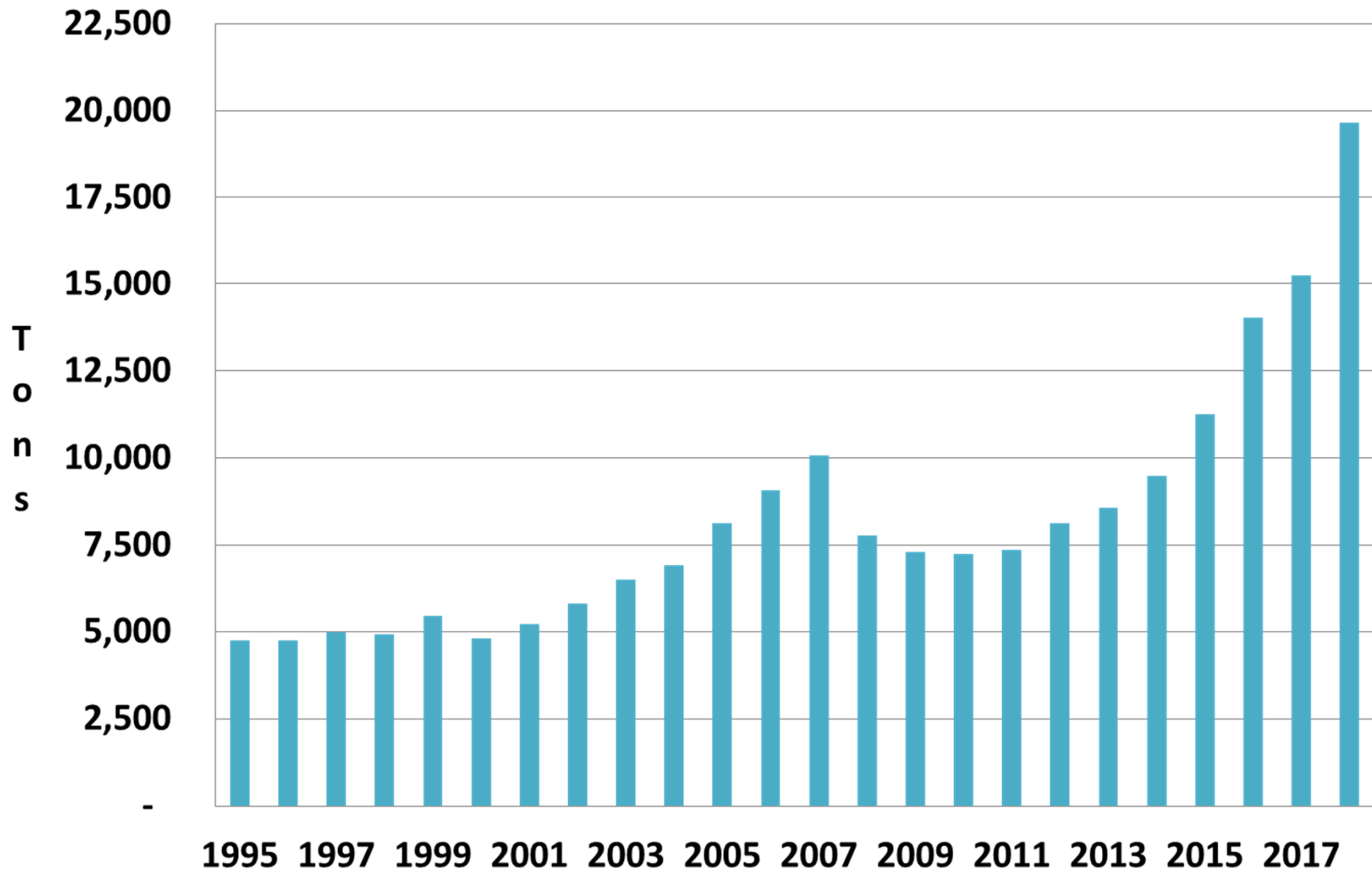
- Over 35,000 customers annually
- Materials Received for a Fee
  - Garbage
  - Yard Debris
  - Wood Waste
  - Appliances
  - Tires
- Recycle Center – Free
- Ash Monofill

Owed and Operated by  
Marion County





# North Marion Recycling & Transfer Station





# Key Partners

## Salem-Keizer Recycling & Transfer Station



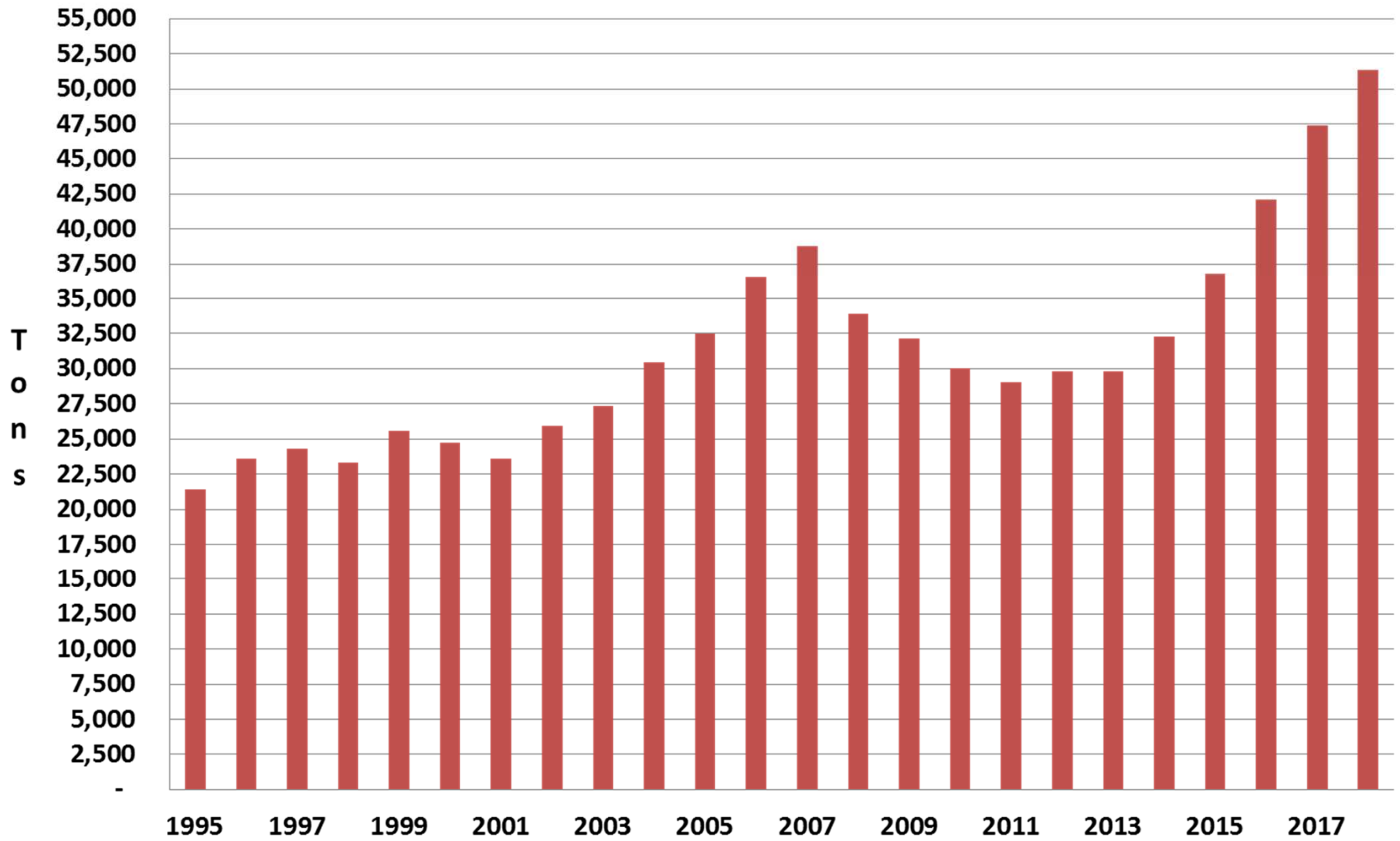
- Over 122,000 customers annually
- Materials Received for a Fee
  - Garbage
  - Yard Debris
  - Wood Waste
  - Appliances
  - Tires
- Recycle Center - Free

Owed and Operated by Republic Services, Inc.





# Salem-Keizer Recycling & Transfer Station





# Key Partners

## Brown's Island Demolition Landfill / Compost



### Construction & Demolition Debris

- ~55,000 yards disposed per year

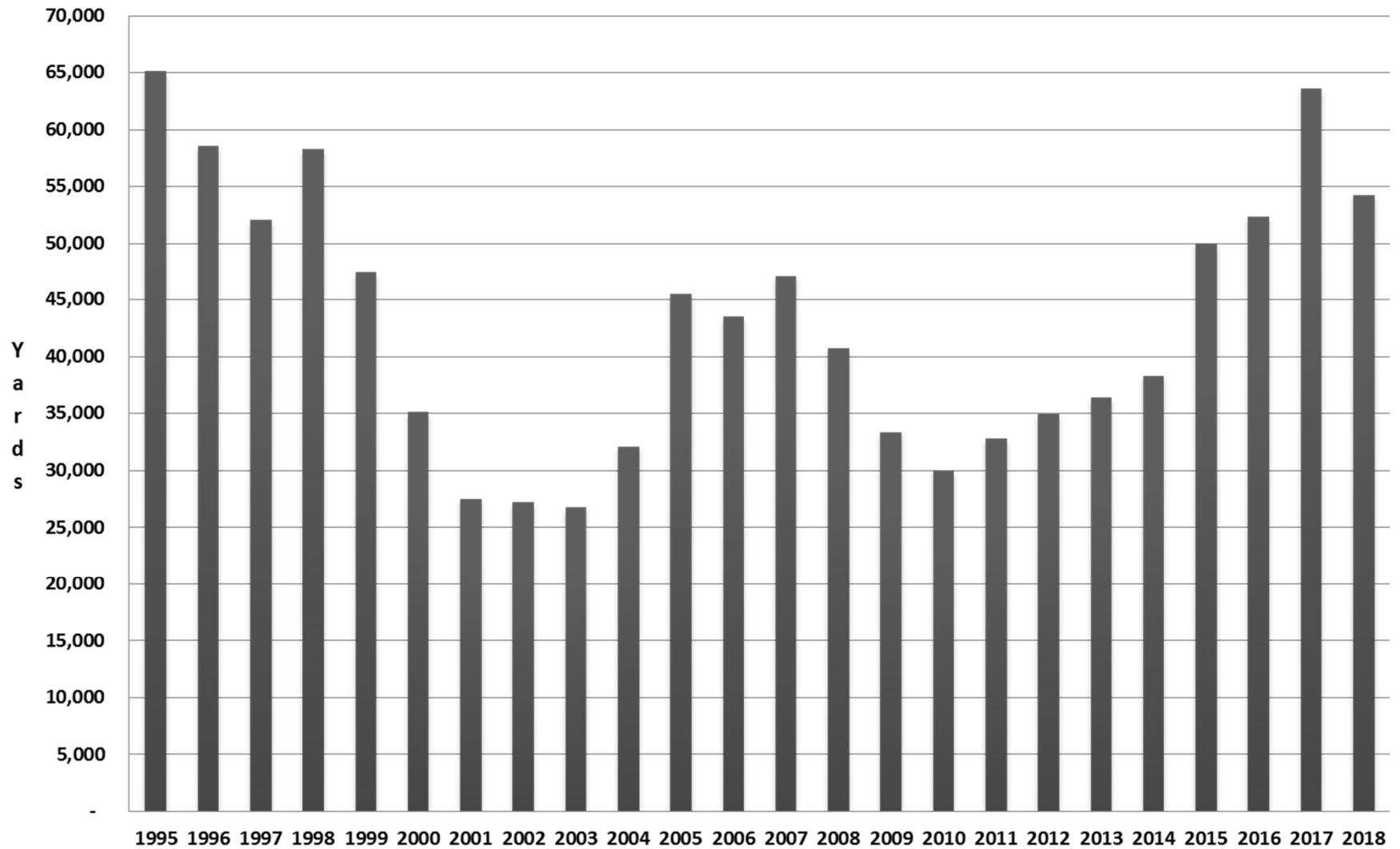
### Compost Operation

- ~25,000 yards composted per year
- Main Sources of Material
  - City of Salem ~15,000 yards
  - NMRTS ~6,500 yards
  - Tree Services ~3,000 yards

Owned and Operated by Marion County



# Brown's Island Construction & Demolition Landfill





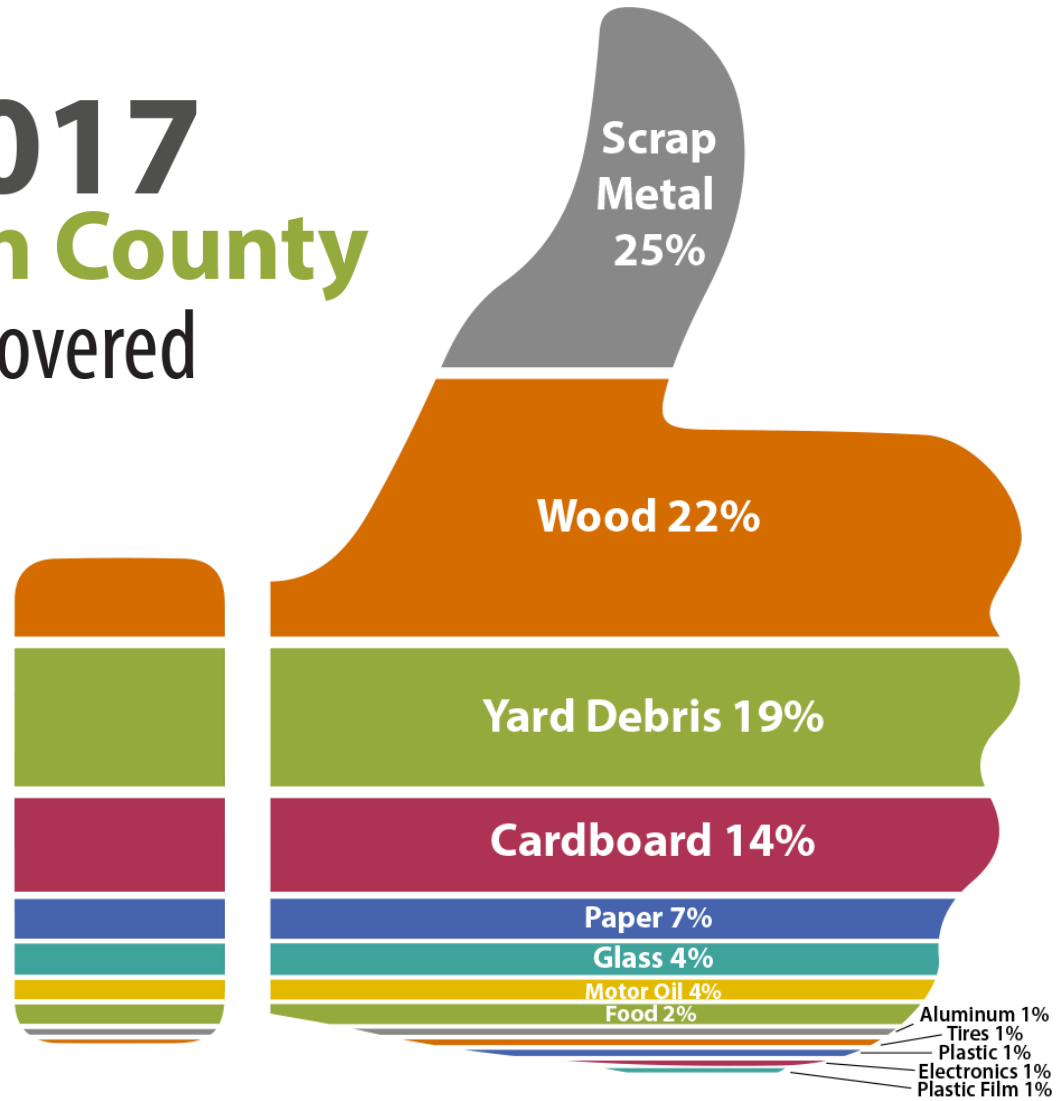
# County-Operated Recycling

- Electronics
- Paint
- Batteries
- Fluorescent Lamps
- Household hazardous Waste
- Styrofoam
- Tires





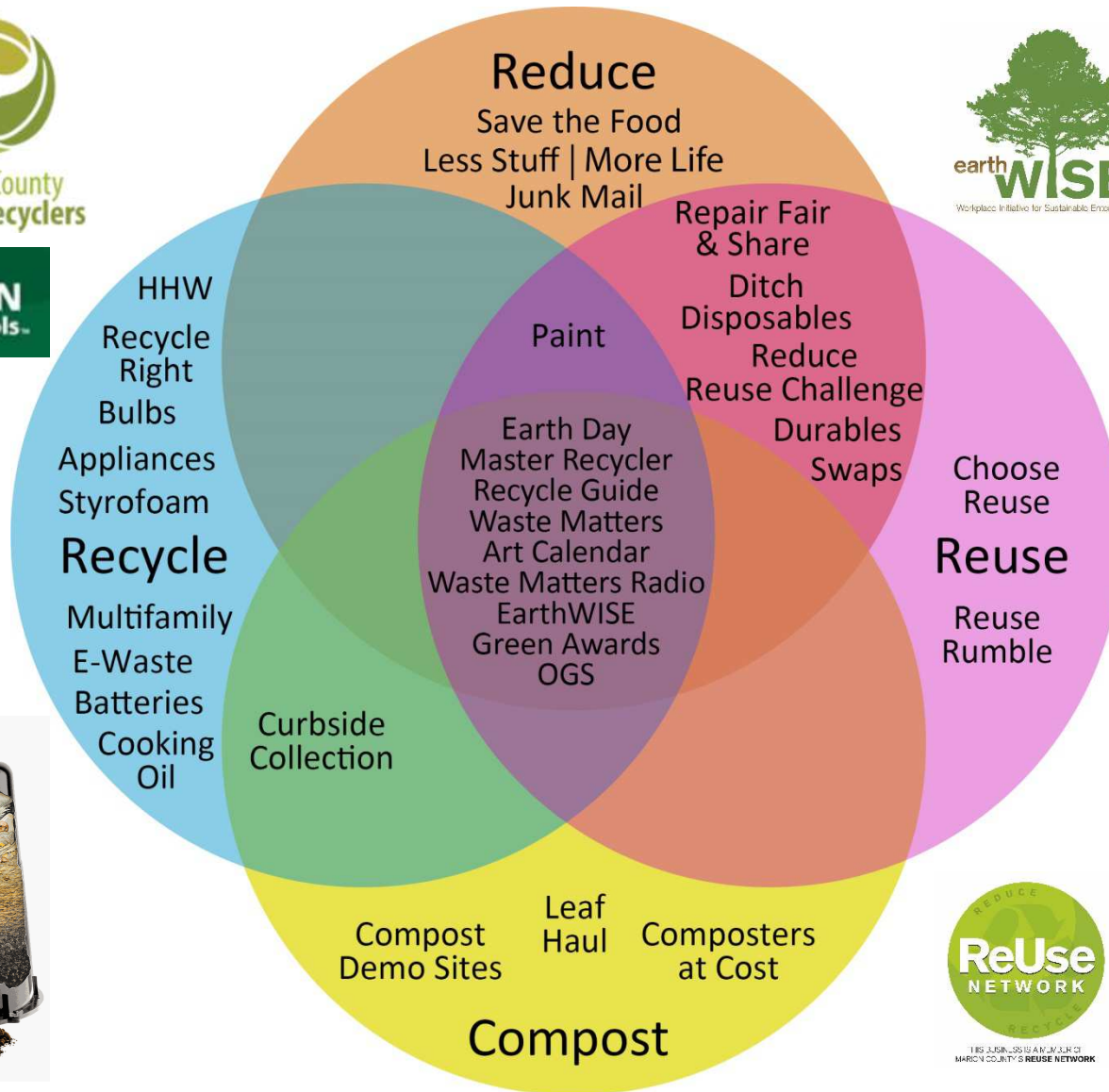
# 2017 Marion County Recovered







# Marion County Value Added Programs





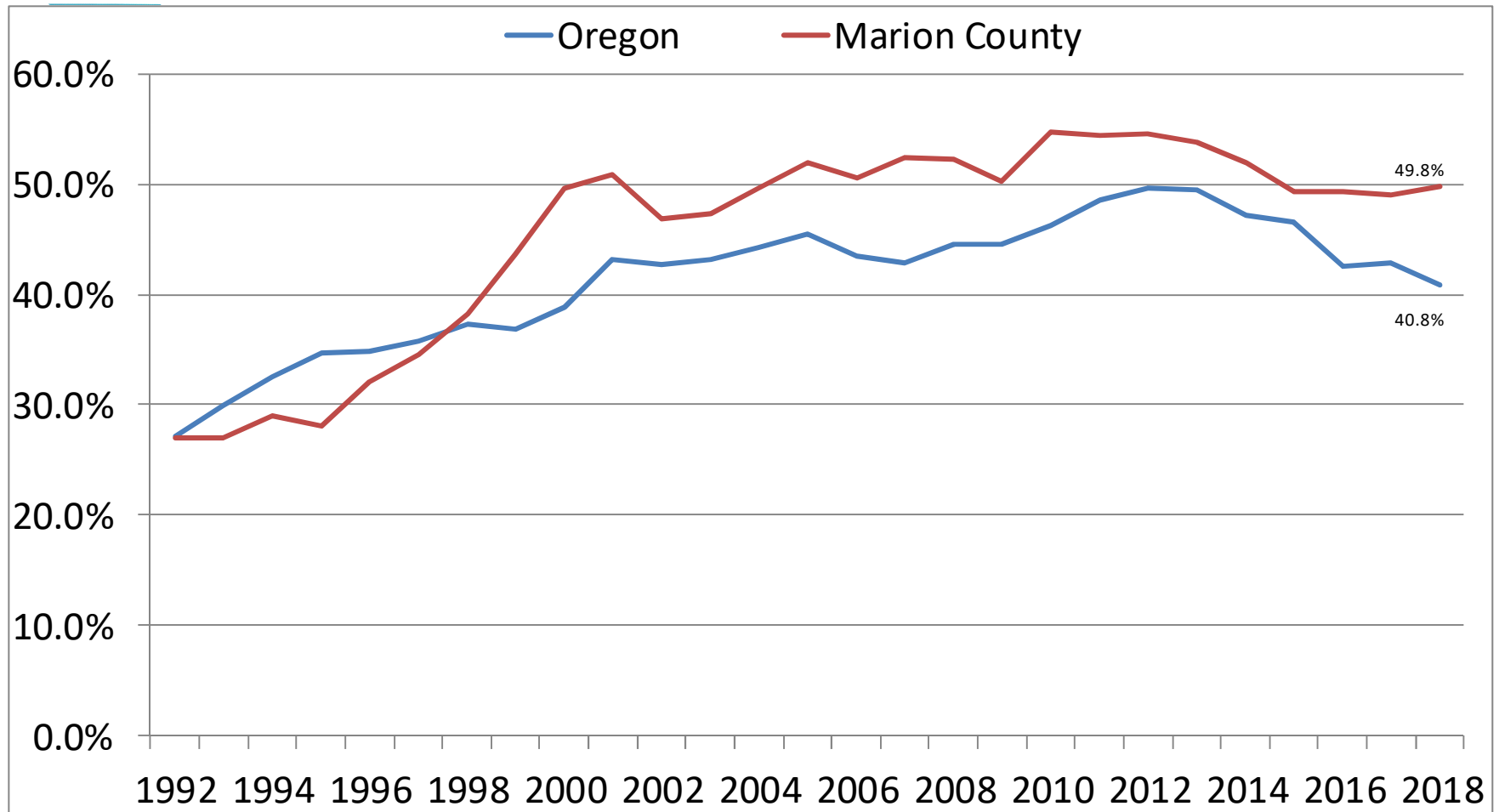
# DEQ Waste Shed Goals







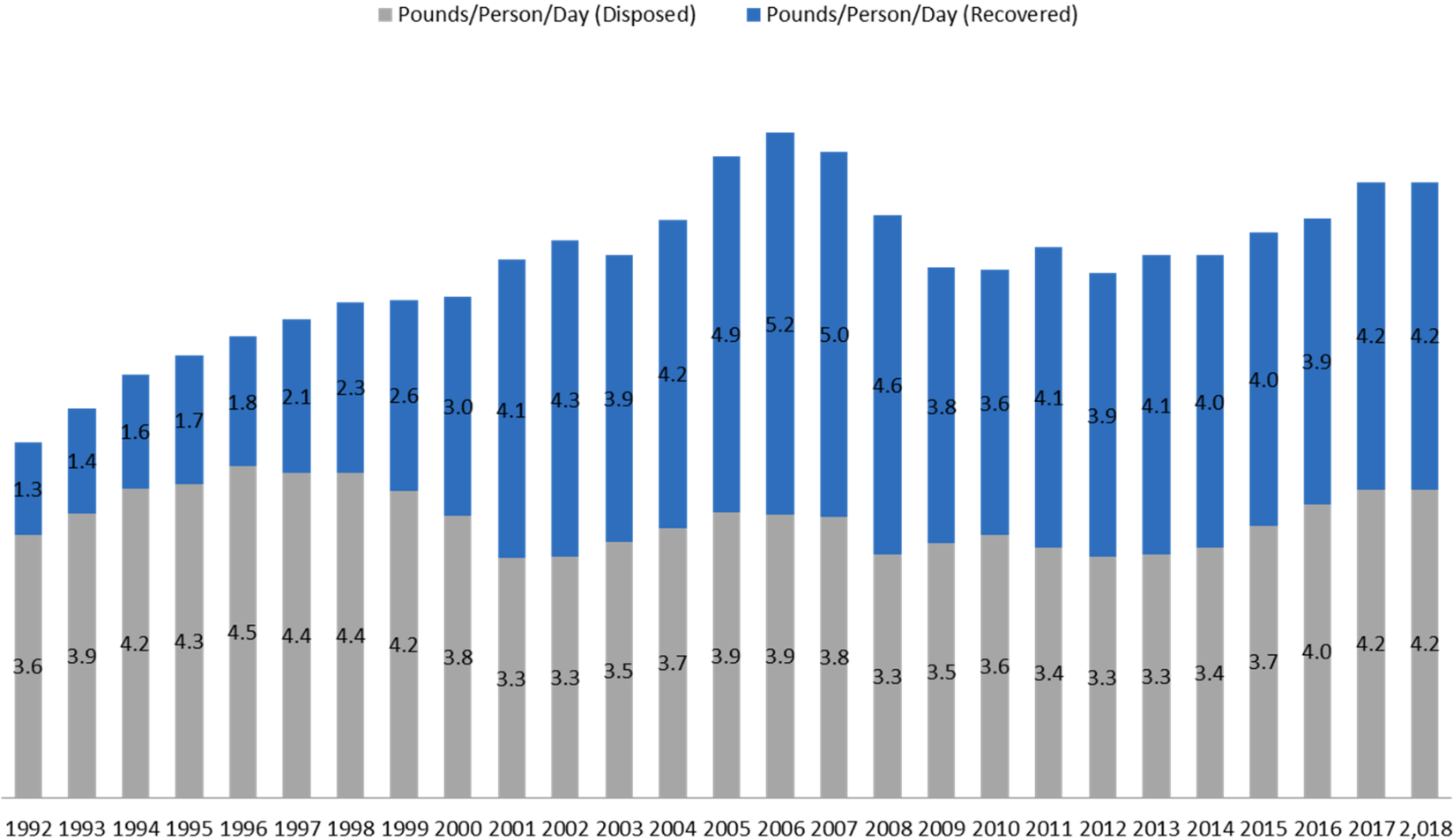
# Recovery Rate Comparison





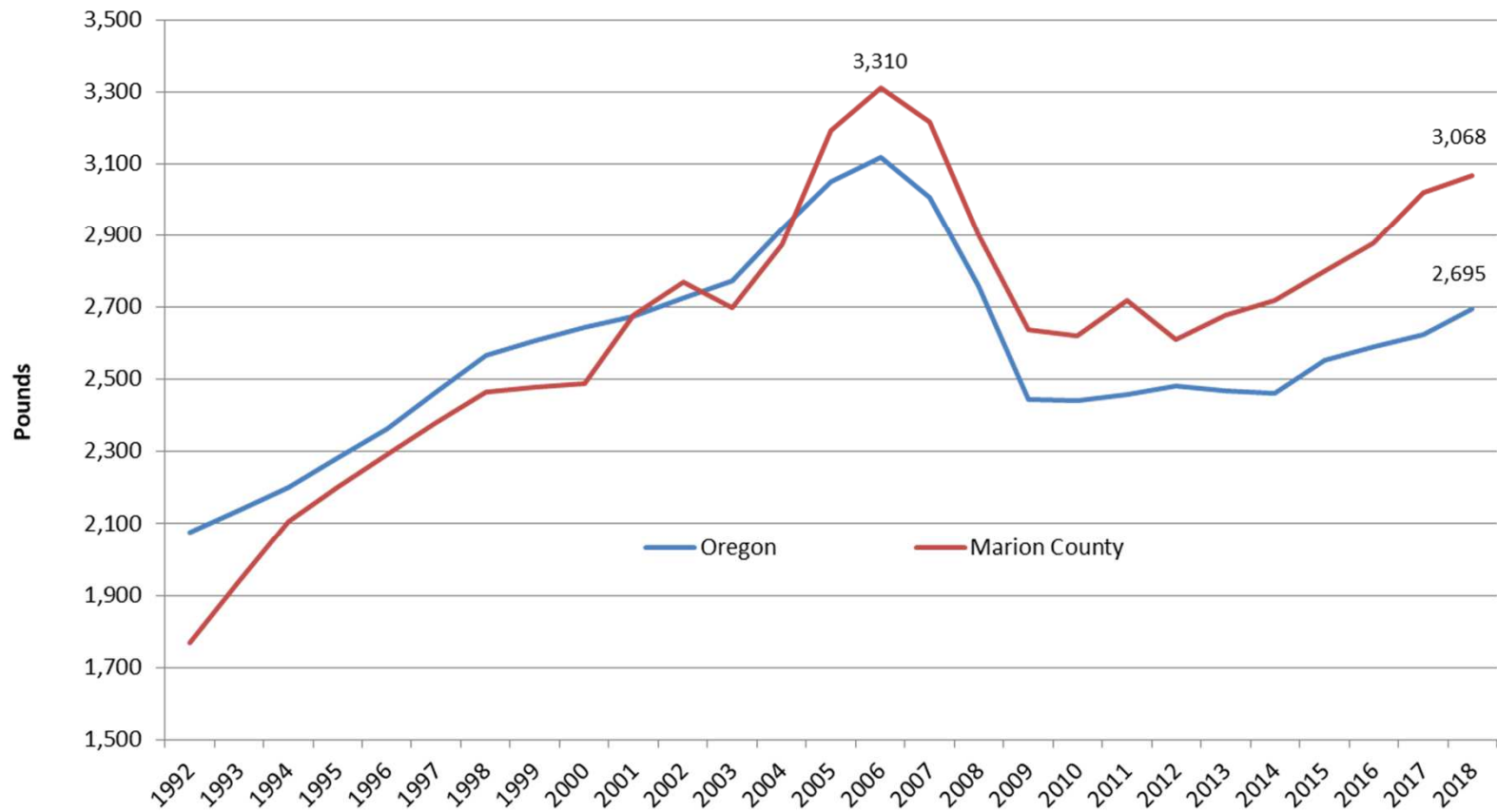
# How much do you throw away?

## Average amount of waste per day per person in Marion County



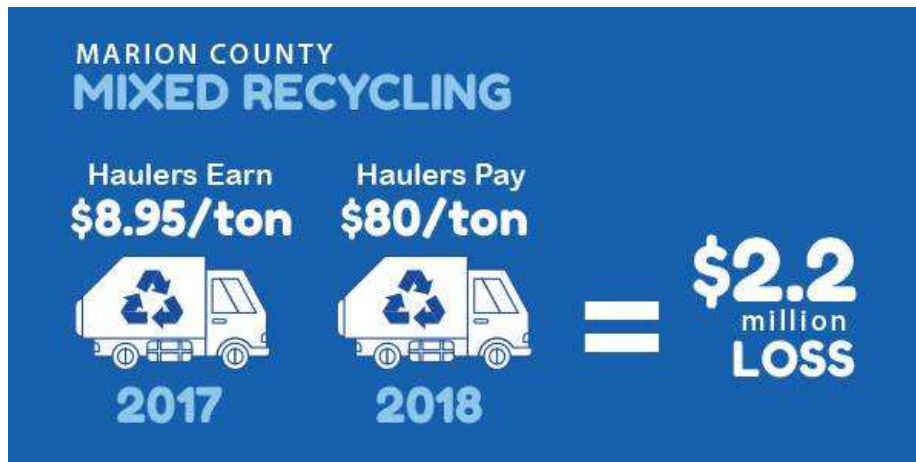
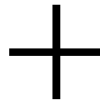
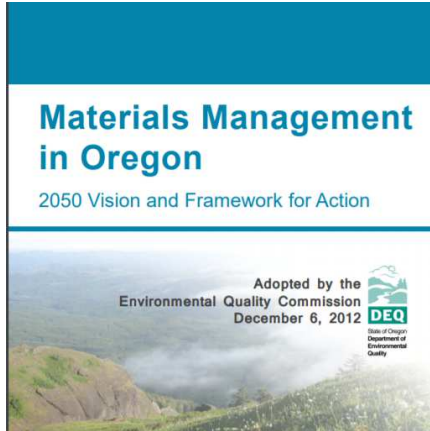


# Annual per Capita Waste Generation





# 2018 Ch-Ch-Ch-Ch-Changes



**RECYCLE RIGHT MIXED RECYCLING GUIDE**

<p><b>Paper &amp; Cardboard</b></p> <ul style="list-style-type: none"> <li>Office paper (junk mail)</li> <li>Cardstock</li> <li>Corrugated cardboard</li> <li>Gift certificates</li> <li>Gift tags</li> <li>Magazines</li> <li>Newspaper</li> <li>Phone books</li> <li>Paperback books</li> <li>Paper bags</li> </ul>	<p><b>Papel y Cartón</b></p> <ul style="list-style-type: none"> <li>Papel de oficina/ Correo no Deseado</li> <li>Cajas de cartón</li> <li>Tarjetas de felicitación</li> <li>Etiquetas de aluminio o gift tags</li> <li>Revistas</li> <li>Periodicos</li> <li>Libros telefonicos</li> <li>Libros de tapa blanda</li> <li>Botas de papel</li> </ul>
<p><b>Plastics</b></p> <ul style="list-style-type: none"> <li>Bottles</li> <li>Jugs</li> </ul>	<p><b>Plásticos</b></p> <ul style="list-style-type: none"> <li>Botella</li> <li>Galtones</li> </ul>
<p><b>Metal</b></p> <ul style="list-style-type: none"> <li>Steel (tin) cans</li> <li>Aluminum cans</li> </ul>	<p><b>Metal</b></p> <ul style="list-style-type: none"> <li>Latas de acero (sustas)</li> <li>Latas de aluminio</li> </ul>

There may still be opportunities to recycle some items that can not be placed into the mixed recycling roll cart. Visit [recyclefororegon.net](http://recyclefororegon.net) to learn of other possible options.

Todavía puede haber oportunidades para reciclar algunos artículos que no pueden colocarse en el bote del reciclaje mixto. Visita [recyclefororegon.net](http://recyclefororegon.net) para conocer otras opciones posibles.



# How can you become more involved?

Visit our website  
[mcRecycles.net](http://mcRecycles.net)



Join our Solid Waste  
Management Advisory Council  
[SWMAC](http://SWMAC)



Become a Master Recycler  
[MasterRecycler.net](http://MasterRecycler.net)





# How can you become more involved?



## Check out upcoming webinars

- Recycling today
- Materials management and LCA
- Upcycling materials for fun and profit
- Avoiding household hazardous waste
- And more!





Final Exam!





# Questions?



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Marion County Environmental Services  
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