

Legislation Text

Res. No. 326

Resolution calling upon the New York State Legislature to pass, and the Governor to sign, legislation banning the sale of beverages in single-use plastic containers.

By Council Members Nurse, Gennaro, Avilés, Salaam, Sanchez, Williams, Ayala and Banks

Whereas, According to a study published by the World Economic Forum, worldwide use of plastic has grown 20-fold over the past 50 years, and is expected to double again in the next two decades, to the point where it is estimated that the planet's oceans will contain more plastic by weight than fish by 2050; and

Whereas, According to the United Nations Environment Programme, approximately 430 million tons of plastic are produced annually, significantly more than the estimated combined weight of every living human on Earth, which amounted to approximately 390 million tons in 2023, according to a study of mammalian biomass on Earth; and

Whereas, According to figures from the Organisation for Economic Co-operation and Development's 2022 Global Plastic Outlook, less than 10% of the plastic produced globally is recycled every year, with approximately 55 million tons collected for recycling in 2019, and approximately 79 million tons released into the environment as litter that year; and

Whereas, In the United States, the percentage of plastic waste diverted for recycling is even lower, with approximately 5% of the more than 50 million tons of plastic waste produced by American households diverted to recycling in 2021, according to a report published by Greenpeace in October of 2022; and

Whereas, According to the Container Recycling Institute, United States sales of plastic water bottles increased from 2.8 billion units in 1996 to nearly 71 billion units in 2018; and

File #: Res 0326-2024, Version: *

Whereas, A 2021 study published in the journal Nature Sustainability found that plastic beverage containers accounted for approximately 12% of global ocean plastic litter, with an additional 6% comprised of plastic bottle caps and container lids; and

Whereas, The same study identified that approximately 50% of global ocean plastic litter is comprised of single-use plastic such as plastic bags, beverage containers, wrappers, food containers, cutlery, bottle caps, and lids; and

Whereas, When exposed to the elements and degraded by ultraviolet light, plastic pollution can begin to break down into smaller and smaller pieces, with particles sized between 1 micrometer and 5 millimeters categorized as microplastics and those sized between 1 nanometer and 1 micrometer categorized as nanoplastics; and

Whereas, In 2022, a study analyzing blood samples from 22 anonymous donors found the presence of microplastics in 80% of the individuals tested, with half the samples containing polyethylene terephthalate (PET) plastic, commonly used in beverage containers; and

Whereas, A 2021 study showed that microplastic particles can be found in human placentas, and a growing body of evidence has demonstrated that microplastic particles can latch onto red blood cells, potentially limiting their ability to transport oxygen, and can accumulate in human hearts, brains, and other organs; and

Whereas, A study published in February 2024 in the journal Toxicological Sciences detected plastic particles in every one of the 62 placental tissue samples examined, finding concentrations ranging from 6 to over 700 micrograms per gram of tissue, with PET comprising more than half of the total plastics found across all tissue samples examined, and polyvinyl chloride (PVC) and nylon microplastic particles each comprising approximately 10% of the total plastics found; and

Whereas, A 2022 study demonstrated that microplastic particles can bond with heavy metals, potentially

File #: Res 0326-2024, Version: *

releasing those metals in our bodies when ingested and increasing the risk of the metals bio-accumulating up the food chain, a process by which organisms amass and concentrate toxins from consuming smaller organisms that have also amassed and concentrated those toxins; and

Whereas, While bottled water is often marketed as healthier or safer to consume than tap water, municipal water suppliers in the United States are generally subject to more stringent regulations than bottled water manufacturers, and are subject to strict testing protocols for pollutants and bacterial contaminants; and

Whereas, New York City's drinking water supply is tested hundreds of times per day, every day of the year, with samples collected from multiple points across the potable water delivery infrastructure, including from among nearly 1,000 street-side sampling stations citywide; and

Whereas, The United States Food and Drug Administration only requires bottled water manufacturers to test their water supply once a year for chemical contaminants, once every four years for radiological contaminants, and once a week for microbial contaminants; and

Whereas, The plastic bottles beverages are sold in can themselves be a source of contamination, with plasticizing chemicals like bisphenol A (BPA), phthalates (PAEs), benzyl butyl phthalate (BBP), di-n-butyl phthalate (DBP), and di (2-ethylhexyl) phthalate (DEHP), which can act as hormone disruptors in the human body, commonly leaching into beverages from bottles; and

Whereas, A study published in January of 2024 in the journal Proceedings of the National Academy of Sciences found significantly higher levels of micro and nano plastic contamination in samples of bottled water than detected in previous studies, with new detection techniques finding on average, 240,000 plastic fragments per liter of water; and

Whereas, Several studies have calculated the carbon intensity of tap water to be anywhere from 300 to 1,000 times lower than the carbon impact of bottled water; and

Whereas, A 2021 study published in the journal Science of the Total Environment estimated the overall environmental impact of bottled water to be approximately 1400-3500 higher than tap water, when considering

File #: Res 0326-2024, Version: *

resource depletion, emission of harmful pollutants associated with production and manufacturing, energy consumption from processing, filtering, bottling, and transportation, and the negative effects of plastic pollution on ecosystems; and

Whereas, According to the Los Angeles Times, over 60% of bottled water manufacturers obtain their water form municipal sources, essentially selling repackaged tap water to consumers at a significant markup; and

Whereas, Given the significant environmental impacts and potential health impacts associated with the sale of beverages in plastic containers, as well as the easy access to beverages sold in other, potentially more recyclable and sustainable packaging materials; now, therefore, be it

Resolved, That the Council of the City of New York calls upon the New York State Legislature to pass, and the Governor to sign, legislation banning the sale of beverages in single-use plastic containers.

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