DCPC's Green Group's recommendation

"...God's work in creation is too wonderful, too ancient, too beautiful, too good to be desecrated...Restoring creation is God's own work in our time, in which God comes both to judge and to restore..."

—PC(USA) Environmental Policy

God calls us to be careful, humble stewards of this earth. Single-use plastic is an increasing threat to the health of our environment, as noted in the links below. The Green Group thus asks our church to replace plastic plates, cups, and cutlery with reusable, easily compostable, or recyclable items.

The need to respond is clear:

- 1. <u>Single-use plastic</u> has a devasting impact on our environment and health.
- 2. <u>Plastic does not decompose</u>. It breaks down into microplastics and nanoplastics.
- 3. <u>Microplastics</u> and nanoplastics are found in our food, water, air, and bodies.
- 4. The health impacts are a growing concern.
- 5. <u>It's time to change</u> how we consume and dispose of the plastic we use.

DCPC became an Earth Care Congregation in 2010 and pledged to be good stewards of God's earth. The Green Group encourages us to continue our commitment by replacing plastic plates, cups, and cutlery with reusable, easily compostable, or recyclable items.

Abstract of link # 4: Chemosphere. 2022 Jul:298:134267.

Micro(nano)plastics pollution and human health: How plastics can induce carcinogenesis to humans?

Microplastics (MPs) and nanoplastics (NPs) are key indicators of the plasticine era, widely spread across different ecosystems. MPs and NPs become global stressors due to their inherent physicochemical characteristics and potential impact on ecosystems and humans. MPs and NPs have been exposed to humans via various pathways, such as tap water, bottled water, seafood, beverages, milk, fish, salts, fruits, and vegetables. This paper highlights MPs and NPs pathways to the food chains and how these plastic particles can cause risks to human health. MPs have been evident in vivo and vitro and have been at health risks, such as respiratory, immune, reproductive, and digestive systems. The present work emphasizes how various MPs and NPs, and associated toxic chemicals, such as polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs), impact human health. Polystyrene (PS) and polyvinyl chloride (PVC) are common MPs and NPs, reported in human implants via ingestion, inhalation, and dermal exposure, which can cause carcinogenesis, according to Agency for Toxic Substances and Disease Registry (ATSDR) reports. Inhalation, ingestion, and dermal exposureresponse cause genotoxicity, cell division and viability, cytotoxicity, oxidative stress induction, metabolism disruption, DNA damage, inflammation, and immunological responses in humans. Lastly, this review work concluded with current knowledge on potential risks to human health and knowledge gaps with recommendations for further investigation in this field.