IOWA STATE UNIVERSITY Facilities Planning and Management

RECYCLING SERVICES NEWSLETTER

CAMPUS RACE TO ZER S WAST

2023

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"One thing you can't recycle is wasted time."

Join the challenge!

Iowa State University will once again compete in the "Campus Race to Zero Waste" (CW2ZW; starting 1/29/23). This competition helps focus on reuse, reduce and recycle, as we try to minimize the waste that is produced on ISU's campus. This will be the fourth year of our participation in the event. For more information, contact Steve Kohtz (sakohtz@iastate.edu).

Reuse, Reduce, Recycle for the Holidays!

There is nothing more exciting than to gift something creatively done from one's own hand. Consider gifting your loved ones with handmade items, recycled from used materials. Dress a coffee mug in a sweater sleeve, or take a pillowcase and write a sweet or kind saying on it that your loved one can sleep upon and think of you all night through. When you recycle something old, and you make it something new! You are practicing holiday Magic!

Than<mark>k th</mark>em before you go!

One of the greatest, unsung heroes in life are our custodians! Don't forget to thank them for keeping your building clean all year long. Without them, life would be less organized, filled with waste and not so pleasantly fresh. They work magic on a daily basis. Give a smile and a kind word to them before you leave for winter break. They deserve all the appreciation we can give.

THANK YOU CUSTODIANS FOR ALL YOU DO TO KEEP LIFE TOGETHER FOR US. YOUR THE BEST!

RECYCLING SERVICES NEWSLETTER is a quarterly publication of lowa State University Facilities Planning and Management Recycling Services. An informative newsletter focusing engaging, educating and empowering Students Faculty and Staff on the importance of a minimal waste/maximum diversion lifestyle.



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MINIMIZING WASTE BY DIVERSION

Waste Minimization and Diversion is a lifestyle, philosophy, movement, and solution to reduce consumption. It is a process aiming to eliminate rather than manage waste. Streamlining production and distribution systems to prevent waste from being produced, Minimizing and Diversion waste is about refusing, reusing, reducing, and recycling, redirecting waste from the landfill.

RETHINK SINGLE USE ITEMS...

Holidays bring with them the thoughts of convenience. It is much easier to use paper and plastic instead of reusable or washable place settings at the table. The presents under the tree add more joy when they are wrapped in some pretty paper and bows, but that beauty is only a fleeting moment. Each convenience brings with it a challenge for recycling. Neither plastic/paper ware or wrapping paper are recyclable. They go directly to the landfill. As you prepare for holidays be mindful of where the convenience items will end up...namely, the special vault in the ground called a Landfill. (see pg.3)

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RECALLING AMERICA RECYCLES DAY

The day started out a bit different than expected, a blanket of white fluffy snow had wrapped the grass, trees and landscape in pure beauty. America Recycles Day was going to be one to remember!

In deep contrast to the white fluffy snow was a pile of 49 bags of garbage. Total weight of 690 pounds of garbage lay in the middle of the Parks Library South Lawn behind the Recycling Services tabling event. Many students, faculty and staff stopped to see why this



eight foot pile of waste had been placed in the serene setting of Parks South Lawn. The answer. 690 pounds of garbage, this eight foot tall pile is what one average college

student will throw into the landfill during a school year. If you take that pile and multiply it by 30,000 you will see what Iowa State University will send to the landfill this school year.

The display is simply to help the Iowa State Community to see what we "throw away" each year. Steve Kohtz the "Recycling Guy," and Iowa State University's Recycling Services Coordinator wants to help everyone understand, that when we throw things "AWAY," we really are sending it to the land-"vault" for permanent storage called the Landfill. Instead of "Away" it is going to a permanent storage system that is depleting our o-zone.

Too often these days we don't even see or think about our trash. We place our trash into a black plastic bag so we don't have to see "it." The bag is often scented with a lavender bouquet, so we don't have to smell "it." When "it" is full we tie the bag with a nice knotted bow and toss "it" into the waste dumpster, where "it" magically disappears into the oblivious location, called "Away." Our trash collectors drive "it" "away" to the landfill. Do you get the idea? we are ignoring the fact that we create waste or trash, daily, moment by moment and we don't even think about it.

Dining out we have grown accustom to single use straws, forks and spoons, plastic lids, paper wraps, and Styrofoam clamshells all to make the meal convenient. Not thinking about these items going into the landfill to be stored for years to come.



Landfills in the 1970's were promoted as a location where the items buried

would deteriorate and decompose. However, reality is that landfills are only filling the land with our waste, and destroving our O-zone. They are tightly compacted, and anaerobically producing methane gas from the waste which is 45-60% more toxic than any other methane producer, trapping the heat into our O-zone, according to the United States Environmental Protection Agency (EPA). (https://www.epa.gov/lmop/basic-information-about-landfill-gas)

Still, "it" isn't talked about. We don't even like to see "it." While collected the 690 pounds of waste, Steve Kohtz noted that as he walked across campus with a full waste cart, people would look away. Kohtz would try to greet people, and they would ignore him. However, when he was without the waste cart, he could smile and greet people and they would return the greeting. It was an interesting experiment he carried out for a week, as he collected the waste.

"It" is out in the middle of Parks Library South Lawn, and sure enough "it" started people talking. "Why is there trash on the lawn?" to which Kohtz would share the pile was what a single college student throws away in a school year. Their reaction was to raise evebrows, shake their head, or cause them to pause and contemplate. To which Kohtz would then let them know that 1/3 of the pile could be recycled. Cutting that pile down by 16 bags of waste, then he would challenge them to a game called "What Recycles?" where participants selected 5 items of trash that could be recycled, from a collection of waste.

America Recycles Day is an opportunity to recommit to recycling. If we could claim the metals, glass, plastics and paper that can be recycled, we would be opening a great deal of space in the landfill. If we chose to reduce our need for single use items and find more permanent solutions we could help the environment out, and help the climate start to change. First, by acknowledging and seeing the waste, realizing its damaging potential, and committing to reducing our waste through recycling. reusing, refusing, reducing and repair ways we create that waste. (see page 3 for more details)

More events like this will happen in the spring, helping Iowa State to recommit to efforts of protecting our environment and reducing landfill waste. America Recycles Day was just the start of a reawakening.

Join the movement! Visit fpm@iastate.edu/recycling for more information.

FIVE R'S FOR REDUCING WASTE DURING THE HOLIDAYS

FUSE DUCE USE PAIR CYCLE

Since the 1970's the Three R's have been a common theme for those who are seeking to be environmentally conscious. A person is encouraged to think about the three R's as they head to the store, as they stand at the trash can, or as they contemplate what to do with their pile of whatnots they have collected.

Interestingly enough, this campaign was started with

the challenge of plastics filling the waste stream. Today, the 3 R's have been added to. Let's take a look at how we can use the 5 R's to consider our individual waste stream.

REFUSE

New to the set of three R's. Refuse is an option that we often don't consider. When we are offered single use items we simply could refuse them and eliminate one straw, cutlery set, or plastic shopping bag from the trash stream. It may not sound like much, but the journey of a thousand steps starts with the first one. If a million people refuse a single use straw, one time, think how many we would reduce from the waste stream. Refusing can also be observed in purchasing bulk items. If we were to purchase balk items like beans, pasta, or soaps, we are refusing the single item packaging and all that entails. Think how much waste occurs with packaging. We need to seek ways to better refuse items that are over packaged, and support products that have little to no packaging. Perhaps this year, we could refusing to use fancy gift wrap. Instead use items like dishtowels, cloth napkins, a tied button down shirt...Perhaps you could in your creative refusal of wrapping, gift, your loved ones twice...a gift and the gift wrapped in a second item.

REDUCE

One of the original three R's, Reduce has it's place in the Sustainable line up! If we could focus on reducing waste, like paper plates at the dinner table, or Styrofoam coffee cups, plastic zip-lock bags or individually wrapped single serve items, we could reduce our waste significantly. What if we were to reduce the amount of food waste we toss in the garbage? We could reduce the waste stream from items that compost and turn back into dirt. Reduce can also mean, our consumption. What if we were to consume less? Minimize our wardrobes down to two weeks worth of clothes? Now instead of having items hardly worn, your wardrobe has become a lessor or secondary worry for you.

REUSE

By reducing your clothing you will find you have to reuse items to create a secondary or tertiary look. Reuse is another standard in the three R's. By reusing items we save on diverting single use items. For instance, using a refillable water bottle saves around 1,500 water bottles a year for one person. Iowa State University is just shy of 30,000 students that would save 45 Million water bottles a year! Reuse also focuses on shopping second hand stores, or downsizing your closets by donating to the second hand stores. Perhaps instead of buying a plastic spray bottle of cleaner, you use a glass reusable bottle and create your own cleaner. This reduces the amount of single waste items in the waste stream as well! In regard to the holidays? Perhaps finding a nice cookie plater second hand instead of the paper plate would be a start? or as mentioned earlier, a cloth item (napkin, shirt, etc.) instead of wrapping paper.

REPAIR

A trade that is slowing disappearing is the repair person. Today's world we are into disposing of a refrigerator instead of fixing it. Gone are the days of the 25-30 year old refrigerators, now they are celebrated if they make it to 10 years. Not only that, but we are encouraged by media outlets to change the style of our homes every seven years, by simply sending out the old and brining in the new. If the shirt has a rip in it, throw it out and get a new one, rather than patching it or darning it with a needle and thread. A refurbished loved item, gifted, is a greater treasure then a new item. Like Tow Mater in the Pixar animated movie <u>Cars</u>, scratches and dents are memories that mean more than being freshly painted.

RECYCLE

Finally, the most known of all the R's, Recycle. It's simple, if we could all learn to recycle, we would see a change in our waste stream. Current trends predict that we will see a decrease in recycling in the next couple of years, due to the recession. It is vitally important that we don't loose site of the responsibility of recycling, rather than the financial reward of recycling. It may cost a bit more to recycle, but it will be a huge deficit to the planet if we don't.



MOVING OUT? Look this over...

Transitions are always interesting to encounter, especially when it comes to moving personal items from one location to another. Move out can be monotonous and challenging. Knowing where things should go is part of the challenge. Please see the Move Out brochure at <u>fpm@iastate.edu/</u> <u>recycling</u> to see all the helpful hints in moving out. Here is a brief of that brochure.

IT'S A TEAM EFFORT!

Remember as you are moving out, your waste is someone else's challenge. Please be a team player and assist in waste removal. Take your trash to the outdoor dumpster and recycle all you can! Remember we single stream, so plastics, glass, metal, and paper all go into the blue bins. If the totter (76 Gal, two wheeled bin) is getting heavy please use extra boxes to set beside the bin so it is easy to travel.

IT'S SURPLUS IF OWNED BY ISU

If any of your items are owned by Iowa State University please note, these need to be either left in the department or office, or sent to ISU Surplus where they will sale it, and if not sold will take care of it by either recycling it or will find another use for it.

PLEASE REQUEST BOXES/BINS

We are happy to assist you with purchased boxes and extra recycling bins if you need, please reach out to <u>FPM@</u> <u>iastate.edu/recycling</u> to request extra supplies a week before moving day. This will prepare the team for delivery of containment products to your area.

IF IT DOESN'T RECYCLE, PLEASE CONSIDER RE-PURPOSING IT

While it may not be of use to you, it might be of use to someone else. If it's office products, we will store them for you until someone needs them. Don't throw away personal unwanted office items, reach out to the Recycling Coordinator to explore ideas of where your items might be most useful.

HOLD THE METAL

If you have stacks of paper to recycle, please make sure metal has been removed from the piles. Large metal clips, paper clips, and metal spiral bound books cause havoc in recycling. Please pull them out, dispose of or reuse them with the office supplies.

DEBUNKING REPORTS...

Perhaps the report from Greenpeace hit your ears this past month. The report said that "little to no plastic in the United States is recyclable or is being recycled."

Their study was a bit construed and misleading, let's take a look a bit deeper into their research and hear from industry officials.

The National Waste and Recycling Association CEO Darrell Smith said, "the opening statement of NPR's story suggests that the vast majority of plastic put in blue recycling bins is headed to the landfills and that is not true. Our members own the majority of recycling facilities in the country. And we can confirm that recyclables get recycled."

Several plastics industry groups pushed back against the claims that Greenpeace reported (most notably on NPR, CBS, and the Guardian). Greenpeace conducted a survey of recycling facilities and used data from industry reports to develop "reprocessing rates" for different types of plastic. The reprocessing rate determines "if sufficient capacity exists to assure customers that a plastic product has a sufficient likelihood of actually being recycled into a new product," according to the report. It was this rate Greenpeace used to compare different plastic with the Ellen MacArther Foundation's 30% threshold. (The Ellen MacArthur Foundation is an international organization that advances the circular economy, and its definition of recyclable was used to set benchmarks for its 2025 Global Commitment goals for brands.)

The conclusion of the report was that, "Overall, the U.S. has a 5% recycling rate."

"It all depends on what the denominator is," said Steve Alexander (President of Association of Plastic Recyclers (APR); "when looking at recycling, APR uses the amount of consumer-facing packaging produced. It appears Greenpeace is using all plastics created as a denominator." That includes durable goods, such as toilet seats, PVC piping, and other high density polyethylene and polypropylene, even then, these resins used in a packaging context have a 21% recycling rate."



Reality is, the world won't stop making plastics tomorrow, we will always have plastic packaging, so we need to make sure it is sustainable, and recycling is the vehicle to do just that. "The recyclers have the capacity to recycle plastics at a 42% rate, but we can't get the supply." Alexander continued. This is due to the poor practices of recycling by U.S. citizens.

Matt Seaholm, president and CEO of Plastics Industry Association, said "There is no question that we as a society can and must recycle more. However, their (Greenpeace) assertions that recycling can't keep plastic materials within a circular economy is disingenuous and irresponsible. Recycling is real...no where in the Greenpeace created document is there a focus on the value that plastics provide," such as health care settings and in reducing food waste.

Greenpeace is reported to say that mechanical and chemical recycling of plastics "has largely failed and will always fail because plastic waste is : extremely difficult to collect, virtually impossible to sort for recycling, environmentally harmful to reprocess, often made of and contaminated by toxic materials and not economical to recycle."

Lisa Ramsden, Greenpeace USA plastics campaigner, said there is more plastic being produced and an even smaller percentage of it is being recycled. The crisis just gets worse and worse, and without drastic change, will continue to worsen as the industry plans to triple plastic production by 2060.

While the views of Greenpeace seem to be very negative, the heart of the report is true, things need to change, and there are many voices in the mix to strengthen the opportunities. One thing we can do at Iowa State is practice recycling. Recycling plastic products that have twist off lids, cuts the waste in the landfill and creates more opportunity to reuse the plastic that is already created, which in turn creates less need for new plastics. Keep it up ISU! Let's make a strong statement in recycling.

Our biggest challenge to recycling is contamination. Don't throw your food, food stained items or liquids into the blue bins. Keep the recycling clean and stain free.

This article is a summary of a full article in Resource Recycling, entitled <u>Greenpeace report: No US plastic is truly recyclable</u> which was published October 25, 2022. <u>resource-recycling.com/recycling/2022/10/25/greenpeace-re-</u> <u>port-no-us-plastic-is-truly-recyclable/</u>

RECYCLING 101

While recycling has been around for some time, it might be new to some of our readers. So let's take a step back and learn about where our recycling waste goes once we throw it in the bins.

RECYCLING

Iowa State University uses Single Stream Recycling which means everything that can recycle goes into one bin, but, how does this work?

All the blue bins around campus and the blue solar compactors on Central Campus collect all things recyclable. Plastics (twist lid bottles and jugs), Paper, Metals can all go into this bin.

On Tuesdays of each week, Waste Management of Des Moines comes to campus and collects all the Blue "totters" (large waste bins with two wheels) and dumpsters (the big collection bins outside), in their Garbage Trucks. Collection happens on Tuesdays specifically because these trucks collect the recycling and take it directly to the recyclers, in Waste Management's case it is International Paper in Ankeny, Iowa.

Once there, the truck dumps the recycling into a pit, and from there everything else takes over via machines. The weight of the metals fall into the lowest hopper, the plastic hits an air stream and is puffed into another hopper, the paper is separated to another hopper, and the process begins. The plastic is separated by an electronic eye, but also has two human sorters to ensure clean recycling. The plastic makes its way down to a baler, and is baled and sent to a plastic recyclers.

Paper too is baled and sold to a fiber company where it will be shredded and prepared to create new paper.

Metals as well are crushed and baled and sold to a refinery.

Your recycling efforts are put into good use, if the recycling is clean and liquid free. Please don't contaminate the efforts of our community by tossing food or food stained items into the recycling bins and no liquids.

And corrugated cardboard is collected on M/W/F and delivered to Schupan Recycling in Des Moines.



3 BASIC RULES TO RECYCLING



RECYCLE ALL BOTTLES, CANS, PLASTICS, PAPER AND CARDBOARD

PLASTICS: Recycle plastic by shape: bottles, jar, jugs and tubs (if the cap twists off, the cap and bottle are recyclable). Make sure containers are clean and dry before tossing in bin.

GLASS: Clean out and dry before recycling.

FOOD AND BEVERAGE CANS: Recycle empty tin, aluminum and steel cans. Empty aerosol cans maybe recycled.

PAPER/FLATTENED CARDBOARD AND PAPERBOARD:

paper, newspaper, and magazine are good to recycle. Flatten and recycle all cardboard. Exception to food stained cardboard. Corri gated Cardboard is collected separately.

KEEP ALL FOOD AND LIQUID OUT OF THE RECYCLING

Food and liquids contaminate the recycling systems. It is hard on the machines that sort the recycling at the MRFs (Material Recovery Facility = "Murphs"). Secondly, it contaminates the new material to be made from the recycled material.

Dump, clean, and dry out the recycled materials.

Don't spoil it for everyone else. If you leave a quarter cup of coffee in the recycling it will send the whole recycle bin to the landfill.

NO LOOSE PLASTIC BAGS OR PLASTIC WRAP AND NO BAGGED RECYCLABLES

Collecting recyclables in a plastic bag is easy to travel your items to the bin. Please dump the recyclables into dumpster and reuse the plastic bag.

Plastic shopping bags and plastic film or wrap, are not accepted as recyclable, because it entangles in the equipment and threatens workers safety.

No flexible packaging. Flexible packaging like chip bags, juice or soup pouches or multi-material packaging (paperboard box with plastic window) can not be recycled. They are too light, and have mixed material, please send to the waste bin.

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OTHER ITEMS NOT ACCEPTED IN RECYCLING:

TANGLING ITEMS: Garden hoses, rope, leashes, wire, holiday lights, string and chains should never go into the recycling.

NO DIRTY DIAPERS: This contaminates the recycling bin . Trash these, and keep your recyclables clean and dry.

NO HOUSEHOLD ITEMS:

Clothing, textiles, shower curtains, mini-pools, fencing, furniture, and appliances don't go into recycling.

NO MEDICAL WASTE: Needles are especially dangerous, please dispose of these in a safe container.

NO GARAGE WASTE: Car parts, scrap metal, tires, filters, propane cylinders and the like are safety hazards.

KNOW YOUR BIN COLORS BEFORE YOUR THROW YOUR WASTE. IT HELPS YOU PUT YOUR WASTE IN ITS PLACE.





HOST A ZERO WASTE EVENT

Do you host events for your organization or club? Consider making the event a zero waste event!

What is a Zero Waste Event you may ask? It is an event that produces little to no waste which would be sent to the landfill. Instead, considerations are taken for reusable or compostable items. Electronic handouts and QR codes are used to connect people with information, and waste bins are minimized for the use of single stream recycling and compost bins.

While it sounds like it could be challenging, hosting a Zero Waste event it is pretty simple. It is more about planning than hosting the event. While in the planning stages, inform those who will be assisting or participating with the event that you are creating a Zero Waste theme. The Vendors should consider what they are bringing and how to eliminate waste that would need a trash can. Instead encourage them to bring recyclable boxes and items that can compost.

If serving refreshments, consider compostable items rather than single use plastic and paper items. If your serving food, consider healthy choices like fresh vegetables and fruits. While Zero Waste may be a dollar to two more expensive, the Eco friendly effort is of greater value. Don't forget to advertise that you are hosting a zero-waste event! Your guests will be excited to be part of the event!

At the end of your event, weigh your three waste can items recycling, compost and trash bins. Note this on a document and turn it in to Recycling Services.

Iowa State University's Recycling Services is hosting a Zero Waste Challenge for those clubs and orgs that sign up. The top three most diverted/Zero Waste Events will be recognized at Sustainapalooza Award Night, and be awarded with a certificate of appreciation; along with a digital badge to promote their efforts on social media.

Be one of the first to celebrate being a Zero Waste Event! For more information go to: fpm@iastate.edu/recycling.

> HAPPY HOLIDAYS FROM ISU'S RECYCLING SERVICES HAVE A SAFE AND ENJOYABLE WINTER BREAK.

Landfills, Societal Necessities

The United States has 3,000 active landfills and 10,000 closed/filled landfills. Landfills are necessary for the proper disposal of solid waste, confining waste that would make its way into the environment. They prevent disease transmission and keep communities clean. While landfills are a necessity, they are the greatest supplier of Methane gas, which absorbs the sun's heat 84 times more than carbon dioxide, breaking down the earth's 0-Zone.

Landfills have federal regulation and guidelines that contain the waste in plastic and clay linings. Which creates a storage vault for waste. Landfills vent more than 45-60% methane, the highest producer of methane gas, and 40-60% carbon dioxide, both gases are detrimental to the 0-Zone.

While landfills are a necessity, our choice to fill them is our choice. Over 3/4 of our trash can be redirected either with reducing, reuse or recycling. While the terms have become common place, and practices seem to be confusing and full of misleading information, it is important that we minimize our waste through diversion. ISU has a goal of diverting it's waste by 75% by 2025, however, that isn't possible without everyone's effort to recycle.

More information at: fpm@iastate.edu/Recycling

information from: colorado.edu/ecenter/2021/04/15/hidden-damage-landfills



Boone County Landfill; image by Steve Kohtz



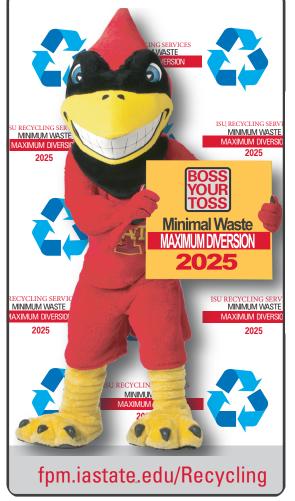


STAY WARM OUT THERE!

Winter can eat up our pennies quickly in our thoughtless attempts to stay warm and cozy. While the temptation is to make the inside of our houses feel like the tropical oasis we wish we lived on, the cost of heating that oasis could be styling!

This year, instead of "slow roasting" through the winter, consider wrapping up in one more layer. Not only will this be more economically beneficial for your pocket book, it is actually more environmentally friendly. Besides, it is winter and time to break out that fashionable style of reused multi layers.

BOSS YOUR TOSS NO FOOD OR LIQUIDS IN RECYCLING!



FACTS NOT FICTION

Here's some facts about recycling that might help you understand recycling is a big deal. Collected from rubicon.com/blog/statistics-trash-recycling

75% of America's waste could be recycled, but only 30% actually is. The rest goes to the in ground vault to store for the next millennium to discover. Landfills don't decompose due to being packed too tight and regulations over run off, contain the waste indefinitely, giving off 25% more Greenhouse gas than any other entity.

9 out of 10 people said they would recycle if it were more convenient.

Americans landfill \$11.4 Billion worth of recyclable containers and packaging every year.

Plastics make up more than 80% of debris pollution in our oceans, and 65% of that plastic comes from the Mid-West land locked states.

Glass is infinitely recyclable and takes over 4,000 years to deteriorate.

Aluminum is unlimited to the amount of time it can be recycled. Americans use 80 billion aluminum beverage cans each year.

In THREE Months Americans throw out enough aluminum cans to rebuild ALL of the U.S. commercial air fleets.

Recycling two aluminum cans can save the same amount of energy that it takes to power a personal computer for six hours.

5.6 million tons of junk mail is buried into landfills each year.

The average college student will produce 690 pounds of garbage this school year.



