



**Testimony of VPIRG Executive Director Paul Burns concerning S.113
House Committee on Natural Resources, Fish and Wildlife**

April 2019

Chair Sheldon and Members of the House Committee on Natural Resources, Fish and Wildlife, for the record my name is Paul Burns and I am the executive director of the Vermont Public Interest Research Group (VPIRG). VPIRG is Vermont's largest consumer and environmental advocacy organization with approximately 50,000 members and supporters across the state.

As part of VPIRG's mission to protect and promote the health of Vermont's people, our environment and our locally-based economy, we have long-supported programs to minimize waste and encourage reuse and recycling of materials. And so, consistent with our past positions in favor of policies that move Vermont toward zero waste, I'm happy to offer VPIRG's very strong support for S.113 today.

The subject of plastic pollution, and single-use plastic bags in particular, is something I've been working on personally for many years. In fact, I recently uncovered a news article from the Syracuse Herald American newspaper that covered a press conference I held in February of 1990 – 29 years ago – urging a local grocery store to stop promoting plastic bags and encouraging people to go with reusable bags instead.

Some of you may recall that one year ago, I testified before this committee urging the rejection of a proposal from the beverage industry that would have directed all the unclaimed bottle bill deposits to them, to be spent on promoting opportunities for recycling plastic bags. Thankfully, that proposal was defeated, and now it seems like a very long time ago that anyone would have been promoting the idea of recycling single-use plastic bags as a sustainable answer to the problem.

Arguably, a lot has changed in the last year. And certainly, a lot has changed in the last 30 years. We know for sure that the problem of throwaway plastic pollution is getting worse by the day. But there's evidence of progress too.

For instance on Monday of this week, Wegmans grocery, which is a chain of nearly 100 stores in the Northeast and mid-Atlantic states, announced it would stop using single-use plastic bags in all its New York locations. This is the same grocery that asked me to leave its premises 29 years ago in a disagreement over plastic bags.

As part of its statement announcing a broader policy to reduce packaging waste, the company said,

“Wegmans has long understood the need to reduce single-use grocery bags. Since the introduction of reusable bags in 2007, the company has put an emphasis on educating customers of their benefits. Not only are they the best option for the environment, but they also hold more groceries without breaking or tearing, requiring fewer bags per shopping trip than paper or plastic bags.”¹

As you probably know, although plastics have been around for more than a century, widespread production only took off after World War II. According to National Geographic, the world has created about 9.2 billion tons of plastic since then. Most of that plastic – 6.9 billion tons – has become waste. And of that, an incredible 6.3 billion tons never made it to the recycling bin.²

Now to be clear, there are different types of plastic and different uses for plastic. Some uses are clearly better than other uses. But with more than 40 percent of plastic being thrown away after just one use, we believe that S.113’s focus on single-use plastic is a great place to start. Plastic bags, which typically have a useful life of just 15 minutes and have been derisively called “urban tumbleweed,” are kind of a poster child for unnecessary plastic pollution.

It’s been said that we are drowning in plastic pollution and that is very close to the truth. Global plastic production is increasing at an alarming rate. In fact, more plastic has been produced in just the last 15 years than in all the years previous, combined.

This plastic is choking our oceans, spoiling our environment and killing wildlife. Hundreds of thousands of birds and marine animals die each year because of discarded plastics. And the so-called garbage patch in the Pacific Ocean made up of plastics fibers is almost unimaginably large – bigger than Mexico is one estimate.

As if that weren’t enough, we must also recognize that plastics are threatening our health too. Plastic doesn’t exist in nature and it doesn’t biodegrade. Over time, it may instead break down into smaller and smaller bits called microplastic. Microplastics have been found in tap water around the world,³ in 90% of bottled water,⁴ in sea salt,⁵ beer,⁶ and in fish, shellfish and other forms of wildlife.⁷

Single-use plastics – such as bags, cups, containers, straws and more – are a kind of pollution like we’ve never seen before. With a useful life that is often no more than 15 minutes, this plastic can last in the environment for 500 years or more.

We have a responsibility to do what we can protect our planet, ourselves and future generations. The plastic path we’re on right now is unsustainable.

Consider the history of plastic production and waste generation by industry sector:

¹ <https://www.wegmans.com/news-media/press-releases/2019/on-the-road-to-zero-waste--wegmans-commits-to--further-reduce-in.html>

² National Geographic magazine, June 2018, p. 46.

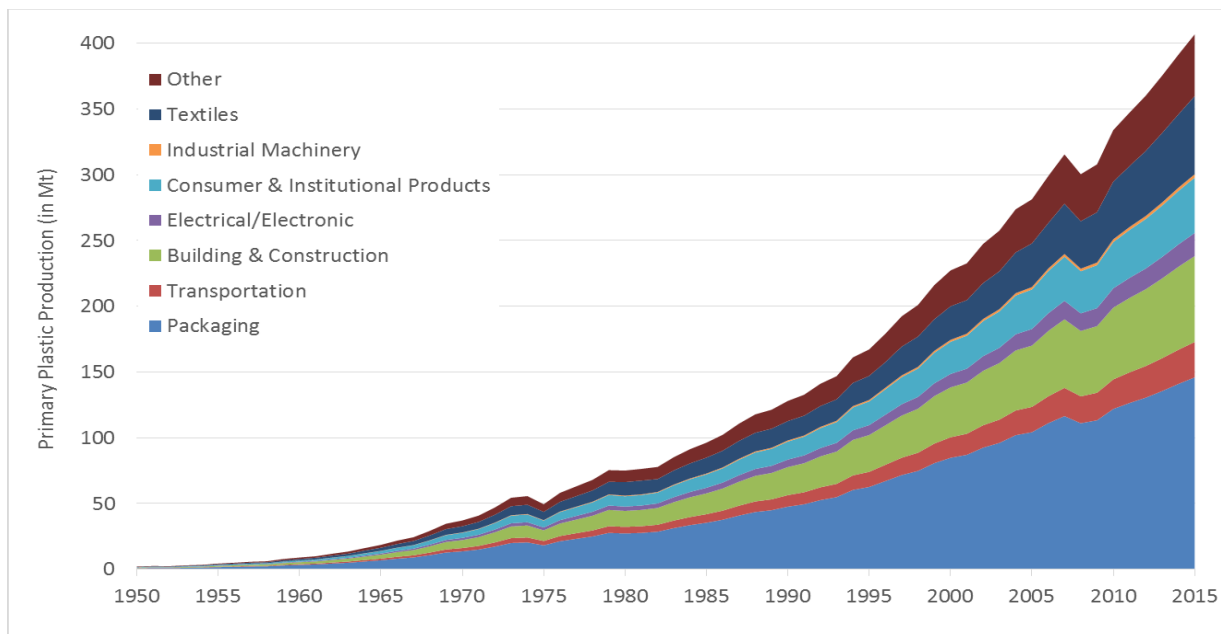
³ <https://www.theguardian.com/environment/2017/sep/06/plastic-fibres-found-tap-water-around-world-study-reveals>

⁴ <https://www.theguardian.com/environment/2018/mar/15/microplastics-found-in-more-than-90-of-bottled-water-study-says>

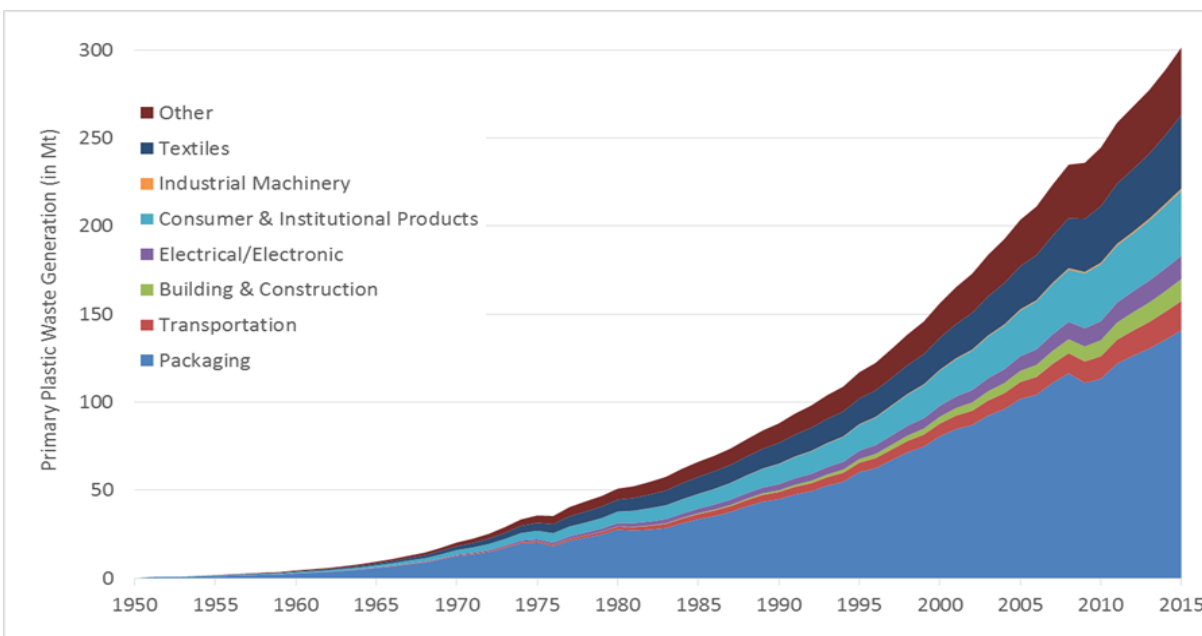
⁵ <https://www.theguardian.com/environment/2017/sep/08/sea-salt-around-world-contaminated-by-plastic-studies>

⁶ <https://www.jsonline.com/story/news/local/milwaukee/2018/05/14/tiny-bits-plastic-found-beer-samples-including-milwaukee/602644002/>

⁷ <https://www.npr.org/sections/thesalt/2018/08/20/636845604/beer-drinking-water-and-fish-tiny-plastic-is-everywhere>



Global primary plastics production (in million metric tons) according to industrial use sector from 1950 to 2015.⁸



Global primary plastics waste generation (in million metric tons) according to industrial use sector from 1950 to 2015.⁹

⁸ Science Advances, **Production, use, and fate of all plastics ever made**, Roland Geyer, Jenna R. Jambeck, Kara Lavender Law; Published 19 July 2017, *Sci. Adv.* **3**, e1700782 (2017); DOI: 10.1126/sciadv.1700782; advances.sciencemag.org/cgi/content/full/3/7/e1700782/DC1

⁹ Science Advances, **Production, use, and fate of all plastics ever made**, Roland Geyer, Jenna R. Jambeck, Kara Lavender Law; Published 19 July 2017, *Sci. Adv.* **3**, e1700782 (2017); DOI: 10.1126/sciadv.1700782; advances.sciencemag.org/cgi/content/full/3/7/e1700782/DC1

These graphs demonstrate the incredible growth in plastics production and waste in the years following World War II. You'll notice the dips in production corresponding to the 1973 oil crisis and the 2008 recession. But otherwise, from an environmental perspective, it's a remarkable and concerning upward trajectory.

A World Economic Forum report estimates that by 2050 there will be more plastic in the ocean than fish.¹⁰ Among the catastrophic consequences of such pollution will be the threat of food insecurity for hundreds of millions of people who rely on seafood as their primary source for sustenance.

Given the growing threat to our environment and health, it's no surprise that local, state and national leaders are taking action on plastics. And for the most part, the actions involve banning single-use plastics. This has been true in communities across Vermont, across the country and around the world.

You will hear that we cannot recycle our way out of the problem. We have to stop generating so much plastic waste. That's because plastics recycling is difficult to do and is often uneconomical, particularly given the diminishing worldwide markets for recyclable materials. And the numbers just don't add up.

Each year, plastic production worldwide goes up another 10-15 million metric tons. In 1950, the world produced 2 million metric tons of plastic resin. In 2015, there were 381 million metric tons produced. Globally, only about 18 percent of plastic is recycled, so the problem gets progressively worse and will continue doing so until we turn off the spigot.

The answer is to stop creating throwaway plastic waste wherever we can. The bill before you, S.113, uses a model that has worked in many other places. The legislation addresses three of the most ubiquitous forms of plastic pollution: single-use plastic bags, straws and expanded polystyrene.

Bags

Under S.113, single-use plastic carryout bags could no longer be used by most Vermont stores or food establishments. Single-use paper bags could still be provided at a cost of 5 cents per bag. The charge collected on paper bags would remain with retailers.

VPIRG urges the Committee to make the charge on paper bags 10 cents instead of five. The reason is two-fold. First, a 10-cent charge on paper bags is a more effective incentive to encourage shoppers to bring their own reusable bags to the store. As noted in the statement from Wegmans above, this is the transition that really needs to happen.

Consider the experience of Alameda County, California. In 2013, the county passed an ordinance similar to the provisions contained in S.113 with respect to bags. According to analysis from the agency overseeing waste management in Alameda County, 69 chain stores there went from using 50 million bags each year to using just 10 million total — paper and plastic. The number of paper bags used went from 13 million to 8 million, and the number of plastic bags went from 37 million to 2 million.¹¹ Shoppers brought their own reusable bags or went without a bag altogether.

The senior program manager at the agency identified the 10-cent charge as being key: "The 10-cents charge actually really affects how the consumer behaves at point of sale," said Meri Soll. "A bag that

¹⁰ https://www.ellenmacarthurfoundation.org/assets/downloads/EllenMacArthurFoundation_TheNewPlasticsEconomy_Pages.pdf

¹¹ <https://www.kqed.org/news/11461251/are-plastic-bag-bans-good-for-the-environment>

used to be free and now you're charging 10 cents actually gives the consumer pause. 'Do I need this bag and next time I'm going to bring my own bag. I'm not going to pay that 10-cents charge.'"¹²

Many other communities in California found similar results after launching their own plastic bag bans before legislators acted statewide. In fact, 151 cities and counties adopted single-use bag ban ordinances before the statewide law was adopted. According to the group Californians Against Waste,¹³ these local policies have:

- Eliminated over 5 billion plastic shopping bags per year and all the resulting litter and waste, equaling 66 million pounds of plastic.
- Reduced paper bag consumption by nearly 400 million bags annually.
- Resulted in the reduction of approximately 185,000 metric tons of CO2 emissions per year.

By increasing the charge on paper bags to 10 cents, Vermont could also use a portion of the money to help get reusable bags into the hands of people who need them, which is the second reason why the charge should be increased. There was concern in the Senate that the 10-cent charge for paper bags may pose a hardship for some Vermonters. But the best answer to this concern is not to drop the charge on single-use paper bags to a nickel. Instead, we should make reusable bags, which are far more durable and versatile, more easily accessible to all.

One way to do this would be to have half of the 10-cent charge go to the Department of Environmental Conservation. The other half could stay with retailers. The Department could be charged with deploying the funds, through grants or other means to entities (nonprofits, agencies, food banks, etc.) that produce compelling plans for distributing reusable bags to those who are in need. Since this type of expenditure will not need to go on indefinitely, the charge could later be redirected to another purpose. Clean water would be a logical choice given the nexus between single-use bag pollution and the need to protect our water resources.

Straws

Many restaurants and bars in Vermont have already moved away from the practice of placing a straw in their customers' beverages as a matter of course.¹⁴ ¹⁵ Ben & Jerry's has recently announced plans to eliminate the use of plastic straws and other single-use plastics in its 600 Scoop Shops worldwide.¹⁶

S.113 would make plastic straws available only upon the request of customers in Vermont establishments. Individuals who need or want a straw would still be able to get one, but the use and disposal of most single-use straws would be avoided.

VPIRG strongly supports the provision on straws, including the thrust of the language about making them available upon request. However, we urge the Committee to consider changing the word "shall" to "may" in Section 6694. (Page 4 of the bill.) The point is to make clear that establishments must not be prevented from making straws available to people who request them. But since establishments are not required to make them available now, it may not make sense to force them to make plastic straws available because of this law.

¹² <https://www.kqed.org/news/11461251/are-plastic-bag-bans-good-for-the-environment>

¹³ <https://www.cawrecycles.org/list-of-local-bag-bans/>

¹⁴ <https://www.mychamplainvalley.com/news/vermont-restaurants-to-cut-back-on-plastic-straws/1269292984>

¹⁵ <https://www.vpirg.org/stop-single-use-plastics/straws/>

¹⁶ <https://vermontbiz.com/news/2019/january/28/final-straw-ben-jerrys-plans-eliminate-single-use-plastic>

An alternative would be to require that a “straw” be made available upon request. This would still be a new requirement for establishments, but for those that transition away from plastic straws to more sustainable alternatives (paper, metal, glass, etc.) this change would allow them to comply with the law without keeping single-use plastic straws on hand.

Expanded Polystyrene

No person would be allowed to sell expanded polystyrene (EPS) food service products or sell food or beverages in those same products under S.113. However, the law would not prohibit a person from storing or packaging a food or beverage in an EPS food service product for distribution out of State.

Already, more than 200 cities and counties around the country have banned or otherwise restricted the use of EPS food and beverage containers, including 16 towns in Maine, 30 towns in Massachusetts, New York City, Portland, Seattle, Minneapolis and San Francisco. State legislators in Maryland voted earlier this month to ban polystyrene foam containers. The bill now awaits the governor’s signature.

Why Ban Expanded Polystyrene Food Packaging?

Toxic

- Out of the large array of plastics sold on the market, polystyrene foam is one of the most dangerous.
- Benzene—a carcinogen—is a building block of polystyrene and is released during manufacture and incineration, exposing workers and communities to dangerous toxic chemicals.
- EPS foam also contains styrene, a chemical linked to cancer, vision and hearing loss, impaired memory and concentration, and nervous system effects.
- Polystyrene quickly breaks down into small particles that are widely dispersed in the environment due to its light weight. These microplastics cause physical and neurological toxicity in smaller organisms.

Environmental impacts

- EPS foam lasts for at least 500 years in the environment. It pollutes our lakes and streams as well as our urban areas and open spaces.
- There are up to 57 chemical by-products released during the manufacturing of styrene.
- EPS foam is manufactured with HFCs (hydrofluorocarbons), a highly potent greenhouse gas that the Vermont Senate recently voted to ban (S.30).
- EPS foam cannot be recycled on a large scale even if it is recyclable in theory because it must be clean (i.e. no food residue) and clean foam cannot be collected curbside because it crumbles into small pieces.
- Because it breaks during the sorting process, polystyrene foam contaminates valuable recyclables.
- Polystyrene foam has no value as a raw material and cannot be sold for a profit after it is recycled.
- Recycling polystyrene foam is also energy intensive.

By dramatically cutting the use and disposal of single-use plastic bags, straws and expanded polystyrene

food service products, Vermont will take a significant step toward reducing plastic pollution in our state. Such a move can also be a model for other states to follow as they consider their means of addressing this growing problem.

Working Group

The fourth major element of the bill is also very important. The Working Group that will be established to identify future opportunities to address this problem is a terrific idea. There is so much more to be done. For instance, legislators in other states are already proposing new standards for recycled content in plastic packaging, including plastic beverage containers.

Some companies are trying to get ahead of the curve, especially outside the U.S. where the pressure to reform has been even greater. For instance, Coca-Cola Australia recently announced that 70 percent of its plastic bottles made in Australia would be made of 100 percent recycled plastic by the end of this year.¹⁷ Even in the U.S., Coke plans to increase the recycled content in its plastic containers to 50 percent by the year 2030. A far less ambitious goal, but one that would still be challenging to meet.

Consider this passage from an article in *Plastics News*¹⁸ this past February:

If we want to achieve the kind of environmental gains major brands have been talking about for plastic bottles — like Coca-Cola Co.'s plans for 50 percent recycled content in its plastic containers by 2030 — the United States will need a herculean effort to more than double its recycling rate for PET bottles.

And that could be a reality check for the public amid all the talk about how to make plastics more sustainable.

That analysis of needing to double PET bottle recycling is not mine. It comes from longtime plastics recycling expert David Cornell, who has been making the rounds with the message that the demand for so many more recycled bottles to feed Coke and others will threaten to overwhelm our recycling systems, and lead to much more pressure for national deposit laws.

The author goes on to say that “bottle bills are the only way to realistically collect enough containers to meet those huge plans from beverage companies for recycled content.” (emphasis added)

There are many worthwhile proposals for the Working Group and other interested parties to consider in the coming months. In addition to banning unnecessary single-use plastics we should be requiring plastics that are used to be made of recycled material whenever possible. To get the feedstock for this recycled material we should also be modernizing Vermont’s successful Bottle Bill recycling program to include water bottles, sports drinks and more.

We look forward to further conversations about these topics and in the meantime, urge you to move forward with S.113 with an increase on the paper bag charge. Thank you for your consideration.

¹⁷ <https://www.foodbev.com/news/coca-cola-amatil-to-double-recycled-plastic-content-in-bottles/>

¹⁸ <https://www.plasticsnews.com/article/20190206/BLOG03/190209938/do-big-plans-for-recycled-content-pet-mean-bottle-bills>