

*NOTE: This presentation on the updated State Solid and Hazardous Waste Plan was given at the WSRA Conference 5/18/15. Only portions of this presentation (slides 25-35 and 43-66) were presented at the MRW Coordinator Meeting on 5/05/15.*



# Washington's The Story of Stuff



# Today's Presentation

1. Status of Stuff
2. The New Plan for the Stuff
3. Reducing Toxic Stuff

*There will be quizzes!*

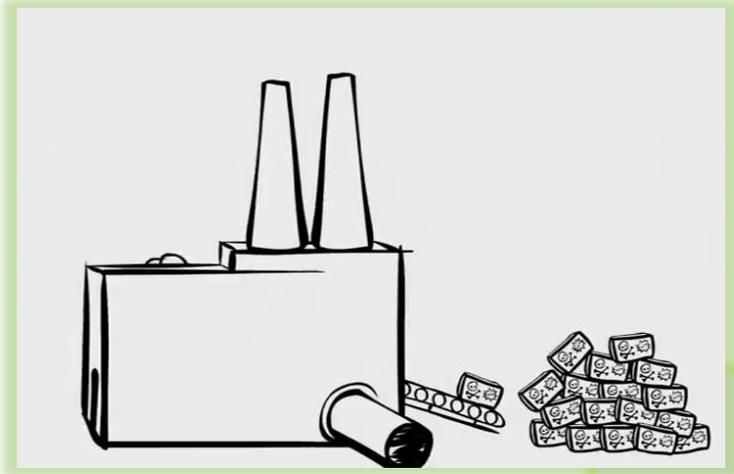
**Acknowledgements to:  
The Story of Stuff Project**

# The *Status* of Stuff

Measuring  
Washington's  
Progress on  
Reducing Waste  
& Toxics



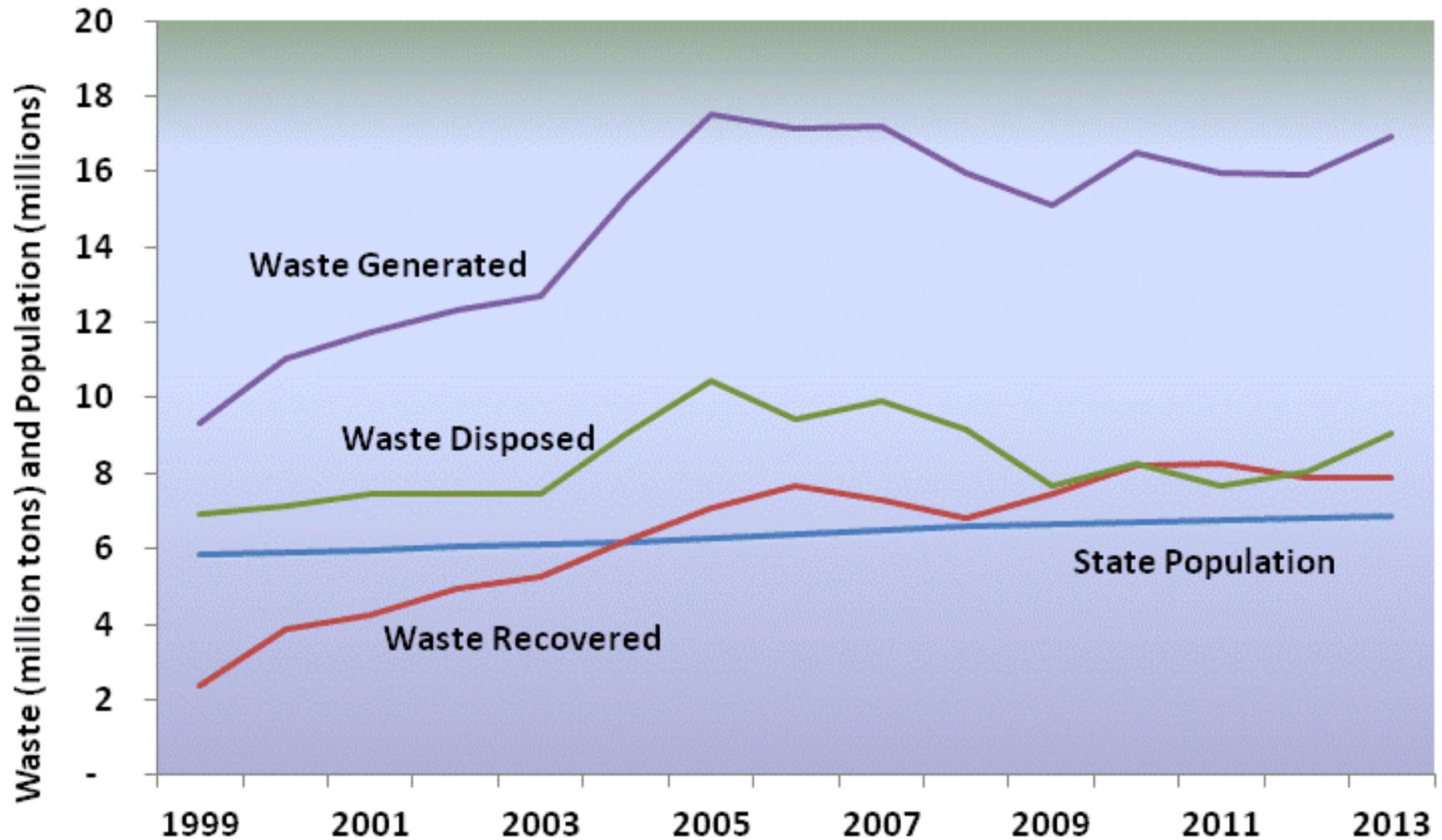
# “Make, Use, Toss?”



# Make, Use, Toss, Measure!



# What progress have we made so far?



\* Includes waste from citizens, industry, business, and manufacturers.

# Are we on our way to achieving the State Plan Vision?

*We can transition to a society where waste is viewed as inefficient, and where most wastes and toxic substances have been eliminated. This will contribute to economic, social and environmental vitality.*



## Beyond Waste

### BEYOND WASTE HOME

About Beyond Waste

Why Beyond Waste

The Beyond Waste Plan

Progress Report

Beyond Waste Indicators  
by Initiative

Beyond Waste Indicators  
- Alphabetical

Beyond Waste Targets for  
2035

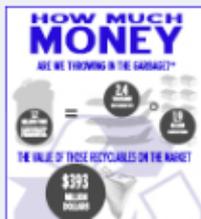
Contact Us

Links and Resources

**How much material are we recycling and still disposing?**



**How much money do we throw away when we don't recycle?**



[Beyond Waste Home](#) > Progress Report

## Beyond Waste Progress Report

The Beyond Waste Progress Report is a series of indicators that track progress toward Beyond Waste goals. It contains seven main indicators for each plan initiative as well as many related indicators. Most indicators are updated annually (see the bottom of each page for the latest date updated). The first report was published in February of 2007.

### Greenhouse Gases Saved So Far this Year by Recycling in Washington\*

000072829360

\*Units are in metric tons carbon equivalent (MTCE); based on [Focus on the Benefits of Recycling](#) for 2013.

As you navigate the pages, watch for the [bright blue underlined text](#), it indicates a link to more information. You may also navigate this site by using the individual page links found in the lists of indicators on the far left column of this page (by [Initiative](#) and [Alphabetical](#)). Also on the far left is a link to the [Beyond Waste Targets](#). These show solid and hazardous waste generation trends if we were to meet our goal of eliminating most waste and toxics by 2035. Finally, if you just want a quick overview: [Printable Summary of the Progress Report](#).

Clicking on each indicator below will take you to detailed information, including data and related indicators.



Manufacturing from recycled materials uses less energy and creates less greenhouse gas emissions than using virgin materials. We've come a long way, but there is still more to do.

[Moving Toward Beyond Waste with Industries](#)

[Reducing Small Volume Hazardous Materials and Wastes](#)

[Increasing Recycling for Organic Materials](#)

[Making Green Building Practices Mainstream](#)

[Measuring Progress Toward Beyond Waste](#)

[Current Hazardous Waste System Issues](#)

[Current Solid Waste System Issues](#)

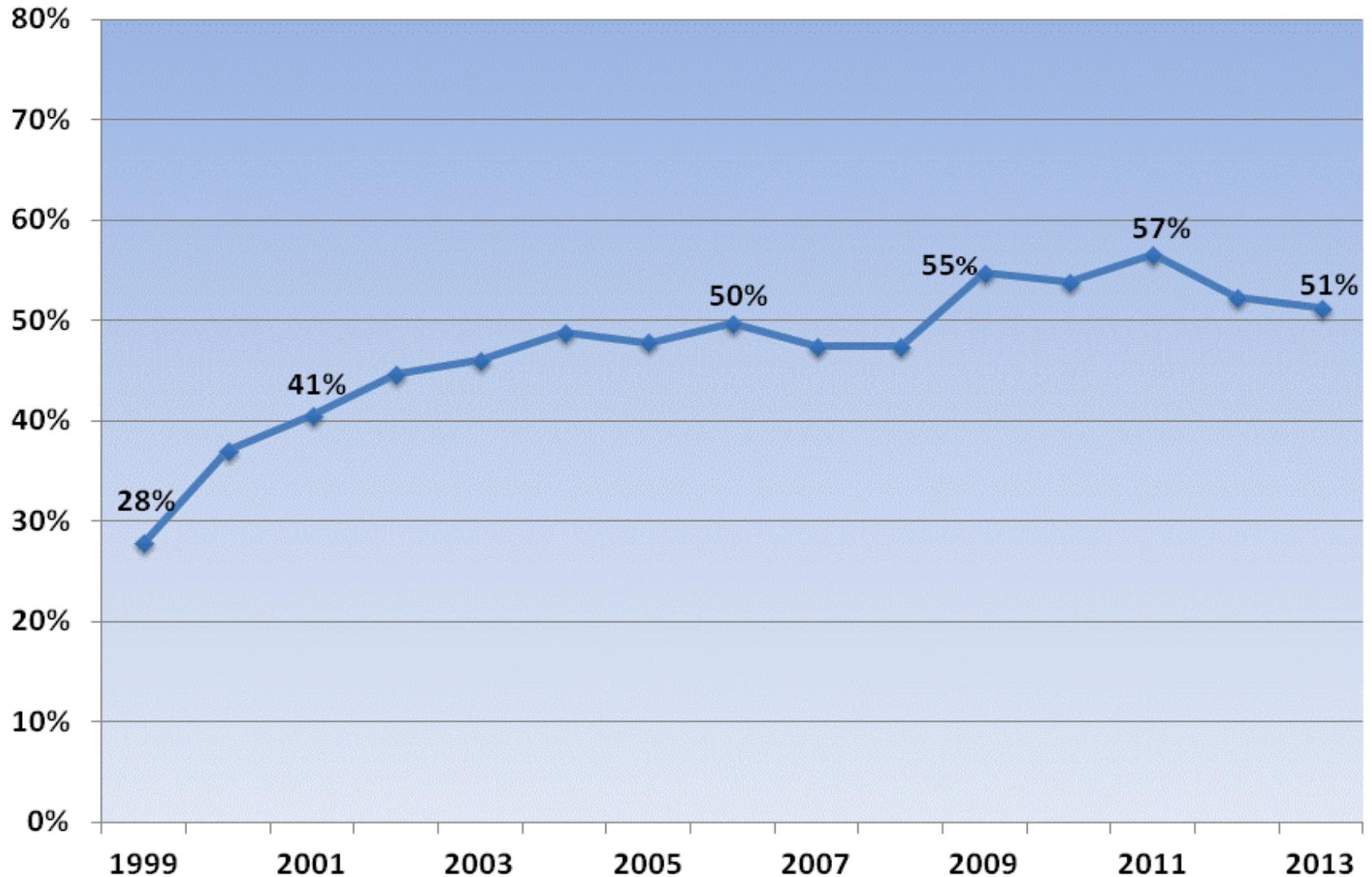
# Quiz Time!

Who can name an indicator for the state plan that addresses:

- Waste or Recycling?



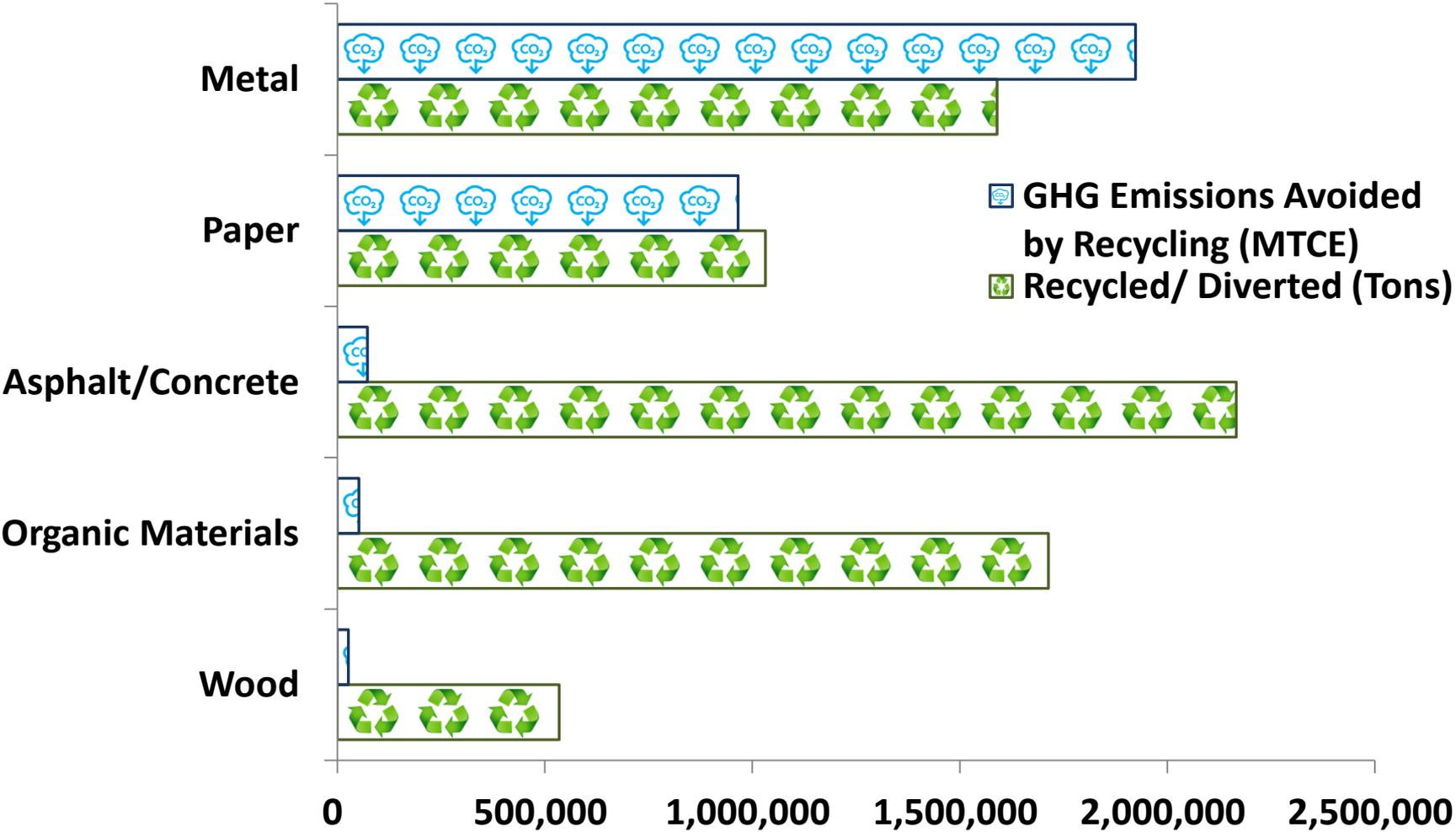
# Solid Waste Recycled / Diverted



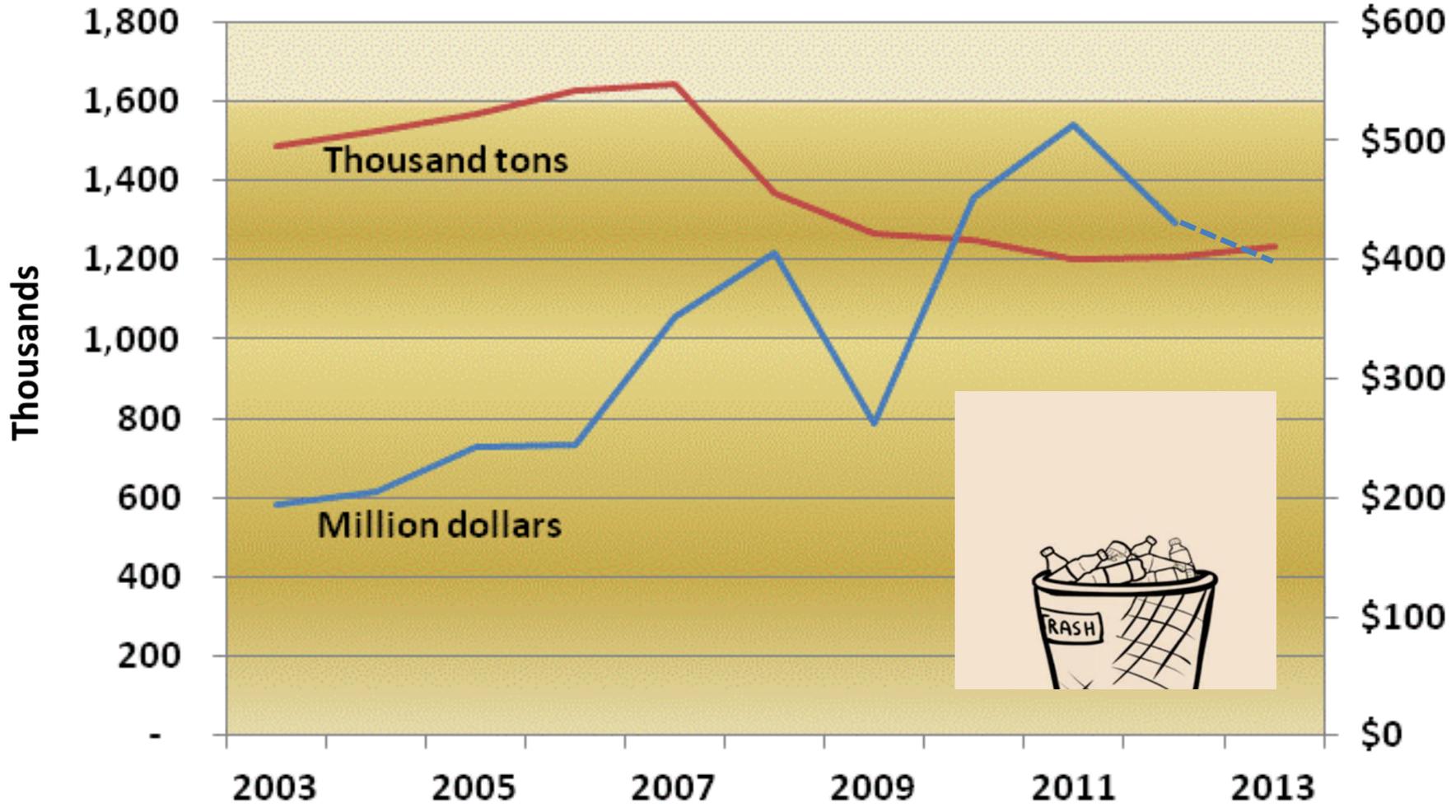
# Environmental and Economic Indicators



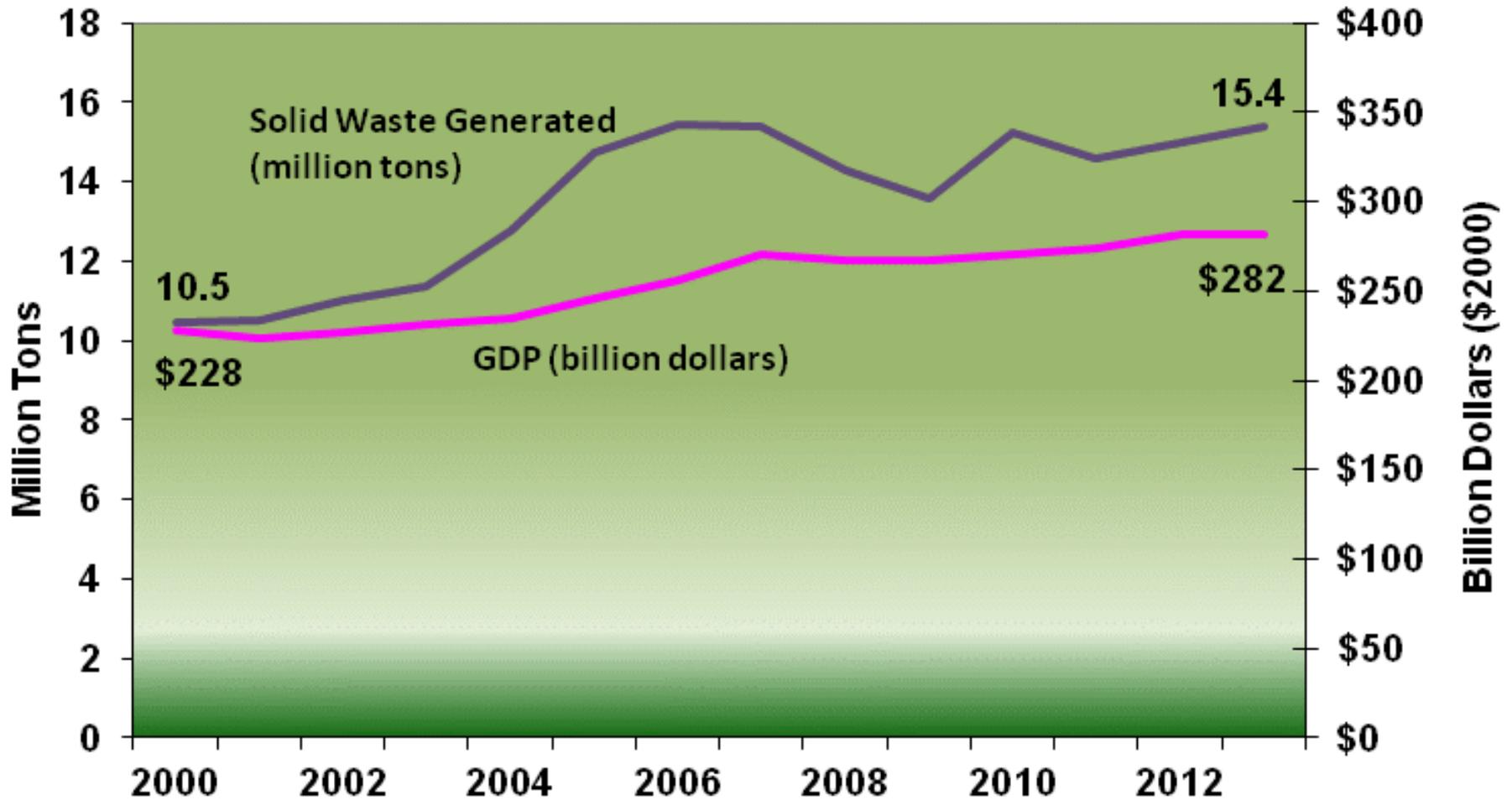
# Recycled/Diverted Materials and GHG Emissions Savings in WA (2013)



# Economic Value of Recyclables Disposed in Washington



# Solid Waste Generated and Gross Domestic Product in Washington

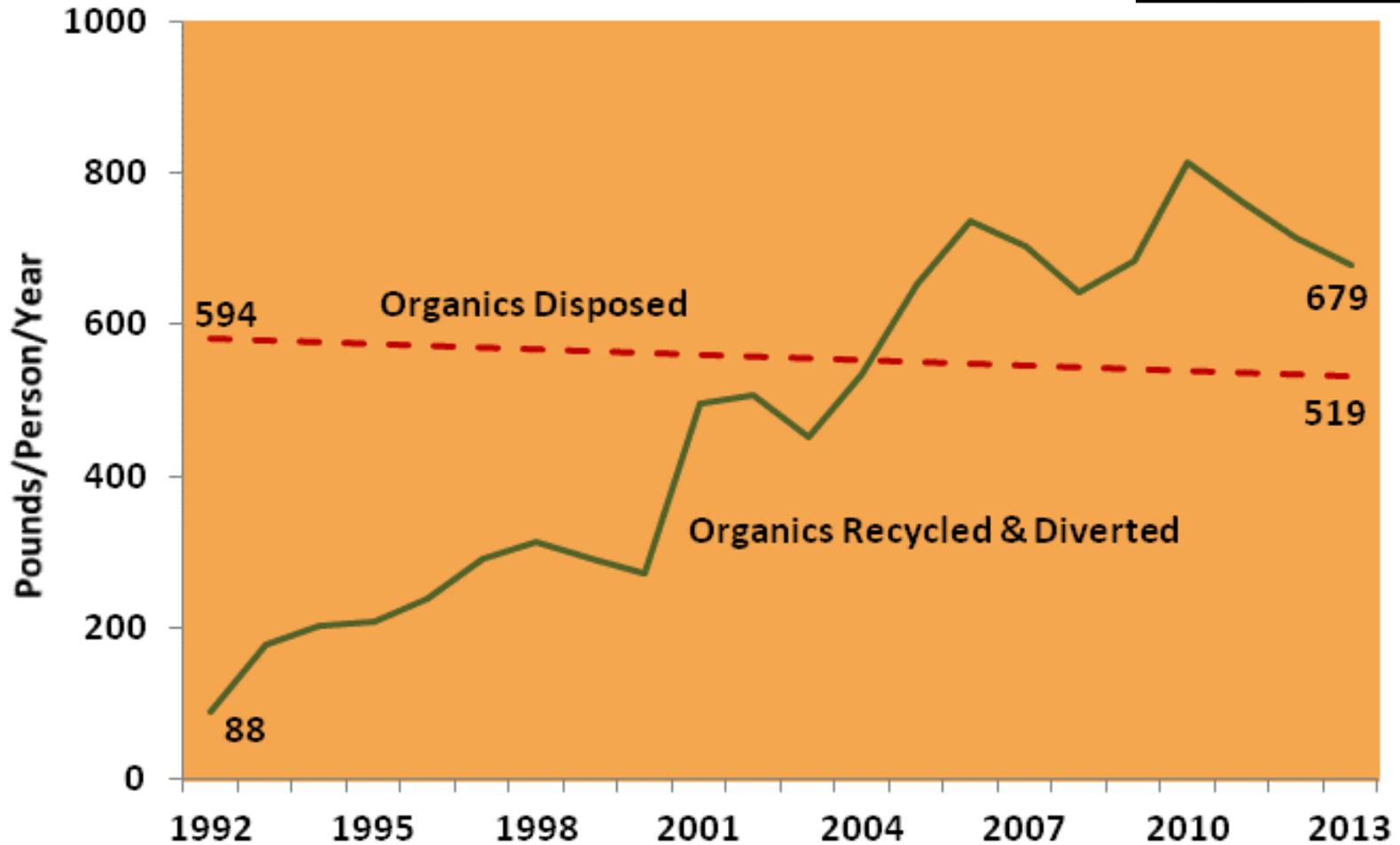


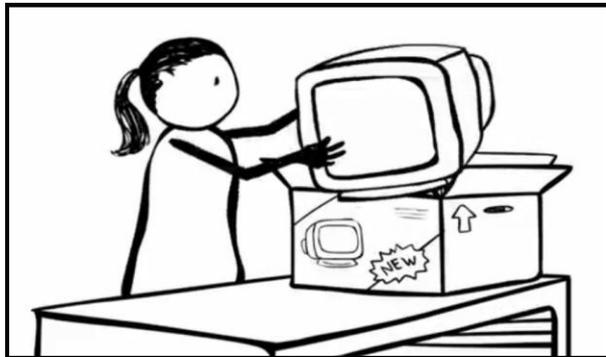
# Other indicators measure trends for specific wastes

- Organics
- Electronics
- Construction & Demolition Debris

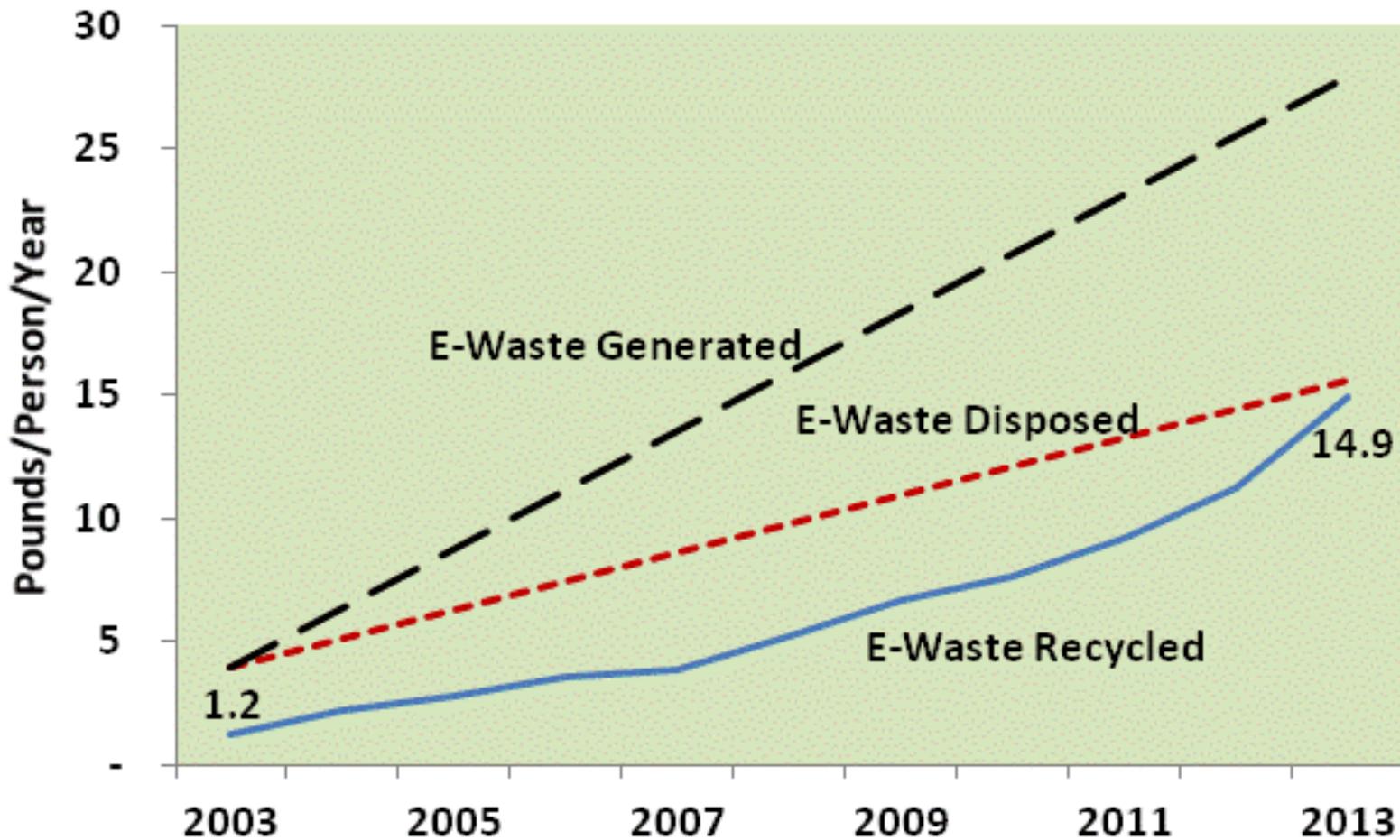


# Progress - Organics

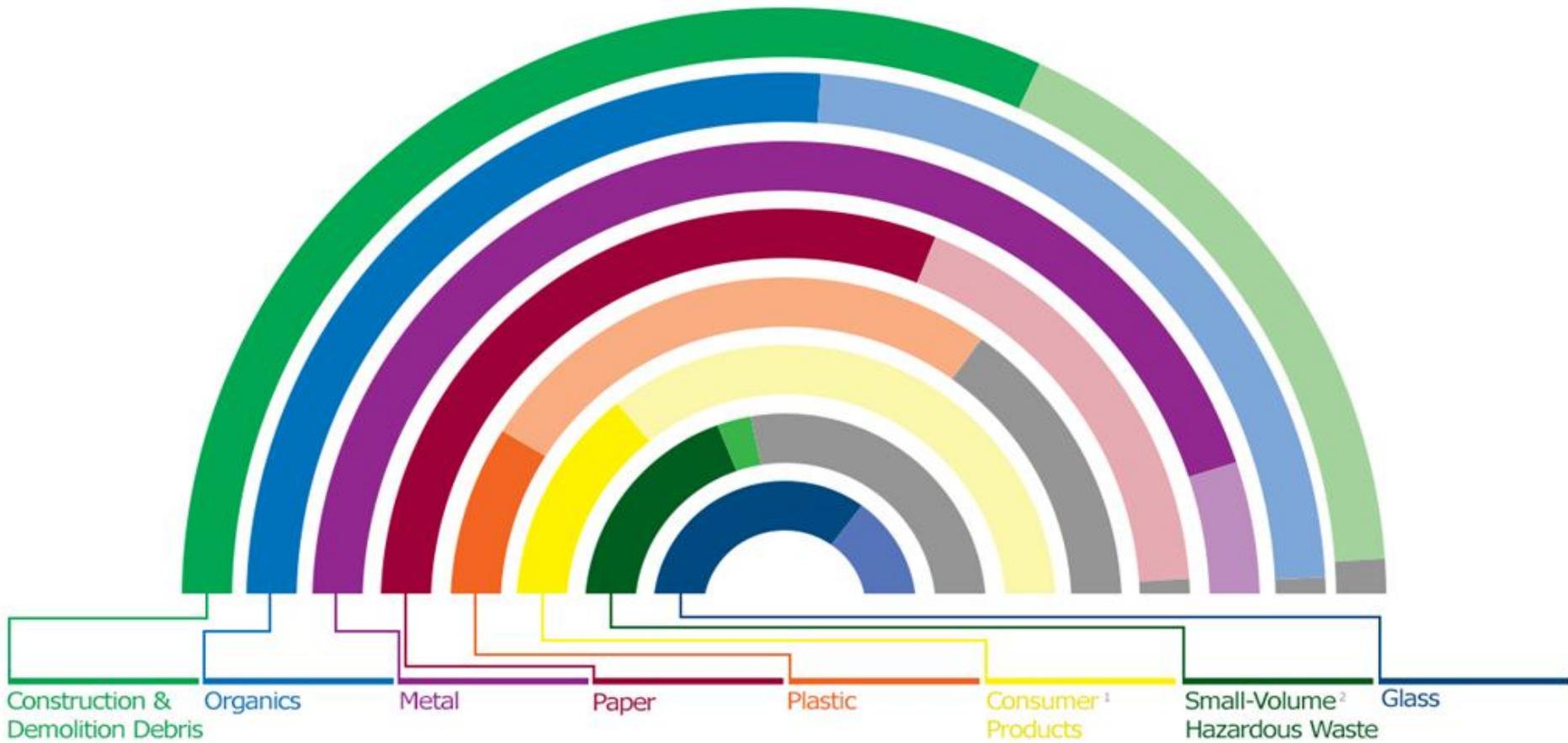




# Progress - Electronics

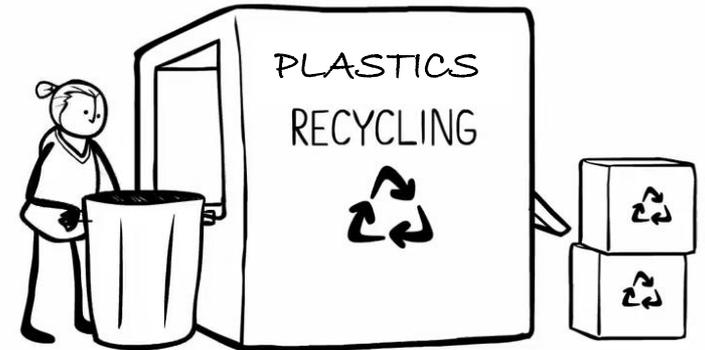
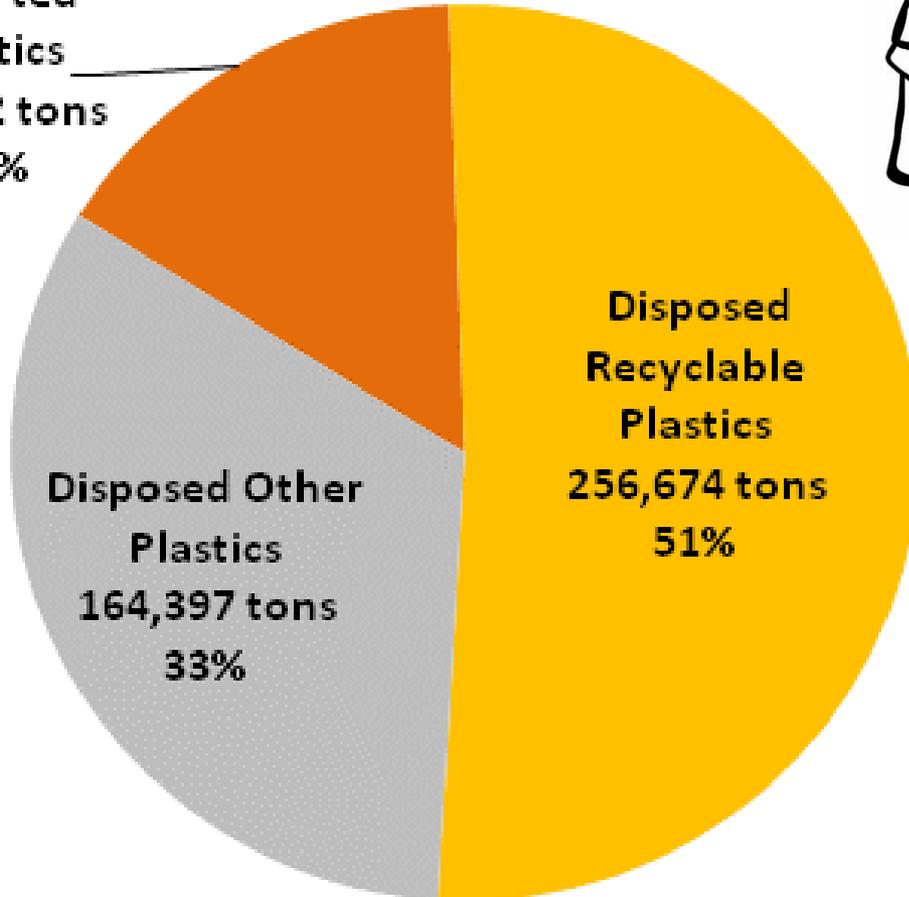


# THE STORY OF SOLUTIONS



# Recycling Opportunities – Plastics

Recycled/  
Diverted  
Plastics  
77,552 tons  
16%





# New Data Efforts in State Plan

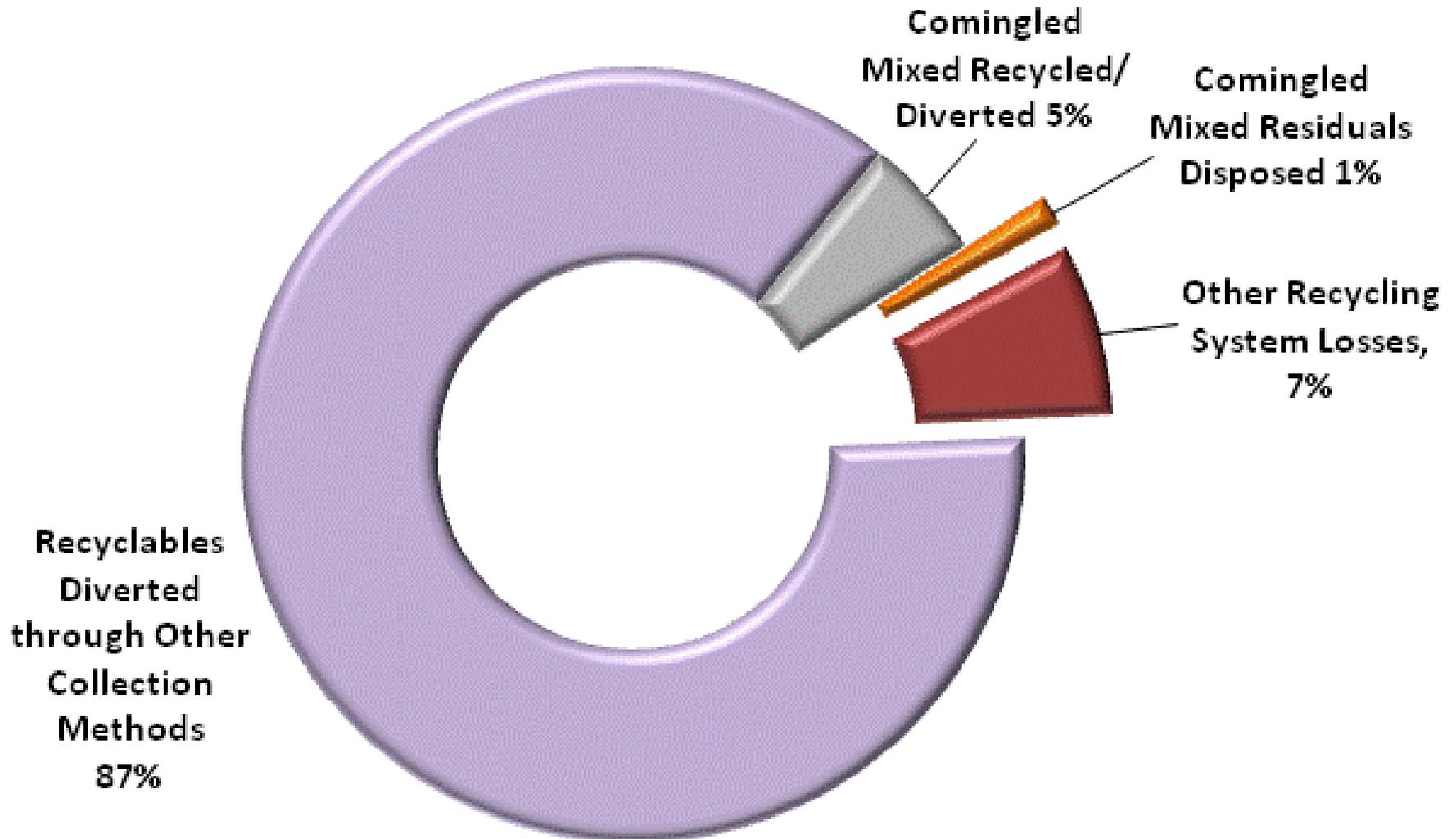
- Evaluate efficiency and effectiveness
- Environmental justice
- Chemicals of concern
- Material flows from manufacture and purchase to discard



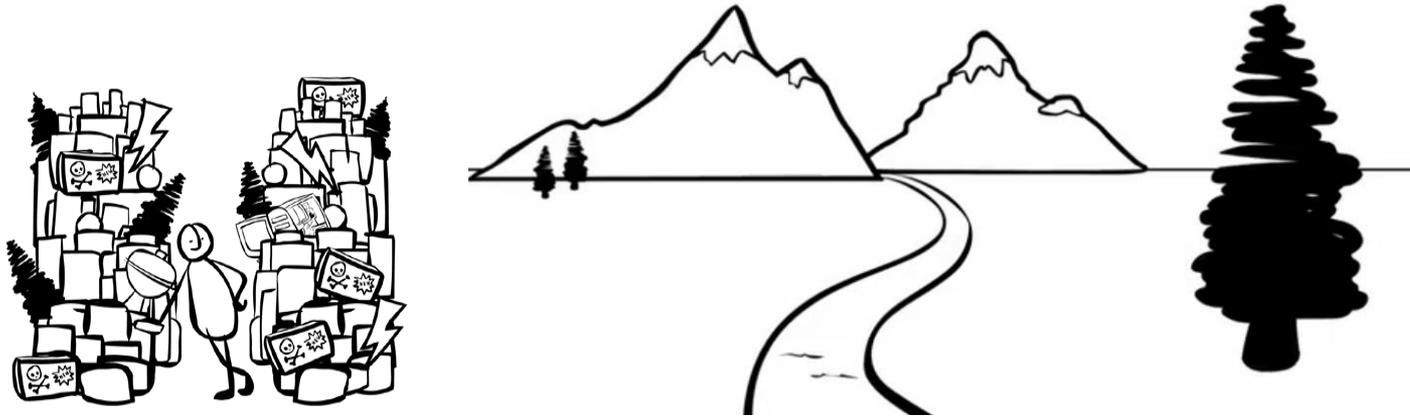
# Quiz Time!

Of what we put in our recycling bins,  
how much of it do you think is  
actually used to make new products?

# Recyclable Materials Collected, Utilized & Disposed in WA (2012)



# The *New Plan* for the Stuff



## The 2015 State Solid & Hazardous Waste Plan *Moving Washington Beyond Waste & Toxics*

# Plan Update Process

An aerial photograph of a winding asphalt road that curves through a lush, green, hilly landscape. The road has a double yellow line in the center and white lines on the edges. The terrain is covered in dense vegetation, including trees and shrubs. The sky is overcast, and the overall scene is a scenic view of a rural or mountainous area.

- Initial Input meetings
  - Fall & Winter 2013-14
- First Draft & Comments
  - Fall 2014
- Second Draft & Comments
  - Winter 2015
- Update Complete - June 2015!

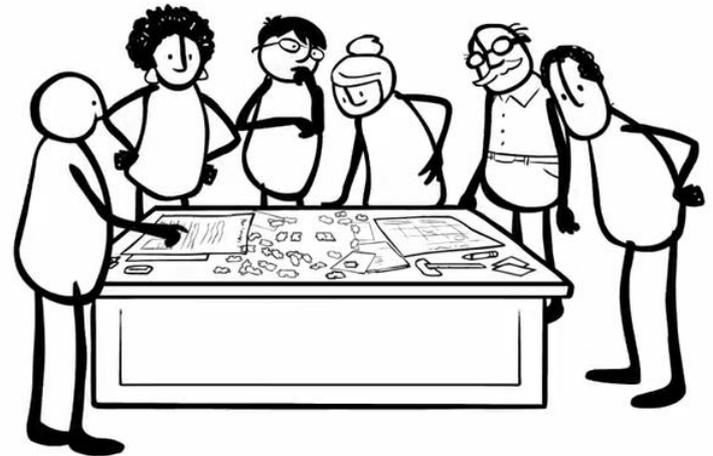
# What Did You Tell Us?

- Finance
- Outreach
- Data & Measurement
- Recycling needs work
- One size does not fit all
- Toxics
- Products and producer responsibility
- Support waste hierarchy
- Look at the big picture
- And more, lots more!

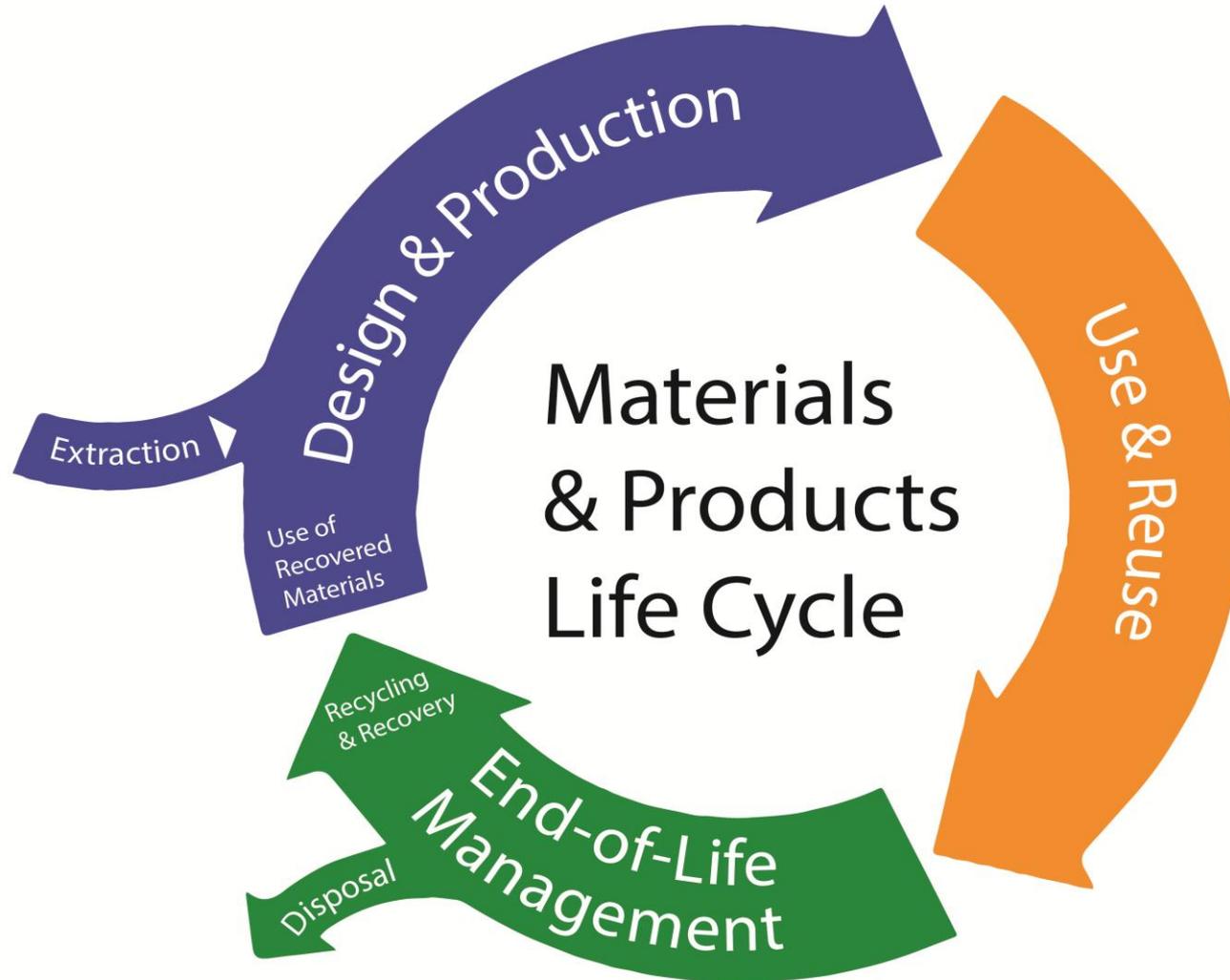


# What Did We Do?

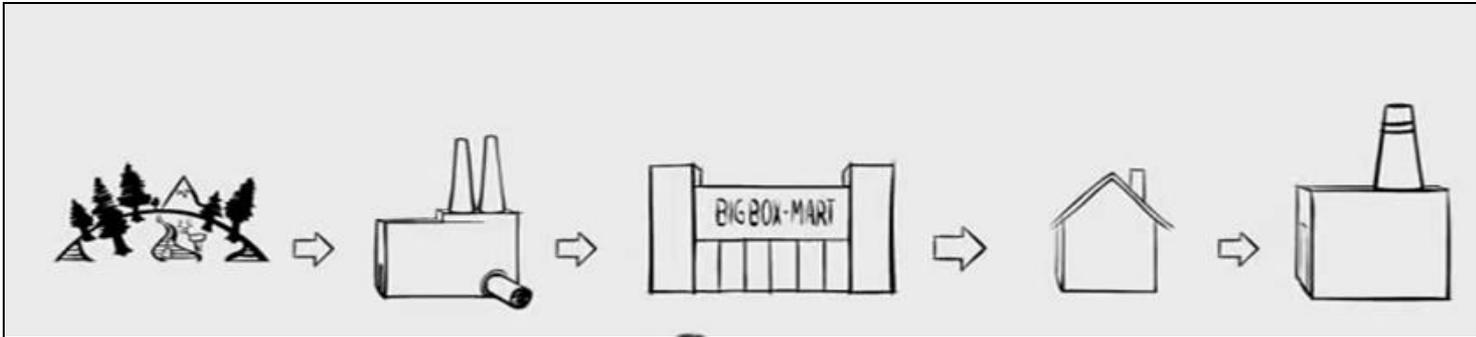
- We used your input
  - Keep vision and direction
  - Focus on current system and where we are now
  - Address the big picture



# Sustainable Materials Management



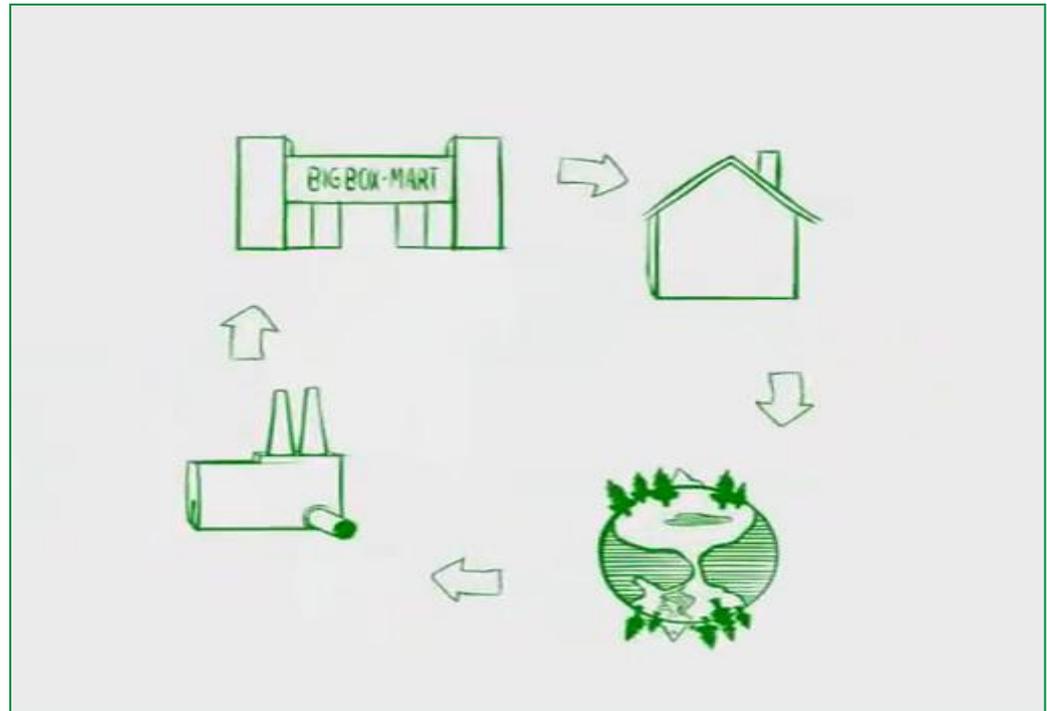
# Sustainable Materials Management



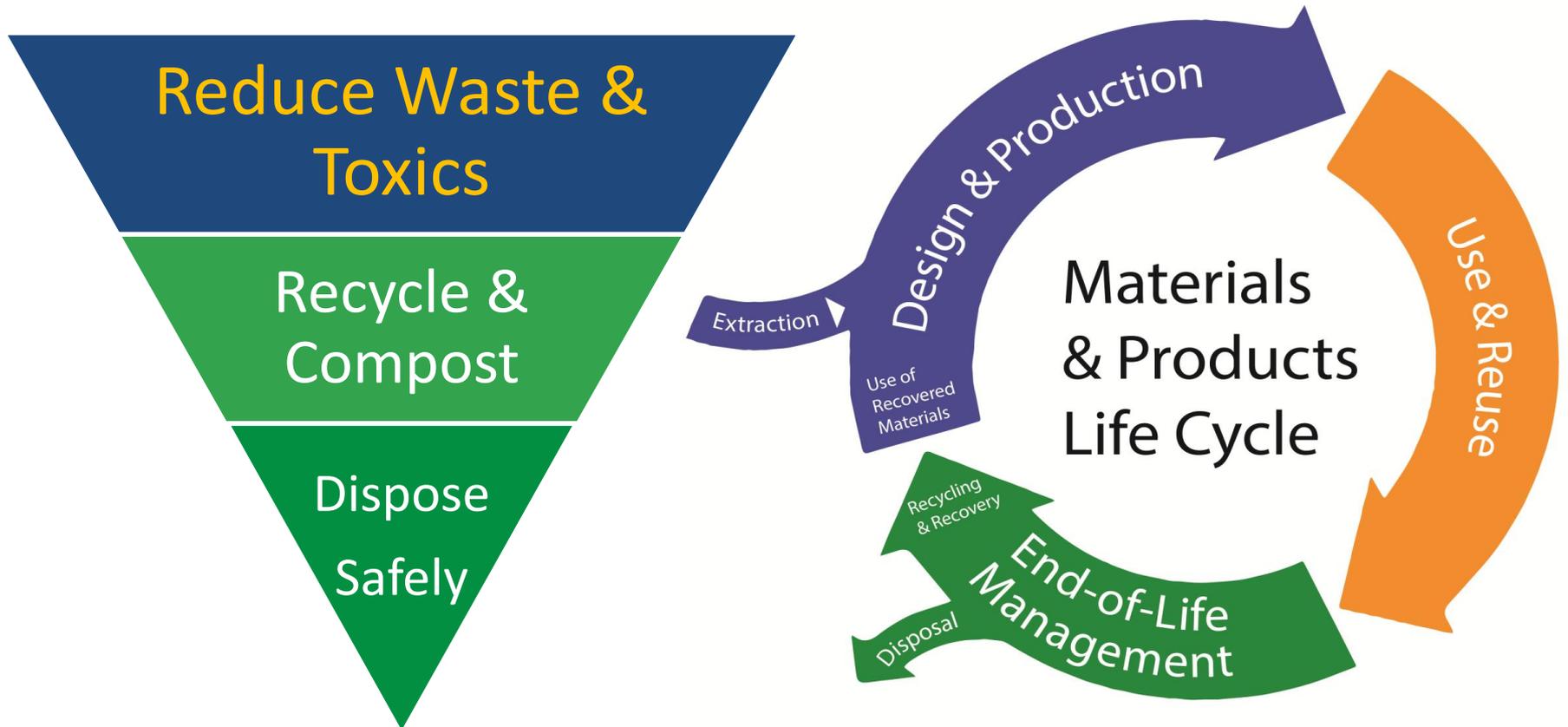
Move From This



To This

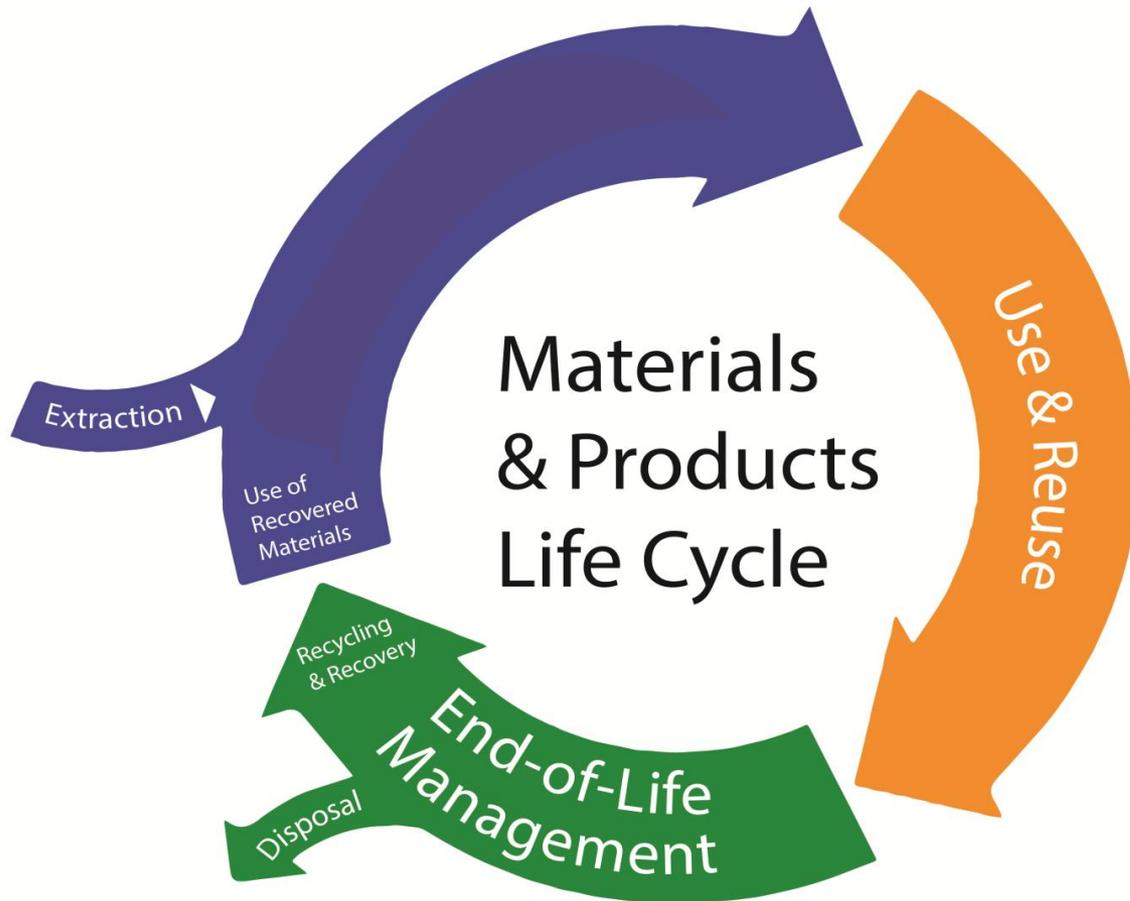


# Sustainable Materials Management *and the* Waste Management Hierarchy



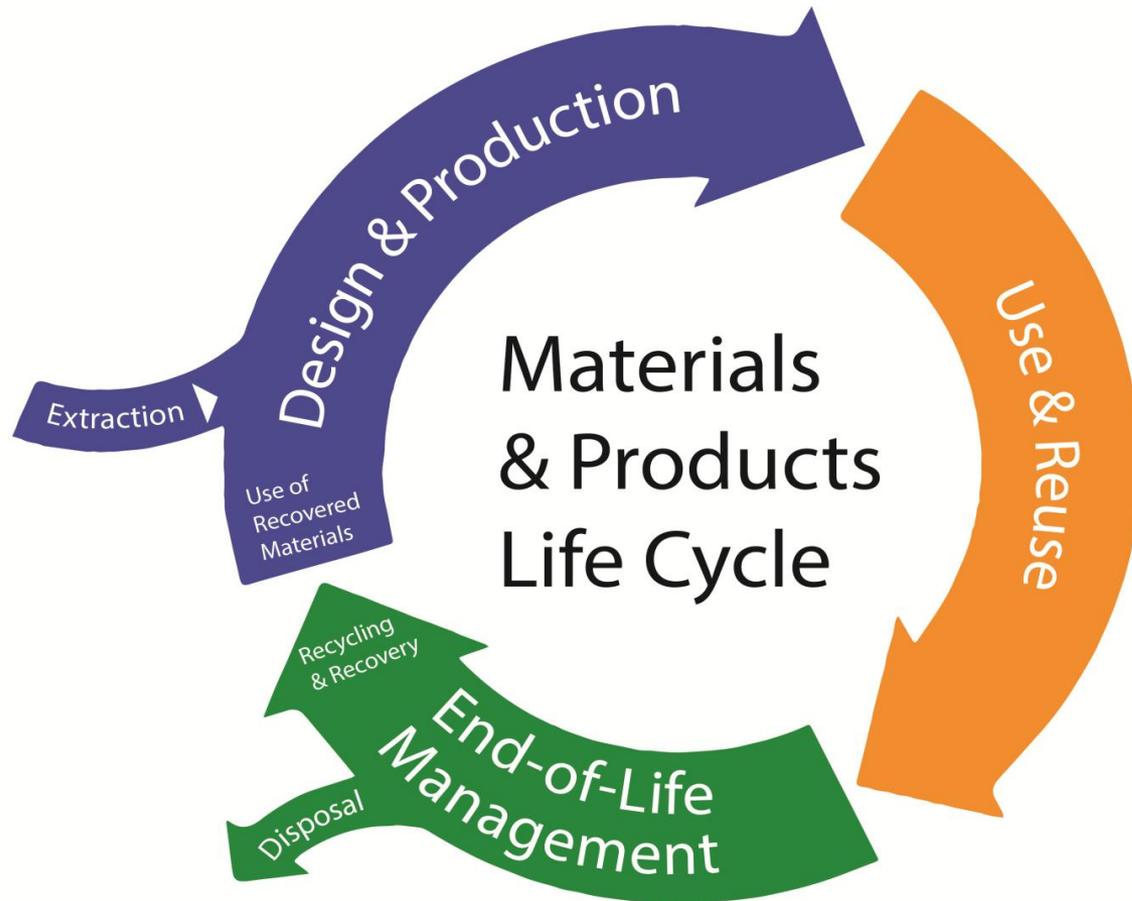
# Quiz Time!

What part of the cycle is missing?



# Quiz Time!

What part of the cycle is missing?



# 2015 State Waste Plan Sections

- **Managing Hazardous Waste & Materials**  
*(includes some MRW)*
- **Managing Solid Wastes & Materials**  
*(includes organics, some building materials)*
- **Reducing Impacts of Materials & Products**  
*(includes some MRW, building materials)*
- **Measuring Progress**
- **Providing Outreach & Information**

# Managing Hazardous Waste & Materials

- Includes three sections specific to hazardous waste program work -- and
- Small Volume Hazardous Materials & Wastes

## **Moderate Risk Waste** *(3 goals and 11 actions)*

- Maximize collection
- Increase access to services
- Well run facilities



# Managing Solid Wastes & Materials

- Solid Waste System Issues
- Solid Waste Materials & Infrastructure
- Organics Materials & Infrastructure



# Solid Waste System Issues:

*3 goals and 5 actions on:*

- **Finance mechanisms**
- **New statewide WRR goals**
- **Plans and grants**



# Solid Waste Materials & Infrastructure

*12 goals and 36 actions on:*

- **Reduce and Reuse**
- **Improved recycling, more access**
- **Litter, marine debris**
- **Sham recycling**
- **Facilities, Landfills**



# Organics Materials & Infrastructure

*12 goals and 36 actions on:*

- **Diverse organics infrastructure and markets**
- **Contamination concerns**
- **Recycled organics used to:**
  - + improve soil
  - + reduce water use
  - + clean water
  - + sequester carbon
- **Food waste prevention**
- **Organic waste management hierarchy**



# Providing Outreach & Information

*6 goals and 21 actions*

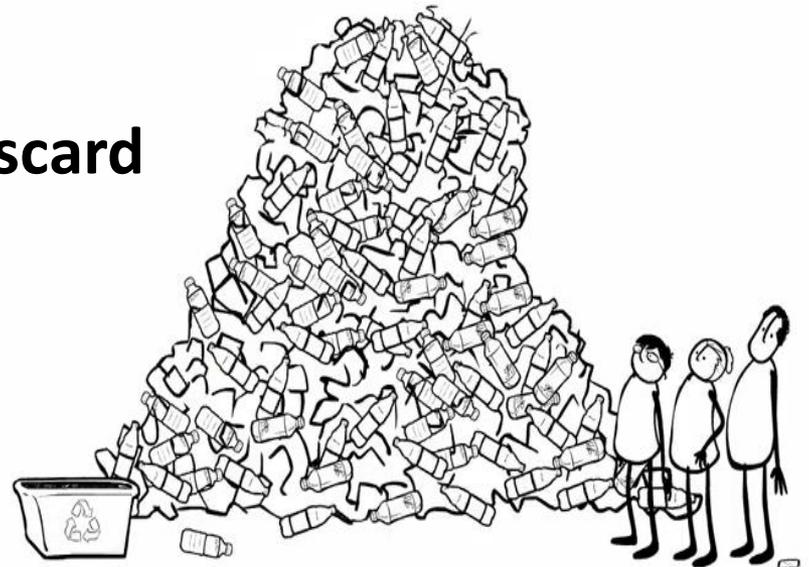
- **Outreach - in coordination with others - on:**
  - Hazardous waste management
  - Toxics in products
  - Composting
  - Recycling and waste reduction
- **Environmental Justice focus**



# Measuring Progress

*3 goals and 19 actions on:*

- **Evaluate efficiency, effectiveness and environmental justice**
- **Research and share knowledge of chemicals of concern in order to reduce toxics**
- **Measure material flows from manufacture, purchase and discard**



# Reducing Impacts of Materials & Products

*6 goals and 24 actions on:*

- *Making better stuff!*



- **More on this from Alli...!**

# Reducing the Toxic Stuff



DEPARTMENT OF  
**ECOLOGY**  
State of Washington



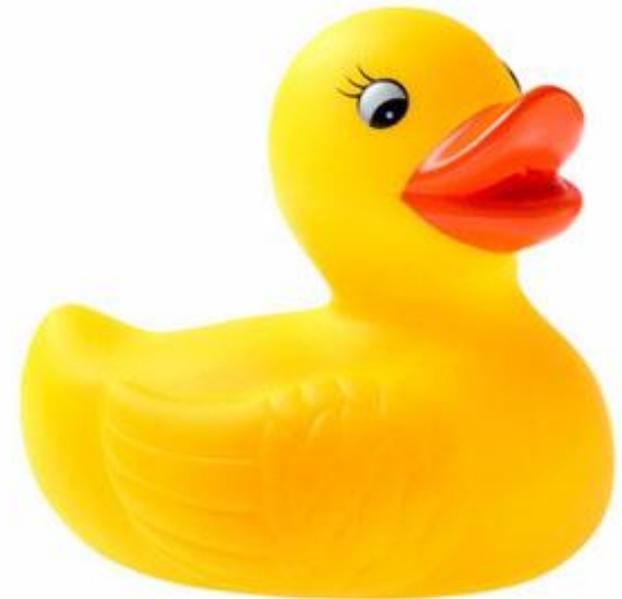


Speaking of Science

# Phthalates, found in hundreds of household products, may disrupt sex development of male fetus



By Amy Ellis Nutt March 6 Follow @amyellisnutt



To Your Health

# Toxic levels of a chemical in plastic medical devices could endanger preemies



By **Abby Phillip** November 13, 2014 Follow @abbydphillip



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[RCWs](#) > [Title 70](#) > [Chapter 70.280](#) > [Section 70.280.020](#)

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[70.280.010](#) << [70.280.020](#) >> [70.280.030](#)

## **RCW 70.280.020**

### **Prohibiting the sale or distribution of certain products containing bisphenol A.**

(1) Beginning July 1, 2011, no manufacturer, wholesaler, or retailer may manufacture, knowingly sell, offer for sale, distribute for sale, or distribute for use in this state, any bottle, cup, or other container, except a metal can, that contains bisphenol A if that container is designed or intended to be filled with any liquid, food, or beverage primarily for consumption from that container by children three years of age or younger and is sold or distributed at retail without containing any liquid, food, or beverage.

(2) Beginning July 1, 2012, no manufacturer, wholesaler, or retailer may manufacture, knowingly sell, offer for sale, distribute for sale, or distribute for use in this state, sports bottles that contain bisphenol A.

[2010 c 140 § 2.]

To Your Health

# Would you like your receipt? Maybe not, if it's still coated with BPA.



By **Lenny Bernstein** August 26, 2014 Follow @LennyMBernstein



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## Plastic Injectic Molding

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Health & Science

# BPA alternative disrupts normal brain-cell growth, is tied to hyperactivity, study says



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# Health impacts and common diseases/health conditions

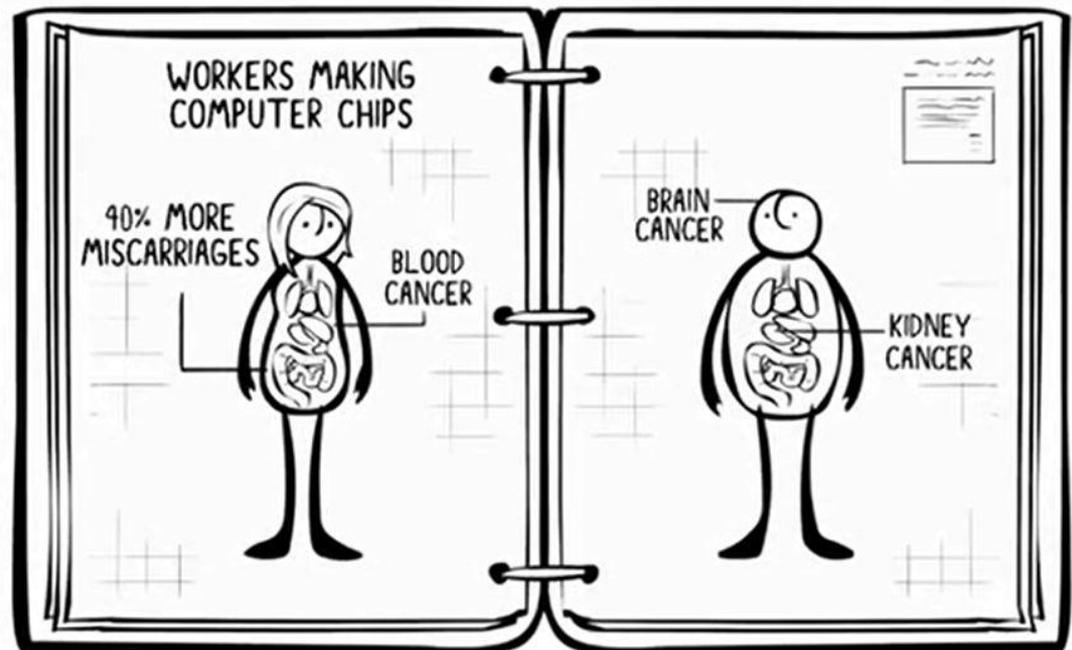
- Diabetics and Obesity  
(BPA & other similar chemicals)
- Parkinson's disease (Pesticides)
- Dementia (heavy metals)



# Health impacts and cancer

“The true burden of environmentally induced cancer has been grossly underestimated... chemicals on the market in the United States... are understudied and largely unregulated, (and) exposure to environmental carcinogens is widespread.”

President Barack Obama’s Cancer Panel, 2010



GABRIELE ALBANESI PRESENTS

# SURROUNDED

A FILM BY LAURA GIROLAMI AND FEDERICO PATRIZI



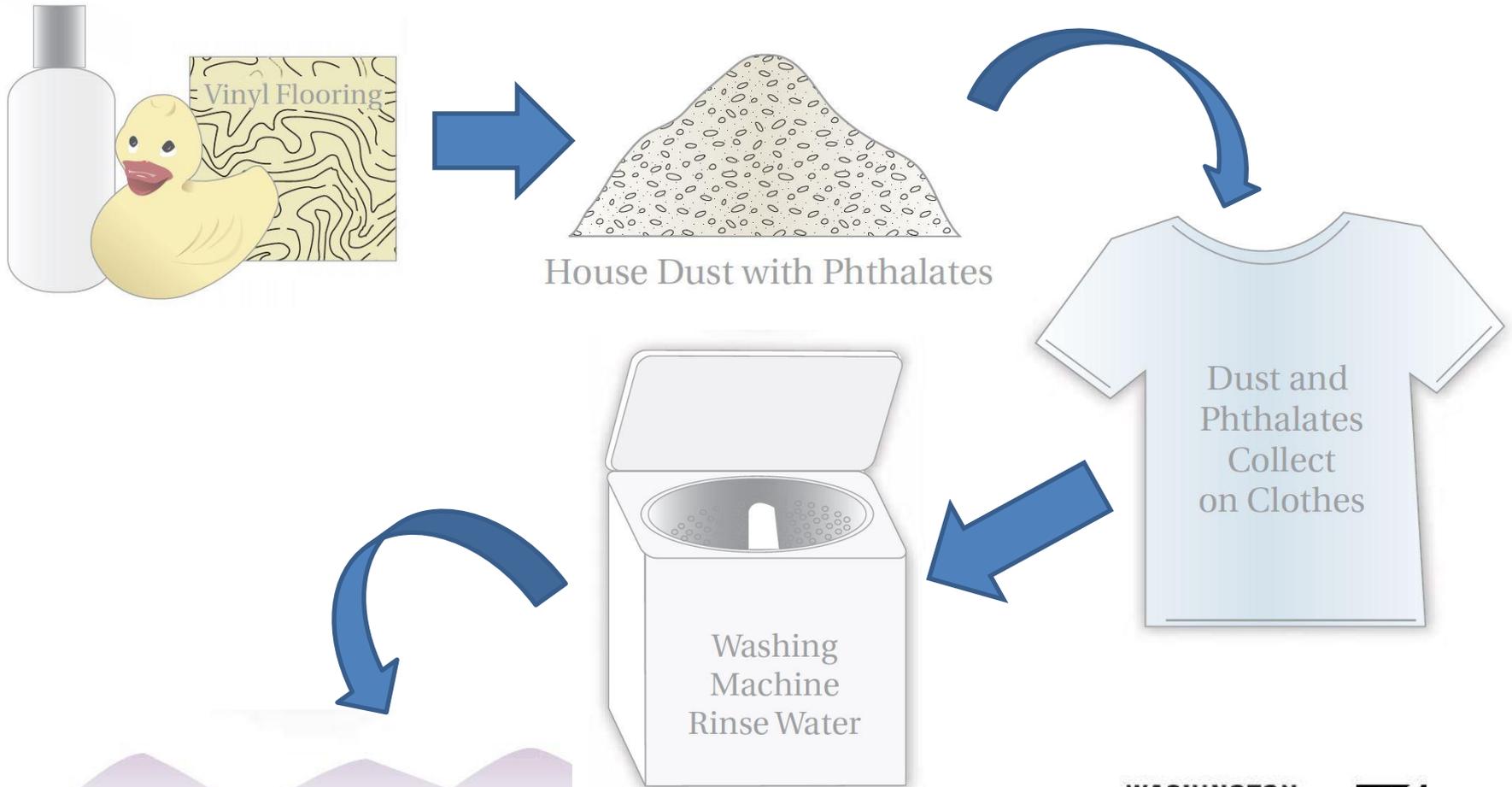
ARE YOU  
SAFE  
IN YOUR  
HOME?

MINERVA PICTURES PRESENTS A GABRIELE ALBANESI PRODUCTION "SURROUNDED" A FILM BY LAURA GIROLAMI AND FEDERICO PATRIZI  
STARRING TATIANA LUTER DANIEL BALDOCK EMANUELA BROCCHI MUSIC ANDREA BELLUCSI PRODUCTION DESIGNER DAVIDE NATALETTI  
SOUND PAOLO GIOLIANI SOUND DESIGN GIANFRANCO TORTORA CINEMATOGRAPHY DARIO GERMANI PRODUCED BY GABRIELE ALBANESI  
EDITED, WRITTEN AND DIRECTED BY FEDERICO PATRIZI AND LAURA GIROLAMI

Minerva Pictures GEMELLI ASSOCIATI S&P

# Puget Sound Down the Drain

## How Everyday Products are Polluting Puget Sound



**WASHINGTON  
TOXICS  
COALITION**

Protecting Health  
& the Environment

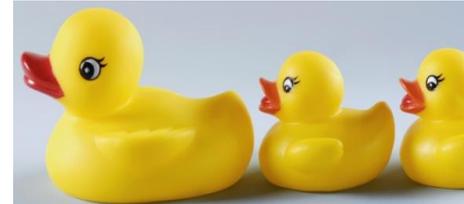




# How Toxic Flame Retardants Pollute Our Waterways

# Laws banning or limiting toxics in products

- Mercury reduction, RCW 70.95M (2003)
- PBDE flame retardants, RCW 70.76 (2007)
- Children's safe products, RCW 70.240 (2008)
- Lead wheel weights, RCW 70.970 (2009)
- Brake friction material, RCW 70.285 (2010)
- BPA in sports bottles, etc., RCW 70.280 (2010)
- Copper boat paint ban, RCW 70.300 (2011)
- Coal tar sealant, RCW 70.295 (2011)
- Limit PCBs in state purchasing, RCW 39.26.280 (2014)



# Product Stewardship

- Electronic Product Recycling , RCW 70.95N (2006)
- Mercury-Containing Lights, RCW 70.275 (2010)



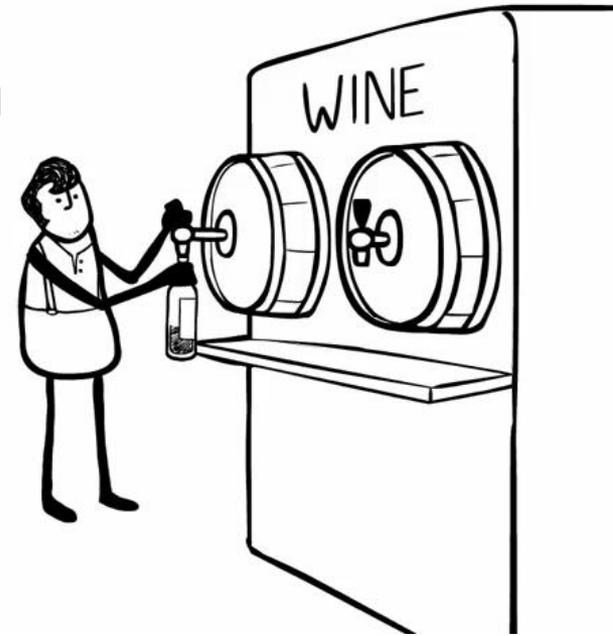
What does this have to do with the recycling industry?



# Toxic Contaminates are found in recycled products

Ecology's and other's tests has shown:

- Flame retardants in recycled foam
- Lead in some colored imported wine bottles
- PCB's in inks & dyes from paper
- Pesticides and other chemicals in compost



# Impacts on the Recycling Industry

- Perception issue of products being “clean”

**KOMO**news.com



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## Soccer coach: Could artificial turf be causing cancer?

By Gaard Swanson | Published: May 19, 2014 at 10:54 PM PDT | Last Updated: May 20, 2014 at 6:30 AM PDT



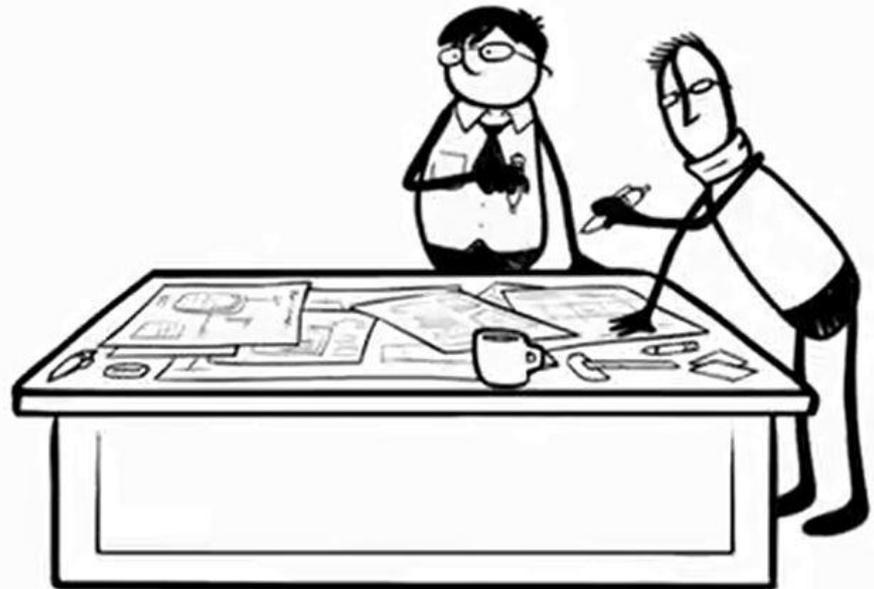
# Impacts on the Recycling Industry

- European REACH Standards may be a problem



# Why are we involved?

RCW 70.95C.010, “It is the policy of the state of Washington to encourage reduction in the use of hazardous substances...”



# What's in the Plan?

*6 goals and 24 actions on:*

- Learn more about chemicals of concerns
- More EPP and Product stewardship
- Design for durability, reuse and recycling
- Design of less toxics products
- Reduce non-point pollution



# What's Next



- Take action...!
- The plan will drive the work of Ecology
- We hope it also supports / aligns with work you are doing or want to do – after all, we used your input.

# Discussion

- How can we help move this work forward?
- What are actions you want to take?
- Other questions?



# Thank You!

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*And thanks to:*



DEPARTMENT OF  
**ECOLOGY**  
State of Washington