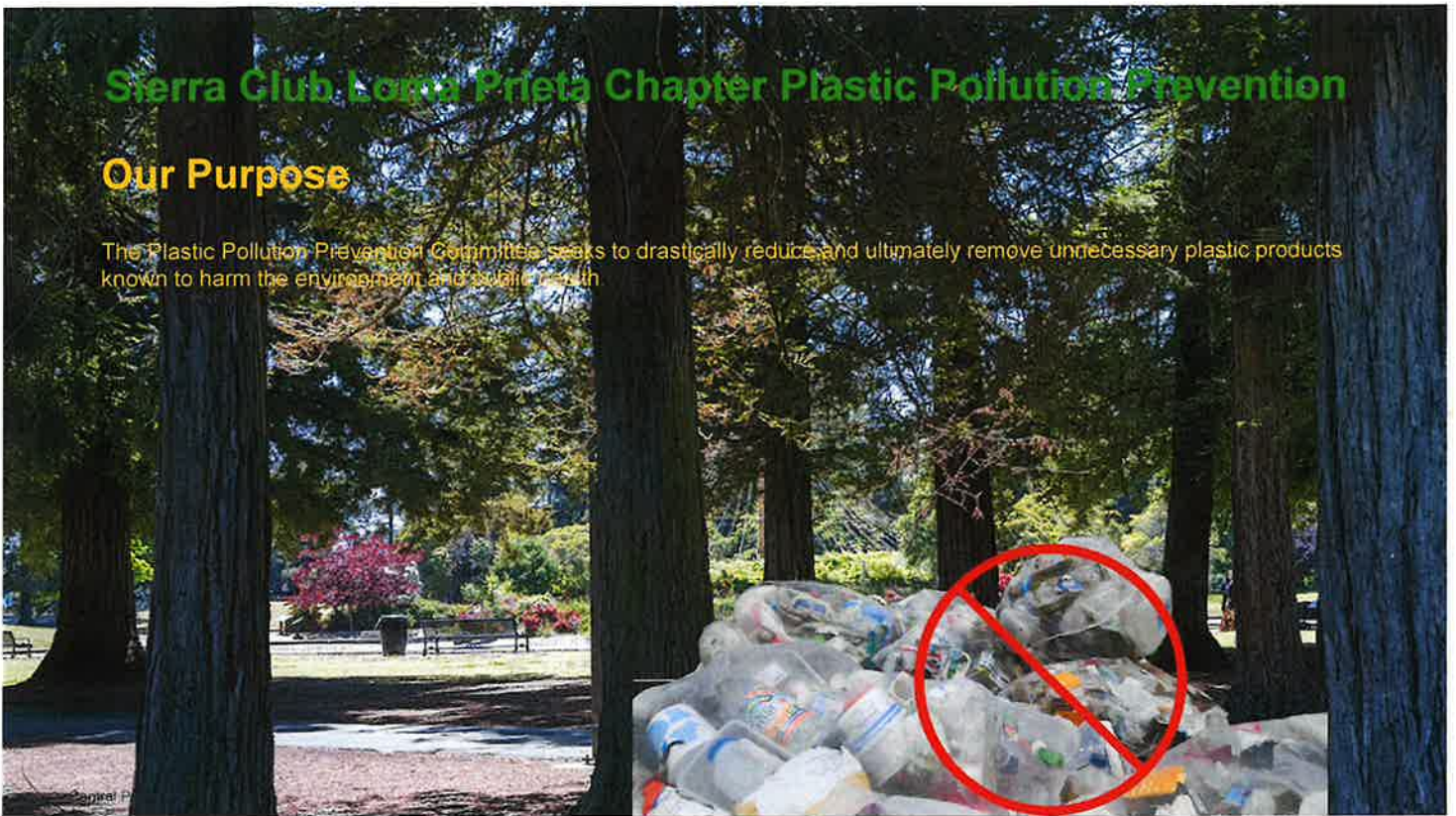


Sierra Club Loma Prieta Chapter Plastic Pollution Prevention

Our Purpose

The Plastic Pollution Prevention Committee seeks to drastically reduce and ultimately remove unnecessary plastic products known to harm the environment and public health.

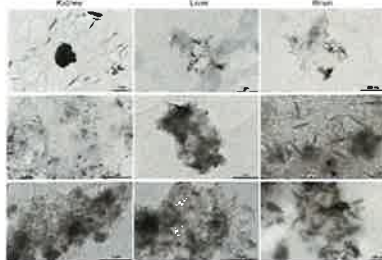


Micro & Nano plastics

May 6, 2024, University of New Mexico <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1100893/>

Center for International Environmental Law <https://www.ciel.org/breathing-plastic-the-health-impacts-of-invisible-plastics-in-the-air/>

Bioaccumulation of Microplastics in Decedent Human Brains Assessed by Pyrolysis Gas Chromatography-Mass Spectrometry



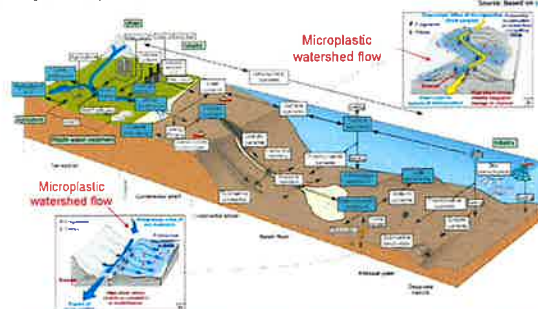
Polyethylene was the predominant polymer. The relative proportion of polyethylene GNPs was greater in brain samples than in liver or kidney. Spherical appearances, with dimensions ranging from micrometer to nanometer sizes, suggest an aged, friable polymer composition.



Human Health Impacts of Exposure to Chemicals in Microplastics

Neurodevelopmental disorders Attention deficit hyperactivity disorder (ADHD) Autism Neurobehavioral deficits Decreased IQ Cognitive deficits	Metabolic disorders Type 2 diabetes Excessive childhood weight gain Increased waist circumference Severe tooth decay e.g., total cholesterol and LDL cholesterol
Hormonal diseases Thyroid disease Thyroid cancer	Other health impacts Decreased antibody response to vaccines Physical damage Carcinogen absorption
Cardiovascular disease	
Respiratory diseases Asthma	
Male reproductive health impacts Subfertility Reduced sperm quality	
Female reproductive health impacts Polycystic ovarian syndrome Endometriosis Delayed time to pregnancy Abnormal zygotes Pregnancy-induced hypertension and/or preeclampsia	Pregnancy outcomes Preterm birth Lower birth weight Abnormal genital phenotype (anogenital distance) Altered pubertal timing

Source: Based on results from a 2020 report by the United Nations Environment Programme, titled "From Pollution to Solution".



Dispersion, Accumulation, and the Ultimate Fate of Microplastics in Deep Marine Environments, Frontiers in Earth Science, 2019



Since 2013

Yes low water
Yes flowers
Yes shrubs
Yes bees
Yes lizards
Yes birds

No lawn
No plastic
No pesticide
No fertilizer
No herbicide

