WHY NEW MEXICO NEEDS THE "PLASTIC POLLUTION REDUCTION ACT of 2023"

The Plastic Action Team (PAT) developed The Plastic Pollution Reduction Act of 2023 as an effort to tackle the enormous problem of single-use disposable plastics. PAT grew out of NM zero waste and recycling advocates' efforts to limit these plastics that break down to contaminate our land, water, air, and bodies, and that are more effectively managed with uniform statewide restrictions.

Over 50% of plastics currently produced are used once for an average of 15 minutes. Recycling, the industry-touted solution, has proven to be ineffective at recovering and reusing plastic waste. With the enormous increase in single use plastics and thousands of different formulas and additives, how can all these plastics be recycled? They can't.

With these issues in mind, the Plastic Action Team created the following goals for statewide legislation.

Here's how the New Mexico Plastic Pollution Reduction Act 2023 addresses single-use plastic waste:

- 1) No plastic shopping bags to be given out by retailers or food delivery services. There will be a 10-cent charge for recyclable paper grocery bags, part of which will go into a dedicated state environmental services fund. The other portion remains with the retailer to offset their costs. If stores give out or sell re-useable bags made of plastic, they must have stitched handles.
- 2) No Styrofoam (polystyrene) food containers, trays, plates, cups, and packaging "peanuts" allowed.
- 3) No single-use plastic takeout containers, plates, cups, and stirrers. Exemptions if/when necessary: food pantries, soup kitchens, church meals, etc. Single plastic straws given only upon request for ADA and HIPAA compliance.
- 4) State law would not preempt local governments from enacting more stringent measures of plastics control.

In a very brief period, we have secured support from a broad group of stakeholders as noted in the enclosed documents.

We hope members of the Water and Natural Resources Committee will sponsor our proposed legislation and consider the pressing need for swift and timely action to address the plastic waste crisis in New Mexico. We are available to offer technical support and assistance along the way. Thank you.

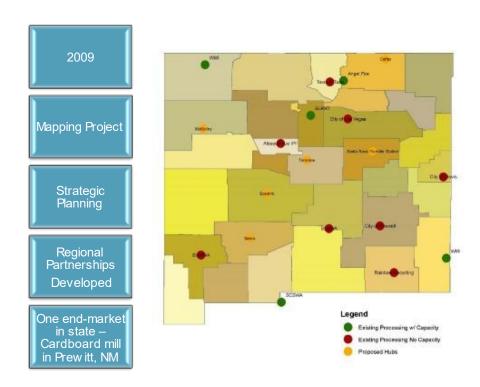
Sarah Pierpont is the executive director of the New Mexico Recycling Coalition (www.recyclenewmexico.com). The New Mexico Recycling Coalition (NMRC) is a statewide, member supported nonprofit organization with the mission to inspire New Mexicans to rethink, reduce, reuse and recycle. NMRC envisions a New Mexico where discarded materials are valued and managed as resources, not waste.

Recycling is an effective way to reclaim valuable natural material resources, especially with the high recycling rates of post-consumer paper, cardboard, and metals. The problem lies not with the concept or process of recycling but with plastic material itself. Even when millions of tons of waste plastic were still being exported to China each year (pre 2018), plastics recycling never managed to reach 10%. When plastics are recycled, they are usually "downcycled" meaning they are turned into another product that then cannot be recycled.

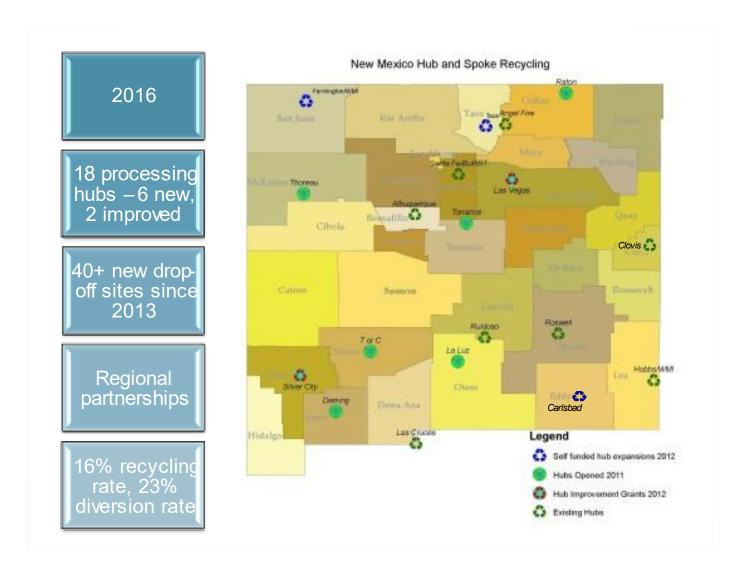
And the word "recycled" is often used loosely with plastic waste. For example, plastic waste collected for "recycling" is sent to cement kilns and burned in Boise, Idaho and Salt Lake City, Utah.

Recycling in New Mexico

New Mexico is home to a "hub and spoke" rural recycling system of which we can be proud. We are recognized as national leader for this efficient form of recycling that provides access to recycling for a geographically large, relatively rural state. That being said......New Mexico's rural hubs have struggled since 2018 when China banned the import of scrap materials and plastics don't fit into this equation currently. The three maps below highlight this history for our state.



Map 1. Recycling in NM in 2009. The 2007 NM Environment Department Solid Waste Management Plan of 2007 noted that access to recycling was the leading barrier to waste diversion in our state. NMRC used this information to secure federal funding in 2008 and 2009 to map existing waste sheds and recycling facilities in our state.



Map 2. NMRC leveraged the information gleaned from the 2008-9 study to secure \$2.8 million grant in American Recovery and Reinvestment Act funding from the Department of Energy to build recycling facilities throughout the state in 2011-2013. \$2 million dollars of this funding was sub-awarded to communities to build hub and spoke recycling systems (funding paid for buildings, balers, forklifts, loading docks, collection containers, etc). New Mexico is recognized nationally as a leader in rural recycling.

2022

Recycling Hubs Shuttered – Silver City, Carlsbad, Deming, Las *V*egas Taos

Recycling Hubs LIMITED items accepted — Estancia Valley (paper & plastic), Ruidoso (paper), Lea County (plastic), T or C (plastic), Angel Fire (paper & plastic), Clovis (plastic never offered)

Recycling & diversion rate unknown (2015 las date)

Hidaligo Hidaligo Las Causes La Lor Huts Opened 2011 Huts Improvement Grants 2012 Existing Hutss

New Mexico Hub and Spoke Recycling

Map 3. Since China closed its doors to the import of scrap material (2018) and the subsequent market volatility, five rural communities in our state have completely stopped recycling and five more have restricted what materials they accept with most of those communities no longer accepting plastics. This highlights the falsely marketed recyclability of plastics. Prior to 2018, most plastics were shipped overseas to be recycled with little to no oversight on whether or how they were recycled. There are numerous reports and studies noting the negative impact of imported plastic waste on developing countries. There is very little plastic recycling infrastructure within the United States.

An increase in state or local funding through the \$.10 bag fee would make these rural programs more sustainable as most communities do not have a budget for recycling education and outreach to their residents, which leads to high contamination rates, which lowers the value and marketability of their recyclables, which can cause programs to cease operations.

Recycling is not the answer for plastic waste in New Mexico. The New Mexico Environment Department's most recent Solid Waste Management Plan (2015) and the New Mexico Solid Waste Act embrace a hierarchical approach to waste management. The Act gives priority to source reduction and recycling and embraces the US EPA's waste management hierarchy (Figure 1).



Figure 1. US EPA's waste management hierarchy



Figure 2. This demonstrates the waste management hierarchy in a popular analogy for the plastic waste crisis. Turning off the faucet is source reduction; grabbing a mob after you've turned off the faucet is recycling.

Recycling Contamination Issues

The plastics outlined in this bill are not recyclable anywhere in New Mexico. Expanded polystyrene (Styrofoam) is not recyclable anywhere in our state, plastic food containers are not recyclable as they contain food/liquid debris and single use-plastic bags are not recyclable in any municipally run program in the state. Across the country, food debris and single-use plastic bags are some of the top contaminants in municipal recycling programs. Contamination rates for recycling in New Mexico are equal to the national average of approximately 30%. This means that 30% of the material put into the blue, curbside recycling cart or at the rural drop off location should not be there in the first place because they are not recyclable. This is considered the "expensive route to the landfill."

Single use-plastic bags are considered "tanglers" (Figure 3) and get stuck in the sorting equipment at recycling processing facilities. On average a city the size of Albuquerque needs to shut down operations twice per day to safely clean out these gears, costing approximately \$200,000 per year in lost productivity and increased staffing requirements.



Figure 3. Plastic bags get tangled in sorting systems at materials recovery facilities (MRFs) and require the sorting system to shut down to clean the material from the gears.

Litter & Illegal Dumping

New Mexico requires that solid waste facilities report the tons of material recycled and landfilled each year to the New Mexico Environment Department: Solid Waste Bureau. According to these reports, New Mexico Recycles approximately 8,000 tons of plastic each year. We also landfill approximately 2 million tons of municipal solid waste annually. This computes to a plastics recycling rate of < .05% statewide and a capture rate (the amount of plastic recycling in areas where plastic recycling IS available) is 3.3%.

If less than 10% of plastics are recycled in the United States and less than 1% of the plastics are recycled in New Mexico, where is all that plastic going? A lot of it ends up in landfills, which are lined and monitored and an appropriate place for this waste. A lot of it ends up as litter as well.

According to Keep America Beautiful's 2020 national Litter Study, an estimated 325 million plastic bags were littered along United States roadways and waterways. The vast majority, 95% of this litter is single use plastic bags such as you'd find at as retail store plastic bags, newspaper bags, and other consumer packaging (thin film) plastic bags.

As a state that depends on tourism dollars, it is in our economic interest to reduce this litter at the source. Figures 4-7 note some illegal dumpsites throughout the state with high amounts of single-use plastic. This litter greatly affects New Mexico's waterways.



Figure 4. Rio Grande Bosque near Albuquerque



Figure 5. Taos County, including bear scat with a plastic bag in it.



Figure 6. Sandoval County



Figure 7. Dona Ana County

The proposed NM Plastic Pollution Reduction Act is a source reduction effort that addresses these issues through the following initiatives:

- This bill proposed a ban on single use plastic bags at the point of sale with a \$.10 fee for paper bags to: 1) serve as an incentive for residents to bring reusable bags, and 2) crate a much-needed funding mechanism for NM communities for recycling and source reduction efforts. For example, the City of Santa Fe has a \$.10 fee for paper bags and that brings in about \$100k per year that they use for recycling education and outreach.
- The bill also proposes a ban on expanded polystyrene (Styrofoam) food containers. Styrofoam is not recyclable anywhere in our state and it is a nuisance material that easily blows away from curbside bins to create litter.
- The bill limits the use of single-use plastic takeout containers, plates, cups, and stirrers. We understand there will be exemptions if/when necessary: such as pre-packaged food, food pantries, soup kitchens, church meals, etc. Single plastic straws given only upon request for ADA and HIPAA compliance.
- State law would not preempt local governments from enacting more stringent measures of single use plastic control.

We are looking for champions to sponsor this legislation and direct that it be drafted by legislative staff, and we are here to help. We have a great deal of background information and legislative language from other communities that we can draw upon to draft this important and meaningful piece of legislation.

Replacing Common Single-Use Disposable Plastics

Good morning, Chairman and Committee members.

I'm Marianne Dickinson, a 40-year resident of New Mexico and a 'rabid recycler' for 50 years. I worked in the New Mexico Main Street program in several roles, which made me familiar with New Mexico's smaller communities. I was involved in starting our Central NM GreenBuilders program and now educate on Zero Waste strategies.

Reducing the accumulation of plastic waste everywhere means moving away from "throw away" to "re-use" in some way. Our packaging and food containers need to be used over and over, or else made of materials that can be captured in a circular system of returning, recycling, or composting. This bill is intended to raise awareness and incentivize that shift.

Right now, packaging design and manufacturing is in a state of flux. One reason is the industry is working to remove hormone-disrupting and cancer-causing chemicals, such as PFAS, BPA/BPS, phthalates and others, added to enhance plastic's qualities. Another reason is the growing consumer demand for products and packaging with recycled content or that is recyclable or compostable, because of environment and health concerns. And finally, the growing awareness of the enormous build-up of microplastics everywhere---and the futility of recycling---is causing consumers and brands to seek substitutes for plastics.

You may have noticed some local retailers and restaurants have already responded to those health and waste concerns. For example:

- The regional grocer that only packs groceries into cardboard boxes, or customers' own reusable bags, or re-useable bags they give to customers in their loyalty program.
- Chain and local stores that credit 5 cents for each bag the customer brings.
- Stores and restaurants where staff ask first, "Do you need a bag?" or "Do you want a straw with that?" Or, "Do you need utensils?" with your takeout order.

Those questions make customers think and engage. They break the staff's habitual behaviors and offer opportunities to up-sell and to build customer loyalty.

Large chains and restaurant owners may be resistant to change in an effort to shave every penny off costs, but they haven't realized the marketing benefit of choosing to "waste less," or go "green," or "clean." McDonald's and other fast-food chains have promised to get PFAS out of their food wrappers and fry bags this year. PFAS crisis is offers them the chance to rethink their packaging and costs.

What about...Contagion?

First of all—plastics are not inert—they absorb toxins, shed with friction and break into smaller particles in sunlight (very frustrating when you're doing litter clean-up and can't pick up all the pieces of an old plastic bag).

They do pick up germs and chemicals in the environment.

What are the options for retailers and for consumers when this bill passes? In other states the usual transition time is 6 to 18 months, giving suppliers and businesses time to diminish stocks and get new supplies. What is available now will be improved on and cost less in the near future because of new demand and more wholesalers carrying them.

Reusables:

Reusable shopping bags, the argument goes, are too elitist, or too funky.

Cloth bags cost anywhere from zero to more than \$20. An old carbon-footprint theoretical model used extreme assumptions---organic cotton, shipping across the globe, requiring too many reuses—to show how disposable, lightweight plastic bags were supposed to have a better climate impact.

In real life...

- Reusable shopping bags don't have to be made elsewhere--we have more than enough capacity and job needs to make them here. (Example shown: "Buy Local" Kei & Molly printed bag.)
- They don't have to be made of virgin fabric--given the many tons of fabric waste we produce each year they could easily be upcycled into bags of all sorts. Hemp growers could even have another market for their fiber. Creative "up-cyclers" in NM have been turning used clothing into fashionable new bags for years, often to give away free.
- As for lifespan, shoppers go to all kinds of stores with reusable bags---using a bag 125 times in 6-8 months is very feasible, and they last for many years. (1995 Recycling Conference bag example.)
- And reusable bags can be washed and sterilized—they don't get thrown away when they get dirty.

[Compare deceptive claims on "re-usable" plastic shopping bag with content of Kraft shopping bag.]

For eat-in dining, reusable service ware is actually cheaper when you factor in the longer life of reusable and refillable equipment, the elimination of single use item costs, decreased waste disposal costs, and the water & energy efficiency of modern dishwashing equipment. One study has shown businesses that switched to reusable items saved up to \$20,000 a year (add in food composting and grease recycling services and you have close to a zero-waste operation).

Carry out and delivery services have boomed since the pandemic, but our restaurant and hospitality industries need their customers and visitors to return. That means treating people as if they are welcome and valued---not with instant litter. Replacements for take-out can be old-school brown bags and aluminum containers and wrapping, or where the option is available, compostable paper containers. *If encouraged or allowed,* more customers would opt for bringing their own refillable containers for coffee, leftovers and take-out.

In closing, we are here to request that some of you sponsor this bill and direct staff to draft the language. We have resource materials and data to assist in crafting this bill and we look forward to working together.

Thank you.

Suppliers/Manufacturers:

https://mckinleypackaging.com/locations/

Recycling center in ABQ, paper mill in Prewitt, NM, supplier of 100 % recycled content Kraft paper for bags.

Numerous bag manufacturers in US, lots of options, including recycled content 40-100%, custom printing, quantity discounts, weight & sizes, types of handles, etc.

Certified compostable products: https://www.urthpact.com/certified-compostable-products-what-to-look-for-and-what-it-means/

Repurpose brand compostable single-use plates/ cups https://repurpose.com Available at some local retailers and on Amazon.

Restaurants' Guide to Reducing Plastics:

https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/62e2b5cb2e8f1126d6bd19f0/1659024853946/Restaurant-Guide-To-Reducing-Plastics-Print.pdf

Education is marketing. But greenwashing is false advertising. https://www.greenbiz.com/article/dont-let-your-brand-be-baby-wrapped-plastic

https://www.greenbiz.com/article/collective-wants-fix-beauty-industrys-packaging-problem

Why Statewide Plastic Reduction Legislation? Karen Sweeney

My name is Karen Sweeney. I live in Santa Fe County. I have been a member of Eldorado/285 Recycles for over ten years and have served as co-chair of the volunteer organization. When living in Wyoming, I was the staff person for the Wyoming Solid Waste and Recycling Assn.

Despite the name, Eldorado/285 Recycles, our group has lately been focused on issues related to sustainability. As Senator Stefanics will recall, when she was a Santa Fe County Commissioner she was instrumental in helping us reopen the Reuse Center at the Eldorado Transfer Station, which continues to this day. The Reuse Center diverts items that might be trashed and instead makes them available to residents for reuse. It is a very popular county offering.

My interest in the proposed NM Plastic Pollution Reduction Act, which targets just those single-use disposable items that are easily replaced with better options, stems from my appointment to the Santa Fe County Single-Use Plastics & Polystyrene Working Group. Our year-long task is to consider options for reducing single use plastic within the county.

As I considered this effort, I was a bit stumped by how it would work wrapped around the City of Santa Fe's years long plastic bag ban. Would merchants be confused; would the public roll their eyes at yet another rule, which might be slightly different than what they have been used to?

From the standpoint of businesses, differing local ordinances are an unnecessary hurdle. A business in Las Cruces, also operating in Santa Fe, has to consider different, possibly conflicting ordinances.

It became apparent that an inclusive, consistent statewide rule would benefit everyone.

<u>Community Ordinances.</u> Several New Mexico communities have developed ordinances restricting single-use disposables like plastic shopping bags and take-out food containers. Among them are Las Cruces, Santa Fe, Silver City, Taos, Bernalillo County.

Deming and Albuquerque enacted ordinances but have repealed them citing, in Deming's case, costs to businesses and residents; in Albuquerque's, costs to low income residents and concerns related to Covid. I believe all of these concerns could be resolved with statewide legislation. For example, the Taos ordinance takes steps to eliminate burdens for low income residents.

More important, though, the purpose is to encourage citizens to bring their own bags, every time, not purchase new ones at a store. Those of us who are old enough will remember that is how we used to do it.

<u>State Regulations</u>. Ten US states plus Canada and Puerto Rico have already passed measures limiting in some way use of plastic bags. They are CT, DE, HI, ME, NJ, NY, OR, RI, VT, WA. Beginning in 2023, CO will impose a fee on plastic bags and in 2024, eliminate single-use plastic bags and polystyrene containers.

Over 100 US local governments have single-use plastic restrictions and/or bag bans. This purpose of this type of legislation is widely supported by the public.

Why enact regulations? Single use plastic is a significant source of micro-plastics in the environment and our bodies. Single use plastic is a "convenience" we do not need. In addition to health concerns, it represents costs to municipalities to clean up and bury unnecessary materials.

Some of you may have seen Greg Polk's excellent video on plastic pollution in New Mexico's waterways. (It's 17 minutes long and worth a watch.) In it, Senator Udall refers to a credit card's worth of plastic we ingest every week in some form. Sounds scary and overwhelming. I traced it to its source, which was an Australian study. It is believable, given that plastic is in the air, water and on the land, all around us.

On a personal note, have you ever done an "audit" of your household garbage? If you do, you will likely find a majority of it is packaging. This legislation would reduce to some extent that burden on your household and on your community's waste disposal system.

<u>Ban on Bans.</u> There is an industry effort to preempt state and local control of this kind of plastic waste. Twenty-two states *have passed no plastic ban legislation*, although last year Colorado *reversed theirs*. It is important that New Mexicans protect and control our state and local choices. *Such an action* would silence the public's ability to be heard on issues they consider important.

How is this different from statewide plastic reduction legislation? A ban on bans is introduced from *outside*. It seeks to squash the statewide disposable plastic reduction movement that has grown from within, choices New Mexicans have made for themselves.

Ban is a loaded word. The point is to *reduce* impediments to our health and environment. It is prudent to do so.

Communities seek to address the waste created by plastics that cannot be recycled, despite the public being assured they can. Disposal then becomes a landfill waste issue, burdening that system.

Creating a statewide "policy," rather than individual communities making their own regulations, gives all New Mexico citizens a better understanding of the problem and the solution. It is more efficient for businesses that operate in more than one locale; it makes it more efficient for communities within counties where regulation might differ. Funding generated by the program would also support ongoing education of the public.

I hope the idea for this proposed legislation will receive positive consideration by this committee's members.

Thank you.

We support the passage of a New Mexico Plastic Pollution Reduction Act (PPRA)

The NM Plastic Pollution Reduction Act has been proposed by the Plastic Action Team (PAT), which grew out of NM zero waste and recycling advocates' efforts to tackle the enormous problem of single-use, disposable, plastic waste. Not truly recyclable, these plastics break down to contaminate our land, water, air and bodies, and are more effectively managed with uniform statewide restrictions.

The PPRA would reduce single-use, disposable plastic waste by restricting distribution statewide of Styrofoam (polystyrene) food containers and packaging "peanuts," single-use plastic food and beverage containers and utensils (with some exceptions), and disposable plastic shopping bags given out by retailers or food delivery services. This State law would create incentives to use recyclable, reusable and compostable replacements and would not preempt local governments from enacting more stringent measures of plastics control.

Contact Name/Title

Brad Weikel, Founder

Tammy Fiebelkorn, Founder

New Mexico Recycling Coalition	Sarah Pierpont, Exec. Director
New Mexico Climate Justice	Anni Hanna
Beyond Plastics Santa Fe	Stephanie Levy
Sierra Club Rio Grande Chapter Central group	Diane Reese, ExComm Chair
Wasteless Life New Mexico	Rachel Zulevi, founder
League of Women Voters NM	Hanna Burling
Progressive Democrats of AmericaCNM	Lora Lucero, Steering Comm.
Eldorado/285 Recycles	Elizabeth Mclaren, Co-chair
Middle Rio Grande Water Advocates	Ralph Wrons, VP, MRGWA

List compiled 9/20/22--9/28/22

Little Green Bucket

eSolved, Inc.

Organization

NM Plastic Pollution Reduction Act--- Frequently Asked Questions

Why can't plastics just be recycled?

- Half of all plastics are designed to be discarded after a single use. It breaks down to micro bits, and spreads everywhere: deep in the ocean, high in the mountains, and into human bloodstreams.
- Recovering and reprocessing plastic uses labor to capture and sort, water to clean, and energy to transport and process the pellets. Virgin plastic is cheaper.
- Market prices for recycled plastic are unreliable.
- Plastic recycling programs have never achieved more than 10% and are now closer to 5%. The remaining 95% is landfilled, burned or escapes into the wild.
- New technologies to decompose plastic must be scaled up to process millions of tons of existing waste.
- Most plastic that IS recycled are downcycled, which means they are turned into something with lesser value than the original item and that downcycled item cannot then be recycled.

What will replace prohibited disposables? Containers and packaging that are compostable, recyclable, returnable, or reusable. Consumer demand, economics, and stricter regulations are driving innovative packaging designs in the US and other countries.

How will the NM PPRA benefit New Mexicans? It will help us:

- Transition to a more circular economy, where resources are recovered and reused. It will create steady, productive jobs.
- Cut down on our exposure to micro-plastics and decrease litter.
- Aid our tourism, film, and recreation industries by keeping our landscapes enchanting.
- Decrease the economic burden on local jurisdictions to process plastic waste.
- Create opportunities for local entrepreneurs to design sustainable products and delivery systems.

Is anyone else prohibiting single use plastics? Ten US states plus Canada and Puerto Rico have passed similar measures. Over 100 US local governments plus European, African, and Asian countries have also enacted restrictions.

Why do we need this bill now? Plastic industry representatives are introducing bills in other states to preempt local plastic restrictions. It's almost certain one will be introduced in NM soon.

Will this bill include Extended Producer Responsibility (EPR)? This bill is a first step which will eventually assist EPR legislation in the future.

When will this go into effect? A transition time of 6 to 18 months will provide businesses time to diminish existing stocks and acquire suitable replacements. Some states, like Colorado, even have multi-year phase in approaches.

What about chemical recycling? Not technically recycling, these technologies use pyrolysis or gasification to turn plastic into fuel for burning. The few facilities currently in operation have yet to prove successful.

Single-Use Plastic Bags

WHY WE NEED TO BAN THE BAG

- Plastic bags are used for an average of 12 minutes, but can last for more than 500 years.
- Plastic bags are one of the top five items found during waterway cleanups.
- Plastic bags are one of the top contaminants in curbside recycling programs.
- Plastic bags are not just polluting our oceans, they're also clogging gutters, streams, rivers, lakes and ending up in our woods, roadsides, meadows, and trees.
- Experts predict that there will be 1 lb of plastic for every 3 lbs of fish in the oceans by 2025.
- Americans use 100 billion plastic bags per year,
 which require 12 million barrels of oil to produce.
- Every year, plastics add as much greenhouse gases to the atmosphere as 189 new coal plants.
- Half of all the plastics ever created were produced in the past 15 years.
- 91% of all plastics have not been and will never be recycled.
- There are microplastic particles in the air we breathe, the food we eat and the water we drink.
- Adults ingest roughly 100,000 micro-plastic particles each year with as yet unknown effects.









Polystyrene Foam

WHY WE MUST SAY "NO" TO FOAM!

- Styrene, the main ingredient in polystyrene foam, is classified as a likely carcinogen in humans.
- Americans use 25 billion styrofoam cups per year; less than 9% of which will be recycled.
- Styrofoam cups and containers readily leach toxins into the food and drinks they contain and the process is accelerated by heat as well as contact with fatty and acidic foods.
- Polystyrene does not biodegrade and may persist in the environment for more than one million years.
- As styrene leaches from landfills into our drinking water, it causes liver, kidney, or circulatory system problems.
- 15+ million metric tons of plastic enter the ocean each year.
- Polystyrene is lightweight and floats. As litter, it easily travels from streets and through storm drains out to the ocean.
- Experts predict that there will be 1 pound of plastic in the ocean for every 3 pounds of fish by 2025.









More Information - Facts, Charts & Graphs

- Plastic waste generation is increasing in the U.S., up from 60 pounds per person per year in 1980 to 218 pounds per person in 2018 (per EPA data) a 263% total increase (roughly 15% per year),
- Not one single type of plastic food service item, including the polypropylene cups lids that Starbucks touts as recyclable, has ever been recyclable per the FTC Green Guide legal definition,
- Toxicity risks in recycled plastic prohibit "the vast majority of plastic products and packaging produced" from being recycled into food grade packaging,
- The expansion of virgin plastic production is keeping the prices of high-quality new plastics low in comparison to higher cost recycled plastic,
- "Advanced" chemical recycling fails in recycling post-consumer mixed plastic waste due to insurmountable contamination, environmental, and economic barriers.

U.S. Plastic Waste, Exports and Recycling Rates

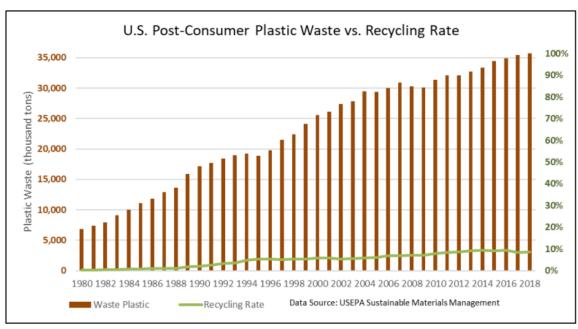


Figure 1: U.S. EPA Post-Consumer Plastic Waste Generation and Recycling Rate

As shown in Figure 1, from 1980 through 2018, plastic waste generation has increased five-fold in the U.S. from 7.4 to 35.7 million tons per year while the plastic recycling rate has never reached 10%. The peak recycling rate reported by the U.S. EPA was 9.5% in 2014 although that number also counted U.S. exported material as recycled when it was largely burned or dumped. The 9.5% included 2.1 million tons of plastic waste to Non-OECD (Organization for European Economic Co-operation) countries, of which 1.2 million tons were sent to China. Since 2018, the U.S. plastic recycling rate has declined along with declining exports of waste as China and other countries have closed their ports to America's unrecyclable and polluting trash exports. The U.S. plastic recycling rate peaked at a dismal 9.5% (including exports) and is now in an irreversible decline to eventual insignificance.

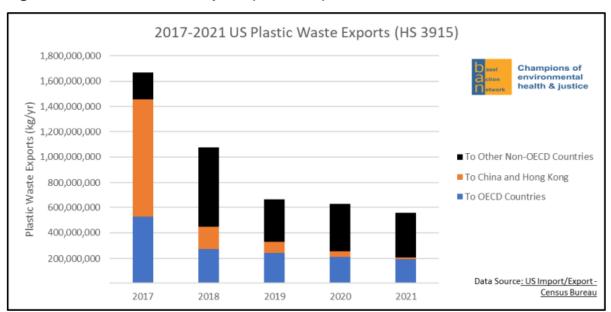


Figure 2: U.S. Plastic Waste Exports (2017-2021)

According to the U.S. Plastic Waste Export data shown in Figure 2, total U.S. plastic waste exports decreased from 1.84 million tons (1.7 billion kg) in 2017 to 0.61 million tons (0.56 billon kg) in 2021. The downward trend in plastic waste exports is a positive trend given the harms of plastic waste exports have caused in receiving countries, as documented in over 100 reports and investigations. 21 The U.S. must take responsibility for managing its own plastic waste.

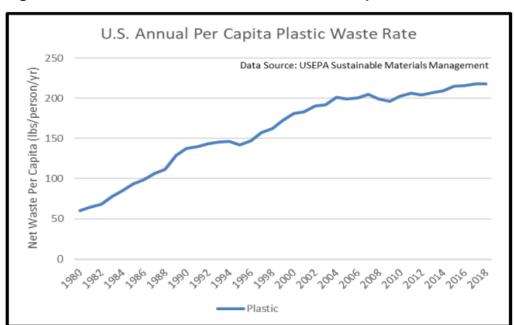


Figure 3: U.S. EPA Plastic Waste Generation Per Capita

Figure 3 shows the increase in per capita plastic waste generation over the same timeframe, from about 60 lbs per person per year in 1980 to 218 lbs per person per year in 2018. Plastic waste generation per person has grown in the U.S. because many new types of single-use plastics are served to consumers. Some of the plastic products were falsely marketed as being recyclable, spurring deceptive advertising lawsuits won against major brands

Proven Solutions to Reduce Plastic Waste and Pollution

Bans on single-use plastics: Single-use plastic items are made of low-value material that makes them widely available but economically impractical to collect and recycle. Legislative action to restrict single-use plastic bag distribution has resulted in a reduction of plastic bag pollution around the world. Bans on other single use plastics in food service applications have been adopted by the European Union, Vermont, Colorado, County of Los Angeles, and many other governments, as detailed by the Plastics Policy Inventory compiled by the Duke Nicholas Institute. (https://nicholasinstitute.duke.edu/plastics-policy-inventory).

Proof that bans and fees work to reduce plastic waste and pollution around the world:

- San Jose, California: Plastic bag litter decreased by 89% in the storm drain system, 60% in creeks and rivers, and 59% in city streets just one to two years after a single-use plastic bag ban took effect.
- United Kingdom and Ireland: According to a 25-year study from the United Kingdom government's Center for Environment, Fisheries and Aquaculture Science, there are significantly fewer plastic bags on the seafloor after European countries introduced bag fees. The study was based on 39 independent scientific surveys of the distribution and abundance of marine litter between 1992 and 2017. Sales of single-use carrier bags dropped by 95% in one year in main supermarkets since the introduction of the 5p charge.
- Australia: After major supermarkets banned plastic bags in 2019, their usage fell by 80% across the nation.
- Suffolk County, New York: The number of bags found polluting shorelines fell steeply in the first year after a 5-cent bag fee was enacted.
- Austin, Texas: The Austin Resource Recovery study found that the Single-Use Bag Ordinance was successful in reducing the amount of plastic bag litter in the city. Austin Parks Foundation reported a 90% reduction in plastic bag litter in the first six months after the ordinance had been passed. (Unfortunately, Austin's and other local bag ordinances in Texas have since been nullified due to a Texas Supreme Court decision)

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