



Environmental Sustainability Board

October 16, 2025

Agenda

**Environmental
Impacts**

**Look at New
Mexico & Los
Alamos**

**Conclusion & Next
Steps**

County Council Motion

1/16/2025

Evaluate single use plastic bags to include factors such as ability to recycle and other alternatives and cost to County to recycle and engagement to include local businesses and other interested parties.

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○ 1
Environmental Factors - ability to recycle
and alternatives

○ 2
Costs - cost to the County and to the
consumer

○ 3
Engagement - local businesses and
interested parties

○

Background

2015 to Present

2015

- Citizens Petition to ban single-use plastic bags and impose a \$0.10 fee on paper bags
- Surveys - 80% opposed a ban and 72% opposed reducing distribution
- ESB recommended education over regulation

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2019-2021

- Another petition to ban plastic bags, straws, and Styrofoam
- Council forms subcommittee
- FY21 - Council actions focused on education campaigns, funding washable utensils for schools, and a feasibility study on food composting, but no plastic bag ban was implemented

Present

- Council directs ESB to evaluate the aspects of a ban/fee

Environmental Impacts



Fast Facts

- What type of plastic?
 - Most grocery bags are high density polyethylene or HDPE
- Lasting Impact
 - It takes 1,000 years for a plastic bag to degrade in the landfill. Rather than breaking down, they photo-degrade, becoming microplastics that absorb toxins and continue to pollute the environment
- In New Mexico
 - New Mexicans use at least 330 million single-use plastic bags a year
 - 7 municipalities have bans/fees
- Recyclable?
 - Yes, but not in curbside recycling
 - About 80%-87% of bags produced are not recycled
 - Used for an average of 14 minutes
- Plastic Bag Policies
 - 19 states ban single use plastics
 - A study looking at US jurisdictions found that bans can lead to a 25% to 47% decrease in plastic bags as a share of tidal items collected by litter cleanups relative to areas without policies
 - BUT can have unintended consequences - increase in trash bag purchased

Environmental Impacts of Plastic Bags

Greenhouse Gas Emissions

- Organization for Economic Cooperation and Development
 - Plastics = 3.4% of global GHG emissions
 - Of the 3.4% of GHG emissions
 - 90% of the total emission from plastics are from novel plastics
- HDPE Plastic Bag
 - 2.6 kgCO₂e /kg Plastic
 - Number varies depending on the source
 - 1.5 to 6 kg of CO₂e
- ~90% of the emissions come from the production stage
 - Reduce and reuse!

Decomposition

- Plastic Bags - ~1,000 years
- Paper Bags - months
- Organic Cotton - several months

Pollution

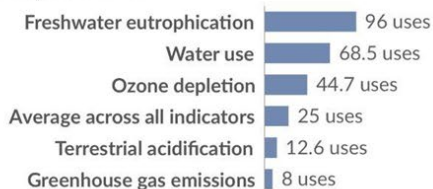
- Most common item of waste found in rivers and oceans
- Can breakdown into microplastics
- Impact on animals - birds and deer
 - Eat plastic
 - Can cause intestinal damage, sickness, death
- British Deer Society notes that plastic bags are a large problem with deer in the UK (and across the world!)



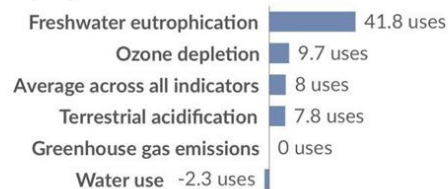
Environmental impacts of different types of grocery bags

Number of times a given grocery bag type would have to be reused to have an environmental impact as low as a standard single-use plastic bag.

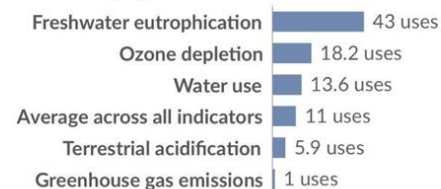
Recycled PET



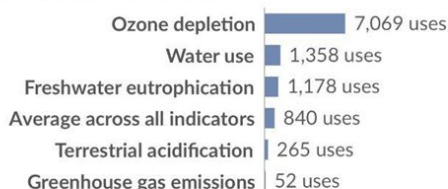
Biopolymer



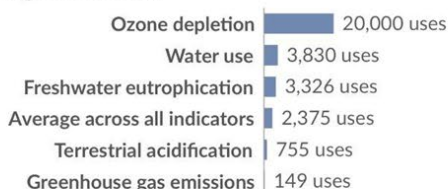
Bleached paper



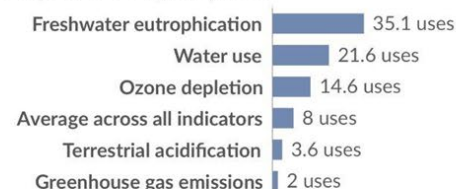
Conventional cotton



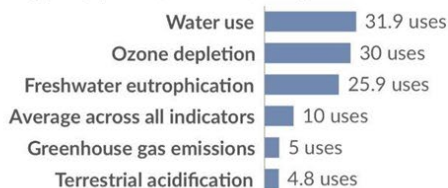
Organic cotton



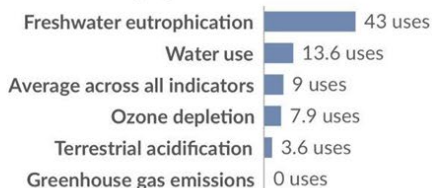
Polyester PET, recycled



Polypropylene, woven, recycled



Unbleached paper



Data source: Danish Environmental Protection Agency (2018)

OurWorldinData.org/plastic-pollution | CC BY

Note: Average across all indicators includes other metrics not shown here, including marine eutrophication, particulate matter, toxicity and others.

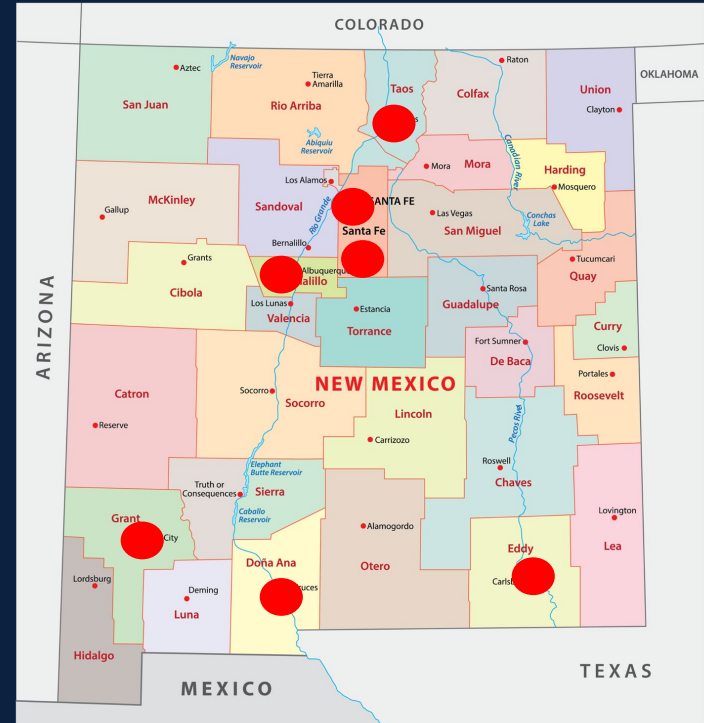
A look at New Mexico and Los Alamos



New Mexico

NM Single-Use Plastic Bag Ordinances

- Santa Fe County - pop. 157,765
- Santa Fe City - pop. 90,551
- City of Las Cruces - pop. 116,998
- Bernalillo County - pop. 671,747
- City of Carlsbad - pop. 113,575
- Silver City - pop. 9,399
- Town of Taos - pop. 6,453



New Mexico Plastic Bag Bags/Fees

- **Santa Fe County** - pop. 157,765 (estimated estimated 24 million single-use plastic bags/ year)
 - Sept 2024: bans single use plastics, styrofoam, straws at all businesses and restaurants (no fee for paper bags)
 - Penalties from \$50 to \$300
- **Santa Fe City** - pop. 90,551
 - April 2015: Ordinance bans single use plastic bags and includes a fee for paper bags
 - Exemptions: restaurants - tourism concerns (mostly targets grocery stores)
 - Ordinance cites plastic bags as concerns for tourism, wildlife and aesthetics
 - 10 cent fee for paper bags, 9 cents goes to the City and 1 cent is kept by the retailer
 - Fee goes to making the residential calendars for waste services
 - Average \$~250,000K
- **City of Las Cruces** - pop. 116,998
 - Jan 2022: Ordinance bans single use plastic bags and includes a fee for paper bags (40% post consumer recycled)
 - Exemptions: restaurants and (internally) exempted mom and pop stores, SNAP/EBT, non-profits
 - 10 cent fee for paper bags, 5 cents goes to City (collected on a quarterly basis) and other 5 cents goes to corporation, ideally used for replacement of paper bags)
 - Fee goes to sustainability education and reusable bag purchases
 - Average ~\$190k yearly in revenue for the City

New Mexico Proposed Statewide Ban - 2025

- While a statewide ban on plastic bags has not yet been enacted in NM, efforts have been made to pass legislation.
- 2025 - House Bill 392, the Single-Use Plastic Bag Act, proposed a statewide ban on plastic bags and a \$0.10 fee per paper bag, with \$0.03 going to the store and the remainder going to the municipality or county for litter reduction and outreach.
- The fiscal impact report estimated a statewide plastic bag ban could save \$3.8 million per year for recycling processors due to the damage that plastic bags have on recycling materials recovery facilities.
- Suggested to us that if more counties adopt their own bans, a statewide ban will be more likely.

Los Alamos

Los Alamos & White Rock Smith's Locations - at least 3.25 million bags used per year

Los Alamos

3.12 million bags/year

Weekly: 24 boxes X 2,500 bags =
60,000 bags/ week

Bag Collection

- Sent to a warehouse either in Phoenix, Las Vegas or Seattle
- Then recycled (?)

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White Rock

130,000 bags / year

Previous Plastic Bag Fee Attempt

- 10 cent fee for “non-single use” plastic bags - all going to Smiths
- Customers complaints that the WR had fee and LA did not
- The bag fee was dropped without any follow on

Bag Collection

- Sent to a warehouse either in Phoenix, Las Vegas or Seattle
- Then recycled (?)

- 2018 - Kroger pledged to eliminate single use plastic bags in stores by 2025
 - No longer pursuing this

Education Opportunities

- Clean reusable bags
- No trash in the recycle drop offs
- Encourage reusing bags

50/50 Preferences

- About ½ of customers use reusable bags and ½ use plastic bags

Recycling Contamination - Cost to County

Mixed Recycle Tonnage

2025 approximate **1,566 tons**

Contamination Rate **17%**

Total contamination 266 tons

Cost

Cost of Contamination **\$46/ton**

Contamination Cost **\$12,236**

**Contamination is general waste in recycling. It is not just plastic bags. Nationally, plastic bags are the largest source of contamination.

The waste audit being conducted on Oct 17 might provide more insight



Conclusion & Next Steps

What would a bag fee/ban look like in Los Alamos?

- Ban: Eliminate single use plastic bags in county
 - Possible exemptions
 - Medical use (dentist, etc.)
- Fee: Consumer would pay for a paper bag at the store
 - \$0.10 fee with \$0.01 going to business & \$0.09 going to County = estimated \$325,000 total, \$292,500 for LAC to use for sustainability and waste reduction efforts (possibly pay for contamination charges)
 - Other uses: bag reuse program, R&D, etc.
 - Possible exemptions
 - Medical use, SNAP & EBT, etc.
 - Small businesses (restaurants, thrift shops) & focus on large grocery stores and gas stations
- Administrative costs for both alternatives
 - Businesses are required to self report annually

Lessons Learned from Santa Fe & Las Cruces

- Ensure fee/ordinance is legally enforceable
 - Recommend considering enforceable fine for businesses
- Ensure revenue from the fee can be used effectively
 - Recommend having a clear but broadly defined use for the revenue
- Initial start-up of collection has the potential to be a lot of work
 - Difficult to contact managers of businesses (particularly big box stores)
- Ensure continued education of ordinance for residents

Engagement with community

- Due to the history regarding the lack of community support and sensitive nature of this topic the ESB is seeking Council guidance before pursuing further engagement with businesses and community
- ESB requests guidance if council wants to keep pursuing bag ban and/or fee
 - How to engage?
 - What questions to ask?

Next Steps

- If Council decides to keep pursuing, ESB requests guidance and expectation on engagement with community.
 - Possible suggestions
 - Survey for residents
 - Survey for businesses
- Consider upcoming audit information
 - Audit expected Oct 17th

Thank You

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Special Thanks:

Environmental Sustainability Board

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Armando Gabaldon

Common Questions & Answers

Q Are plastic bags recyclable?

A **Yes, BUT not in curbside recycling. Locally, both Smith locations collect them.**

Common Questions & Answers

Q Do plastic bag bans work?

A **Yes, they have shown a reduction in plastic waste. However, other studies show an increase in plastic garbage bag purchases.**

Common Questions & Answers

Q Are paper bags or canvas bags better for the environment?

A **Depends, BUT either way, bags need to be reused multiple times to offset the environmental impacts.**

New Mexico Plastic Bag Ordinances Compared (1/3)

Jurisdiction	Date	Mandatory Bag Fee	Exemptions (Bag Type)	Exemptions (Bag Fee)
Las Cruces	8/16/2021	\$0.10 Environmental Services Fee	(e) The following bags are excluded from this ordinance: 1. Laundry dry cleaning bags, door-hanger bags, newspaper bags, or packages of multiple bags intended for use as garbage, pet waste, or yard waste; 2. Bags provided by pharmacists or veterinarians to contain prescription drugs or other medical necessities; 3. Bags used by restaurants to take away prepared food; and 4. Bags used by a consumer inside a retail establishment to: a. Contain bulk items, such as produce, nuts, grains, candy, or small hardware b. Contain or wrap frozen foods, meat, or fish c. Contain or wrap flowers, potted plants or other items to prevent moisture damage to other purchases, or d. Contain unwrapped prepared foods or bakery goods; and 5. Bags used by a non-profit corporation or other hunger relief charity to distribute food, grocery products, clothing, or other household items. ("Common Exemptions")	Retail establishments shall not collect the environmental service fee from any person with a voucher or electronic benefits card issued under Women, Infants and Children Program (WIC), the Emergency Food Assistance Program (TEFAP), Temporary Assistance to Needy Families Program (TANF), or the federal Supplemental Nutrition Assistance Program (SNAP), also known as Basic Food Stamps) ("Voucher and Electronic Benefits Exemptions")
Santa Fe City	4/29/2015	\$0.10 Environmental Service Fee. 10% of fee to be retained by the retail establishment for administrative costs.	The fee does not apply to: 1. Paper bags smaller than a manufacturer's stated capacity of one-eighth barrel (882 cubic inches); 2. Common Exemptions	Voucher and Electronic Benefits Exemptions

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New Mexico Plastic Bag Ordinances Compared (2/3)

Jurisdiction	Date	Mandatory Bag Fee	Exemptions (Bag Type)	Exemptions (Bag Fee)
Bernalillo County	6/25/2019	Retail establishments may charge a fee of up to \$0.05 per approved bag or container issued to customers.	Single-use carryout bags do not include bags without handles provided to the customer: (1) To transport produce, bulk food, candy, or meat from a product, bulk food, or meat department within a store to the point of sale; (2) To hold prescription medication dispensed from a pharmacy; (3) To segregate food or merchandise that could damage or contaminate other food or merchandise when placed together in a bag; and (4) To transport clothing items from a dry cleaning establishment.	None
Taos	3/10/2020	\$0.10 Environmental Service Fee. 10% of fee to be retained by the retail establishment for administrative costs.	A. Laundry dry cleaning bags, door-hanger bags, newspaper bags, or packages of multiple bags intended for use as garbage, pet waste, yard waste, or home food storage; B. Bags used by a consumer inside a retail establishment to: 1. Contain bulk items, such as produce, nuts, grains, candy, items; 2. Required by health regulations to contain or wrap frozen foods, meat, or fish, whether or not prepackaged; 3. Contain or wrap flowers, potted plants or other items to prevent moisture damage to other purchases; or 4. Contain unwrapped prepared foods	Voucher and Electronic Benefits Exemptions

New Mexico Plastic Bag Ordinances Compared (3/3)

Jurisdiction	Date	Mandatory Bag Fee	Exemptions (Bag Type)	Exemptions (Bag Fee)
Silver City	7/8/2014	No fee	i. Paper bags provided by pharmacies for the purpose of containing medications or other prescriptions; ii. Paper bags provided for the containment of carryout beverages or liquor sales; iii. Garment or laundry bags from any material; iv. Plastic bags provided to effect convenience and food safety by preventing contamination from any bulk, cooked, chilled, frozen or raw food. v. Paper bags customarily provided by a retail establishment as its primary bag as of the effective date of this section.	None
Carlsbad	8/24/2024	Any fees imposed for alternatives to single-use plastic carryout bags may be set by the retail establishment, restaurant, or mobile food establishment; however, should a retail establishment, restaurant or mobile food establishment choose to implement a fee for recycled paper bag usage, <u>that fee may not exceed ten (.10) cents each.</u>	The term single-use plastic carryout bag does not include: (i) Produce bags or product bags; or (ii) Bags used exclusively to carry prescription drugs when dispensed from a pharmacy; or (iii) Bags used exclusively to hold cleaned laundry at a dry cleaning establishment or deliver a newspaper in bad weather; or (iv) Bags utilized at ice machines Produce bag or Product bag means a bag without handles used exclusively to: (i) Carry produce, meat, or bulk food from the produce, meat, or bulk food department of a retail establishment to the point of sale; or (ii) Contain or wrap flowers or potted plants; or (iii) Segregate food or merchandise that could damage or contaminate other food or merchandise when placed together in a bag.	None