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## UMass Amherst Guide to Zero-Waste Events


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# UMassAmherst



## Guide to Zero-Waste Events

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# Zero-Waste Event Checklist

## Requesting Space

- Log onto [Facilities & Campus Services Service & Space Requests](#) page
- Select the appropriate event type, login, and fill out the event information
- Pick your best guess for number of compost, recycling, and trash bins needed

## Waste Management

- Contact OWM Collection and Moving Manager, [Mike Dufresne](#) to discuss number of bins needed, location, drop off and pickup times, etc.
- Create a comprehensive waste management plan including maps and schedules

## Volunteers

- Dedicate at least one event planner to manage waste volunteers for the event
- Ask if student or full-time staff are available to volunteer at the event
- Contact the [Eco-Rep Program Manager](#) and / or [Sustainable UMass](#)
- Contact Fraternity & Sorority Program, [Michael Wiseman](#)
- Develop a list of volunteer roles to be assigned. Meet with volunteers before event
- Discuss the creation of a sign to place in front of the pile of diverted compost bags

## Marketing

- Submit your event to the UMass events calendar [umass.edu/events](http://umass.edu/events)
- Contact [Sustainable UMass](#) for social media outreach
- Use other social media outlets, e.g. Living at UMass & UMass Amherst pages to advertise your event
- Consider creating social media “events” for interested students to report their intention to attend. This will also help to estimate attendance at the event
- Ensure that signage for bins, as well as general signage about your zero-waste event will be present

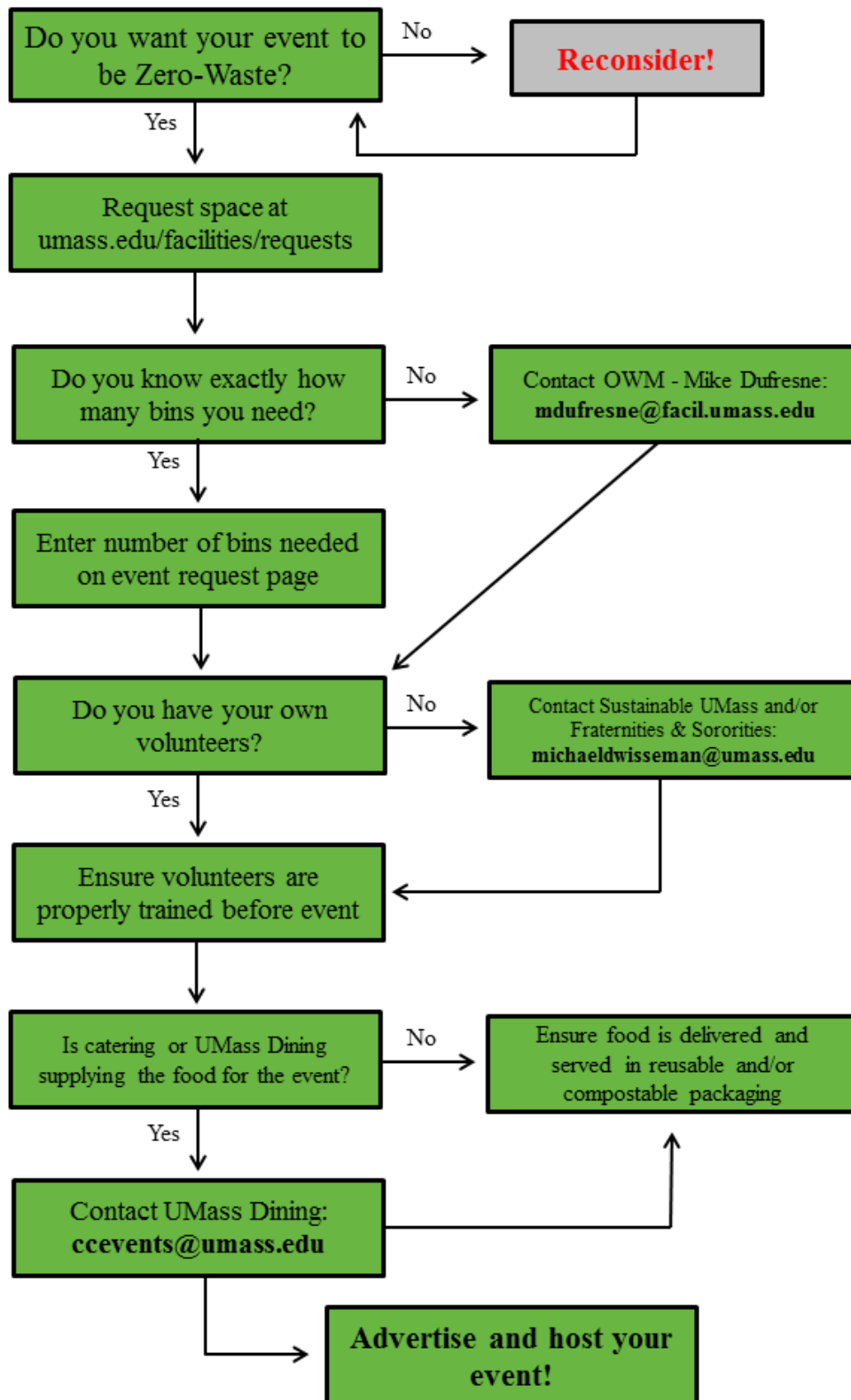
### Catering

- Contact [UMass Catering](#)
- Ensure condiments are served in bulk not individually packaged
- Request water globes/refill stations, no plastic bottles
- Ask for brown, compostable napkins instead of UMass-branded napkins
- Ask for use of compostable food gloves and service wipes
- Request food preparers use of stainless steel pans rather than Aluminum
- Request only finger food, or request reusable flatware for entrees and desserts to reduce use of disposable cutlery and flatware

### Cleanup and Next Steps

- Ensure that the waste from your event will be weighed prior to disposal
- Take notes while the event is fresh in your mind about future improvements!
- Provide feedback to [Sustainable UMass](#) regarding the pros and cons of your experience with the “Green Events” process
- Take pictures of the event as well as the diverted waste for testimonials and for marketing your next event

# Zero-Waste Flowchart



## Defining Zero-Waste

“Zero-waste” is a philosophy, which focuses on eliminating all or most material sent to landfills, oceans, or incinerators. Instead, the idea of zero-waste urges reuse, recycling, or composting of all materials, which ensures that no material is squandered without reason. “Zero-waste” is defined as 90% to 95% or more diversion of solid waste, however, elimination of “landfill” waste is the quintessential goal for the zero-waste movement.

## Introduction

According to the World Footprint Network, humanity would require five Earths in order for every individual to sustain a typical modern-day American lifestyle. (Global Footprint Network, 2016) Universities have long been a medium for the spark of meaningful change and social advancement to take place. However, an educational institution must not only teach future leaders to reduce their resource demands, but also practice resource conservation itself. By “walking-the-talk” colleges and Universities will provide practical evidence that a zero-waste lifestyle is practical, logical, and sustainable.

The University of Massachusetts Amherst has displayed a continued commitment to sustainability. With growing concerns over dwindling landfill space, leaching, and off gassing, as well as the continued environmental impacts of ocean dumping or trash incineration, institutions across the nation and around the world have begun to adopt long-term zero-waste strategic plans. Aside from environmental impacts, incinerators and landfills disproportionately impact lower-income individuals and people of color, adding environmental justice and equity concerns to the nationwide waste issue. Prestigious colleges and universities across the United States have committed to net zero-waste campuses in the near future, including; University of Arkansas, Arizona State University, the University of California system, and many others. Furthermore, these and other institutions have also adopted strategies for zero or low-waste events.

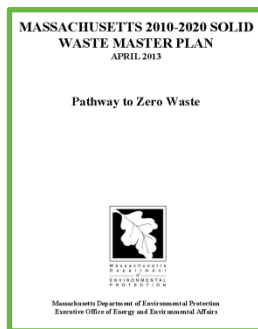


Compost and recycling bins at CNS College Day Cookout

UMass Amherst has all of the prerequisites in place for executing zero-waste events with proper planning and management. In fact, compostable plates, cutlery, cups, and napkins are already provided by UMass Dining at all catered events. However, this added premium for compostable products is squandered when compostable items are trashed and sent to an anaerobic landfill where the material is unable to break down properly. If these items are composted

instead, Martin’s Farm in Greenfield, MA converts the food waste and compostables into nutrient-rich soil, some of which is returned to the University. This is, of course, an improvement over simply adding additional material the Southbridge, MA landfill where the University’s landfill waste ends up.

The College of Natural Sciences “College Day Cookout” has been conducted as a virtually zero-waste event for the past four years. Organizers of the cookout, however, needed fervent determination and several personal connections in order to plan and execute the event successfully. This manual was produced with the intention of simplifying the zero-waste process for event organizers through structured guidance and support.



The Massachusetts 2010-2020 Solid Waste Master Plan lists “Increase Business and Institutional Recycling and Composting” as its first objective (Mass DEP, 2013). Additionally, institutions that produce over 1 ton of food waste within the state are now required to have a composting system and divert as much of this waste as possible (Mass DEP, 2014). The SWMP also includes benchmarks and goals for the state, which includes a commitment to “Zero-Waste” by 2050. As UMass Amherst continues to grow, and as programming for the campus community becomes an ever-rising priority, events organizers will need to consider the waste implications of every event to comply with state and University standards, goals, and policies. Although it may soon be the new norm or even a state requirement, a campus commitment to zero-waste events at this stage would show initiative and responsibility, and would help to create a spirited campus culture centered on sustainability.



## Case Studies

### Case Study 1

#### Exemplary Green Event: The College of Natural Sciences College Day Cookout

The College of Natural Sciences (CNS) has hosted a “College Day Cookout” since 2010. Since the very first event, Jane Markarian, CNS Special Projects and Outreach Manager and coordinator of the event, has focused on waste reduction strategies from careful pre-planning to education of the 3,000 to 5,000 attendees. The organization, commitment, and flourishing success of this annual event leaves something to be desired for all other campus events. This continued success has not come easy, however.

Collaboration with campus partners is vital for the accomplishment of zero-waste events. For the CNS Cookout, working with the Office of Waste Management (OWM) to supply compost, recycling, and trash totes was the clear first-step. In addition to providing bins lined with bags, OWM staff also manned disposal locations to ensure compliance of attendees and hauled all refuse from the event site.

Working with the Eco-Rep program was another major key to hosting a successful zero-waste event. Eco-Rep is a peer-facilitated student group dedicated to tackling sustainability issues on campus. The program uses volunteer opportunities like the Cookout as an educational opportunity to learn about real-world institutional change. Training of the Eco-Reps prior to the start of the event, to establish which items belong in which bins, allowed the students to man the disposal locations and encourage other students to dispose of their waste properly. The students also designed a sign which read “Thank you for NOT sending this to the landfill”, which was placed in front of the large pile of compost bags at the end of the event.



**Eco-Rep volunteer manning disposal station at CNS Cookout**



**Students lined up next to a “Green BBQ” sign at CNS Cookout**

An additional step taken by Markarian was proactive coordination with UMass Dining. As the caterers of the event, Dining staff held the burden of making or breaking the zero-waste goal. Water bottles were replaced with water dispensers and compostable cups. Prior to the event, dining staff were also encouraged to bring all prepared foods in bulk and/or reusable containers. This

reduced the volume of trash at the site itself, although some trash would likely have been disposed of by Dining during off-site preparations.

Outreach before the event and signage prepared in advance informed and educated cookout attendees. Eco-Reps attached items to signs that were present at the event, such as compostable cups, plates, and napkins, indicating what should be placed in the compost bins. Signs describing the aim of the “Green BBQ” were placed strategically at the entrance of the food tent, which encouraged consumers to use the least amount of materials possible. Online marketing prior to the event also requested that those planning on attending the event brought their own containers for liquids to limit the use of small compostable cups for beverages. Widely marketing the event as “zero-waste” also seemed to draw a larger number of students, faculty, and staff to the event, and prepared them for the difference from a typical UMass barbeques.

The 2014 College Day cookout, achieved an impressive 83% diversion rate. While this diversion is spectacular for a standard outdoor UMass event, it also left organizers with room to improve. The remaining 83 pounds of landfill waste were partially due to pink Chix® foodservice towels, often used in a similar manner to paper towels by catering staff. Other contributing waste included refused compost bags that were partially contaminated. This may have been due to certain disposal stations being unmanned for a short period of time. The diversion rate increased to 87% in 2015.



**Remaining landfill waste after CNS cookout**



**OWM Staff and Eco-Rep educating attendees at CNS College Day Cookout**

## Case Study 2

### Room for Improvement: The World's Largest New England Clam Bake

A UMass tradition from 2010 to 2014, Guinness World Record breaking food events obviously also produced many tons of food waste each year. UMass Dining planned for this food waste by including compost bins and hiring Office of Waste Management staff for the New England Clam Bake on September 1st, 2014. Compost bins were placed liberally around the outdoor event, and all food items were served in compostable bowls or on compostable plates.



**Plastic nets present at UMass Clam Bake**

While this event was planned with the best of intentions, one small oversight led to a major waste frustration. The shellfish and clams were placed in single-serve plastic netting to make distribution of the food quick and simple for each guest. In total, the event served over 3,000 students and guests, making the event an apparent success in terms of campus community engagement. Unfortunately, most of the record-breaking 3,000 clam bake meals were sent to the landfill due to this plastic netting.

Due to the presence of the plastic nets, and the lack of guest awareness, compost bins were filled with the non-compostable red plastic netting. By the time the event was over, all compost was rejected due to its high contamination rates. Even with the careful planning and meticulousness of UMass Dining while organizing and promoting this event, one small miscommunication prevented this event from being almost completely zero-waste. This event illustrates the need for a streamlined process for planning zero-waste events, especially on a large-scale.



**Chancellor Subbaswamy and UMass Dining staff accepting Guinness World Record for the 2014 Clam Bake**

# Planning Your Zero-Waste Event

## Requesting Space

Those planning an outdoor event must first submit a Land Use Request with the Physical Plant. Requests may be made through the [Facilities & Campus Services Service & Space Requests](#) page. The request system allows users to request staffing by the Office of Waste Management to ensure proper management of composting and recycling totes. The system also allows for the user to request a certain number of trash, recycling, and compost bins. Additionally, users may request tables for their event.

**Outdoor land use request webpage**

## Waste Receptacles

Of course, the success of a zero-waste event is not possible without proper waste disposal receptacles. Outdoor event requests allow users to specify the exact number of trash, recycling, and compost bins. However, requesters do not need to know the exact number of bins needed. Michael Dufresne, Collection and Moving Manager for the Office of Waste Management, can estimate the number of bins and bags required based on past events, estimated attendance, as well as the nature and/or quantity of waste expected at the event. Dufresne may be contacted by the event coordinator to ensure a full mutual understanding of the needs of the planned event.

Proper signage and placement of bins at the event is vital to ensure proper waste compliance of attendees. Suggested labels for compost, recycling, and trash bins respectively include; “food waste” or “compost,” “recycling” or “single stream,” and “landfill waste” or “trash.”

Physically attaching disposable items to signs has also been shown to increase compliance and decrease contamination at past University events. For instance, compostable “plastic” cups, usually made of PLA (polylactic acid) often cause confusion when attendees are informed that these cups are industrially compostable. Some attendees are inclined to recycle these cups. Attaching these cups to the “food waste” or “compost” sign gives a physical indication of where these cups belong when disposed of. UMass Auxiliary Enterprises is in possession of several large metal signs which indicate which bins are “Food Waste and Compostables”. Signage may be requested from UMass Catering when planning an event with compost bins.

Another method for reducing contamination in compost and recycling bins is to simply make these bins more accessible. If an event is expected to distribute only compostable or recyclable items, landfill waste receptacles should be placed behind, or out of plain sight as compared to the other bins. With the presence of waste compliance volunteers, if any landfill waste needs to be disposed of during the event, volunteers may then take the item and place it in the trash container on behalf of the event-goer.

Furthermore, the physical placement of disposal stations must be considered. Primary disposal locations should include all exits from the event location, as well as nearby the exit of the food distribution line. Additional stations above the minimum requirement and the creation of a map of the event space is strongly advised, not only for strategic placement of disposal locations, but also for overall planning purposes as well. Although, waste disposal stations may also be adapted to accommodate changing or unexpected needs the day of the event.



Map of CNS Cookout Site including disposal station locations

Volunteers are vital for ensuring clean and compliant waste streams during a zero-waste event. While signs and messaging aid in the understanding of the general public, face-to-face interaction is the most effective means of communicating proper waste disposal to event guests. However, for successful utilization of event volunteers, it is essential that they receive proper training prior to the event.

### Marketing

#### See you at the College Day Cookout on Friday, Sept 27 11:30 am – 1 pm

Submitted by Martha Baker on Mon, 09/23/2013 - 2:54pm

Celebrate the beginning of the academic year with food and fun! Our College Day Cookout is always a fall favorite for all CNS students, faculty, and staff! We provide delicious local food and live music—all you have to bring is a smile and a willingness to help make this a zero waste event.

Here's some of what we are doing to make it Green:

- Locally-sourced food minimizes transportation costs & bolsters local economy
- CNS-raised cranberries (UMass Cranberry Station) & apples (Cold Springs Orchard)
- Free-range, low-chemical meats—humane and healthy
- The menu is all finger food—no need for eating utensils
- Plates, cups, napkins and food waste—all compostable
- Food packaging—minimized
- Green decorations—to be given away afterward or returned to the farm
- Student EcoReps on site to provide eco-education
- Plastic bun bags, last year's main trash source, will be reused by a local ceramics artist
- The all-acoustic band will provide 100 percent people-powered music

Looking forward to seeing you Friday, September 27, 11:30 am – 1 pm at a new location: the Life Sciences Laboratory Lawn (behind the ISB)—rain or shine!

#### Example of effective marketing for CNS Cookout on the College of Natural Sciences website.

In order to advertise your event, plan to utilize as many UMass social media channels as possible, including but not limited to; Sustainable UMass, Living at UMass, and UMass Amherst official accounts. Determine which other mediums you want your event to be advertised through (e.g. TV slides, fliers, chops, table tents). Considerations for advertising include asking attendees to bring their own reusable water bottle, the goal of the event, and a brief

explanation for why we compost. For advertising through Living at UMass accounts, contact [Lacey Olson](#) and for Sustainable UMass account advertising, contact [Arianna Moscone](#) or [Ezra Small](#) at Sustainable UMass

### Volunteers

Volunteers will be the major driving force in making a zero-waste event successful as they will guide guests in disposing of their waste. They will be trained on the specifics of waste disposal to ensure that waste contamination is avoided. Training the volunteers should take no longer than 10 or 15 minutes where they will learn the specifics on what is be compostable, recyclable, and trash. While enforcing the zero-waste event volunteers will also be educating the public and spreading awareness on composting.

Volunteer recruitment for an event will have to be planned at least one week in advance. Contact the Eco-Rep Program Manager as well as Michael Wiseman from Fraternities and Sororities for volunteer connections. Event coordinators are also encouraged to recruit student volunteers from their respective areas. Student volunteers who may be asked to aid in the setup and break-down of tables, chairs, tents, and materials may be asked to stay during the event to man waste receptacles. Yet, these students will also need to be trained and informed of what materials they should expect to see during the event. The number of volunteers required will vary by size of event and specific event needs.

It is strongly suggested that a volunteer signup sheet is distributed while recruiting volunteers. The most effective mode for this is Google Sheets, which may be customized by the recruiter to include date, time, and location of the event. The signup sheet should include a field for name, email, and a field asking whether the student is able to commit to volunteer for the entirety of the event, or only for a specified shift time. Organizations such as the Eco-Rep program may request that volunteers sign-in and sign-out to ensure the students have actually attended the event.

### Catering Challenges

A leading challenge that a zero-waste event may face is the handling of prepackaged food and adhering to sanitation standards. These two factors will make up the 5-10% of inevitable landfill waste at an event. Thankfully, 5-10% landfill waste is often still defined as “zero-waste”. When placing an order through UMass Catering, it is important to specify how to have the food prepared and delivered (e.g. bulk preparation). In terms of meeting sanitation standards employees working the event should use compostable food service wipes and change gloves only when necessary.



Dining staff at CNS Cookout

# Day of the Event

## Marketing

Advertising throughout the day of the event is important to remind guests that they are indeed at a Zero-Waste event. Requesting the use of signage to inform guests to reuse their plates and cups, receiving only one food portion size at a time, and properly disposing of their waste, will promote the success of your event. Request such signage from [UMass Catering](#) prior to your event.



Green BBQ Sign.

## Management of Volunteers

The presence of a lead volunteer should provide the ability to adaptively manage other volunteers during the course of the event. An example of adaptive management is the movement of disposal stations or volunteers around the area of the event if there is an unexpected need for additional or rearranged disposal stations. A lead volunteer can also have regular check-ins with volunteers at each station to ensure bins are not filling up too rapidly, and volunteers are well fed and hydrated. They can also encourage volunteers to interact with event-goers more proactively, and explain the purpose and reasoning behind hosting a zero-waste event, as opposed to a more wasteful one. Volunteers should receive regular breaks, and be given the opportunity to participate in event activities. Consider incentivizing volunteers with (sustainable) gifts or UMass swag. Happy and well-fed volunteers are much more likely to return for future events.

## Sample Volunteer Roles

Once volunteers have been secured for the event, different roles may be assigned to delegate work for the smooth operation of your zero-waste event. Of course, the majority of volunteers should be responsible for manning compost, recycling, and trash containers. However, the lead volunteer should also be responsible for training of additional volunteers who may be less familiar with the responsibilities for the day. It is ideal to have a volunteer check-in station for when volunteers arrive or shifts change. Here, the lead volunteer can delegate tasks, quickly train, and distribute t-shirts or stickers identifying the volunteers. Volunteer roles may include; assistance with setting-up, manning of bins, education of attendees, and assistance with breaking-down.

Ensure that the lead volunteer has a precise understanding of which items belong in which bins and as well as the overall timeline for the event to ensure that all volunteers are receiving the appropriate information. This leader may also be responsible for

relieving volunteers of their duties when their shifts have ended, and providing compost bags to be replaced when compost bins fill-up.

Finally, if presenting a “compost mountain” at the conclusion of the event, such as the pile that was created at the CNS cookout, volunteers must understand where compost bags should be dropped when filled. If a sign was created to spread awareness about zero-waste, the sign should be placed visibly in front of this pile. This may also prevent attendees from believing that this pile was simply landfill waste being kept aside until the event has concluded.



**Eco-Reps next to compost collected at CNS Cookout. Eco-Reps created a handwritten sign which read “Thank you for NOT sending this to the landfill”**

### Office of Waste Management Staff

OWM staff provides replacement bags when needed, remove recycling or trash bags when filled, assist with manning disposal stations, and of course drop off and pick up bins before and after the event. They may also be asked to weigh each stream after the event and/or set aside landfill waste to be inspected after the event. Continued communication with OWM staff before, during, and after your event will ensure a smooth waste operation at this and future events.



## Post-Event

### Cleanup

Although OWM staff will likely coordinate pickup and transportation of waste off-site, event organizers and volunteers may be asked to consolidate waste into a central area for more efficient pickup. This central location may be accompanied by a “Thank you for NOT sending this to the landfill” or similar sign such as the one created by Eco-Reps for the CNS Cookout to bring awareness to the zero-waste efforts of the event. It is recommended that each waste stream is weighed and recorded for comparison with subsequent years and to calculate diversion rates after the event, and to track and highlight improvements over time.



**OWM hauls compost off of CNS Cookout site**

### Waste Totals

It is highly recommended that OWM staff is asked to set aside the landfill trash collected from the event. Conducting a small waste audit on this trash will allow event organizers, dining staff, and OWM staff to identify any remaining problem areas or items which did not belong at a zero-waste event. Of course, some landfill trash is expected to be brought onto the site of the event by students, faculty, and staff. Although, remember that “zero-waste” may be defined as a 90-95% diversion rate, so any material brought on-site from outside of the event area is unlikely to contribute more than 10% of the total weight of the landfill waste produced.

### Improvements

Aside from addressing any issues with remaining landfill waste, event organizers are encouraged to review the general organization and planning for the event as well. Alternative sites, placement of disposal stations, recruitment of volunteers, food and beverages provided, and many other alternative options may be explored for future events. It may be helpful to conduct a debrief meeting in order to identify any problem areas that have been missed. Any suggestions for improvements to this manual for the creation and coordination of a zero-waste event may be directed to the authors of this document or [Sustainable UMass staff](#).

### Marketing Your Success

At the end of the event it is important to gather the statistics on how much compost versus waste you have accumulated, this may be done by contacting waste management prior to the event. [Mike Dufresne](#), Collection and Moving Manager, can assist with weighing the waste and provide statistics on the compost and trash accumulated from your event. It is important to advertise the success of your event for promotion of others like it in the future. Social media outlets can be used for advertising the statistics and pictures you may have accumulated from your event.



Post-cleanup at the CNS Cookout



Marketing success of 2014 CNS Cookout

## Conclusion

As a growing University calls for increased programming and larger-scale events, the implications on the waste stream are growing concurrently. Meanwhile, environmentalism continues to gain momentum nationwide and globally, and state organizations such as the Massachusetts Department of Environmental Protection may issue citations more regularly for unsorted or contaminated waste streams, specifically from large producers of waste such as educational institutions. Although the environment and equity should always be the primary motive for increasing recycling and composting on college campuses, these citations provide a financial incentive as well.

Hosting and increasing prominence of zero-waste events campus-wide may also spark sustainable behavior among the student body. With additional residential and outdoor composting systems popping up across the UMass campus, an understanding of how to sort waste into the proper bins is fundamental to a purified campus-wide waste stream. If University students, faculty, and staff wish for a University of Massachusetts system-wide zero-waste commitment like the University of California system has committed to, the hosting of zero-waste events as a mechanism for educational outreach, and as a prime example of the feasibility of zero-waste, is a logical first step.



There is currently no University policy in place for hosting low-waste or zero-waste events. There is also currently no goal or commitment to a zero-waste University. However, a commitment to sustainability must include every aspect of operation, maintenance, living, and even entertainment. Therefore, the authors of this manual are hopeful that University administration will consider adopting a Zero-Waste Events Policy as a first step based on the recommendations provided by this manual as well as a commitment to a zero-waste campus (90% diversion or more) by 2050. Policies of this nature are not only a necessary step towards a carbon-neutral and sustainable campus, but these policies would also demonstrate the University of Massachusetts' institutional leadership, in both the Commonwealth and across the nation, towards an equitable, resourceful, and sustainable planet for all.