



National Capital Presbytery Earth Care Network

REDUCING THE USE OF PLASTICS

The 226th General Assembly met in the summer of 2024 and voted to approve this recommendation: On Becoming Free from Plastic Pollution, encouraging Presbyterians to work to eliminate single-use plastics, and commending several resources to the church. Much of this information came from an excellent PowerPoint presentation developed by the Presbyterians for Earth Care.

<https://presbyearthcare.org/wp-content/uploads/2023/07/Power-Point-for-Single-Use-Plastics.pptx>

WHAT ARE SINGLE-USE PLASTICS?

- Put simply, single-use plastics are goods that are made primarily from fossil fuel-based chemicals (petrochemicals) and are meant to be disposed of right after use—often, in mere minutes. Single-use plastics are most commonly used for packaging and serveware, such as bottles, wrappers, straws, and bags.
- Though plastic—a chain of synthetic polymers, essentially—was invented in the mid-19th century, it wasn't until the 1970s that its popularity skyrocketed. Manufacturers began replacing traditional paper or glass staples with lighter or more durable and affordable plastic alternatives; plastic jugs replaced milk jars, for instance. Since the 1950s, 8.3 billion metric tons of plastics have been produced, and half of that in the past 15 years alone.



WHY DOES THIS MATTER?

- Single-use plastics are a glaring example of the problems with throwaway culture. Instead of investing in quality goods that will last, we often prioritize convenience over durability and consideration of long-term impacts. Our reliance on these plastics means we are accumulating waste at a staggering rate. We produce 300 million tons of plastic each year worldwide, half of which is for single-use items. That's nearly equivalent to the weight of the entire human population.



- Left alone, plastics don't really break down; they just break up. Over time, sun and heat slowly turn plastics into smaller and smaller pieces until they eventually become what are known as microplastics. These microscopic plastic fragments, no more than 5 millimeters long, are hard to detect—and are just about everywhere.
- Tiny shards of plastic are becoming embedded in human brains, kidneys, livers, and other organs every day, with likely negative health consequences. Your brain is likely composed of 99.5% brain and .5% plastic.

Sources:

(1) <https://www.cnn.com/2024/08/23/health/plastics-in-brain-wellness>;

(2) <https://chemsec.org/the-plastic-pandemic-takes-a-249-billion-toll-on-health-everyyear>.



- Exposure to microplastics, as well as the chemicals that are added to plastics during processing, harm our health. Many of the chemicals in plastics are known endocrine disruptors, and research has suggested that human exposure could cause health impacts including hormonal imbalances, reproductive problems like infertility, and even cancer.
- Although single-use plastic pollution accumulates most visibly on our streets, in fact our water suffers even more. Litter can be the first stage in a waste stream that enters waterways as plastics tossed on the street are washed away by rain or travel via storm drains into rivers and streams. Our waterway plastic pollution is particularly concentrated: Just ten rivers carry 93 percent of the world's total amount of plastic that enters the oceans via rivers each year
- Marine animals bear the burden of this influx of garbage into their habitats. Beached whales have been found with stomachs full of plastic trash. And recent studies found plastic in the guts of 90 percent of the seabirds tested and 100 percent of the turtles. Alarming, scientists estimate that there will be more plastic than fish in the ocean by weight in 2050. Not only is plastic estimated to kill millions of marine animals and seabirds each year, but it's also contaminating seafood that humans have relied on
- for millennia, particularly with microplastics in animals' guts.



HERE ARE SOME TIPS FOR REDUCING THE USE OF PLASTICS IN OUR CHURCHES:

- Offer communion through intinction or by using glass or compostable cups.
- Hospitality time benefits from washable or compostable cups, plates, and utensils and from homemade snacks or ones purchased locally and packaged in sustainable wrapping.
- Cloth or oilcloth tablecloths make superior choices to disposable plastic ones.
- Wildflowers make beautiful decorations and are a better choice than plastic.
- Installing fountains for reusable water bottles will encourage the congregation to avoid single use plastic bottles.
- The neighborhood around the church will benefit from a congregational neighborhood clean-up program, which will help keep plastic and other litter out of the stormwater system.
- Hosting a conversation about plastics and their effects on the “least of these” can be an opportunity to be better educated about the lives of those affected most by plastic pollution.



OUR CONGREGATIONS CAN BE ENCOURAGED TO TAKE THEIR FAITH OUT INTO THE WORLD BY:

- Understanding that using single-use plastics is unsafe for food use because they can shed micro-plastics and nano-plastics. If you have to buy food in plastic containers, don't increase your exposure by using them again and certainly don't use them to reheat food.
- Keeping reusable shopping bags available and taking them along when shopping.

