

LET'S GO

ZERO WASTE

**A GUIDE FOR ORGANIZATIONS ON ZERO
WASTE EVENTS**





WHAT IS ZERO WASTE?

There are many different ways that people might think about zero waste. According to the U.S. Environmental Protection Agency (EPA), Zero waste can be defined as "The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."

When considering zero waste goals, most people incorporate ideas of eliminating waste through all waste streams, reusing the waste in other ways, and finding ways to make products more easily recycled and reused, and overall taking more consideration into the entire lifecycle of a product. There are many ways that people can go zero waste, including recycling, composting, and reusing products.

WHAT'S THE BIG DEAL WITH WASTE?

Practicing zero waste principals, like reusing materials, diverting waste, and composting rather than buying new and throwing away means you combat resource extraction and pollution, and help combat climate change.

Consumption contributes a great deal to climate change and pollution overall - the amount of energy that it takes to manufacture all of the “stuff” that we use on a daily basis expels large amounts of greenhouse gasses (according to the United Nations, the manufacturing industry is one of the largest contributors to climate change worldwide). The U.S. Environmental Protection Agency (EPA) has estimated roughly 42% of all greenhouse gas emissions come from the production of goods, food products and packaging. Once we are done using this “stuff”, they go to the landfills, where much of the inorganic waste that we produce can cause pollution and contaminate ecosystems. Reducing purchases of such products can both reduce their demand and reduce the amount of trash that lands in the landfill.

Aside from inorganic waste, the large amount of organic waste that we generate, like food scraps and yard trim, sits in landfills and expels methane, a greenhouse gas that is 28x as potent as carbon dioxide.

On top of all this, transportation was responsible for 28% of United States GHG emissions in 2022. Out of that 28%, 23% comes from medium and heavy duty trucks, like the kind that are responsible for transporting goods.(EPA) All of these emissions can be avoided when practicing zero waste.



WHY GO ZERO WASTE?

Because consumption of single use and disposable products can produce GHGs, our collective choices as consumers can have an important role in mitigating carbon emissions. Going zero waste is one way that we can do this. But why should you or your organization take this on?

Many zero waste practices help save money in the long run. Buying in bulk, purchasing reusable tableware, limiting the amount of food you serve, and upcycling can greatly reduce the cost might otherwise take to put on an event. Reducing waste can also help reduce disposal costs and save money on the additional resources it would take to help in the disposal process.

For organizations specifically, your efforts can signal to your community where your values lie, so efforts like this can have a positive impact on your organization's reputation.

Going zero waste presents a great opportunity for you or your organization to act as a model to the rest of your community. Research has shown that changing social norms can be achieved when as little as 25% of the people adopt the new behavior. By being a model for waste reduction, your efforts can serve as encouragement for others to follow in similar footsteps and increase community sustainability.

A little goes a long way - If all of Maryland's counties decreased the total amount of waste generated by just 1%, they could save nearly \$4 million in disposal costs

Events provide an especially good opportunity to implement zero waste practices; while events are fun, they produce large amounts of waste that often go towards the landfills – including food scraps, food ware, paper, cardboard, and other materials that could otherwise be recycled. For example, events waste about 15-20% of the food that it serves. At larger events like music festivals, 53,000 tons of waste can be produced (CNN). Promoting zero waste practices at events can help promote a culture of sustainability that can help reduce the amount of waste that we produce, and therefore the amount of pollution and greenhouse gases that we emit.



HOW DO I GO ZERO WASTE?

There are many ways that you can implement zero waste practices in your life! Implementing any action that reduces the amount of waste or products that will turn into waste will help you reach your zero waste goals. Overall, there are a few guiding principles to start you on your zero-waste journey:

- 1. Determine the greatest sources of waste.** This can be done by conducting a waste audit. [more information on page 7]
- 2. Set waste reduction goals.** You may want to try first to reduce overall waste by a certain percentage or to eliminate one or more specific kinds of waste that are among the greatest sources at your events. Then you can gradually work towards achieving zero waste events.

3. Prevent waste from the start by buying less or buying sustainable products.

4. Research options. This may include asking about options for waste reduction at different event venues, scoping the market for low waste supplies for purchase or rental, and learning about local options to recycle or compost food waste.

5. Communicate and educate. Make sure staff and volunteers understand your waste reduction goals and procedures. Consider educating participants through activities, signage, etc.

6. Plan for success. Make sure you have volunteers to assist with waste reduction efforts if needed, prepare bins and signage for collecting waste, recycling, and composting, etc.

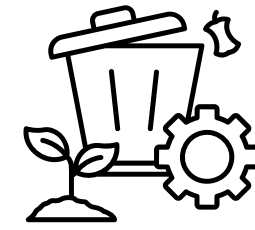


PLANNING FOR A ZERO WASTE EVENT

Planning ahead for a zero-waste event is critical. Without the proper help, signage, materials, waste receptacles, and disposal strategies, diverting waste and ensuring waste goes in its proper bin will be difficult.

Once you have established your waste reduction goals, the next steps finding a venue, gathering resources, getting extra help, and communicating your goals!

COLLECTING WASTE AUDIT DATA



Knowing what your waste goals are can help guide your next steps. Whether that be reducing a specific type of waste, a specific amount of waste, adding a waste stream, or increasing waste reduction awareness, there are many different ways that you can have an impact.

One way to help establish zero waste goals is to conduct a waste audit. A waste audit will allow you to build a picture of how much waste you generate, and where there is room for improvement.

Conducting a Waste Audit

What is a waste audit? A waste audit is an opportunity for you to get an idea of how much waste is normally produced in order to highlight opportunities for reduction. This is ideal for organizations that want to find ways to start increasing waste reduction efforts, or for organizations that want to improve current waste reduction efforts.

If you want to compare how well you did to other events, make sure to audit an event without waste reduction practices and compare it with your zero waste event audit. Having a baseline to compare your event with can help you understand the impact of your waste reduction efforts, and drive home the effectiveness to your eventgoers.

1. Gather a team (at least 5 people) to help conduct the waste audit
2. Pick a frequently occurring event within your organization to collect data from. This event will be your baseline for waste production.
3. It is highly recommended that protective materials such as grabbers, masks, goggles, gloves, etc. are used during the audit.
4. Consider observing the use of signage, bin placement, and how frequently bins are emptied during the event that you chose to audit.

During the audit (This step will be conducted after the event is over and before your waste is collected for disposal):

- Collect and place waste bags in a secure location.
- Label where the waste bags are coming from (landfill, recycling, or composting). Take pictures!
- Weigh each bag for total amount of waste. Note the total weight for each waste stream, as well as the weight of waste overall.
- Sort through the trash by categories (food, cardboard, aluminum, etc.), and then weigh each category. Make sure to note where there was contamination (items placed in the wrong bin), as well as which categories were high in contamination and which waste stream had the highest amount of contamination.

Common Waste Audit Categories:

- Glass
- Paper
- Signage
- Materials

- Cardboard
- Food waste
- Plastic bottles
- Packaging

- General plastic
- Aluminum cans
- Display materials

After the Audit

- Document the data of each category’s weight on paper or by video/photo - make note of which category was the largest and which one was the smallest. Note also which items were found in the wrong bin most frequently. Take your data and estimate averages, totals, and percentages. Some examples of questions to ask are:
 - How much of your recyclable or compostable material was placed in the right bin?
 - What percentage of your waste was contamination?
 - What percentage of your waste was diverted from the landfill?
 - What was the average weight of non-recyclable or non-compostable material?
 - How much of your waste was food waste?
- Visualize the data in pie charts, videos, graphs, bar graphs, etc. Share this information with your team and schedule another one for after your zero waste event to compare how you did.

SET A WASTE REDUCTION GOAL



Once you have collected your audit data, you can use this information to set waste reduction goals for your next event.

A few questions to consider as you are analyzing your data are:

- Which category of trash weighed the most? Which category weighed the least?
- Which category had the most contamination? Which category did most of the contamination belong in? Which bin would this waste should have gone in?
- Did anything surprise you about the data or the type of waste that you found as you sorted?
- How much waste did you generate in total? Is this more or less than you expected?



Once you have you have completed your data analysis and better understand the strengths and weaknesses of your waste collection process, you can start to set goals.

Some areas for improvement might include:

- Determine how much waste you want to prevent from being sent to the landfill for your next event. This will be your waste diversion goal.
- Add composting to your waste stream
- Identify single use plastic items you commonly find in your waste and replace these items with reusable, compostable, or recyclable items
- Increasing or decreasing the number of waste receptacles you have available
- Improving waste signage and education where needed
- Improve on communications with eventgoers before and during the event your organization is hosting
- Increasing the amount of compostable or organic material that your find in your waste stream
- Creating event policies that can reduce the use of single use items or plastic that you find in your waste stream (ex. Requesting that guests bring reusable water bottles rather than providing plastic bottles for them).

PREVENTING WASTE



Purchase Less

The first step in preventing waste is to purchase less of it. There are several ways to avoid purchasing new items, including renting items, using donated or borrowed items, or upcycling and repurposing items already at hand.

Rent or Borrow Items

Renting or borrowing items for your event can significantly cut down on costs, and help reduce the use of disposable items. Some options include checking out items from the Elkridge Library DIY Center, renting items from a catering company or a rental company, or asking willing members of your organization to bring in items to use for the event. Renting or borrowing is an especially good option if your organization does not host events frequently. Resources for rentals can be found at the end of this guide.

Upcycling

Upcycling can be both sustainable and fun! Reusing materials you have on hand can give you the chance to get creative, and make for unique decorations or tableware and make your event stand out even more. Some ideas are:

- Reusing old wine bottles as vases
- Reusing old jars or mugs as cups for hot and cold drinks
- Crafts from on-hand materials for goodie bags
- Reuse or make decorations like streamers or banners using old CDs, yarn, newspaper, or cloth

Examples of areas to consider reducing waste are:

Goodie Bags and Giveaways

A good way to reduce waste from goodie bags and giveaways is to not provide them at all! There are many other ways that you can show your appreciation to guests.

If you must, provide gifts and goodie bags, purchasing fewer, more sustainable items will make a bigger impact when it comes to giveaways. Consider the lifespan of the items that you are giving away to event goers - a reusable water bottle might have more use than a rubber bracelet.

Event Supplies

Investing in reusable or compostable supplies can pay off in the long run. This helps prevent single use plastics and paper products from ending up in the landfill, and helps save money when it comes to purchasing more supplies for future events. Other good tips to consider when purchasing supplies include:

- Buy in Bulk

Companies and contractors may provide discounts to those that order these supplies in bulk. This helps you save money, ensure that you have the appropriate amount of items for your event, and reduce the amount of plastic packaging used. This is a good tip especially for tableware.

- Supply Reusable Amenities/Provide Incentives

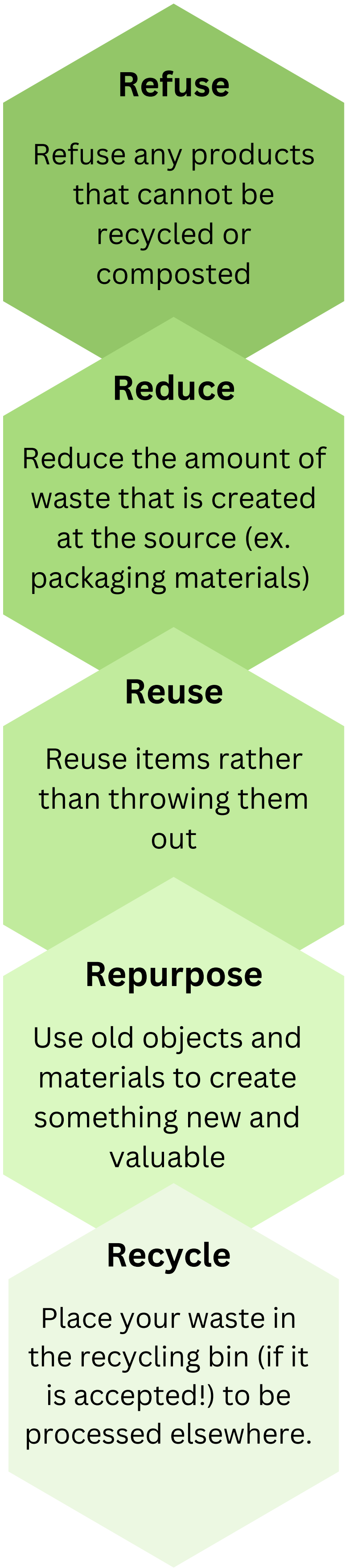
One source of waste that can be avoided during events are plastic products and disposable packaging, including plastic water bottles. Where you can, provide guests with incentives to bring in their own items from home. For example, provide water dispensers that will allow guests to bring their water bottles from home, rather than handing out plastic water bottles.

Decorations

Decorations can often be an unexpected source of waste during some events. Decorations can present an opportunity for organizers to get creative - buying decorations that can be recycled or composted are good alternatives to disposable decorations.

You can also get creative by determining what decorations can be reused or repurposed for future events. You can even make your own decorations from recyclable or compostable materials if you are feeling crafty!

THE 5 RS OF WASTE REDUCTION



Most Preferred

Least Preferred

There are many ways that this can be accomplished, including using **The 5 Rs** of Waste Reduction and buying waste free as much as possible.

According to the MDE, Source Reduction is the prevention of waste before it is generated. The Five Rs are a good tool to use to help remember the best ways of reducing waste, starting with prevention, and ending with disposal.

SOURCE REDUCTION FOR FOOD WASTE

In a similar vein to the Five Rs, source reduction, this same idea can be applied to food waste prevention at events as well. The EPA has created a scale depicting the best methods for food waste prevention.



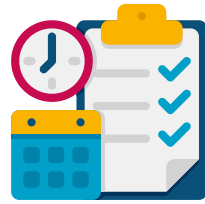
A list of Howard County organizations that can accept food donations is included in the Appendix.

RESEARCH FOR SUCCESS



Doing research before planning any event is important, and the same goes for a zero waste event! Below are some tips on research that will help ensure you reach your zero waste goals.

FINDING A VENUE



Where you host your event can have a big impact on the level of planning you will need to do to mitigate your waste production. The host venue might have their own unique rules and protocols that could impact your own waste goals.

Therefore, its important to ask questions up front if you are interested in reducing the amount of waste that your event produces. Once you decide to work with venue, you will have to abide by their rules. **Check in with the venue to learn more about their already existing waste policies/procedures and existing waste infrastructure.**

Some good questions to ask are:

- Do they have waste signage or clearly labeled waste bins? How many receptacles do they have in the event space?
- Do they compost?
- Do they have water bottle filling stations?
- Do they have access to reusable or compostable event supplies and food ware?
- Do they allow outside vendors? If so, can they make a request for vendors to reduce their waste or eliminate use of plastic supplies?

If venue does not have policies, you can communicate with the venue ahead of time and create your own policies.

Other venues might have their own policies about what types materials you can use during events when serving guests and decorating. For example, the Howard County Conservancy has a no plastics rule, where guests may only bring in compostable or recyclable materials. Any other sorts of waste that cannot go into these categories should be thrown away by the guests or event host at a separate location.

COMMUNICATE AND EDUCATE



Communication is key! Having clear communication with both the venue and event guests about your goals will give everyone time to prepare and consider their own choices during the event.

Depending on the nature or size of your event, the following recommendations may or may not be applicable. These recommendations may be more helpful for larger events, or events with ≥ 200 guests, while smaller events may have ≤ 200 or less guests.

Communicating with Vendors



Based on your waste reduction goals, create rules or policies for your event and make sure the vendor (people that are tabling or selling goods or services) that are tabling or selling items understands your goals. The vendors may be able to help give you extra support and any extra supplies that they have on hand to help you achieve your goals.

The same can go for food caterers - communicating your goals and expectations to any food suppliers or outside vendors can give vendors plenty of time to prepare and adjust. This can include the requirement of reusable, recyclable or compostable materials in contracts or agreements. This also gives you time to adjust if vendors are not able or willing to accommodate for your waste reduction goals.

Asking for any additional advice from the vendors and caterers you are working with on waste reduction strategies can also be helpful, and can encourage further and open conversation between your team. This can also give you a better idea of what sorts of goals are feasible, and what might be more challenging.



*For larger events, it may be helpful to compile a list of items that are acceptable/not acceptable to use during the event. This list can be given to caterers (as well as guests) ahead of time to allow for sufficient preparation. For vendors, including a list of locations to purchase acceptable items can save time and make it easier for your vendors to help you reach your waste reduction goals.

Communicating with Event Goers



- Keep all communication between eventgoers (and vendors!) electronic. This will help save paper, and time.
- Let your guests know what your waste reduction goals are before the event. This will help guests know what to expect and encourage them to be more conscious of their actions during the event.
- Remind your guests what your waste reduction goals are during the event - this can be an opportunity to point out where available waste receptacles are, and what sorts of bins are available. This can also be done with clear signage on/near bins, effective volunteer placement, and periodic announcements throughout the event if necessary.

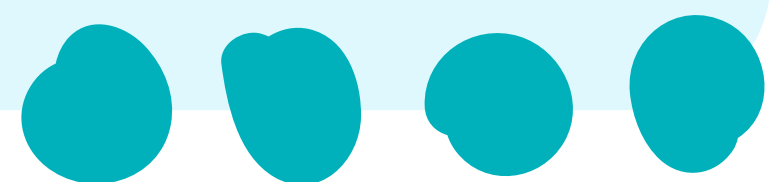
WASTE SORTERS AND GUEST EDUCATION



Knowing what goes in which bin can be confusing! Having extra guidance at waste bins can be helpful for event guests to decide where to place their waste.

- Having roles such as waste monitors at receptacles can help hold guests accountable and encourage them to pause before throwing their waste away. If waste monitors are equipped with the right tools, they can also help sort trash and reduce contamination as it is being accumulated.
- Providing larger waste stations are also a good option to have - these stations are often locations where larger bins for each waste stream (landfill, recycling, and composting) are placed next to each other. These present convenient locations for guests to find and dispose of waste, and ideal spots for waste monitors to be stationed.

Extra education on waste reduction can be useful, if you are able to add it. For example, [this jurisdiction in South Carolina](#) included a waste sorting station at their event to help educate guests on the importance of waste reduction as they disposed of their waste.



VOLUNTEER EDUCATION

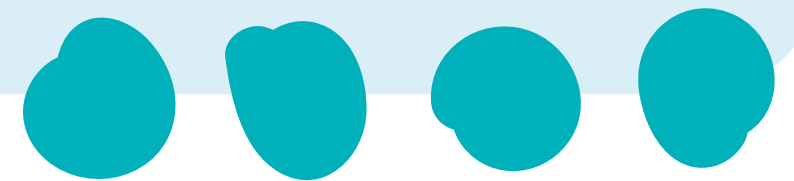


Ensuring that your volunteers understand how to sort waste is just as important as communicating with your event guests. Here are a few ways to help educate your volunteer team on waste reduction:

- Communicate the waste reduction goals of your event to your volunteer team and ensure that they understand what is needed to help achieve these goals.

Here is example language used to communicate with vendors at GreenFest 2024:

“In the spirit of waste reduction, this year we are asking all vendors to prevent waste by being more mindful of their giveaways and table items during the event. Some ways to do this are by giving away fewer items, using items that can be easily recycled, that are sustainably sourced, that are not single-use plastics, or giving items that have more longevity and are more likely to be kept and used in the long term. GreenFest will have trash, recycling and composting options for waste created during the event, particularly near the food vendors.”



- Talk to your volunteer team about the importance of waste reduction. Working with a team with a vested interest in your goals will help make your efforts more successful!
- Make sure that volunteers know which disposable items at your event are recyclable or compostable, and which ones are not before your event starts. This will allow them to help guests place their waste into the proper bins. Volunteers can also serve as an extra resource to guests for any questions that they might have.
- Make sure that your volunteers understand any waste reduction policies you have in place. Having extra support can help ensure that vendors and guests are abiding by the policies that you have set for your event.

PLANNING FOR SUCCESS



RECEPTACLES



Having accessible and clear receptacles is your first line of defense against waste.

Having a bin for each waste stream

Depending on the type of waste that you are expecting to be generated at your event, it is important to include receptacles designated for each type- landfill waste, recycling, and organic waste.

Knowing what is/is not accepted in recycling in your area

Recycling can be confusing! One way to help understand what can and cannot go into the blue bin is to check what is accepted in recycling in your jurisdiction. This will make it easier for you to identify what waste at your event can be recycled, and it can prevent any waste that is not accepted from going into the landfill.

Signage and accessibility

Keep things consistent, clear, and easy to locate. Having signage that is easy to identify, read, and find will make the waste reduction process go smoothly and help prevent the amount of contamination that may result from confusion and misunderstanding. Having bins that are easy to locate will also make it easier for guests to dispose of their waste, rather than holding onto it and disposing of it in a spot that is not suitable, or in an incorrect bin.

EXAMPLES OF SIGNAGE

Howard Community College

Howard Community College has a very committed team behind their waste management efforts. The following examples include images of a of waste station signage and disposal bins at Howard Community College containing all three waste streams, a landfill and recycling station, and signage used to indicate where composting bins are available and what can go into composting bins.



Example of a waste station. Each waste bin has clear signage, color coding, and different slot shapes to accommodate for various types of waste.



Example of recycling and waste bins with clear signage on campus. Placing each waste stream next to each other can encourage people to recycle.



Example of compost signage, including image of BPI Certification label, and items that can be placed into this bin.

Oakland Mills Interfaith Center

Oakland Mills Interfaith (OMI) has implemented many efforts to reduce their overall waste production through composting, using waste bin signage, purchasing compostable materials and reusable table clothes, and encouraging the use of reusable water bottles.



Example of a waste station at OMI. This station includes all three waste streams and signage for each slot.



Example of compost bin in OMI



Image of signage included on waste station with example images of items that are accepted.

The most recognizable colors for each waste stream are grey/black for landfill waste, blue for recycling, and green for organic waste.



*One method to try is to use signage with images of the supplies being used at your event. This would allow for guests to easily identify which bin to place the items they are trying to dispose of. This method may work especially for smaller events, where event planners are able to determine what supplies are being used beforehand.

GETTING HELP BEHIND THE SCENES

Finding Extra Hands

Depending on the size of your event, you may find it helpful to have extra staff or volunteers to help you reach your waste reduction goals. Having extra help can help prevent waste contamination, increase guest education, help monitor waste bins, and help manage the logistics that go into managing waste during an event.



For smaller events, reaching out for a few extra volunteers might be sufficient. These volunteers might be bin monitors or additional resources for questions that guests might have.

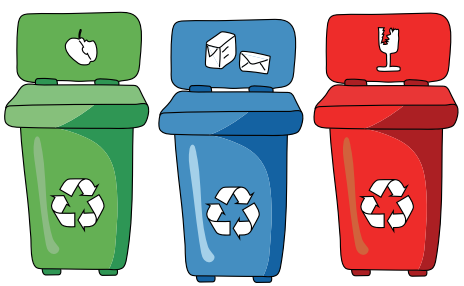


Roles and Responsibilities

There are several different roles that may be helpful to help manage waste at a larger event:



- **Zero Waste Lead:** This person would be responsible for observing and communicating any obstacles to waste reduction that may come up, creating a waste collection schedule, manages logistics for waste removal, and leading a waste audit and measurements of collected waste.
- **Waste Bin Monitors:** These people would be responsible for ensuring that event guests dispose of their trash in the correct waste bins to help prevent contamination.



- **Waste Collectors:** Waste collectors would be responsible for making sure that waste bins are emptied and each waste stream is collected and taken to the right place for later disposal.
- **Waste Educators:** A waste educator might be tied into all of these roles. A waste educator helps educate guests about waste reduction goals and the importance of waste reduction. They may do this through ensuring announcements are made within event invitations, policies and goals are made clear to volunteers before the event and being the point of contact for any questions guests have before and during the event.



- **Vendor Liaison:** A vendor liaison would coordinate with vendors and caterers on goals of the event, maintain contact with vendors, and monitor materials that vendors are using during the event to ensure anything bought in is also taken out and that they are adhering to waste reduction goals and agreements.

AFTER THE EVENT



COMMUNICATING SUCCESS

After the event, it is important to reflect and evaluate the success of your efforts. In order to do this, there are several things that you can do:

- Conduct a waste audit
 - Conducting a waste audit after your event can help you measure the amount of waste diverted and the overall success rate of your efforts. Information on how to conduct a waste audit can be found on Page 7.
- Create post-event surveys for volunteers and vendors
 - This survey can include questions to help determine the effectiveness of waste reduction strategies and methods used, and where there can be room for improvement. Examples of some questions are:
 - How much contamination did you encounter throughout the event?
 - Did guests ask many questions about where to put waste?
 - How effective were waste bin signs during the event?
 - How efficient was waste removal and bag replacement? Were bins ever too full during the event?
 - Did you feel that you had enough waste sorting supplies and trash bags during the event?

- Collect feedback from guests
 - Collecting feedback from guests can help show how successful your communication, outreach and education efforts are in helping guests sort their waste and educating them on the importance of waste reduction. Examples of questions that you may ask are:
 - How much did you consider your waste choices before the event? Do you think this will change after attending this event?
 - Do you feel that you can sort waste more accurately now after attending this event?
 - How important do you think waste reduction is prior to attending the event? How important do you find waste reduction to be now after attending this event?

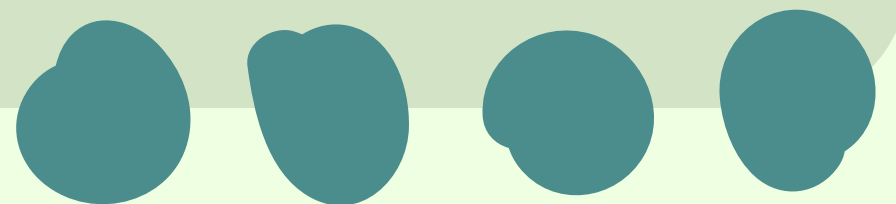
Once you have completed a waste audit and measured the amount of waste you were able to divert, let your event guests, volunteers, and vendors know how they did! Sharing how successful the event was can further emphasize to event goers and volunteers the impact of the measures you have taken to reduce waste. This can also demonstrate to them the impact of their own choices and actions, even at events!

Zero Waste: A Case Study

While there are many different ways that someone can go zero waste, events provide an especially good opportunity to implement zero waste practices; while events are fun, they produce large amounts of waste that often go towards the landfills – including food scraps, food ware, paper, cardboard, and other materials that could otherwise be recycled or composted. Events present a great opportunity to divert waste and help educate community members about zero waste.

In order to demonstrate the effectiveness of the practices recommended in this guidebook, a case study event was planned. The goal of this event was to divert as much waste as possible, while and educating eventgoers about waste reduction in its different forms. The success of this event in terms of waste reduction was measured through a waste audit after the event.

The event conducted for this case study was planned for an audience of middle school students in collaboration with the Howard County Conservancy and Youth Climate Institute (YCI) students.



What makes an event zero waste?

A zero-waste event is typically defined as an event that produces 10% or less landfill waste – or in other words, an event that achieves 90% diversion of waste from landfills. The following section uses the previously mentioned steps to carry out a zero waste event. This is just one example of how a similar event can be used with waste reduction principles in mind.

Planning the Event

The purpose of the event was to help educate middle school students about environmental issues within Howard County, specifically related to waste reduction. The majority of speakers that attended this event spoke about topics related to recycling, composting, or upcycling. Specifically, these activities were composting demos, discussions on fast fashion, creating seed bursts, and my zero waste discussion and activity.

In planning and promoting the event, all communication for the event was electronic, so as to save paper, as well as the time it would take to meet in person and hand out physical advertisements.

In order to help prevent waste, I encouraged that only compostable items be used during the event, specifically food ware items. Fortunately, because the Howard County Conservancy is already vigilant in terms of waste reduction, compostable food ware was easily accessible to us through the Conservancy’s already existing supply.

In preparation for the event, I created an activity for the students to help them better identify and sort waste into three different categories: landfill, recycling, and composting. To make the activity more engaging, I made the event into a scavenger hunt where the students could search for different items of “trash” and sort them into the proper “bin”.

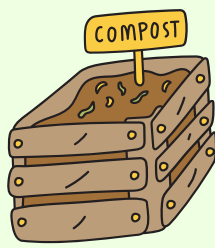


Example of waste sorting activity with sorted “trash” and waste categories.

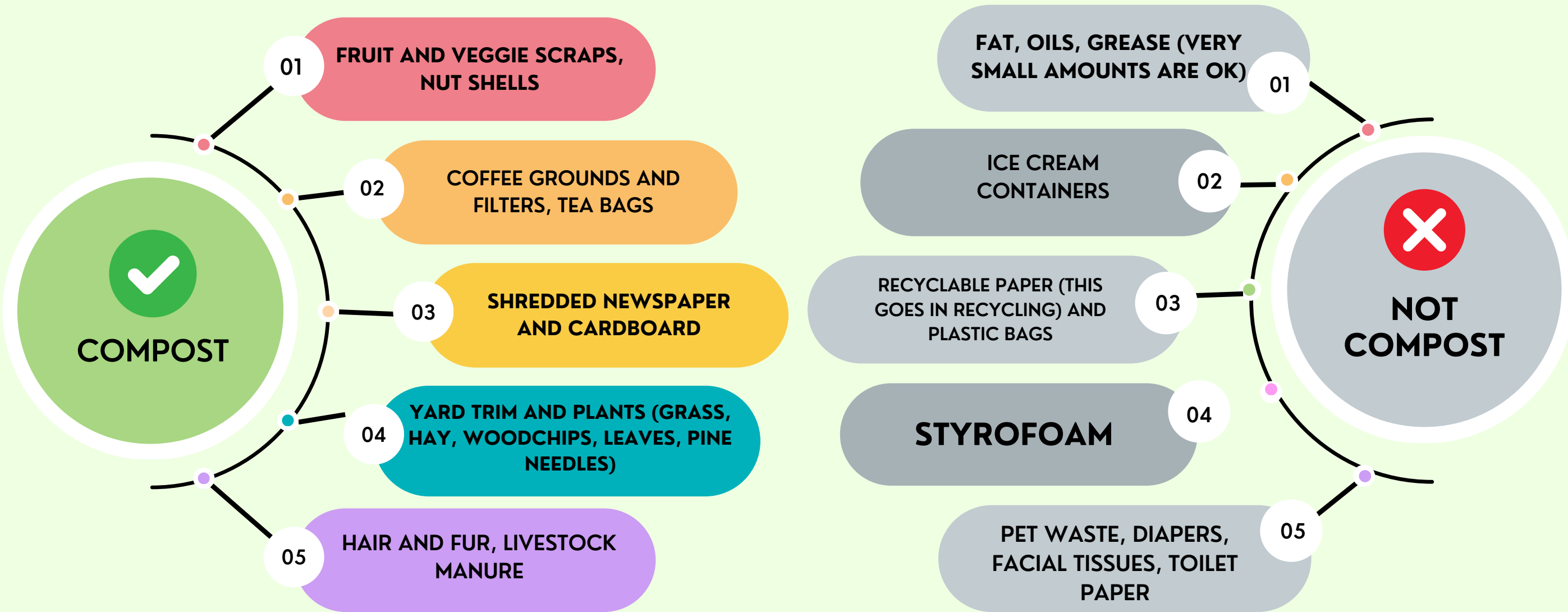


Photos from the waste sorting activity. I was able to share small graphics depicting what is and isn’t compost/recycling (bottom right image).

COMPOSTING MATERIALS



Items that come from a plant or an animal



RECYCLING MATERIALS

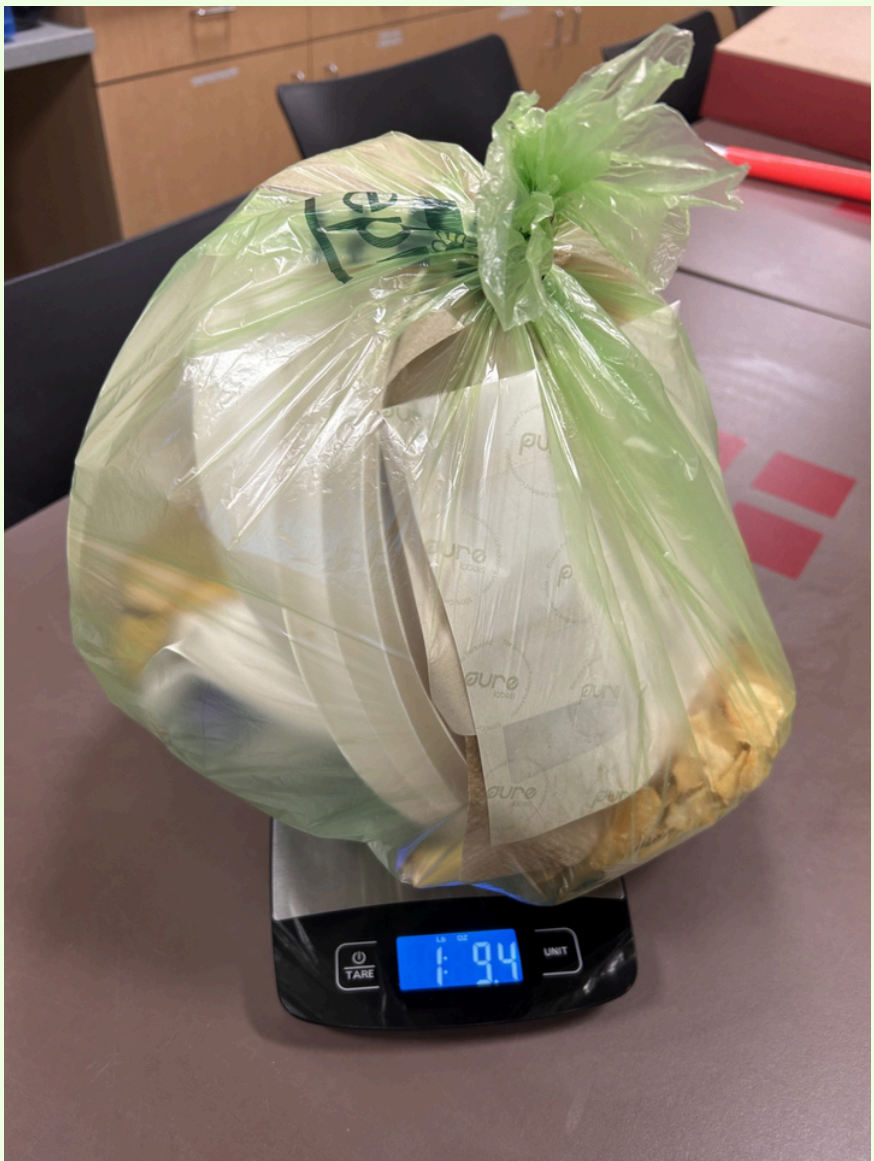


*DEPENDS ON THE MATERIAL..THIS IS WHERE IT CAN GET TRICKY!

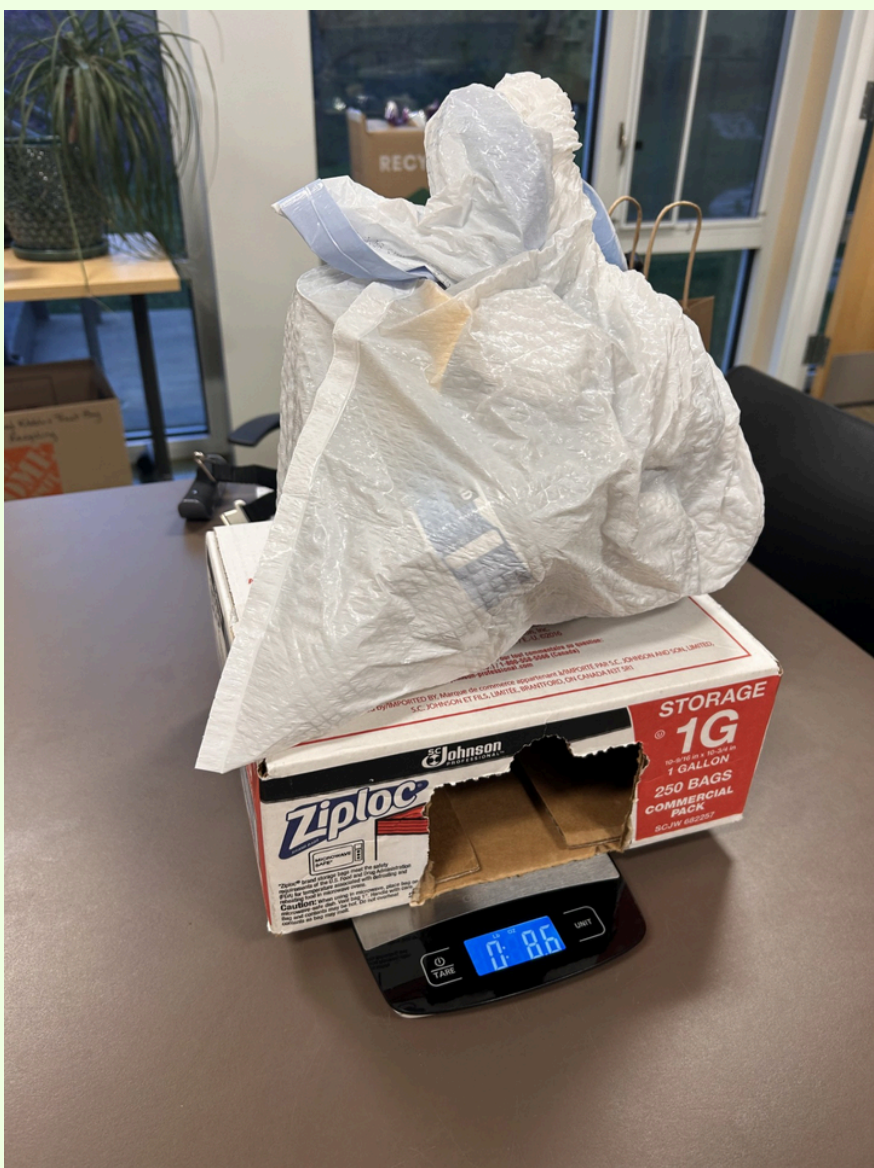
Graphics used prior to activity explaining what can and cannot be accepted in Howard County recycling and composting programs.

The event was attended by a total of about 20 students. After the event was completed, I, with the help of another member of the Howard County Office of Community Sustainability (OCS), conducted a low-level waste audit. We were able to sort and weigh the amount of landfill waste, compost, and recycling produced, as well take pictures of the contents of each bag.

Composted Waste



Recycled Waste



After measuring the recycled, composted, and landfilled waste that was produced during the event, we were able to determine the diversion rate of the event. The overall diversion rate of the event was 58%, with recyclable contamination being found and unsorted in the landfill waste bin.

Landfill Waste (with contamination)



After measuring the recycled, composted, and landfilled waste that was produced during the event, we were able to determine the diversion rate of the event. **The overall diversion rate of the event was 58%, with recyclable contamination being found and unsorted in the landfill waste bin.**

Overall, this is higher than the Maryland state waste diversion rate of 46.1% (MDE). While this did not achieve the 90% diversion rate that usually defines a zero waste event, there are several opportunities for improvement for future events and similar events.



Because of the level of contamination during the event, more emphasis and communication on the waste goals of this event to attendees ahead of time would prove to be more effective. Good opportunities to do this would have been to include language in email correspondence to guests, as well on the flyer and registration pages for the event to indicate that the event was "zero waste". This would help attendees know what to expect and encourage them to be more aware of their choices while at the event.

Re-emphasizing this goal throughout the event would also help ensure that guests know to be more aware of where they place their waste. Some ways that this could be accomplished is by having more clear signage, locations, and instructions at the waste bins, especially if the audience of the event is a younger audience. This is because a younger audience may be less inclined to pause before placing their trash in a bin without attention grabbing signs.

An additional method that would be helpful is to highlight the location of each bin to guests and communicating the presence of recycling and composting options at the event to help guests know where to go and what options for disposal they might have.

These methods may have improved the level of effective waste education that is present at the event. While I did have an activity during the event that emphasized what items could be placed in which bin, more emphasis was needed in informing the students that the items they were using were compostable or recyclable, and that there were locations for these items to be placed into the respective bins.

While there could have been more effective communication and education at the event, the activities that were present proved to be engaging and helpful for the students. Upon asking the students how much they knew about composting and recycling, most of the students indicated that they felt they had a good understanding of what they were and what belonged in each stream. However, when asked to sort some of the “trash”, a few items still stumped and surprised them. This demonstrated to me that they were still able to learn something new. Knowing this, it might have been more useful for the students to have participated in this activity at the start of the event so that they would be more aware of their waste throughout the event. This likely would have helped reduce the amount of contamination and improved the diversion rate.

Lastly, I would be better prepared for contamination in the different waste bins. Contamination can be very difficult to avoid and can prove to be the biggest challenge in efforts to reduce waste. While oftentimes sorting through trash once it is disposed of is not ideal, I would be more prepared to sort disposed trash into the correct bins by asking for tools such as pickers and gloves, to do so. For future events, this could be a post event activity that volunteers could assist with.



APPENDIX

- Accepted Recycling in Howard County
- Accepted Composting in Howard County
- Examples of waste reduction practices and policies
- Supply rental resources
- Resources used for guidebook and statistics

Accepted Recycling in HoCo

CLEAN. DRY. EMPTY.

YES		NO	
PAPER	<ul style="list-style-type: none">□ aseptic packaging (drink, milk, soups, food)□ books (paperback, hardback, phone books)□ boxes (food, snack, shoe, toys)□ catalogs/magazines□ gift wrap (non-shiny/non-foil only), kraft paper□ junk mail□ milk & juice cartons□ molded fiber containers□ newspapers & inserts□ paper egg cartons□ paper insulation (Climacell)□ tubes from paper towels & toilet paper□ windowed envelopes NEW!	<ul style="list-style-type: none">□ foil-type gift wrap (can't easily be torn)□ food contaminated boxes such as greasy pizza boxes*□ ice cream containers□ laminated paper□ paper plates, bowls, cups□ paper that can't be torn easily (typically means there are plastic layers added)□ paper towels, napkins, tissues□ thermal paper receipts□ wax paper	
PLASTIC	<ul style="list-style-type: none">□ #5 takeout containers□ bottles (soap, dressings, drinks, sauces, etc.)□ buckets (no metal components)□ flower pots (CLEAN, no soil or plant material)□ frozen food trays□ jars (peanut butter, spreads, sauces)□ jugs (detergents, milk, juices)□ large items, such as playhouses, laundry baskets, & lawn furniture□ milk/soda crates□ pet carriers□ pump bottles (lotions & soaps)□ spray bottles (hair & cleaning products)□ storage bins□ tubs (butter, cheese, yogurt)	<ul style="list-style-type: none">□ #1 plastic clamshell packaging (food, toys, electronics, batteries, etc.)□ #5 orange pill bottles□ acrylic plastic□ battery-operated electronics□ bubble mailers□ CDs/DVDs & jewel cases□ crinkly wrappers for chips & snacks□ cups, plates, straws & utensils□ drink & food pouches□ gel packs□ hangers□ insulation□ liners from cereal/cracker boxes□ motor oil or pesticide bottles□ packing peanuts□ plastic bags, film, wrap, & plastic-bagged materials□ plastic egg cartons□ PVC plastics□ StyrofoamTM□ toothpaste tubes, toothbrushes	
METAL	<ul style="list-style-type: none">□ aluminum, steel & tin cans (even pet food!)□ EMPTY aerosol cans	<ul style="list-style-type: none">□ aluminum foil/bakeware*□ compressed gas tanks (propane, helium, oxygen, etc.)*□ hangers*□ motor oil or other automotive fluid cans□ pots, pans or other scrap metal*	
GLASS	<ul style="list-style-type: none">□ any color glass bottles & jars	<ul style="list-style-type: none">□ ceramics□ CorningWare or Pyrex□ lightbulbs□ mirrors□ non-food/drink glass (window panes, drinking glasses, furniture inserts)	
CARDBOARD	<ul style="list-style-type: none">□ clean, dry cardboard (no plastic bags, film or Styrofoam packaging)	<ul style="list-style-type: none">□ food contaminated boxes such as greasy pizza boxes* (these can be composted in the Feed The Green Bin program.)□ furnace filters□ StyrofoamTM pieces□ waxed cardboard (bulk/supplier produce boxes)	

***Items may be recycled at Residents' Convenience Center at Alpha Ridge Landfill.**
Visit the following website for more details:

Accepted Composting in HoCo



- Fruit and vegetable scraps (fresh or cooked)
- Pumpkins and gourds
- Grass, leaves, yard trim
- Bread, pasta, rice, grains, cereal, baked goods, etc.
- Meat, fish, shellfish (including bones)
- Dairy products (cheese, butter, ice cream, etc.)
- Nuts, beans, seeds (including shells/hulls)
- Egg shells
- Pet food (dry or wet)
- Coffee grounds and filters (no foil or foil-backed products)
- Tea bags (must meet ASTM D6400 or BPI standards for compostability)
- Paper towels & napkins (free of chemicals & cleaning products)
- Compostable cups, plates and bowls (must meet ASTM D6400 or BPI standards for compostability)
- Pizza boxes (remove non-food items)
- Houseplants, cut flowers (please no dirt)
- Chopsticks and popsicle sticks
- Wood pellets



- Fats, oils, grease (small amounts are OK)
- Ice cream containers
- Facial tissues/toilet paper
- Styrofoam
- Pet waste
- Diapers
- Dirt/soil/mulch
- Recyclable paper (magazines, cardboard boxes, shredded paper, milk/juice cartons, etc.) should go in your curbside recycling only.
- Plastic bags and non-compostable packaging

EXAMPLES OF WASTE REDUCTION POLICIES AND PRACTICES FOR EVENTS

Howard County Conservancy Plastic Policies for Guests

Howard County Conservancy has written policy language that restricts both vendors and guests from using plastic or Styrofoam products. Instead, they encourage guests to use reusable items, or compostable single use items.

Guest Policy

1. Single use plastic and/or Styrofoam products are not permitted at rental events at the Conservancy.
2. Single use plastic water bottles are not permitted at rental events at the Conservancy. The Conservancy has two water bottle filling stations with filtered water that rental events may use.
3. It is preferred that all rental events at the Conservancy use only reusable plates, utensils, and cups/glasses. Single use products will be permitted as long as they are made of compostable materials (paper, cornstarch, sugarcane, or bamboo), aluminum, or glass. No single use plastic or Styrofoam products will be permitted.
4. The Conservancy does not currently have the capacity to compost waste from rental events. The nearby Alpha Ridge Transfer Station accepts compost free of charge if bagged in a compostable bag.

Robinson Nature Center - Alternative Foodware Options

Robinson Nature Center offers alternative, compostable event supplies for parties that are hosted at their center. They offer these supplies at a low cost of \$1 per table setting, including 1 dinner plate, 1 dessert plate/bowl, cup and utensils. This makes it more encouraging for guests to use more sustainable products at a low cost to both them, and the environment.

Compostable Tableware

Reduce your party's eco-footprint! The center can provide compostable tableware and arrange for collection and deposit at Howard County's industrial composting site. Cost: \$10 for 10 settings

Note: Setting includes 9 in. dinner plate, 6 in. dessert plate, (can be substituted with a bowl), 9 oz. cup, spoon, fork, and knife.

Examples of Vendor Contract Language

Howard County Conservancy Vendor Policy

The Howard County Conservancy is a green facility and does not allow the use of disposable plastics or Styrofoam. See our Plastics Policy later in the contract for more details. Caterers contracted by the lessee must use reusable silverware and china OR single use products that are compostable. Materials such as paper, bamboo and sugarcane are permitted.

Promote Compostable Packaging and Food Service Ware and Containers

Our organization prohibits the use of all polystyrene (Styrofoam) containers and promotes the use of only recyclable or compostable food service ware and packaging. Several companies offer alternative products that are environmentally safe, contact (point person) for a listing. Violators will be assessed a daily fine of \$50 until the situation is corrected. (Stop Waste)

Promote Recycling and Resource Conservation

In an effort to address environmental concerns, the (organization, facility or event name) maintains a policy of mandatory recycling. We are committed to doing our part to ensure a clean, environmentally safe world for future generations to enjoy. Please breakdown (flatten) all cardboard boxes and keep them in your compound for pickup. DO NOT PLACE THEM IN PUBLIC VIEW. Other items for recycling include glass bottles, plastic beverage containers and aluminum cans. Please use the recycling receptacles provided for public use throughout the grounds. Use of polystyrene (Styrofoam) containers is prohibited. Any vegetable or fruit food waste must be placed in the composting containers provided. (Stop Waste)

Donating Food Waste

Donating any leftover food that you might have is a great way to prevent waste. Offering leftovers to event guests and volunteers is always a good first option, but if you are still overwhelmed, here are some options.

Donation:

[Food Rescue Locator](#) is a directory of organizations that serve as a resource for individuals looking to recover food and prevent food waste.

[The Howard County Food Bank](#) is also a good option for those that have non-perishable goods to donate.

[FoodPantries.org](#) is another directory of food pantries that are accepting donations in Maryland and beyond


[Bridgeway Community Cupboard](#) is run by a local church in Columbia. They accept non perishable food items.

Other opportunities for food donation and recovery might exist at local churches or food shelters.

Recovery:

[Olio](#) - app that connects individuals looking to give waste a second life

Buy Nothing - Buy nothing groups on Facebook allow for community members to give away items, including food, easily



Food Scrap Collection

The following organizations that offer food scrap collection for organizations and businesses interested in composting:

[Veteran Compost](#)

[Compost Cab](#)

[Key Compost](#)

[Waste Neutral](#)

[Compost Crew](#)

For more food recovery resources, visit [MDE's website](#) for donation and scrap collection locations

SUPPLY RENTAL FOR EVENTS

Dreamers Event Rentals


12300 Owings Mills Blvd Suite 8 Reisterstown, MD 21136

AA Party Rentals

7911 C Braygreen Rd Laurel, 20707

Elite Tents and Events

6355 S. Carroll Park Drive
Sykesville, MD 21784



Recommended Sources for Compostable or Reusable Supplies

When it comes to finding compostable and reusable products and foodware, it can be hard to tell what is actually compostable. For composting specifically, **those products that have a BPI Certification and/or ASTM D6400 are trustworthy and accepted in Howard County’s composting program.**



This is the label to look out for when it comes to shopping for compostable items.

Recommended Websites for Reusable or Compostable Products

- [Webstaurant](#) - Website for bulk purchasing of reusable items
- [Green Paper Products](#)- Compostable Products

Other Websites (make sure products you purchase are BPI certified!)

- [Eco Products](#)
- [Green Safe Products](#)
- [Good Start Packaging](#)

To learn more about BPI Certification and to find products, visit BPIworld.org

RESOURCES USED TO MAKE THIS GUIDEBOOK

References

Types of Waste Management- [RTS.com](https://www.rts.com)

EPA – [How to conduct a waste sort](https://www.epa.gov/watersheds/best-management-practices/bmp-10-how-conduct-waste-sort)

Waste Diversion Rate Formula - [CleanRiver.com](https://www.cleanriver.com)

Reduce waste at special events - [stopwaste.org](https://www.stopwaste.org)

[A guide to waste reduction at events - DC Special Events](https://www.dcspecialevents.com)

5 Rs: refuse, reduce, reuse, recycle and (repurpose/rot) - [roadrunnerwm.com](https://www.roadrunnerwm.com)

How to Conduct a Waste Audit

- [Dumpstersblog.com](https://www.dumpstersblog.com)
- [Engieimpact.com](https://www.engieimpact.com)

Statistics

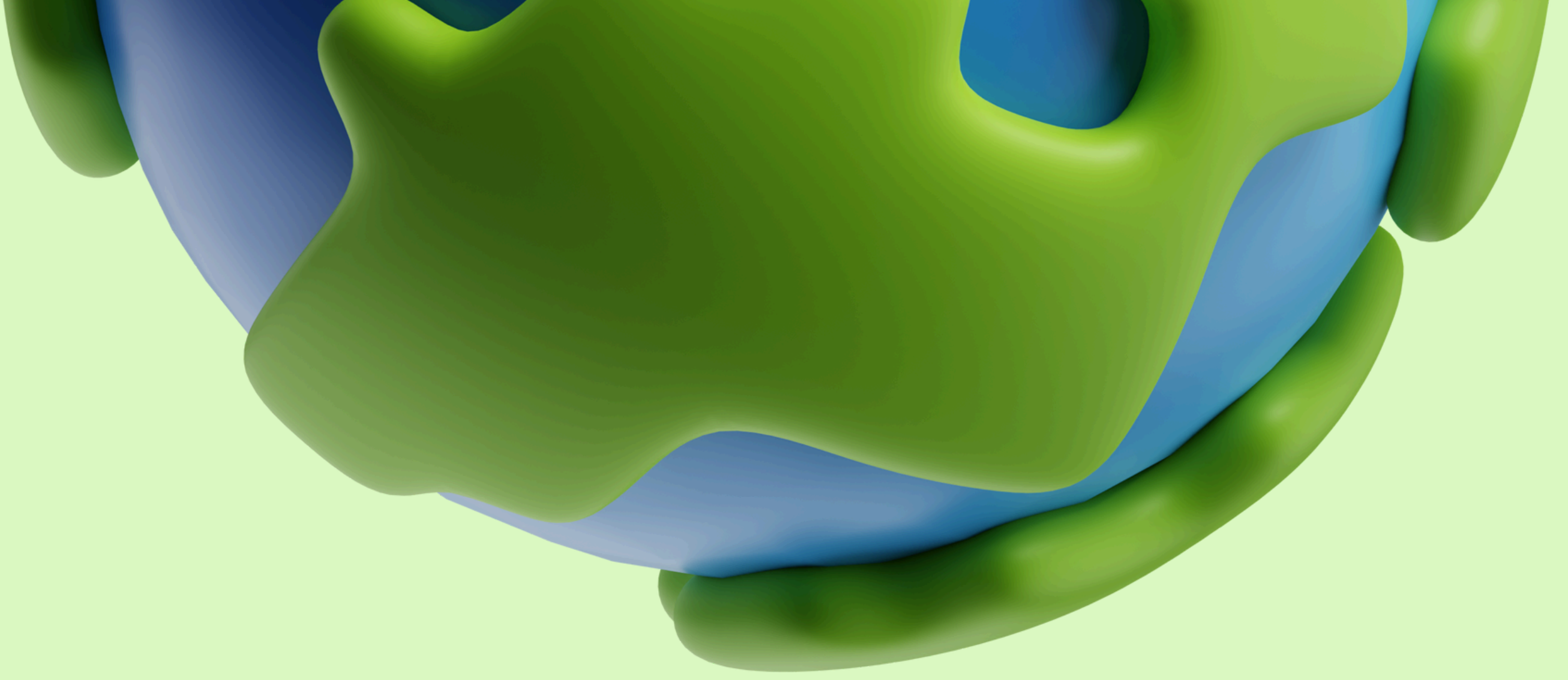
[EPA - Transportation Statistics](https://www.epa.gov/transportation-statistics)

[EPA - Waste and Climate Change](https://www.epa.gov/waste-and-climate-change)

[UPenn - Tipping Point for Large Scale Social Change](https://www.upenn.edu/tipping-point-for-large-scale-social-change)

[MD Department of the Environment - Source Reduction](https://www.mde.state.md.gov/source-reduction)

[CNN - Waste at Music Festivals](https://www.cnn.com/waste-at-music-festivals)



This guidebook was created by
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Howard County Office of Community
Sustainability's 2023-2024 Chesapeake
Conservation and Climate Corps member. This
was done with the help and insight of the
following community organizations:

Community Ecology Institute
Howard Community College
Howard County Conservancy
Oakland Mills Interfaith Center
Robinson Nature Center

THANK YOU!