



Materials Management at Events

INTRODUCTION

Flagstaff area residents love events. Tens of thousands attend massive events like the County Fair, Fix-it Clinics, Earth Day celebrations. Farmer's Markets sprout up all over the region on a weekly basis in the warmer months. Businesses, neighborhoods, apartment complexes, churches, and families throw annual picnics, ice cream socials, weddings, and coming-of-age celebrations.

Big or small, these gatherings can generate a good deal of waste and consume natural resources. However, community events are a wonderful way to showcase shared values and demonstrate our commitment to recycling, composting and waste prevention. Fortunately, there are great reasons to create sustainability plans for these events.

Master Recyclers can play crucial roles in recovery and waste prevention efforts. Whether you are organizing a party, wedding, or family picnic or have signed up to help a community event with their recovery goals, this chapter will provide you with tools, resources, and best practices to successfully plan or participate in less waste-intensive events. This chapter begins by presenting best practices for recycling and composting at events and then explores other materials management strategies including selection of take away containers and waste prevention strategies. It also offers an overview of how to create an event sustainability plan. The appendix contains additional resources, including sample vendor letters.

PAYBACK AT EVENTS

Please keep in mind that Master Recyclers can play many important roles in event recovery, but not all event activities related to materials may be appropriate for volunteer payback. The central mission of the Master Recycler Program is to educate. Therefore, the best use of Master Recyclers at events is to offer expertise in waste reduction best practices.

Here are roles that count as payback for Master Recyclers at events:

- **Volunteer Trainer:** On the day of the event, learn what the event's waste management plan is and then offer an initial training. Use the best practices in this chapter to supervise volunteers who monitor containers throughout the day and troubleshoot problems as they arise.
- **Vendor Outreach:** Large events with multiple food carts may have a plan in place and need Master Recyclers to start the day off explaining to the food handlers how to use this system. Subsequent periodic visits to answer questions, troubleshoot unexpected problems and

provide feedback are helpful.

- Recovery or Sustainability Coordinator: Join the event committee as the recovery or sustainability coordinator or work individually to strategize, organize, implement and evaluate a waste prevention and/or recovery plan at an event. It is best to first take on smaller one-day events focusing on recycling. Larger events with more involved sustainability practices should be done when you (and the event) have had more experience.

Some work that is necessary for a successful event recovery plan does not fit the educational requirement for Master Recycler payback. The following activities will not count toward Master Recycler Certification if they are the only activities you are doing:

- Standing next to recycling/composting stations to monitor containers.
- Hauling and sorting or auditing waste.
- Recruiting volunteers. (This should fall on the responsibility of the community organization.)
- If you act as a lead in a project and end up doing some of these activities the time does count as payback. It just needs to be a small subset of the overall role that you play. If you are concerned or have questions about payback guidelines you are always welcome to check in with the Master Recycler Program Coordinator.

THE EVENTS RECOVERY CHALLENGE

The ultimate goal for any recovery plan is twofold:

1. To capture materials that are resource rich like plastic, paper, metal, glass or food, for a market that will use them in place of virgin material.
2. To minimize the contamination of the materials you are trying to capture so that the end market is getting a clean load of the materials they seek.

Events are temporary by nature. An event may take place in a park, street, backyard or campus. There are special challenges to meeting these recovery goals in a temporary setting:

- Containers. There may be no existing garbage cans, much less recycling and compost containers. Events may be sprawling with a need for multiple locations for containers. If containers are present, they are set up for the normal use of that space. There will be a need for a larger container for pick up and a plan for someone to haul it away.

Contamination:

Unintended materials mixing with desired materials for recycling or compost (glass is a contaminant in a paper stream); materials that are too soiled, such as with food or dirt, to be recyclable.

- Event organizers. These are busy people with multiple pressing demands on their time. They also usually don't know the best practices and resources for recycling and composting.
- Event goers. The attention participants will give to making decisions about which container to place waste will be less than at home or work. Containers, signage and accepted materials are also not always the same as the systems they are used to. Participants may be from out of the area and unfamiliar with recycling and composting.
- Waste. It is challenging to predict what kinds of waste will be generated at an event. Vendors, event organizers, the set up crew, event participants, and passersby are all potential sources of material that might end up in waste containers.

These challenges don't need to be overwhelming. Successful event recovery planners will tell you that the biggest key to success is to use best practices to design a good plan and then EXPECT SURPRISES. Flexibility, the ability to think on your feet and remembering to have fun are some of the most important tools to prepare for the bumps that arise in event recovery.

RECYCLING BEST PRACTICES

Understanding best practices will equip you for any setting, even if you just show up the day of an event to train folks and troubleshoot. These best practices will also lay the groundwork for understanding how to design and implement any recovery plan, big or small.

Always use the buddy system

Provide a recycling and/or compost container everywhere where there is a garbage can. Even in the most motivated communities, it needs to be as easy to recycle or compost as it is to throw things away. Wherever you only have a garbage can in place, you can expect to find recyclables or compost tossed in the garbage. Similarly, if you only have a recycling container in place, garbage will end up in your recycling or compost container.

Simplicity

Unless there is enough volunteer power to staff every station and guide event goers about what to do with their waste, you are going to need to rely non-verbal communication.

- Make garbage and recycling stations highly visible, (e.g. a flag on a tall pole, balloons, signs, etc.) and in convenient locations, like areas where people buy and eat food.
- Label recycling and garbage receptacles with clear, large and simple wording and place signage at eye level.
- Images of desired materials are best.

Plan for human nature rather than trying to change it

Good, clear simple signage will increase the chance that people will look at it and follow it, but the main clue that people use to decide what to put into a container is the objects that are already in the container.

You can get upset that people didn't read your sign, or you can plan for the inevitable. In fact, the knowledge that people look for specific materials in containers to make choices about where to put their arms you with important information about how to influence those choices. Here are some ways to capitalize on that knowledge:

- Monitor recycling and compost containers frequently to remove contaminants and replace full bags. Contaminants will multiply quickly if people see an unwanted material in a container. If a bag is overflowing people will start using the other container.
- Limit the number of recycling/waste stations to allow for ease of monitoring. Place larger stations in areas where high volumes of waste will be generated.
- If feasible, attach a physical sample of the acceptable material to its sign.
- Plant a few samples of the acceptable material into its proper container.
- Use clear bags for recycling so that people can see the desired material even as they are walking up to the container.
- Use black garbage bags so that people won't see recycling in there and follow suit.

Tailor the entire system around the desired materials

To be absolutely clear what you want people to put in a container it is best to use signage and containers that are designed to invite people to put that exact material in the right place. Container lids with holes the shape of a bottle or can, for instance, are ideal if that is all you are collecting in that container.

It is tempting to use a general recycling sign, but people will go with their general knowledge of what they think is recycling. At events this is a kiss of death because the vast majority of the materials vendors are handing out are garbage. Most programs in the region know what is often generated at events and have made special signs. Use them. Or if you are capturing something special make a simple sign for that material.

If you are the recovery planner at an event following the best practice of tailoring the system around desired materials will mean that you will need to make a choice early on in the planning process:

- Find out what kind of waste is generated at this event, pick desired materials to capture and design around it. OR
- Influence what materials are generated and make a plan for that material. The planning section of this chapter will explore these two approaches in more depth.

Even if you are just a volunteer-trainer or vendor-trainer for the day, it is still very helpful to know this best practice so that you can troubleshoot. You may arrive on the scene and see that they have used general recycling signs. You can use the seed method mentioned above and work to clarify signage.

WASTE PREVENTION BEST PRACTICES

It is much easier to manage waste if it is never generated in the first place! There are plenty of easy best practices that involve reduce and reuse concepts for events. Consider these options for your events big or small:

Centralize everything

A lot of times the reason we end up with individual packets of waste is because we are only thinking about distribution from one individual food vendor to one individual event participant.

What if the event was considered a shared venture?

Consider setting up a condiments island between the vendors. Large containers can be used to squirt ketchup and mustard directly onto the food (no more little ketchup packets!). Use urns, pitchers or punch bowls rather than canned or bottled products. Serving buffet-style avoids boxed lunches and packaging. It also reduces food waste because people can select the food they like to eat.

Use durables instead of disposables

There are many strategies for introducing durable goods at events. Linens, dishes, silverware and glasses add a sense of class to a dinner gathering of 300 people. You can borrow or rent these items for one-time events from community swap organizations or rental companies, such as That Party Store. You can incentivize behavior change by giving a raffle ticket to anyone who brings his or her own container. Vendors might be excited to hand out beer mugs or other reusable items with their company logo on them. You can use live plants for a table centerpiece

that can be auctioned off after the event. Farmers Markets are increasingly purchasing durable equipment for their food vendors and working with nearby businesses, schools or churches to wash and store them between market days.

BEST PRACTICES FOR FOOD

Plan to donate leftover food

Fresh and prepared foods are in demand by food rescue agencies. Consider donating large amounts of uneaten food to local organizations such as, Flagstaff Family Food Center, Sunshine Rescue Mission, Northern Arizona Food Bank and elsewhere.

Know when to and when not to compost

It is increasingly popular for community groups to want to start off their first sustainability plan with composting. Organics often are the largest waste material at events, and composting food scraps and coffee grounds is certainly an effective way to increase your recovery rate. But composting is complicated and should be considered an advanced level in the world of event recovery. The compost facilities in our region will accept food only.

These conditions need to be met before it is recommended to attempt composting:

- The goal is to capture food. If it is not expected that a lot of food scraps will be generated at this event, composting should not be practiced. Beer festivals are examples of events where there is little food scraps left, but the event organizers want to compost because they think that the cups are compostable. These cups do not provide nutrients to compost and are contaminants for all of the facilities in our region.
- A hauler and receiver of the food scraps is available. You may need to identify a farmer who will use the food scraps for pig feed or self haul food scraps to transfer stations.
- There will be plenty of volunteers to staff waste stations to remind people to separate their food scraps from their plates and flatware.

Consider composting food scraps (organics) from Vendors Only

Often the most effective food scrap collection plan is to work with the vendors only. Providing collection options during their food preparation stage will often capture more waste than the public will generate anyway.

DESIGNING AN EVENT SUSTAINABILITY PLAN

With the previously discussed best practices in your back pocket, you are now ready to explore how to approach a project from beginning to end.

Pre-planning

There is a lot to do before an event. Make sure you have enough time.

Gather information to determine what to propose

Work with the community organization to understand the reason that they want to have a sustainability plan. Are they required to have recycling in order to use the facility? Do they want to collect materials as a fundraiser? Is sustainability a core value for their community? Do they want to recover material or are they also interested in waste prevention? You can also ask the coordinators questions to understand existing conditions. Is this the first time they have attempted to do something? Have there been failed attempts before and if so what went wrong?

If they have had the event before, ask what types of waste were generated. Plastic bottles, cups and food are common recoverable materials. Metal and glass are less common. Disposable plates and silverware are virtually impossible to recover. They might even have data or a report from past events. Clarify what resources are available for this project. Is there a green team or are you the only planner? How much time, budget and volunteers do you have?

It may also be necessary to do some research to understand the existing conditions. Contact the venue to find out what is included in the use of the space. Walk through the area to understand where the containers are now and how the space will be used during the event so you can see if waste will be generated in the same places that there are containers. Is there a recycling or compost container buddied with every garbage can? Perhaps there are too many cans and they are really spread out. Can they be moved to create a more central waste station area?

Another way to determine what you should try to achieve is by contacting the vendors and asking them what they plan to bring and handout to participants. You can also ask them about their own waste. Do they prep food on site? Do they end up with a lot of cardboard after their boxes are emptied of literature?

Draft a proposal and meet with event planners to develop a plan

Decide on goals. What materials are you going to capture and how much? Do you want to set a goal of the percent of volume of garbage reduction or bottles captured? How will you know you

were successful?

Define roles. For example, who in the organization will arrange, sign and manage the contract with the hauler after you make recommendations? Who do you contact to talk about volunteer needs? Who will be removing full bags of material and hauling them to larger containers for haulers (this will likely be the volunteers with your leadership)? Are you allowed to contact vendors ahead of time directly or can you include your messages with the other messages that go to them?

Secure a budget. It is crucial to be clear that you have the funding assigned to costs related to waste management. Sometimes event coordinators forget to include this in their budget planning. Create a site map. This map can include containers and locations for larger waste containers to store waste before pickup. You should share this map with everyone involved. Identify places where food, boxes and other types of waste will accumulate.

Organize and execute

Arrange for pickup. If there is not already an onsite hauler, contact one to secure larger containers, work out logistics, clarify recovery goals and arrange for pick-up of the garbage and/or recovered material. (You may end up having a separate plan for some or all of the recovered material.)

You can contact City of Flagstaff Solid Waste at 928-213-2110. From the Materials Recovery Facility to your local pig farmer, you can be creative in finding places to bring materials for recovery.

Event containers, signs and other assistance.

We recommend contacting the City staff for help getting assistance with recycling at your event (928-213-2158).

Volunteers.

Ask the event coordinators to include your recovery plan needs in their volunteer recruitment plans and task assignments. Be sure that they provide enough volunteers for the cleanup crew. There is a lot to do at the end of the day! Also make sure they let the volunteers know if they will be doing cleanup so that they dress accordingly. Green Team t-shirts or aprons are a nice way to mark the volunteers.

You can send an email to the Master Recycler Coordinator to post an announcement to invite other Master Recyclers to help with planning, volunteer and vendor training.

Event coordinator, site supervisor and/or janitorial staff

Your venue's staff can make or break your recycling program. Make sure that all parties understand and will carry out your plans, especially if they are doing the recycling themselves. Establishing a good relationship with the event coordinator, site supervisor, and/or janitorial staff is crucial.

During the event:

1. Set up containers and signs the day before if possible using the best practices.
2. Check in and train vendors and volunteers.
3. Spend the day monitoring for problems, checking in with volunteers and looking for contamination or full bags.
4. Move containers, add details to signs (as needed), and use volunteers to help solve unforeseen problems.
5. Find out if you can promote recycling by making some announcements on stage.

Post event:

1. Tear down and clean up. Materials continue to be generated during cleanup. Assist vendors with tear down. Complete and/or confirm final sorting and pick-up of garbage and recycling. Donate food.
2. Evaluate Your Event's Success. Ask for feedback and suggestions from everyone involved in the event including organizers, volunteers, vendors, exhibitors and haulers.
3. Calculate Your Event's Success. To calculate the recovery rate, ensure ahead of time that your process will allow a clear comparison between garbage and recycling. Sometimes groups state, "We had one garbage can and three bags of recycling." This statement does not give a clear evaluation, because it is unknown how big the can was in comparison to the bags. To calculate your recycling rate you need to be able to compare recycling with the waste generated. If your hauler/recycler was able to weigh your garbage and recycling, follow up with them the day of the event for final weights.
 - Calculate your recycling rate using the following formula: $\text{Recycling Rate} = \frac{\text{Weight Recycled}}{\text{Waste Generated (Weight Recycled + Weight Disposed)}}$
 - For example, if an event recycled 5,000 pounds of material and disposed of 3,000 pounds of material, the total waste generated was 8,000 pounds. The recycling rate would be 62.5 percent ($5,000 / (5,000 + 3,000) = 62.5$ percent).

- If your hauler was not able to weigh your garbage and recycling you will need another plan for evaluating your recovery rate. One option is to calculate your recycling rate using volume as your base with the following formula: $\text{Recycling Rate} = \frac{\text{Cubic Yards Recycled}}{\text{Cubic Yards Recycled} + \text{Cubic Yards Disposed}}$. 1 Cubic Yard = 201.974 026 US Gallons
 - For example: if an event recycled three 90-gallon roll carts full of cans and bottles ($90 \times 3 = 270$ total gallons). The hauler provided a 2 yard garbage container and it was $\frac{1}{2}$ full. First convert the recycling to yards ($\frac{201.974\ 026}{270} = .748$ yards of recycling). Then calculate your recycling rate $\frac{.748 \text{ yards recycled}}{(.748 \text{ yards recycled} + 1 \text{ cubic yard disposed})} = 43$ percent recycling rate.
4. Publicize the recycling rate along with the results of waste prevention efforts. Thank your donors, sponsors and volunteers with a card or a post-event celebration, and share the recycling rates and waste prevention results with them.

REPORTING YOUR HOURS

All work including emails, research, meetings, training and trouble-shooting counts as payback so long as your primary role is training or planning. Some of these projects may be one day events in which case the regular Master Recycler volunteer hours report form will work great to report your hours.

However, ongoing projects will make this form tedious and confusing to use. You can choose to keep a tally or spreadsheet of your activities as you go and send the sheet to the Master Recycler Program Coordinator all at once or you can fill out the volunteer report form online after you do an activity.

Please do not wait until after the event to try and calculate the hours we owe you. You will forget many of the details. If you are not sure how to count hours, contact the Master Recycler Program Coordinator.