Stamford, CT Briefing Packet, EPS Foam Foodware and Straws, Sept. 2019

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PART I: Recent Studies + Enacted Laws for Further Research
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PART I: Recent Studies + Enacted Laws for Further Research

Notable Research + Articles

→May, 2018: Styrene is reclassified from a possible carcinogen to a probable carcinogen by the World Health Organization:
https://www.sciencedaily.com/releases/2018/05/180530113105.htm

→September 17, 2019: New study on widely used plastic products confirms toxicity of chemical content – Health groups call on new European Commission to make addressing chemical pollution a priority:
https://www.env-health.org/new-study-on-widely-used-plastic-products-confirms-toxicity-of-chemical-content-health-groups-call-on-new-european-commission-to-make-addressing-chemical-pollution-a-priority/ (note findings on PLA, which many single-use bioplastic foodware items are made of, further underscoring the need to prohibit bioplastics as a suitable replacement).

Info:

The most comprehensive scientific study on the toxicity of chemicals present in plastic products to date, *"Benchmarking the in Vitro Toxicity and Chemical Composition of Plastic Consumer Products",* was released today in *Environmental Science and Technology*[1].

Researchers analyzed 34 widely used consumer products made out of plastics, including products coming in contact with food such as refillable water bottles, food wraps and yogurt cups. This analysis covers eight major polymer types: polyvinyl chloride (PVC), polyurethane (PUR), polyethylene terephthalate (PET), polystyrene (PS), Polypropylene (PP), high-density polyethylene (HDPE), low-density polyethylene (LDPE) and polylactic acid (PLA). Researchers found toxic compounds in a majority of the plastic extracts and proposed a prioritization of chemicals entering into their composition according to their toxicity.

Striking findings include the following:

- **74% of the plastic extracts contained chemicals triggering at least one endpoint relevant for assessing health impacts** – including baseline toxicity, oxidative stress, cytotoxicity, estrogenicity, and antiandrogenicity. Popular plastic consumer products can contain endocrine disrupting chemicals and chemicals currently used in plastics food contact articles and materials can be toxic to human health.
- **Plastics contain large mixtures of chemicals – many of those are unknown and difficult to identify**. This suggests the need for an urgent shift to a precautionary approach from industries, risk assessors and regulators alike to guarantee that all products are proven safe for consumers before entering the market.
- 260 chemicals were tentatively identified – including monomers, additives, and non-intentionally added substances – **27 of those were prioritized based on high in vitro toxicity**, including well-known additives such as benzophenones, butylated hydroxytoluene or triethyl phosphate, as well as less known isomers such as decanoic acid.
- **Extracts of polyvinyl chloride (PVC) and polyurethane (PUR) were observed to induce the highest toxicity at most endpoints** from the eight polymer types investigated.
- **All "bioplastics" made of polylactic acid (PLA) were also observed to be of toxicity levels similar to that of PVC and PUR** – showing that substitution needs to be approached with caution in order to be truly beneficial to health and avoid future phenomenon of "regrettable substitution".
- **The toxicities of low-density polyethylene (LDPE), polystyrene (PS), and polypropylene (PP) varied**.

According to the Health and Environment Alliance (HEAL), the findings confirm the health concerns about the effects of chemicals involved in the processing and production of products we use on a daily basis, with potential impacts on essential body functions such as our hormonal system.

"The implications of this study are clear: addressing the plastic challenge requires addressing society's addiction to chemicals. This commitment must be at the centre of the new Commission's 'zero pollution' strategy", says Natacha Cingotti, Senior Health and Chemicals Policy Officer at HEAL. *"Urgent priorities include the release of a new strategy on endocrine disruptors, an upgrade of the food contact materials regulation, a shift in the approach to plastics regulation from use to production cut and the promise to prevent toxic recycling."*

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Notes:

[1] An uncorrected proof of this study was published online on 5 August, 2019. The final version was released today.

→ Scientists say atmosphere carrying microplastics to the Arctic: https://www.dw.com/en/scientists-say-atmosphere-carrying-microplastics-to-the-arctic/a-50028215; https://advances.sciencemag.org/content/5/8/eaax1157/tab-pdf

→ More Recycling Won't Solve Plastic Pollution, https://blogs.scientificamerican.com/observations/more-recycling-wont-solve-plastic-pollution/

→This study that speaks to the real costs of foam and recyclability (2016)
The study finds that: "**The results of our analyses suggest that the real cost of Styrofoam outweighs the benefits of its use**. The impact of the social costs of production, the effects on the environment, and the risks to human health should be taken into account from both a qualitative and quantitative perspective. The recommendation of our team is that individuals and businesses reduce their use of Styrofoam and take advantage of a growing number of alternative products." https://greendiningalliance.org/wp-content/uploads/2016/12/real-cost-of-styrofoam_written-report.pdf

→NYC Study on Foam (more on this below under "Enacted Foam Laws" and in Part II): https://www1.nyc.gov/assets/dsny/docs/2017-05-12FoamDetermination_FINAL.pdf

Select List of Enacted Municipal Straw Mitigation Ordinances

Seattle, Washington:

Starting July 1, 2018, plastic straws and utensils are now banned in Seattle (Seattle Municipal Code 21.36.086)

The ordinance requires food service businesses to transition from using disposable food service ware to compostable and recyclable alternatives. Food service businesses include "full-service restaurants, fast food restaurants, cafes, delicatessens, coffee

shops, grocery stores, vending trucks or carts, business or institutional cafeterias, and other businesses, selling or providing food within the City of Seattle for consumption on or off the premises."

Food service ware includes any "non-compostable and non-recyclable containers, plates, 'clamshells,' serving trays, meat and vegetable trays, hot and cold beverage cups, wrappers, and utensils that are intended only for one-time use, including so-called biodegradable products where any portion is not compostable." While the text of the ordinance does not explicitly include "straws," in other documents the City of Seattle makes it clear that straws are included. The Seattle Public Utilities' website, for example, states that the "City of Seattle requires all food service businesses to find recyclable or compostable packaging and service ware alternatives to all disposable food service items such as...straws, utensils, and other products."

Plastic straws are not recyclable in Seattle, so single-use plastic straws must be compostable.

Seattle Public Utilities describes straws compliant with SMC 21.36.086 as "durable or compostable" including those made of "compostable paper or compostable plastic." Compostable options that Seattle Public Utilities has approved are available on their website.

"Compostable" means made solely of organic substances that break down into a stable product due to the action of bacteria in a controlled, aerobic commercial process that results in a material safe and desirable as a soil amendment meeting the compost quality standards found under WAC 173-350-220 for metals, physical parameters, pathogens, manufactured inert material and other testing parameters set by the local Health Department and has been found to degrade satisfactorily at the composting facility receiving the material. "Recyclable" means made solely of materials that are capable of being separated from a waste stream by a food service business and made available for collection and delivery to a processor for reuse or remanufacture into the same or other products.

While Seattle implemented the ban on straws beginning July 1, 2017, it allowed businesses to apply for waivers to use utensils, straws, small portion cups, and foil-faced, insulated wrap. These waivers expired on June 30, 2018. Only compostable straws are now permitted.

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Santa Cruz, California:

On September 26, 2017, the city of Santa Cruz banned food providers (vendors, businesses, organizations, entities, groups or individuals, including essentially all establishments that serve food to the public) from using plastic "disposable food service ware" including straws, cutlery, and hot drink lids (Santa Cruz Municipal Code § 6.48.015(h)&(n)).

Food providers may provide compostable, biodegradable, and recyclable alternatives, but only upon request. However, there is an exception to the requirement to use only compostable, biodegradable, and recyclable alternatives, where there are no "affordable" alternatives that cost no more than 15% higher than non-alternatives.

The City's recycling program does not collect plastic straws. Both plastic and paper straws are too small to be sorted for recycling, and therefore go to a landfill. Therefore, food providers are limited to biodegradable or compostable alternatives. "Compostable" means all the materials in the product or package will break down, or otherwise become part of usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner. Compostable disposable food service ware must meet ASTM standards for compostability and any bio-plastic or plastic-like product must be clearly labeled, preferably with a color symbol, to allow proper identification such that the collector and processor can easily distinguish the ASTM standard compostable plastic from non-ASTM standard compostable plastic. "Biodegradable" means the ability of organic matter to break down from a complex to a simpler form through the action of bacteria or to undergo this process. "Recyclable" means any material that is accepted by the city of Santa Cruz recycling program, including, but not limited to, paper, glass, aluminum, cardboard and plastic bottles, jars and tubs.

Restaurants must therefore use compostable or other biodegradable alternatives. While the ban took effect on November 7th, the City granted businesses a six-month grace period before it begins enforcing the law. The City began issuing citations for violations beginning May 7, 2018. The ordinance encourages, but does not require, local businesses to pay their customers a 25-cent credit for bringing their own reusable containers for to go items, while charging customers this same amount for requesting

disposable cups, lids, straws, stirrers and/or utensils.

Santa Cruz County, California:

All retail food establishments (including any restaurants, coffee shops, and essentially any place that serves food or beverages to consumers including movie theaters, hotels, and food trucks) may only use compostable, biodegradable, or recyclable straws, unless there is no affordable product available as determined by the County's Director of Public Works (Santa Cruz County Code § 5.46.040(A))

Plastic straws are not recyclable in the county. The Director of Public Works is required to adopt a list of available, suitable, and affordable biodegradable, compostable, or recyclable alternatives, which he or she is required to update regularly. All county departments, county facilities, and county contractors and lessees working under contract with the county, are similarly required to only use compostable, biodegradable, or recyclable straws, unless there are no affordable alternatives (See Santa Cruz County Code § 5.46.040(B), (C)). "Affordable" means available at the same cost or less than the non-environmentally friendly alternatives.

A first violation is subject to a written warning; while subsequent violations are subject to the following fines: (1) $100 for a second offense within 30 days of the first violation; $200 for a third offense within 60 days of the first violation; and $500 for a fourth offense within 90 days of the first violation. County vendors or special events lessees will be subject to different fines, based on the number of attendees at the specific event (See Santa Cruz County Code § 5.46.080).

Santa Cruz County Recycling and Waste Services operates and administers recycling services and solid waste disposal in the unincorporated area of Santa Cruz County. Alternatives must be certified compostable by the Biodegradable Products Institute ("BPI"), a non-profit organization that maintains a list of certified compostable products (See: http://www.dpw.co.santa-cruz.ca.us/Portals/19/pdfs/Flyer.pdf?ver=2016-08-30-103427-393; see also https://bpiworld.org/).

BPI has identified dozens of compostable straw options from a variety of different manufacturers for businesses in Santa Cruz County to choose from (see: http://products.bpiworld.org/?s=1&search=straw&type=1).

Carmel, California:

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Until April 22nd, 2018, restaurants in the city could only provide straws upon request (Carmel by the Sea Municipal Code § 8.68.041).

Beginning April 22nd, 2018, in addition to being provided only upon request, restaurants and food vendors (including grocery stores, delis, farmers markets, food trucks, city events, and any other similar business) may only use biodegradable, compostable, or recyclable straws (Carmel by the Sea Municipal Code § 8.68.042)

"Hardship" exemptions may be granted by the City Administrator, Code Enforcement Officer, Environmental Compliance Manager, or her/his designated representative, upon a showing that using a biodegradable, compostable, or recyclable alternative would increase costs by more than 20% (Carmel by the Sea Municipal Code § 8.68.070).

"Biodegradable" means the entire product or package will completely break down and decompose into elements found in nature within a year after customary disposal. "Compostable" means all the materials in the product or package will break down, or otherwise become part of usable compost (e.g., soil-conditioning material, mulch) in a safe manner and in approximately the same time as the materials with which it is composted. Compostable disposable food service ware must meet ASTM standards for compostability and any bio-plastic or plastic-like product must be clearly labeled, preferably with a color symbol, to allow proper identification such that the collector and processor can easily distinguish the ASTM standard compostable plastic from non-ASTM standard compostable plastic. "Recyclable" means that a material can be recycled, salvaged, composted, processed or marketed by any means other than landfilling or burning, whether as fuel or otherwise, so that they are returned to use by society. It includes any material that is accepted by the City's franchise waste hauler for recycling (Carmel by the Sea Municipal Code § 8.68.020).

Malibu, California:

Starting in June 2018, restaurants and vendors within the city are prohibited from using, providing, distributing, or selling "plastic beverage straws" and "plastic stirrers." Plastic beverage straws and plastic stirrers are also prohibited from being used or distributed at city facilities and city sponsored events (Malibu Municipal Code § 9.24.045(A)).

“Plastic beverage straw” means a tube made predominantly of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, for transferring a beverage from its container to the mouth of the drinker. It includes compostable and biodegradable petroleum or biologically based polymer straws, but does not include straws that are made from non-plastic materials such as paper, sugar cane, and bamboo.

Prohibited “plastic stirrers” are defined as devices used to mix beverages, intended for only one- time use, and made predominantly of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources. It includes compostable and biodegradable petroleum or a biologically based polymer stirrer, but does not include (and therefore does not prohibit) stirrers made from non-plastic materials such as paper, sugar cane, and bamboo.

Allowable “non-plastic alternatives” may only be provided to customers upon request.

Manhattan Beach, California:

Food providers cannot sell or distribute polystyrene straws, along with polystyrene cup lids and utensils, in conjunction with the sale of prepared food within the city (Manhattan Beach Municipal Code § 5.80.030(A)).

Polystyrene straws may also not be used at city facilities; or at city-sponsored events, city managed concessions, or city meetings open to the public. However, straws are also commonly made from polypropylene and polyethylene.

It therefore seems food providers in the city can use straws made from other types of plastic and remain in compliance with the ordinance. Food providers may only distribute disposable food ware, including straws, that exhibits a recycle code other than No. 6 or PS, and maintain documentation about the composition of the disposable food service ware. The City and its departments are prohibited from purchasing or acquiring polystyrene ware including straws.

While Manhattan Beach collects both polypropylene and polyethylene for recycling, when littered these materials do not break down easily and can pollute much the same as other plastics. Further, the law does not prohibit people from bringing polystyrene straws to city properties or facilities, including the beach. There is also an available hardship exemption that may be granted by the City Manager or his or her designee.

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San Louis Obispo, California:

On November 7th, 2017, the City Council unanimously voted to implement a "straws upon request" ordinance for all dine-in customers. The law became effective March 1st, 2018. Vendors, which include any business providing food or beverages within the city, are required to ask each dine-in customer if he or she would like a single-use straw before providing one with their order (San Luis Obispo Municipal Code §§ 8.09.020, 8.09.010(D)).

"Single use" is defined as a product that is designed to be used only one time in its same form by the customer, food vendor or entity. All take-out orders will be exempt, however, meaning these vendors can continue to give straws automatically for take-out orders. "Take-out food orders" are defined as prepared food or beverage that are purchased at an establishment and are intended to be consumed elsewhere.

**San Louis Obispo's ordinance was the basis of the study referenced in Section IV of this briefing packet.

Enacted State + National Foam Laws Providing Good Policy Examples

→The State of Maine enacted the first in the nation EPS foam foodware ban this year; House Representative Paige Zeigler was lead sponsor and can be reached at: StanleyPaige.Zeigler@legislature.maine.gov**.** The law takes effect on 1/1/21.For public hearing materials, including a repository of public testimony on LD289, see: http://www.mainelegislature.org/legis/bills/display_ps.asp?paper=HP0213&PID=undefined&snum=129 **+** http://www.mainelegislature.org/legis/bills/display_ps.asp?paper=HP0213&PID=undefined&snum=129#

→The State of Maryland enacted the 2nd in the nation EPS ban this year; the law takes effect on 7/1/20 and can be found at http://mgaleg.maryland.gov/webmga/frmMain.aspx?pid=billpage&tab=subject3&id=sb0285&stab=01&ys=2019RS
Bill sponsor Senator Cheryl Kagan conducted extensive research, including economic analysis, and can be reached at: Phone: 410-841-3134 | 301-858-3134 | Cheryl.Kagan@senate.state.md.us

→Vermont passed Act 69 / S.113 this year instituting a straws on demand, bag ban and EPS ban bill. The law takes effect July 1, 2020. View the chaptered law at https://legislature.vermont.gov/bill/status/2020/S.113

→The EU directive passed in 2019 included straws and EPS foodwares under its single-use plastic products covered by Article 5 on restrictions on placing on the market (passed June 5, 2019; https://data.consilium.europa.eu/doc/document/PE-11-2019-REV-1/en/pdf

Enacted Municipal Foam Laws Providing Good Follow Up Opportunities

→Portland, Maine: passed a ban in 2014. Staff Troy Moon would be a good contact for efficacy data: thm@portlandmaine.gov. To note; Portland is also currently considering a straw ban with a draft (subject to pending amendments resulting from the Sustainability and Transportation Committee meeting of 9/18/19) available at: https://portlandme.civicclerk.com/Web/GenFile.aspx?ad=2479

→NYC foam ban took effect on 1/1/19; FMI: https://www1.nyc.gov/assets/dsny/site/resources/recycling-and-garbage-laws/collection-setout-laws-for-business/foam-ban. Contacts from NYC can be found in the study presented in Part II.

PART II: NYC's 2017 determination that foodservice EPS is not recyclable

The following study was produced by NYC as part of a lawsuit by Dart Container Foundation. It's bulletproof and conclusive in disputing claims that EPS foodwares are recyclable:
https://www1.nyc.gov/assets/dsny/docs/2017-05-12FoamDetermination_FINAL.pdf

Excerpts:

A. EXECUTIVE SUMMARY

As described herein and summarized below and pursuant to Local Law 142 of 2013, the New York City Department of Sanitation ("DSNY" or "the Department") determines that Food Service Foam or post-consumer Food-Service Foam cannot be recycled in a manner that is economically feasible or environmentally effective for New York City.

As a result of this determination, on and after November 13, 2017, no food service establishment, mobile food commissary, or store shall possess, sell, or offer for use single service articles that consist of expanded polystyrene ("Food-Service Foam"),

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unless otherwise exempt under Local Law 142. In addition, no manufacturer or store shall sell or offer for sale polystyrene loose fill packaging ("Foam Packing Peanuts").

In accordance with Local Law 142, DSNY will provide public education and outreach to food service establishments, mobile food commissaries, and stores to inform them of the provisions of this section and provide assistance with identifying replacement material and no violations will be issued under this Law until May 14, 2018. To make this determination, the Department has consulted with and requested information from the City's metal, glass, and plastic recycling contractor Sims Municipal Recycling ("Sims"); manufacturers and purported recyclers of expanded polystyrene; plastics industry and recycling market experts; other municipalities and their recycling contractors; and other stakeholders with expertise on expanded polystyrene, as required by Local Law 142.

Key Findings: For 30 years, attempts to recycle Food-Service Foam—both subsidized and non-subsidized attempts—have failed at each step of the recycling process. The municipalities and programs that DSNY researched tell a very clear story: Food-Service Foam is not capable of being recycled in an environmentally effective or an economically feasible manner.

The municipalities found that Food-Service Foam compacts in collection trucks, breaks into bits, and becomes covered in food residue, making it worthless when it arrives at the material recovery facility ("MRF"). It then blows throughout the MRF, is missed by manual sorters, mistakenly moves with the paper material and contaminates other valuable recycling streams, namely paper, which can be the most consistently valuable commodity in a recycling program. Food-Service Foam is too costly to clean and process compared to virgin material. If some is sorted successfully, the light-weight foam must be stored for months, waiting for enough material to economically ship.

If any Food-Service Foam makes it over these hurdles, the process grinds to a stop due to the struggle to find a buyer. With no buyer, municipalities get stuck with the material and ultimately send the remaining amount of Food-Service Foam that was not already landfilled after the compacting or sorting phases to a landfill.

This has been the experience of the large municipalities contacted by DSNY—the same municipalities that Dart suggested DSNY research—and several other small and large 3 municipalities that also attempted to recycle Food-Service Foam. After designating Food-Service Foam, numerous municipalities end up disposing of the material at each

step in the recycling process. There is no basis to expect that New York City's experience will be any different.

i. Food-Service Foam is Being Landfilled by Jurisdictions Collecting It

DSNY's research and interviews with jurisdictions that collect foam as part of their residential commingled recycling collection lead to one conclusion—Food-Service Foam is being landfilled at high costs. Food-Service Foam is crushed in commingled collections, cannot be properly sorted, and moves with other products through the MRF. The small amount of foam that is sorted properly is often stockpiled awaiting non-existent buyers and ultimately sent to landfill. Numerous municipalities end up sending Food-Service Foam collected in commingled recycling to a landfill at every step of the process.

ii. No Markets Exist for Recycled Food-Service Foam, Failing Tests for Economic Feasibility and Environmental Effectiveness

In interviews with other jurisdictions and numerous expert reports, it is clear that Food-Service Foam is not being purchased from MRFs by reclaimers and no markets exist. Businesses that do purchase foam are only interested in purchasing industrial discards or clean post-consumer Foam Packing Materials, and even then on a very limited basis.

iii. Processing Food-Service Foam is Not Cost Effective

Due to high costs, attempts to recycle Food-Service Foam are not economically feasible.

Past industry-subsidized programs have failed, leaving municipalities to dispose of collected foam in a costly manner. And Los Angeles abandoned its past attempts to clean, process, and convert Food-Service Foam into a new marketable product because it was twice the cost of using virgin material.

iv. Food-Service Foam Contaminates Valuable Recycling Streams

Research and discussions with municipalities and MRFs echoed the findings of a study supported by major packaging and plastics industry trade groups—Food-Service Foam contaminates other valuable recycling streams, especially paper. Food-Service Foam flattens in commingled recycling and can be sorted as paper in the two-dimensional sorter.

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v. If New York City Designates Food-Service Foam Recyclable, Then Abandons, It Will Reduce the Overall Recycling Rate

When New York City altered its recycling program temporarily in 2002, recycling rates dropped and took 15 years to recover. DSNY's research shows that industry-sponsored foam recycling programs, the offer Dart has presented, have failed over the last 30 years in the United States and Canada, leaving cities facing huge costs and no buyers. After the subsidized markets failed in Ontario, Canada, many municipalities have paid MRFs to sort the designated Food-Service Foam and then landfilled it. Other municipalities have reversed foam's designation as recyclable. These 4 actions can erode public understanding of, confidence in, and, as a result, participation in the City's recycling programs.

PART III: Recyclers That Accept Foam Urge Public To Refuse Foam

The following excerpts were copied from the website https://greencitizen.com/learn-more/styrofoam-recycling/ of recycler, GreenCitizen, that accepts foam that has not been tainted by food for recycling. This recycler points out the hassles with recycling foam and urges the public to refuse foam products.

****Even recyclers urge refusal of polystyrene foam food products + packaging!**

"Every day, about 1369 tons of Styrofoam ends up in a landfill and it takes 500 years to decompose.

When heated, Styrofoam releases toxins.

Even exposure to sunlight creates air pollutants that harm landfills and the ozone layer. It's infamous for breaking into smaller pieces, which can fatally harm mammals or fish that ingest them.

Styrofoam is one of the most frustrating materials that we encounter as recyclers trying to protect the environment.

It biodegrades slowly in a landfill and shows significant resistance to photolysis, or decomposition by the action of light. (For comparison, organic material like a banana peel will biodegrade in just two months.)

While Styrofoam is 100% recyclable under ideal conditions, most recyclers won't accept it because its low density takes up significant storage space, which makes for cost-inefficient recycling (bottom line: recyclers lose money).

The best course of action around this environmentally unfriendly material begins with you, the consumer.

Bring your own reusable food containers to restaurants and just say no to that inevitable Styrofoam takeout box. Avoid buying products with Styrofoam packaging, including online purchases that must be shipped to you.
*Note that this page has outdated information on the classification of styrene as a possible carcinogen; the WHO reclassified styrene as a
probable carcinogen in 2018 (see reference above).

PART IV: Straw Mitigation and Policy Mechanisms for Accommodating Persons Identifying as Living with Disability

Straw Mitigation

The 2018 study from Travis Wagner looked at the effectiveness of straws on demand laws and found that they are effective but that bans on plastic straws are more effective.
https://digital.detritusjournal.com/articles/assessing-the-use-of-default-choice-modification-to-reduce-consumption-of-plastic-straws/167

Other key take-aways from this Study:

In September 2018, California became the first state in the US to enact a plastic straw law. The law adopted the "straw only upon request" approach. It applies only to full-service restaurants; it does not apply to fast-food restaurants, coffee shops, delicatessens, or restaurants serving takeout to customers. (California cities and counties may adopt more stringent ordinances involving straws such as which establishments are covered and the adoption of a ban.)

→Local ordinances are far more prevalent in the US and as of September 2018 (**already very outdated**), there were 31 ordinances that had been adopted by local governments: 13 in California, 7 in Florida, 3 in New Jersey, 2 each in Massachusetts and Washington, and 1 each in Minnesota, New York, Ohio, and South Carolina.

Of these 31 municipal ordinances 16 are full bans, 6 are partial bans, and 9 default choice modifications.

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→There have been numerous resolutions passed by local governments encouraging businesses to reduce the use of plastic straws, but these are not ordinances as they are suggestive and do not have the force of law.

Policy Mechanisms for Accommodating Persons Identifying as Living with Disability

Environmental justice movement seeks not to exempt any community members – from persons identifying as living with disability to financially challenged communities to schools and beyond- from improved access to environmental and health protections. This is why dialogue with potentially affected stakeholders is paramount for arriving at local solutions to our global plastic pollution crisis. At the Surfrider Foundation, we strive to apply our policy expertise and grassroots volunteer network toward inclusive and collaborative ends that strike the best balance for the ocean, waters and beaches and all people who enjoy them.

At base level, the following lays out preferred policy mechanisms for straw mitigation ordinance with approaches for disability accommodation noted.

Best approach:

Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Straw" means a tube made predominantly of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, for one-time use in transferring a beverage from its container to the mouth of the drinker.

B. "Splash Stick" means a device made predominantly or in part of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, that is designed for one-time use to prevent heat and/or liquid from escaping a lidded cup.

C. "Beverage Lid Plug" means a device made predominantly or in part of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, that is designed for one-time use to prevent heat and/or liquid from escaping the open mouth or steam escape holes in plastic beverage lid.

This section includes single-use plastic Straws, Splash Sticks and Beverage Lid Plug products that are marinedegradable, compostable and biodegradable petroleum or biologically based polymer products but does not include single-use Straws, Splash Sticks and Beverage Lid Plugs that are made from non-plastic materials, such as paper, sugar cane, bamboo, or other naturally occurring materials.

2. Prohibition

This subsection governs the use of single-use Straws, Splash Sticks and Beverage Lid Plugs.

A. Except as otherwise provided in this subsection, **a business may not manufacture nor provide a single-use plastic Straw, Splash Stick or Beverage Lid Plug to a customer at the point of sale or otherwise make single-use plastic Straw, Splash Stick or Beverage Lid Plug available to customers.**

B. A business providing a single-use straw, splash stick or beverage lid plug of non-plastic origin to a customer at the point of sale or otherwise shall do so only upon request by the customer and for a fee of not less than 5-cents per item to be retained by the business for any lawful purpose. Request must be made by the customer and not offered by servers.

C. No business shall provide a self-service straw station for any allowable by request only non-plastic single-use straws, splash sticks or beverage lid plugs.

D. Nothing within this section shall prohibit customers from bringing with them a Straw, Splash Stick or Beverage Lid Plug of their own choosing to a business establishment for their personal use. (**accommodation for persons identifying as living with disability is to explicitly include this language within the ordinance, despite the authority already being inherent)

E. Nothing within this section shall require a business to carry any single-use straws, splash sticks or beverage lid plugs of any composition. (**accommodates businesses who wish to go completely reusable)

3. Exemptions.

The prohibition in paragraph 2A does not apply to:

(1) Licensed nursing homes, medical facilities or hospitals.

(2) The shelved sale of goods at grocery stores for personal consumer use.

(3) The provision of juice boxes with attached straws to licensed nursery school, day cares or elementary school.

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On behalf of the Surfrider Foundation Connecticut Chapter

4. Violations + Enforcement TBD locally

Should the above not be locally expedient to legislate, please consider the following contingencies:
1-Best Immediate contingency: On Demand initially for 1 year for all single-use straws with originally presented ban on plastic splash sticks and plugs; and then phase-out to ban on all plastic straws, mechanisms as written in initial draft.

2-Next Best Contingency: Ban plastic splash sticks + plugs as written; advance a ban on s/u plastic straws with minimum quantity requirement and an ask-first policy for reusable straws or single-use natural-made (non-plastic/non-bioplastic/non-compostable plastic) straws (as written); amend section 2D to be an exception clause requiring businesses providing single-use straws to have a small quantity of plastic straws on hand (50-200) for persons expressing explicit preference for plastic straws.

In this approach, any person generally requesting a straw would be given a s/u straw made of natural content, and any person expressing an explicit preference for a plastic straw would be given a plastic straw.

This makes the primary default for all to need to ask, and the ability to explicitly request plastic to be available to all but without the primary default being plastic, and so would serve to incentivize natural-made single-use straws over plastic, resulting in fewer plastic straws littered in the environment + consumer paradigm shift to more sustainable choices without persons identifying as living with disability or otherwise requiring a plastic straw to drink needing to identify themselves or their needs in a way that is different than any other consumer establishing preferences.

Add sections to both:

- prohibit PFAS in any allowable plastic items; (FMI on PFAS: https://www.ewg.org/interactive-maps/2019_pfas_contamination/?gclid=EAIaIQobChMIifjvwbjd5AIVTtHeCh0eUwHNEAAYBCAAEgKYV_D_BwE); and,
- require any allowable plastic items to be made of post-consumer recycled content.

3- Final Contingency Option: on demand policy for straws with ban on splash sticks and plugs intact;

Add sections to both:

- prohibit PFAS in any allowable plastic items; and,
- require any allowable plastic items to be made of post-consumer recycled content.

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