



# SINGLE-USE PLASTICS SURVEY RESULTS

and Next Steps

November 2025 – Bluffton Town Council

Photo by Juliana Zadik



# WASTE REDUCTION IS NECESSARY



**TABLE 7.20: Beaufort County MSW Recycling Data in Tons in FY24**

COMMODITIES	RESIDENTIAL	COMMERCIAL/ INSTITUTIONAL	INDUSTRIAL (office/ packaging)	TOTAL
Glass	685.71	0.10	0.00	685.81
Metal	112.15	5.67	259.80	377.62
Paper	2,063.91	3,225.67	77.04	5,366.62
Plastic	378.66	0.26	0.00	378.92
Organics	4,881.58	0.00	0.00	4,881.58
Banned	2,241.10	604.15	48.53	2,893.78
Miscellaneous	145.67	328.88	2.91	477.46
Commingled	5,766.09	134.93	0.00	5,901.02
<b>TOTAL</b>	<b>16,274.87</b>	<b>4,299.66</b>	<b>388.28</b>	<b>20,962.81</b>

**TABLE 7.21: Beaufort County Facilities List for FY24**

FACILITY TYPE	NO. OF FACILITIES	FACILITY TYPE	NO. OF FACILITIES
Class 1 Landfills	0	C&D Debris Recyclers	2
Class 2 Landfills	1	Transfer Stations	4
Class 3 Landfills	0	Structrual Fills	0
Waste Tire Facilities	1	Solid Waste Processing Facilities	1
Used Oil Facilities	0	Composting and Wood Grinding	2
Incinerators	3	Other Permitted Solid Waste Facilities	0

Estimated  
Remaining  
Life of  
Landfill  
  
6 yrs

[Source](#)



# THEY'RE IN OUR ENVIRONMENT

Over 197,000 lbs of litter removed from roads in Beaufort county as of May 2025. Source: Solid Waste and Recycling Board meeting 5-22-25 [Source](#)



The Island Packet

<https://www.islandpacket.com> › local › article250465186

## Horseshoe crabs tangled in bag on Hilton Head beach

Apr 7, 2021 — Three horseshoe crabs were stuck in a thick plastic mesh bag on the beach near Port Royal Plantation. Millen said the bag reminded her of the bags that onions ...

[Source](#)



The Island Packet

<https://www.islandpacket.com> › local › article247286479

## Marine animals off Hilton Head, SC coast eat plastic

Nov 24, 2020 — The study compiled 1,792 reports of animals swallowing or becoming entangled in plastic trash between 2009 and 2018. It showed that in those ...

[Source](#)

Photo by Grant McClure

Source: Island Packet



Winner of the 2022 Governor's Award for Excellence in Scientific Research at a Primarily Undergraduate Institution

## Microplastics and Tire Wear Particles in South Carolina Coastal Waters: Sources, Pathways, and Toxicity

John E. Weinstein<sup>a\*</sup>

*Journal of the South Carolina Academy of Science*, [2023], 21(1)



<sup>a</sup>Department of Biology, The Citadel, Military College of South Carolina, 171 Moultrie St., Charleston, South Carolina 29409, USA

[Source](#)

## Effects of microplastics and nanoplastics in shrimp: Mechanisms of plastic particle and contaminant distribution and subsequent effects after uptake

Volume 894, 10 October 2023, 164999

Anil Timilsina<sup>a</sup>, Kaushik Adhikari<sup>b</sup>, Amit K. Yadav<sup>c</sup>, Pabitra Joshi<sup>d</sup>, Grace Ramena<sup>e</sup>,

Kailash Bohara<sup>e</sup>  

[Source](#)



## Microplastic Content in Oysters (*Crassostrea virginica*) from South Carolina, USA

Blosser, Brooke Caroline. College of Charleston ProQuest Dissertations Publishing, 2022. 29213218.

[Source](#)

## Microplastic contamination in fish: A systematic global review of trends, health risks, and implications for consumer safety

Marine Pollution Bulletin Volume 219, October 2025, 118279

Himanshu Jangid<sup>a</sup>, Joydeep Dutta<sup>a</sup>, Arun Karnwal<sup>b</sup>, Gaurav Kumar<sup>a c</sup>  

[Source](#)

# THEY'RE IN OUR FOOD

Microplastics are found in 1,600 species, including 1,300 ocean dwellers.

[Source.](#)

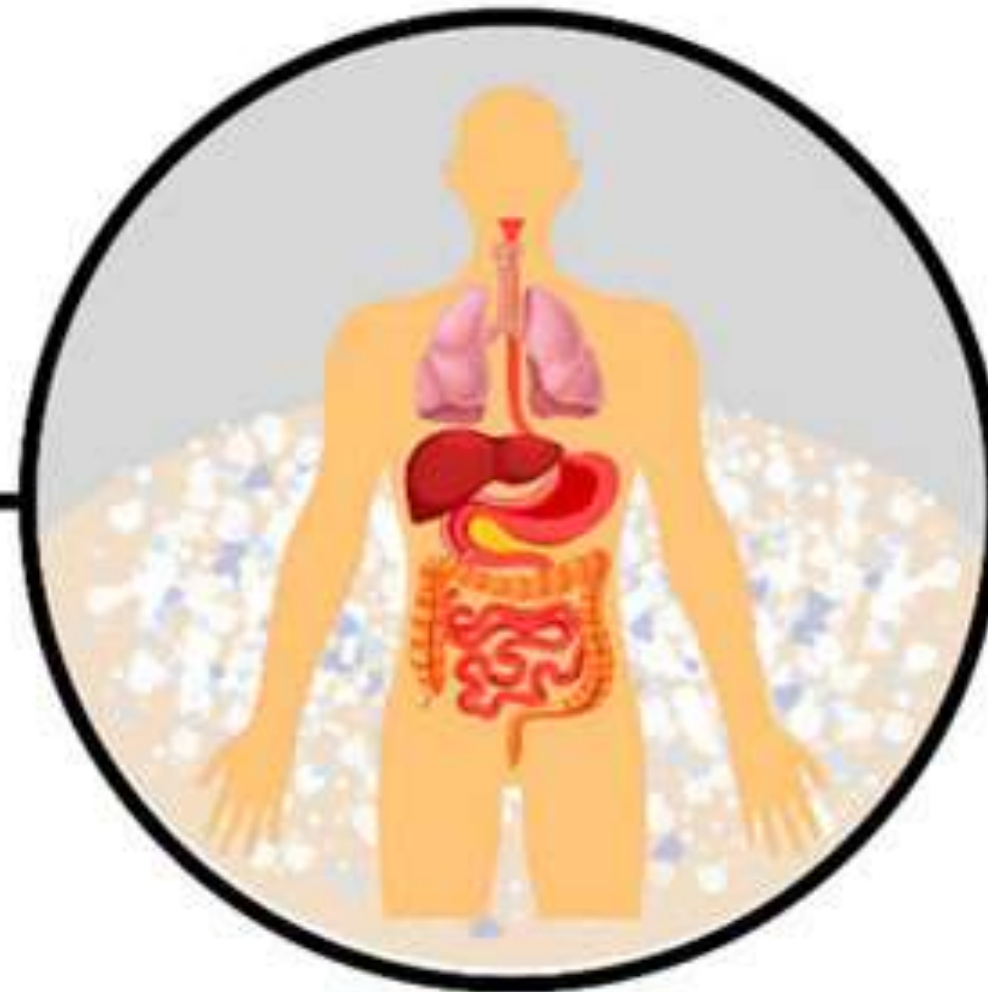
Photo by Jake Zadik



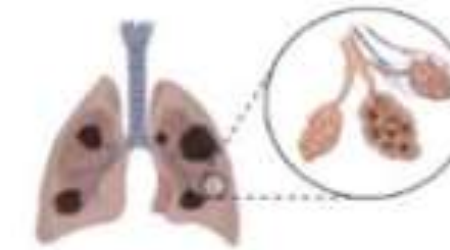
# THEY'RE IN OUR BODIES

## MICROPLASTIC

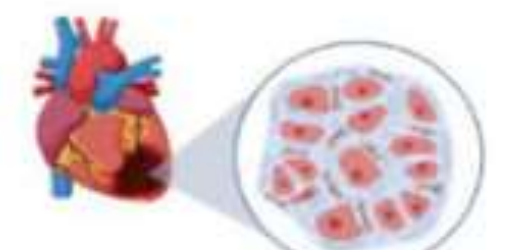
### Exposure



### Toxicity



Pulmonary diseases



Cardiovascular diseases



Inflammatory diseases



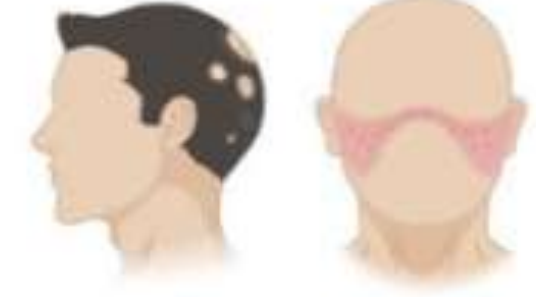
Cancer



Infectious diseases



Pregnancy and maternal exposure to progeny



Immunotoxicity

[Source.](#)

[Source.](#)



A photograph of a coastal environment. In the foreground, a light-colored crab with yellowish-orange legs is positioned on a sandy surface. Behind the crab is a large, disorganized pile of dry, brown sticks and twigs. In the background, tall green grasses or reeds are visible against a clear blue sky. A white rectangular box is superimposed over the upper portion of the image, containing the text 'LOCAL ACTION = GREAT IMPACT' in a bold, dark blue, distressed font.

**LOCAL ACTION = GREAT IMPACT**

Photo by Juliana Zadik



A multi-disciplinary working group developed and deployed surveys

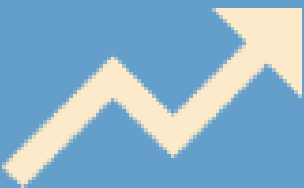
# QUICK RECAP



**January 13, 2025 – April 3, 2025**



**Two Survey Types**



**Regulatory Preferences**



**Media & Business Outreach Campaign**



## PLASTIC REDUCTION EFFORTS IN BEAUFORT COUNTY

IN 2018, BEAUFORT COUNTY COUNCIL PASSED AN ORDINANCE THAT WAS INTENDED TO LIMIT THE NUMBER OF PLASTIC BAGS THAT END UP IN OUR FRAGILE ENVIRONMENT. THE COUNTY IS EVALUATING THE ISSUE AND CONSIDERING WAYS TO ALLEVIATE THE NEGATIVE IMPACT ON OUR COMMUNITY.

*How can you help?*

TAKE A MOMENT TO FILL OUT THIS SURVEY TO HELP US MAKE AN INFORMED DECISION FOR THE FUTURE OF BEAUFORT COUNTY, ITS BUSINESSES AND RESIDENTS.



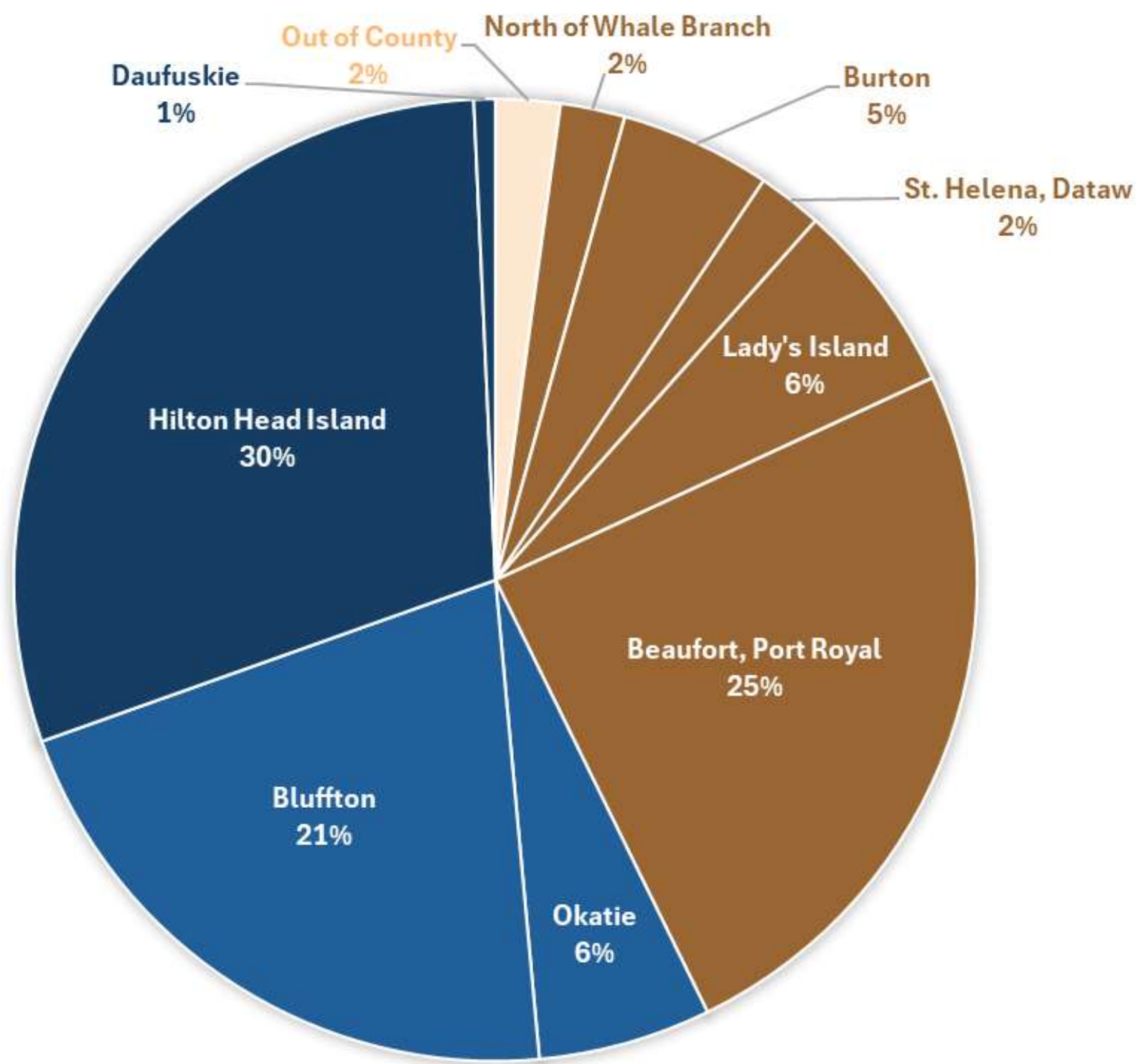




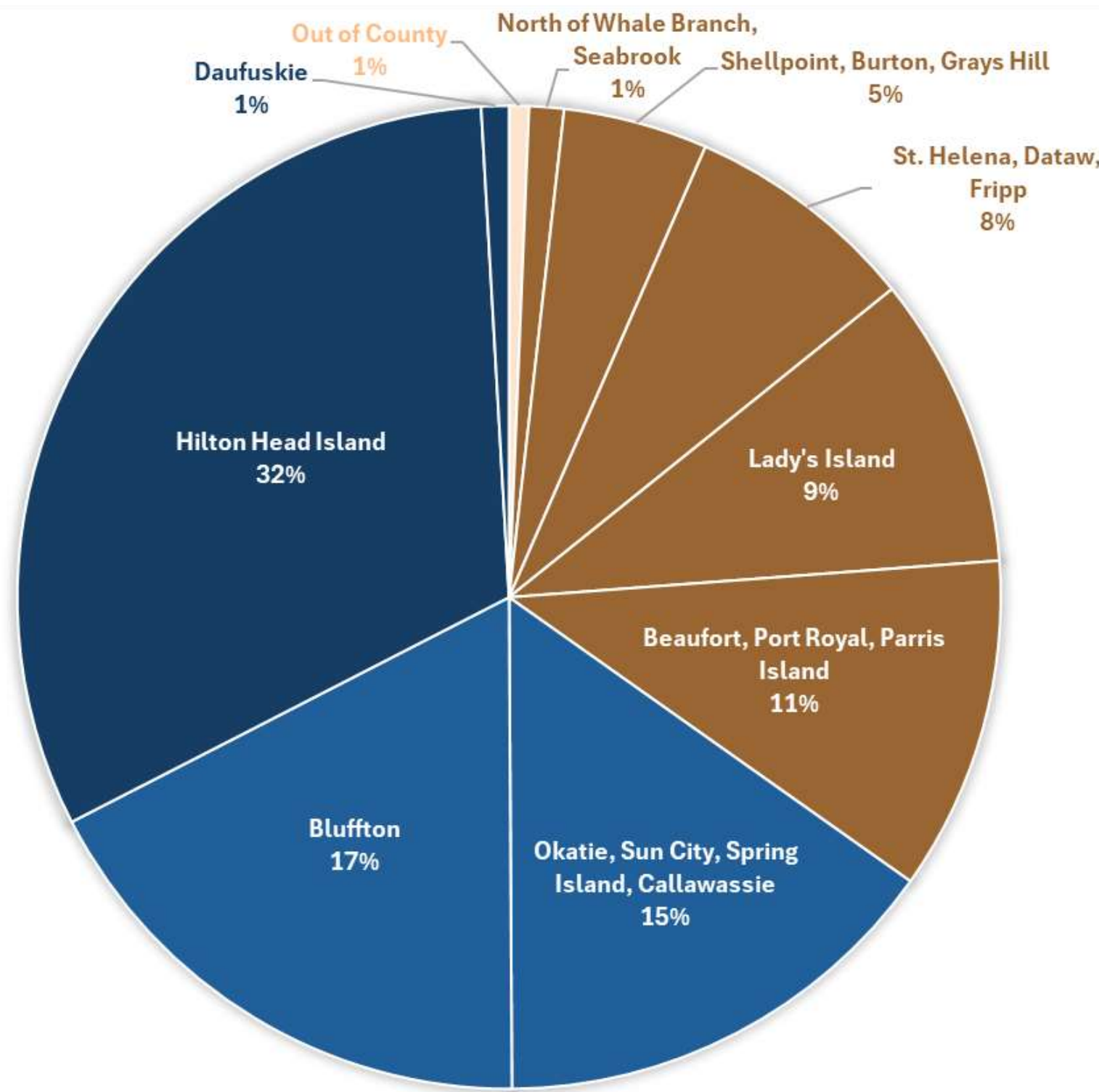
# WHO RESPONDED?

138 Business Responses  
6,062 Resident Responses

BUSINESSES

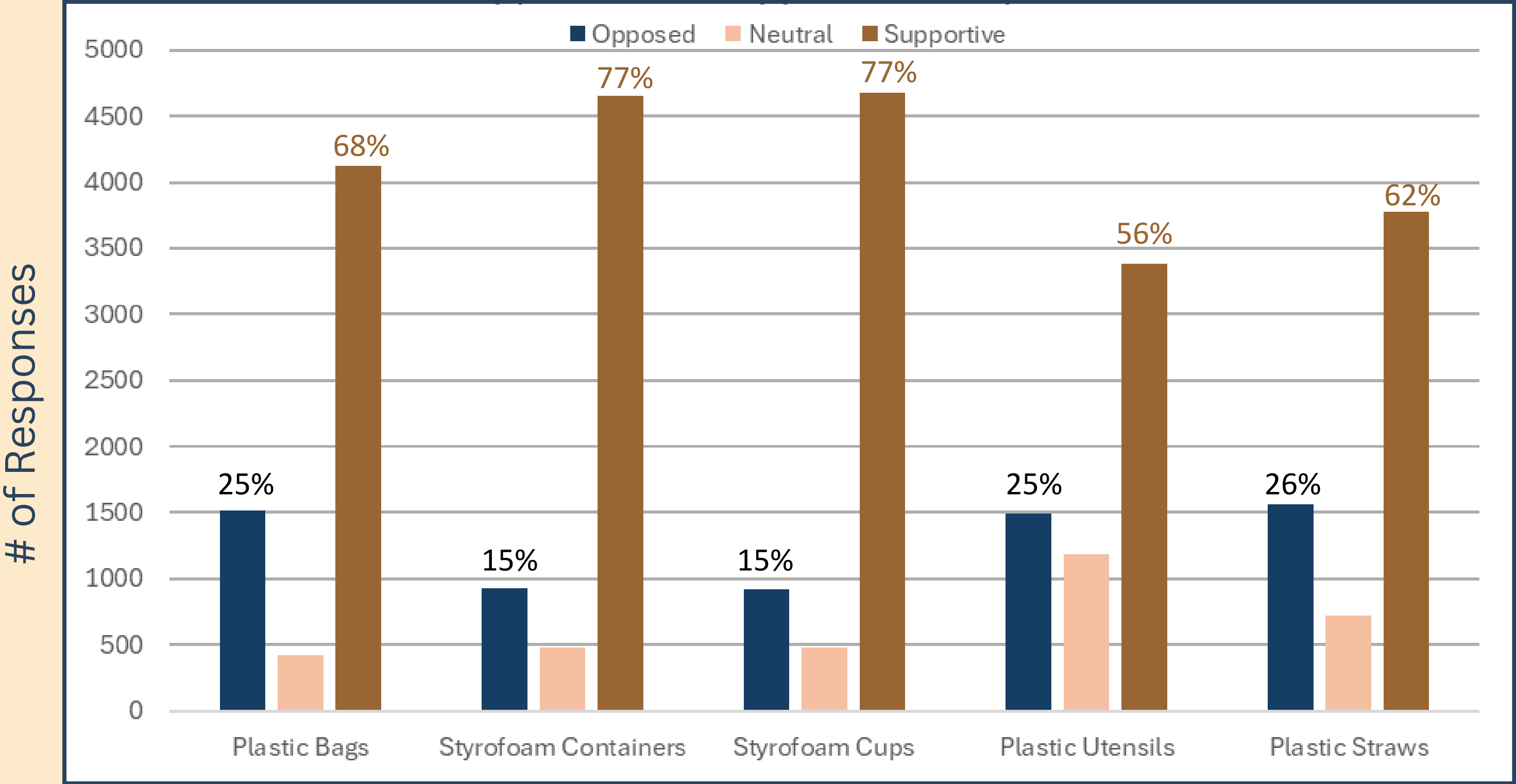


RESIDENTS

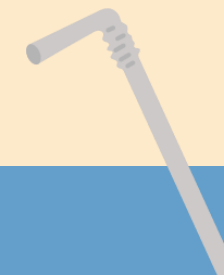
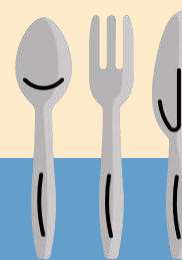
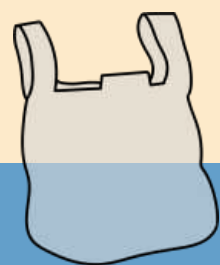




# RESIDENTS SUPPORT SINGLE-USE PLASTIC REGULATION



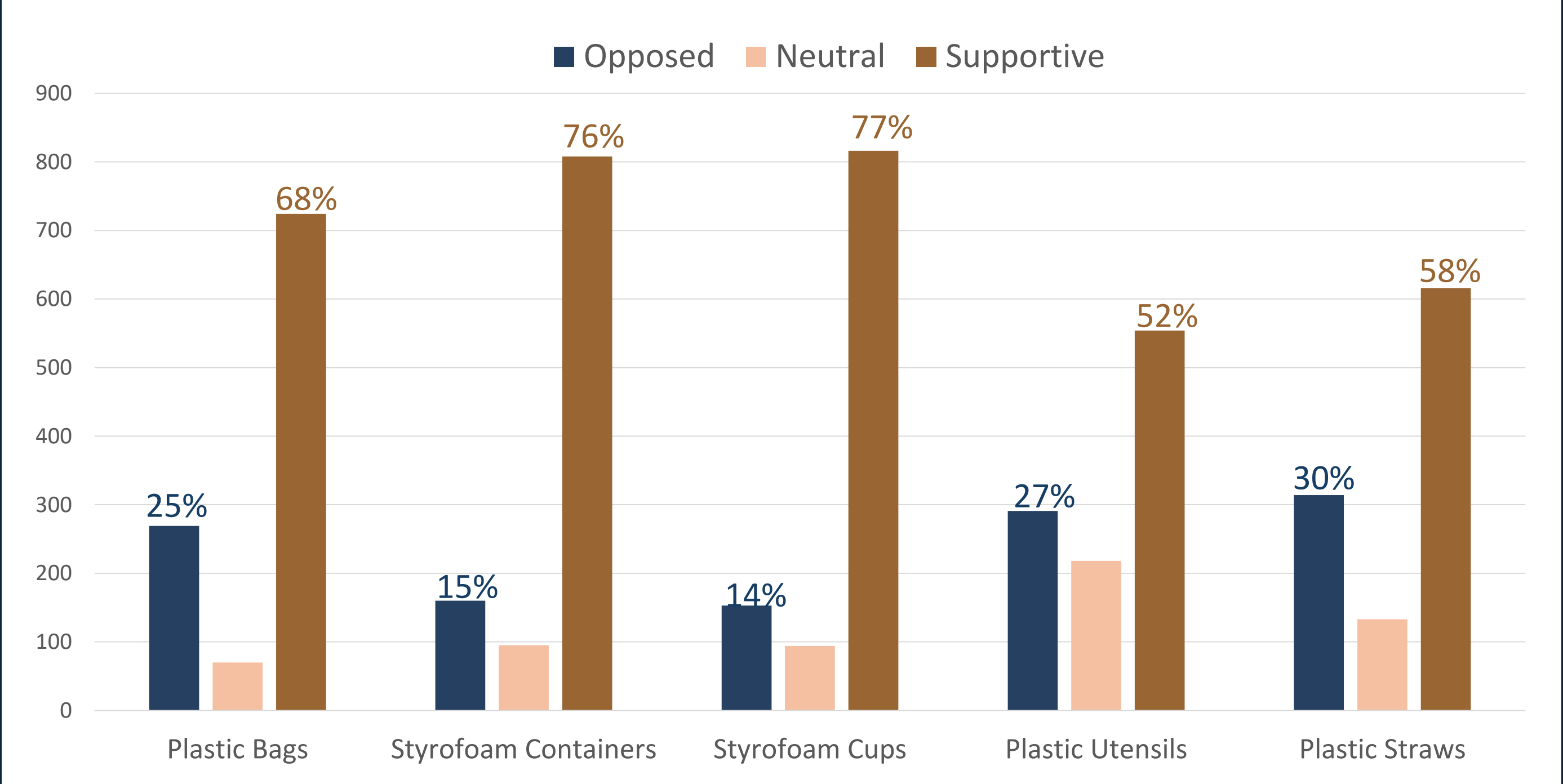
“All plastic needs to be tapered down and eventually eliminated as waste. There are alternative... products that can adequately be used.” – Resident Participant





# BLUFFTON RESIDENT SUPPORT FOR SINGLE-USE PLASTIC REGULATION

# of Responses



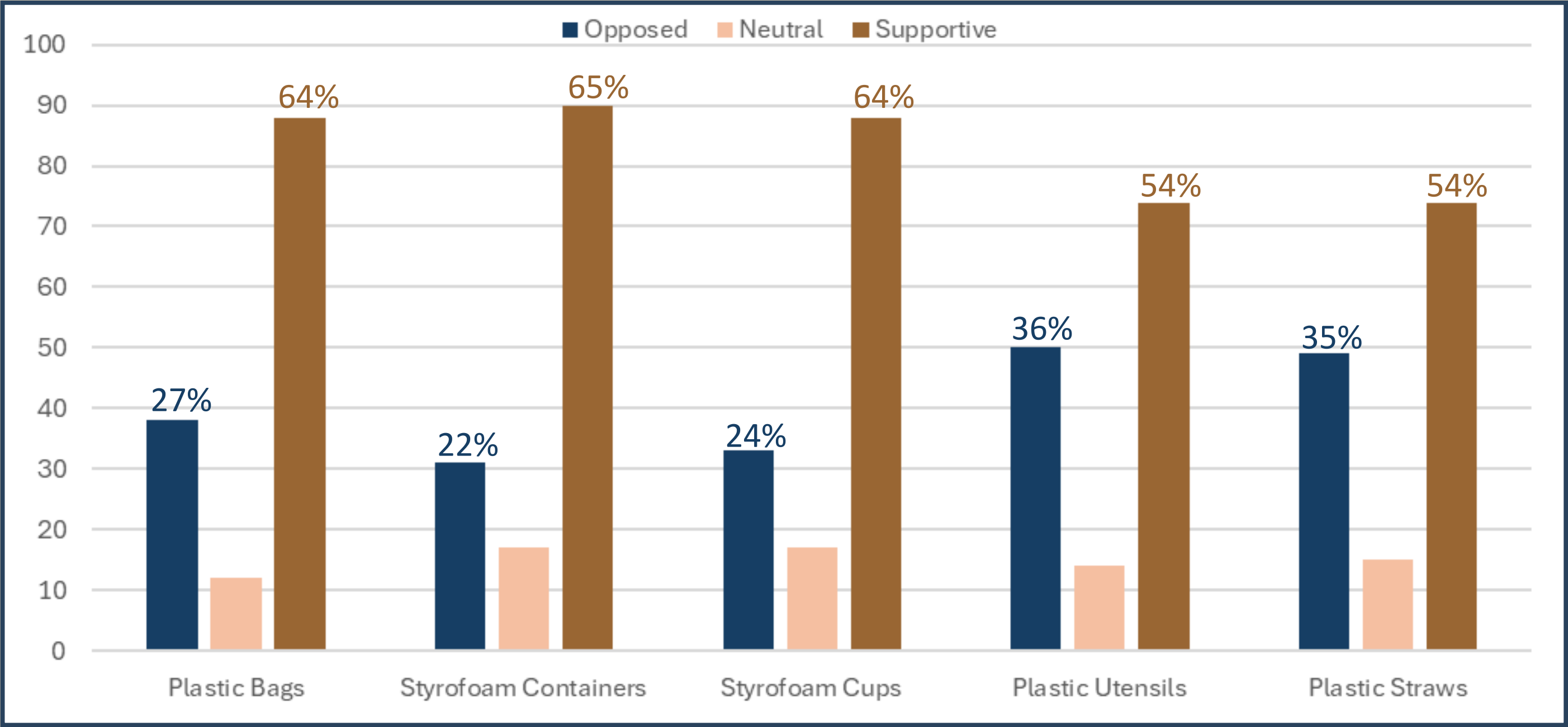
“I live on the may river and am appalled to see plastic and styrofoam in our river and marshes. There are too many other options....change can be painful, but is necessary.” – Bluffton Resident Participant



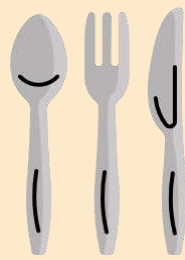
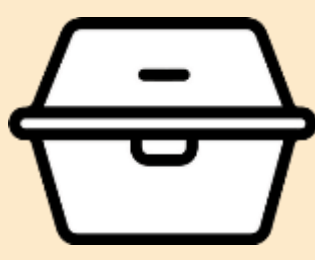


# BUSINESSES SUPPORT SINGLE-USE PLASTIC REGULATION

# of Responses



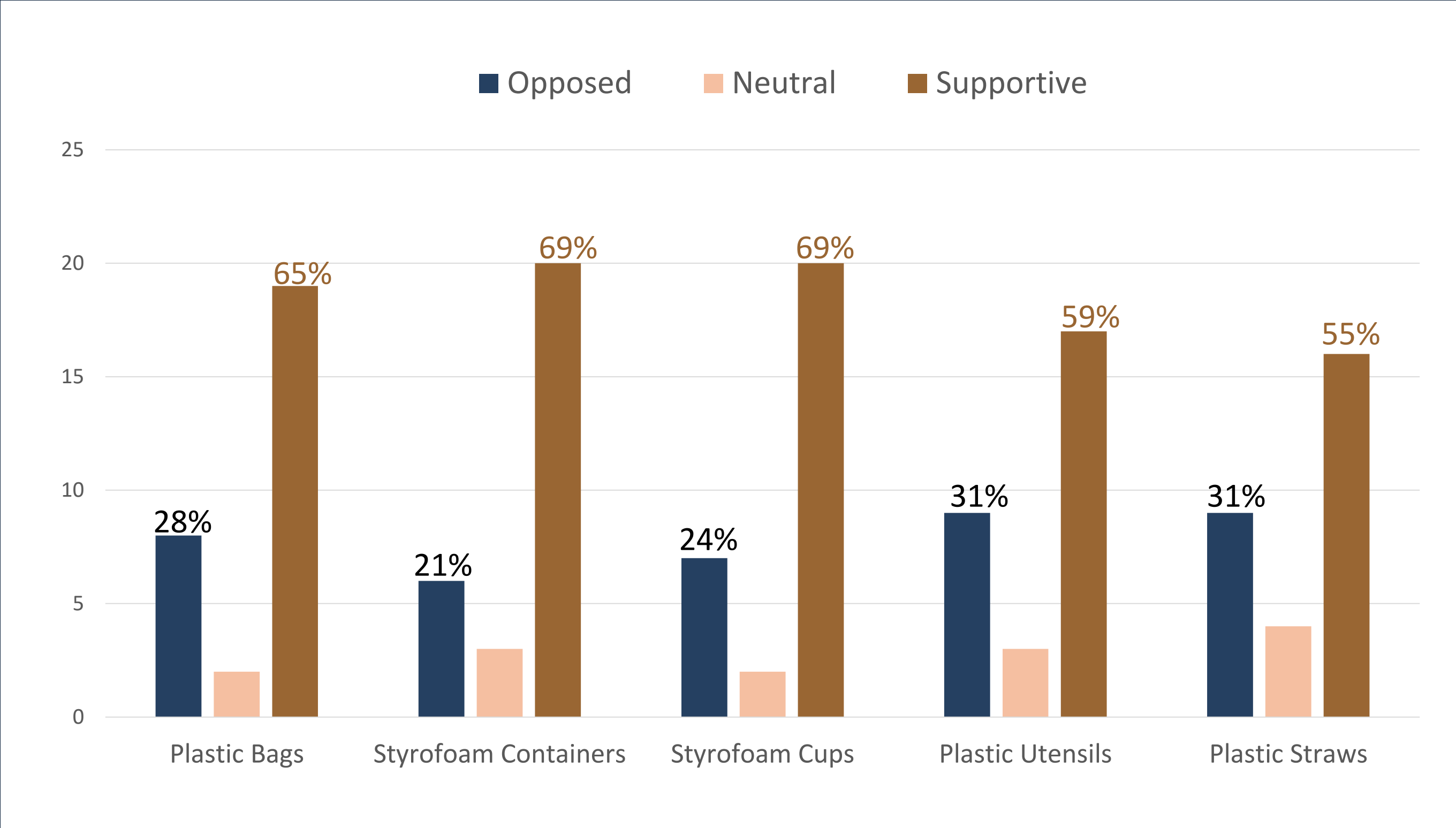
“The fact that aggressive recycling and bans on plastic and Styrofoam is not in place is appalling. We can do better!”  
– Business Participant





# BLUFFTON BUSINESSES SUPPORT SINGLE-USE PLASTIC REGULATION

# of Responses

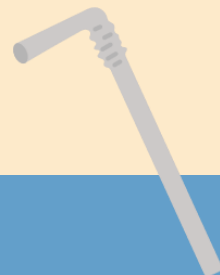
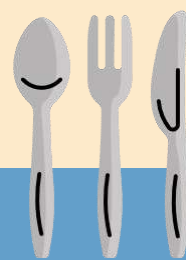
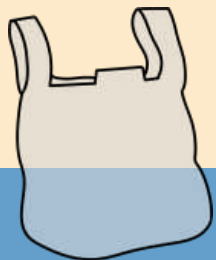
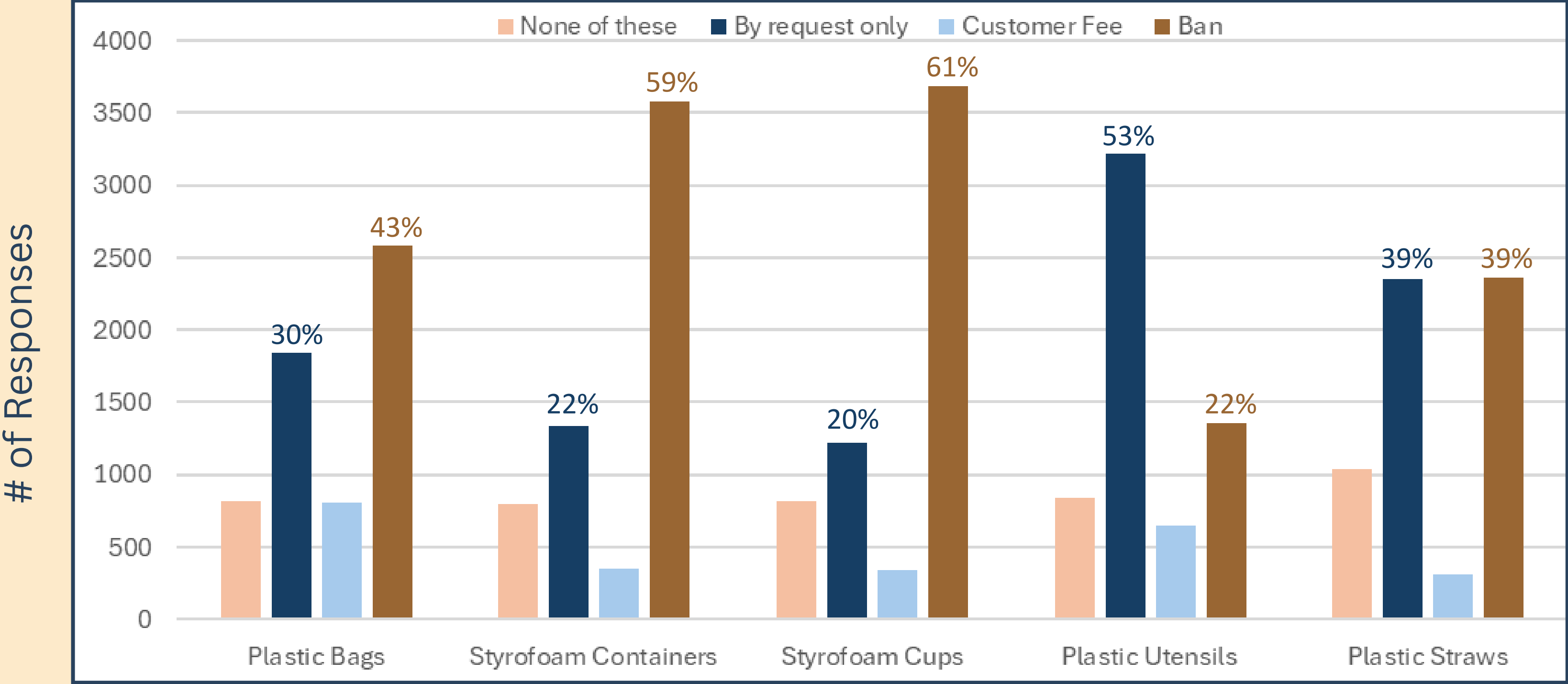


“Styrofoam should be outlawed. Plastic straws should be outlawed.”  
– Bluffton Business Participant



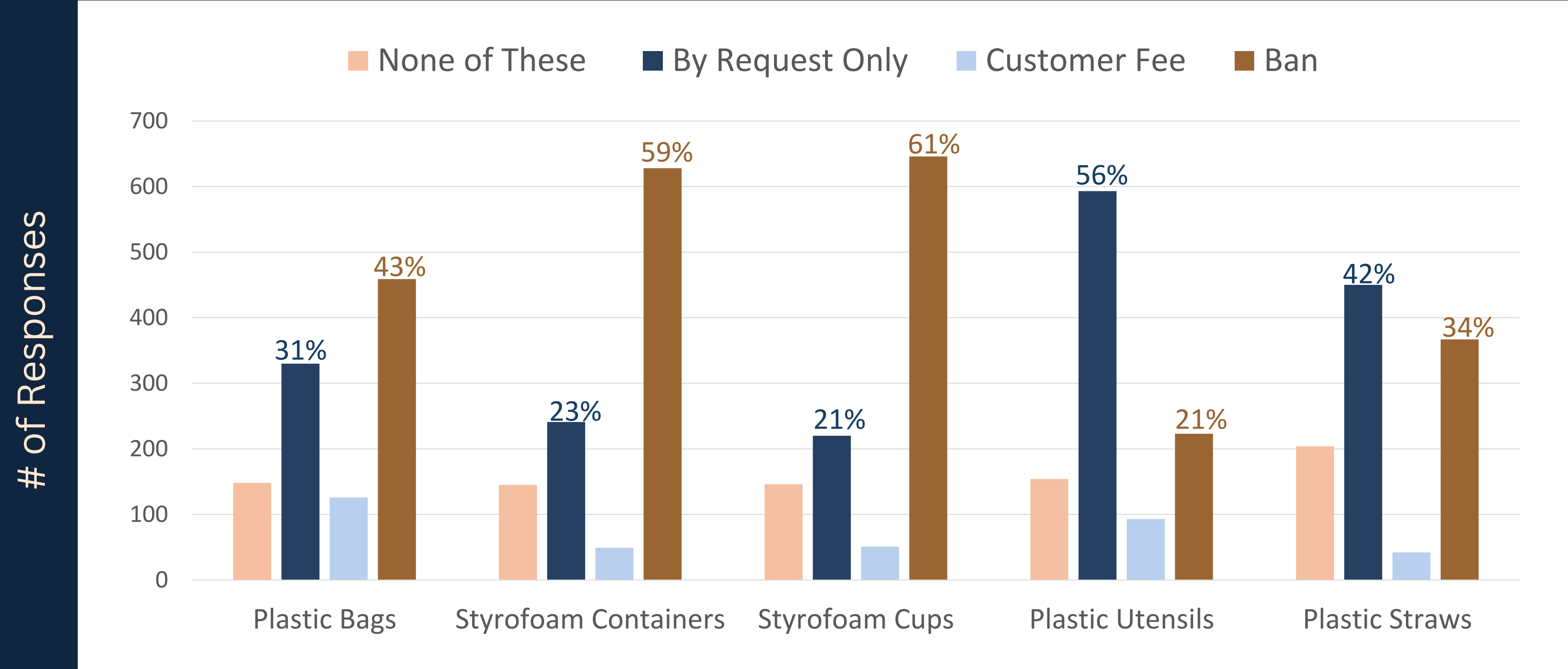


# OUR RESIDENTS PREFER...



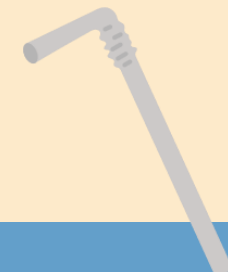
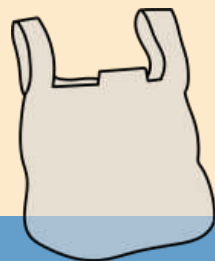
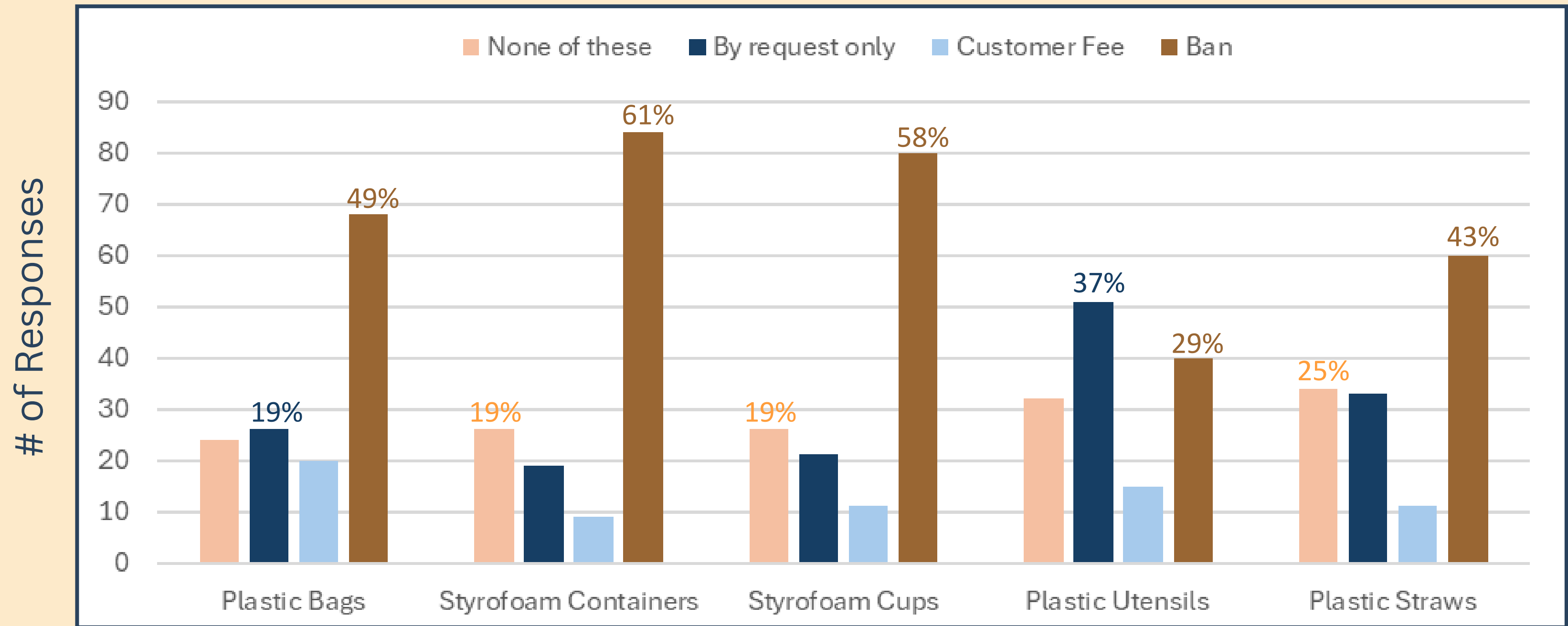


# BLUFFTON RESIDENTS PREFER...



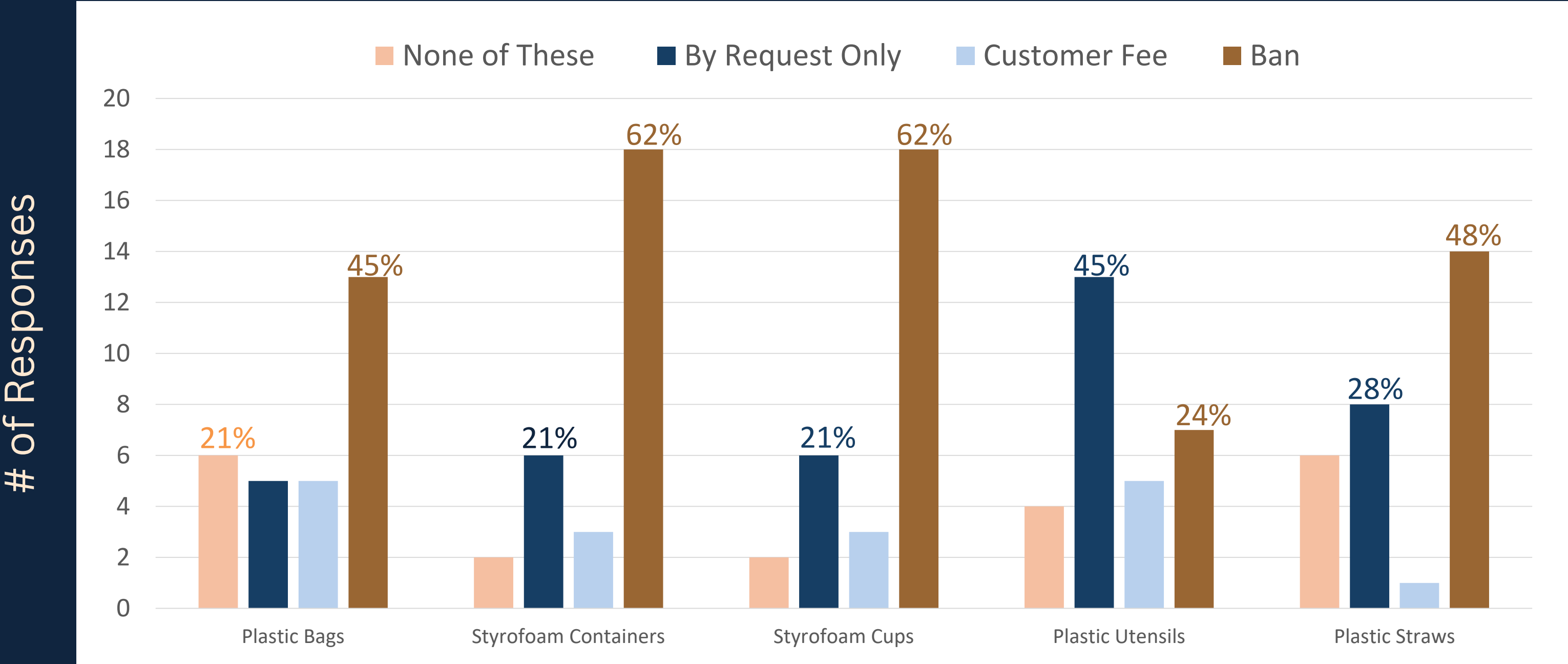


# ...AND SO DO OUR BUSINESSES.



























































# BLUFFTON BUSINESSES PREFER





# BROAD LOCAL EFFORTS

## What's managed where in Charleston Area

	 Banned	 Single-use plastic bags	 Extra thick plastic bags	 Straws	 Disposable cutlery	 Plastic foam
	 Not banned or no regulation in place					
City of Charleston					ON REQUEST	
Isle of Palms						
Mount Pleasant						
James Island					ON REQUEST	
Seabrook Island						
Kiawah Island						
Folly Beach					ON REQUEST	
Charleston County						
Edisto Island						
Sullivan's Island						



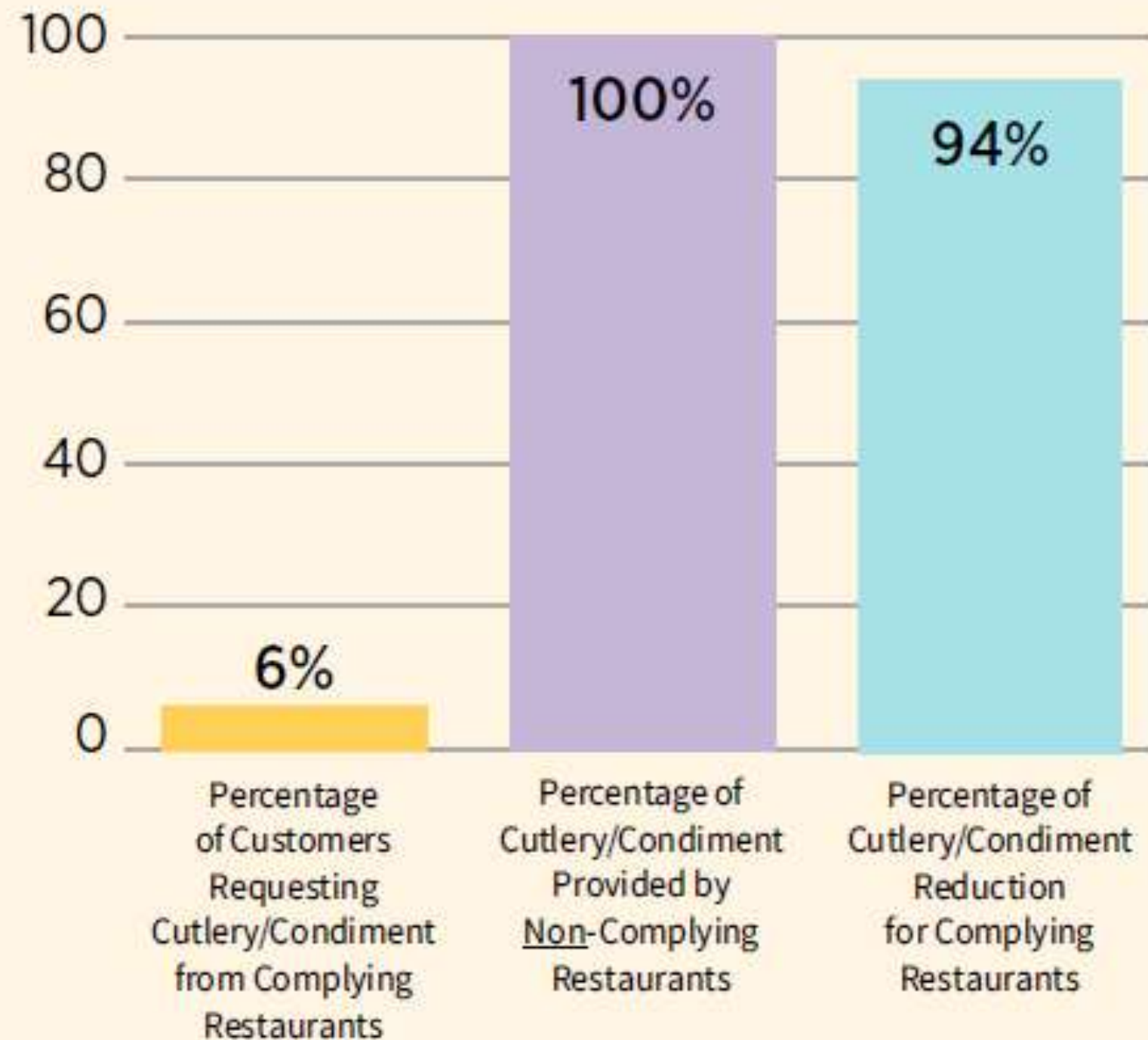
# 2025 Eco Tableware Costs are Very Competitive with Plastic - Only Pennies More

Eco tableware prices in 2025 vary based on **material type, design complexity, order volume, certification requirements, and region of purchase**. While the **per-unit price** for compostable products is still slightly higher than traditional plastics, the gap is narrowing due to **scaling, innovation, and policy-driven adoption**.

Product Type	Traditional Plastic (per unit)	Eco Tableware – Global Average (per unit)	Material & Notes
9"x6" Single-Compartment Clamshell	\$0.045	\$0.055–\$0.065	Bagasse pulp; compostable; PFAS-free
9"x6" 2-Compartment Clamshell	\$0.048	\$0.060–\$0.072	Bagasse; portion control; export-certified
9"x9" 3-Compartment Clamshell	\$0.052	\$0.068–\$0.080	Bagasse; catering-grade durability
16oz Salad Bowl with Lid	\$0.035	\$0.045–\$0.055	<a href="#">Kraft paper</a> with PLA lining; leak-resistant
24oz Soup Container	\$0.038	\$0.050–\$0.062	Kraft or bagasse; heat-safe
<a href="#">Cutlery Set</a> (Fork, Spoon, Knife)	\$0.025	\$0.035–\$0.045	CPLA/cornstarch; 100% compostable
<a href="#">Sauce Cup (2oz) with Lid</a>	\$0.020	\$0.030–\$0.038	Bagasse or PLA; ideal for condiments



# BY REQUEST ONLY REDUCES COSTS



**1,578,769  
pieces**

of toxic plastic cutlery  
(over 10,000 lbs)  
annually reduced  
from the waste stream  
as a result of 16  
compliant restaurants  
in Red Bank

**94%  
reduction**

in single-use cutlery  
and condiments for  
all businesses  
following Skip the  
Stuff, equating to  
money saved

**Red Bank, NJ (2024)** [Source.](#)



# RECOMMENDATIONS

## Eliminate & Replace



## By Request Only

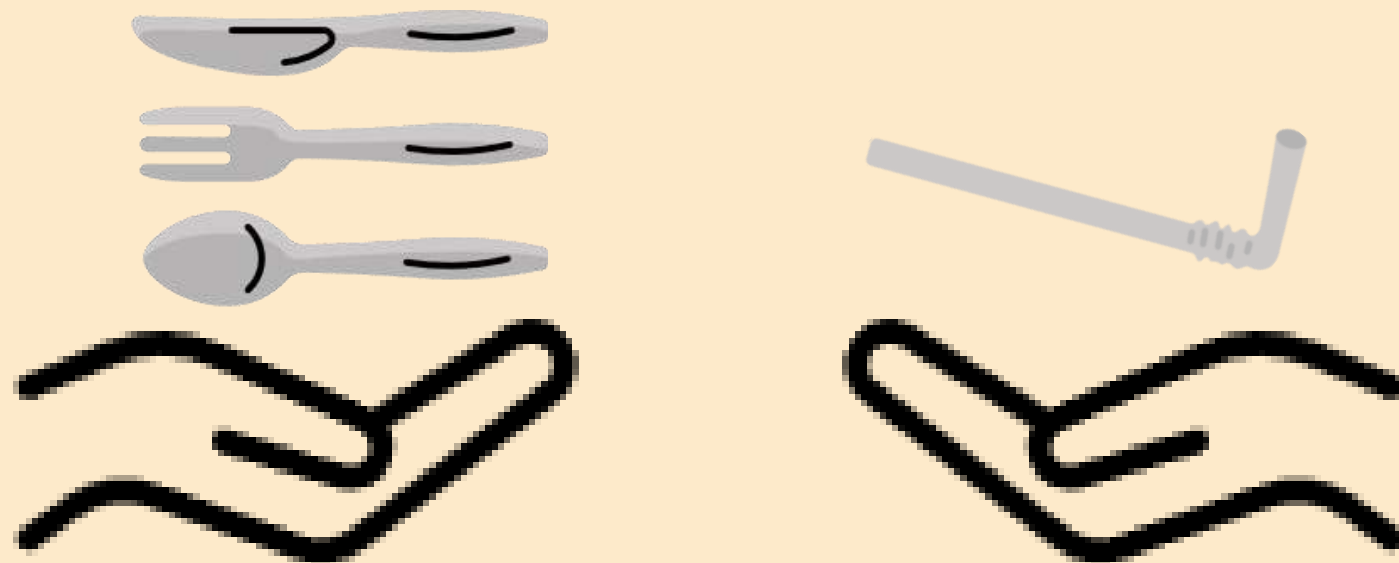


Photo by Courtney Kimmel





Photos by Juliana Zadik

# NEXT STEPS



**Finish Analysis**



**Bring back final results**



**Update Municipalities**



**Develop amendment language.**



**Create Implementation Plan**



# SOURCES

**Beaufort County Single Use Plastics Survey  
Results – Final Report (April 2025):**

<http://bit.ly/48S2ACq>

Slide 2: <https://des.sc.gov/sites/des/files/Documents/BLWM/Recycling/OR-2660.pdf>

Slide 3: <https://beaufortcountysc.new.swagit.com/videos/343802>  
<https://www.islandpacket.com/news/local/news-columns-blogs/untamed-lowcountry/article250465186.html>  
<https://www.islandpacket.com/news/local/article247286479.html>

Slide 4: <https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1266&context=jscas>  
<https://www.sciencedirect.com/science/article/pii/S0048969723036227>  
<https://repository.library.cofc.edu/items/9677ba1f-c49a-4a46-9a2b-c51ab0b9c7b3>  
<https://www.sciencedirect.com/science/article/abs/pii/S0025326X25007544?via%3Dihub>

Slide 5: <https://pubs.acs.org/doi/10.1021/envhealth.3c00052>  
<https://link.springer.com/article/10.1007/s10311-023-01593-3>  
<https://www.nejm.org/doi/full/10.1056/NEJMoa2309822>

Slide 17: [https://www.postandcourier.com/rising-waters/extra-thick-plastic-bag-ban-charleston-microplastics-environment/article\\_7f89d7ec-242c-11ef-99ef-eb31f40d66dd.html](https://www.postandcourier.com/rising-waters/extra-thick-plastic-bag-ban-charleston-microplastics-environment/article_7f89d7ec-242c-11ef-99ef-eb31f40d66dd.html)

Slide 18: <https://www.bioleaderpack.com/eco-tableware-vs-traditional-plastic-a-true-cost-analysis-for-2025/>

Slide 19: [https://cleanwater.org/sites/default/files/2025-04/CS\\_STS\\_Red\\_Bank\\_03.06.25a.pdf](https://cleanwater.org/sites/default/files/2025-04/CS_STS_Red_Bank_03.06.25a.pdf)





# QUESTIONS?

Photo by Juliana Zadik