

Hosting a Zero Waste Event / Lessons Learned

October 2010



Pacific Northwest
NATIONAL LABORATORY

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What is a Zero Waste Event?

- ▶ Zero Waste suggests that the entire concept of waste should be eliminated.
 - Promotes not only reuse and recycling, but more importantly, prevention.
 - Waste may cause great loss of value and resources.
- ▶ We can learn to identify all types of waste and through their elimination, save money and achieve a more sustainable future.
- ▶ Events are geared to promoting reuse, recycling, composting or rethinking of materials that otherwise go into landfills.



How Does it Work?



Planning

- Plan events and menus that generate minimal waste (minimize packaging, reuse when possible, purchase recyclable products, or compost).



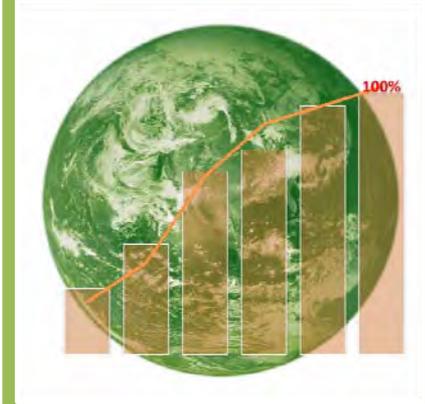
Setup Recycling Stations

- Determine waste streams to be generated and set up Recycling Stations to collect materials.



Event Day

- Have knowledgeable staff located at Recycle Station during the event to assist staff in properly segregating their waste.



Report success!

- If you don't report it, we don't know it happened. Measuring amount of waste generated vs. waste avoided is key to demonstrating a successful event.



Why Try Zero Waste?

- ▶ Idea came from Washington State Recycling Conference
- ▶ Coco Cola in Bellevue WA does zero waste as a policy (98% of materials)
- ▶ If Mariners can do it at Safeco Field for 40,000 fans, we can do it for 1,000 people picnic
- ▶ Increase staff awareness/participation in environmental stewardship
- ▶ Enhance operational excellence culture
- ▶ Demonstrate community leadership



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Zero Waste Events Results Summary

Event	Date	% Waste Avoidance	# Staff	Total Pounds per Staff
VPP Picnic	8/6/2009	88%	1,600	0.21
All Staff Salmon Bake	8/6/2010	95%	828	0.7
Sequim Seafood Festival	8/7/2010	91%	117	1.28
Business Directorate	8/18/2010	87%	300	0.22
F&O Directorate	9/8/2010	67%	500	0.29
VPP Picnic	9/15/2010	100%	1,600	0.22
Organizational Development Directorate	9/23/2010	93%	140	0.53
Average % Waste Avoidance =		91%		

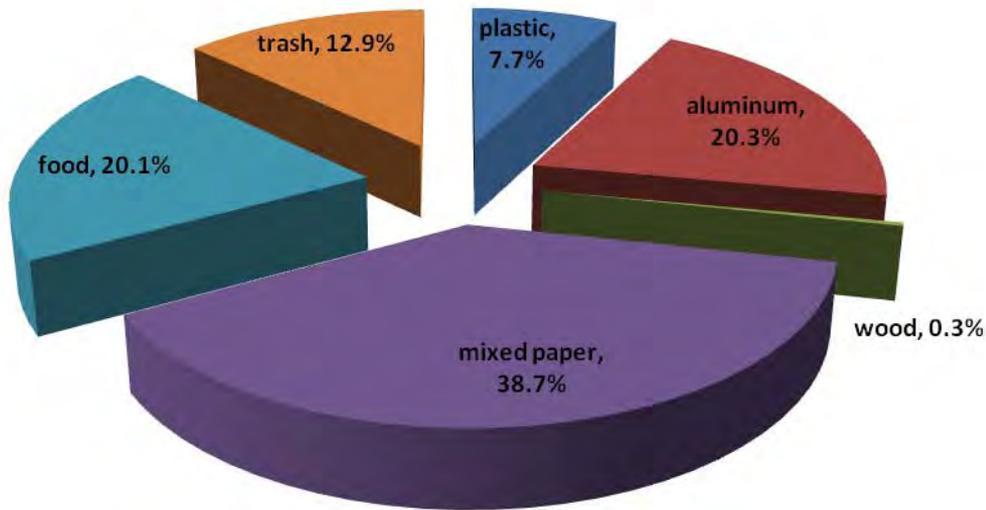


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Zero Waste Events Results - Example

2010 BSD STAFF BBQ - Waste Percent



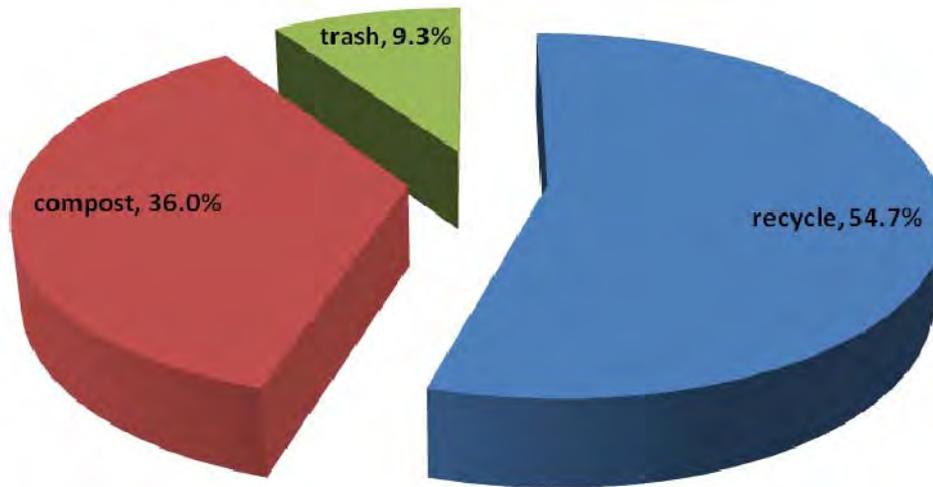
Number Employees	300
Total Waste	65.8 lb.
Recycle/Reuse	57.3 lb.

Itemized Breakdown:	
<i>Reuse</i>	
Food Waste to Pigs	13.2 lb.
<i>Recycle</i>	
Plastics	5 lb.
Aluminum	13.4 lb.
Mixed Paper	25.5 lb.
Wooden Sticks	.2 lb.
<i>Waste</i>	
Trash	8.5 lb.
Percent	87%



Zero Waste Events Results - Example

2010 Sequim Seafood Fest - Waste Percent

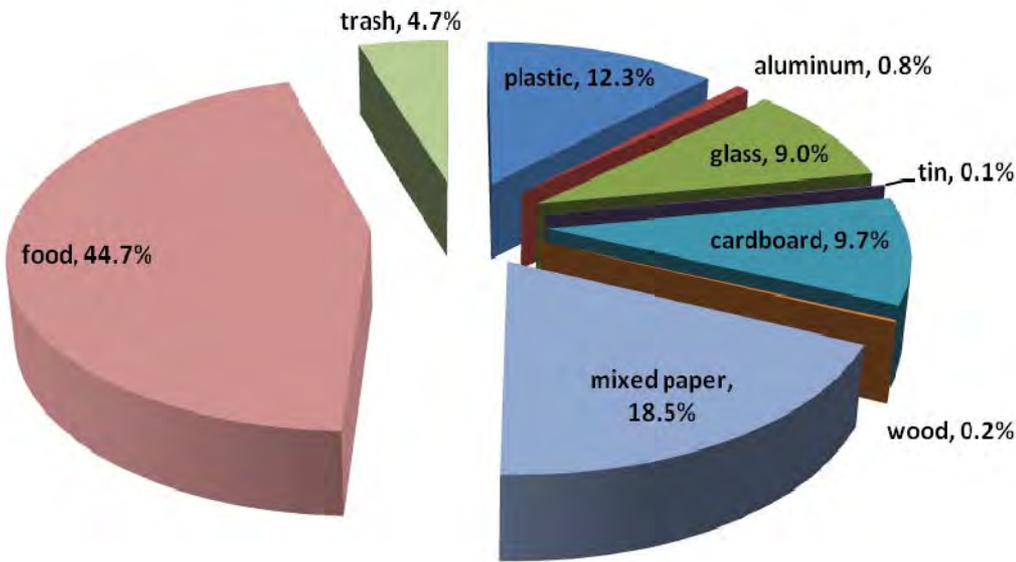


Number Employees	117
Total Waste	150 lb.
Total Recycle/Reuse	136 lb.

Itemized Breakdown:	
<i>Reuse</i>	
Food Waste (compost)	54 lb.
<i>Recycle</i>	
Plastic, Aluminum, Paper	82 lb.
<i>Waste</i>	
Trash	14 lb.
Percent Recycled	91%

Zero Waste Events Results – Example

2010 Salmon Bake Waste Percent



Number Employees	829
Total Waste	548.6 lb.
Total Recycle/Reuse	522.6 lb.

Itemized Breakdown:	
<i>Reuse</i>	
Food Waste to Pigs	245 lb.
<i>Recycle</i>	
Cardboard	53 lb.
Plastics	67 lb.
Aluminum	4 lb.
Mixed Paper	101 lb.
Glass	49 lb.
Tin	0.6 lb.
Wooden Sticks	1.1 lb.
<i>Waste</i>	
Trash	26 lb.
Percent Recycled	95%

How Did We Get Started?

- ▶ Worked with existing PNNL picnic event and found outlet for existing menu (e.g, chip bags and food waste)
- ▶ Convinced picnic planning committee, Recycling Team would take care of details and they didn't have to change anything.
- ▶ Engaged strong team of volunteers (e.g., Recycling Team) to staff stations and gave out lots of prizes.
- ▶ Worked with City of Richland on ideas and implementation
- ▶ Received good local press and got senior management's attention.





How Did We Get the Momentum Going?

- ▶ANYBODY?
- ▶ Put goals into our EMS!
- ▶ Develop Checklist and Built a Zero Waste Kit
- ▶ For those PNNL organization that didn't have goals, competition and lime light took over. Nobody wanted to be left out.

Achieve ZERO WASTE
Pacific Northwest National Laboratory

Did you know?
In 2009 PNNL staff produced 666 tons of garbage. That's more than 300 lbs per person!

What is zero waste?
Zero waste events encourage planning to minimize waste by implementing the "Reduce, Reuse, and Recycle" concept.

Why zero waste?
Waste causes loss of resources. A zero waste event can save money and help to achieve a more sustainable future.

How does it work?

- Plan your event and menus around minimizing waste
- Set up recycling/composting stations during the event
- Measure your success
- Questions or feedback? Contact pollution.prevention@pnl.gov

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What Did We Learn?

1. Plan Ahead



2. Volunteers are Key to Success

3. Logistics Matter – Make it Easy



1. PLAN AHEAD

- ▶ **OWNERSHIP** - Have picnic POC work with pollution prevention POC
 - They decide to go zero waste – opportunity to educate
 - Have POC evaluate waste and think about options (order in bulk, reusable silverware, bring your water bottle)
- ▶ **MENU PLANNING**
 - Know ALL waste being generated (wet wipes, soft plastic)
 - Avoid trash (e.g, individual packets of sauce)
 - Work with recycling vendor on current options (e.g. sugarcane plates, commingled plastic)
 - Menu selection matters and needs to be aligned with food waste options i.e., bones not good for pigs or composting
- ▶ **COMMUNICATE** – Engage communications staff early to get zero waste message integrated with event announcement

Example- Zero Waste Planning

Menu	Waste Stream	Disposition
Sausages	Paper Boats & Napkins	Mixed Paper – Clayton Ward
	Food Scraps	Food Waste – Collect for Pigs
	Condiments – Glass & Tin	Glass – Clayton Ward
	Condiments - Plastic	Plastic – Clayton Ward
	Vendor - Soft Plastic Bags from Buns	Collect and Place in Grocery Store Recycle Bin
	Vendor - Foil	Aluminum – Clayton Ward
Chips	Chip Bags	Box to Terracycle
Ice Cream	Ice Cream Wrappers	Mixed Paper – Clayton Ward
	Ice Cream Sticks	Wood Recycling – City of Richland
Drinks	Water Bottles (Prefer reusable)	Plastic – Clayton Ward
	Aluminum Cans	Aluminum – Clayton Ward
	Cardboard Box Tops from Soda/Water	Spudnut Shop Donation for Reuse



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2. VOLUNTEERS are KEY

► Volunteers

- Educate volunteers before event
- Monitor bins or scrape/sort for them. Need to educate staff or will contaminate whole recycle stream
- Have one volunteer work with vendors during event to collect foil, cardboard, soft plastic etc.
- Volunteers need to be nice but firm
- If not enough volunteers, consider non-profit organization



3. LOGISTICS MATTER – Make it Easy!

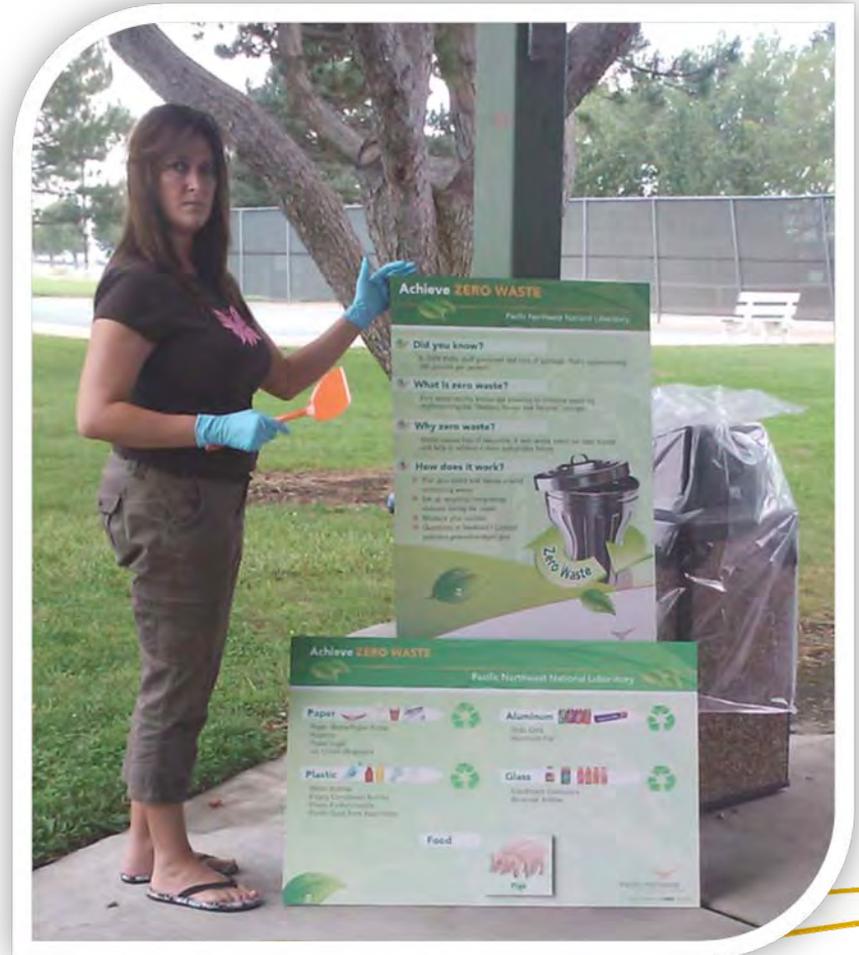
- ▶ Use Single Collection Area if Possible
 - Easier for Volunteers to help each other
 - More visible to staff
- ▶ Put ALL Trash Cans Out of Service
 - Use Black Trash Bags to cover or use cans as collection containers
 - Double Check for strays cans sitting out. They will fill up.
- ▶ Plan Recycle Bin Layout
 - Label Bins
 - Containers openings match material





Conclusion

- ▶ Takes time to teach someone how to “fish”
- ▶ Increased awareness on what and how to recycle
- ▶ Now folks ask, “Why isn’t this a zero waste event?”
- ▶ Still evaluating cost vs. benefit



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