

**EXPLORE - ENJOY - PROTECT** 

# SIERRA CLUB

Volunteers Lily Fountain and Na'ilah Dawkins share environmental health information at the Federal Employees Association Spring into Health event at National Harbor on a wintry day in March.



Prince George's Sierra Club Outings program starts off the New Year with a First Day Hike at Greenbelt National Park for the health benefits of a walk in the woods led by Lily Fountain.

#### Newsletter Winter 2022 Health Edition

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#### Healthy People, Healthy Planet

By Janet Gingold

This Health Edition of the Prince George's Sierra Club Group Newsletter focuses on areas where acting for a healthy environment has benefits for human health.

So many of the major contributors to our collective environmental footprint also adversely affect human health. When we stop burning fossil fuels, our air becomes less polluted with PM2.5 particulates, nitrogen oxides and other products of combustion that aggravate respiratory conditions. When we switch to more efficient electric appliances and HVAC systems and electrify our vehicles, we breathe cleaner air for better health. When we walk or bike instead of driving, we not only decrease air pollution, we also get more exercise, which strengthens our hearts, lungs, bones, and muscles. When we eat more vegetables and less meat, we decrease our carbon footprint while also decreasing our risk of heart disease and stroke.

We are part of Earth's biosphere. What's good for the planet is good for the people.

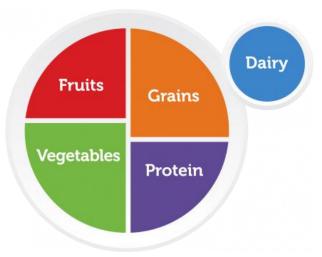
## Healthy People, Healthy Planet



Healthy people need a healthy planet. Changing some of the human activities that harm earth's natural systems brings health benefits for human populations as well.

#### More veggies, less meat

The average American diet isn't good for us or for the planet. When we eat more calories and animal products than we need, we are at greater risk from cardiovascular disease, diabetes, and some cancers. Meanwhile, our meat-centric Western diet creates an estimated one-fifth of global greenhouse gas emissions. Changing how we eat can be difficult. Still, small changes can make a big difference. By choosing more colorful fruits and vegetables, paying attention to portion sizes, and reducing meat consumption, we can get better nutrition while decreasing our carbon footprint. Shifting away from meat-heavy diets to more plant-rich diets benefits both people and the planet.



#### Walk more, drive less

To keep our bones and muscles strong and to maintain the health of cardiovascular systems and our lungs, most of us need more exercise than we get. Increasing evidence indicates that putting more walking into our daily routines has many benefits for both physical and mental health. Meanwhile, our transportation sector is the largest contributor to our greenhouse gas emissions. Because most of our communities aren't very walkable, we depend on cars to get where we need to go. Our decisions about where we live, work, play, and shop make a big difference in how many miles we travel in our cars—and how much pollution our vehicles produce. Designing infrastructure for safe walking and biking and improving access to public transportation make it easier for more people to choose active transportation options. Decreasing our vehicle miles traveled by walking, biking, and using public transportation helps human health while decreasing our impact on climate change.





#### Climate Changes Health

Health tips from the CDC as the world warms

from

https://www.cdc.gov/climateandhealth/effects/

#### **Heat Illness**

Everyone can be impacted by extreme heat events but some people are at greater risk: pregnant women, young children, older adults, outdoor workers, student athletes, city dwellers, people with chronic disease. Extreme heat can aggravate an existing chronic illness and lead to serious medical conditions that require emergency treatment. Stay safe this summer. Learn to spot signs of heat-related illness and how to stay cool and well-hydrated.



#### Respiratory problems

Warmer temperatures can increase the adverse health effects of air pollution. A longer and more intense pollen season could be in the forecast this year as our climate changes. Talk to your doctor about how you can protect your family against increased allergies and asthma attacks.

Fine particulates in wild fire smoke can penetrate deep into the lungs, increasing the risk of significant health problems — especially among children, older adults, and people with existing respiratory and cardiovascular problems. Listen and watch for news or health warnings about smoke in your area.



#### Infectious Diseases

The warmer weather in Prince George's County can mean increases in the risk of some infections. Diseases transmitted by mosquitoes, fleas and ticks can multiply faster, spread farther, and infect more people. Protect yourself by using insect repellent, wearing long sleeves and pants, and checking for ticks after spending time outdoors. Higher temperatures and changes in rainfall can create ideal conditions for disease-causing bacteria to thrive in standing water. Don't let children play in or drink standing rainwater and check local alerts before before taking that lap in the lake.





### **Building Electrification**

For healthy homes and a healthy environment

What is building electrification?

Building electrification is the process of powering all appliances and systems in residential and commercial buildings with electricity instead of fossil fuels (gas, oil, or coal).

Why electrify?

Fossil fuels emit carbon dioxide and methane, potent greenhouse gases that accelerate climate change. To reduce greenhouse gas emissions and curb global warming, we must stop relying on fossil fuels and switch to clean energy sources, such as renewably generated electricity.

Electric buildings are better for the climate

In Maryland, commercial and residential buildings are responsible for more than 40 percent of greenhouse gas emissions. By using clean electricity in buildings instead of appliances powered by fossil fuels, we can significantly curb greenhouse gas pollution and lessen our impact on the planet.

Electrified homes are safer

Powering buildings and homes with clean electricity isn't just better for the environment. It's also healthier. Gas-powered stoves and other appliances release harmful compounds that pollute the air. In particular, without proper ventilation, gas stoves can create levels of indoor pollution that exceed safety levels for outdoor air pollution.

Health impacts of gas stoves

The pollutants released by gas stoves have been linked with higher rates of lung cancer, cardiovascular disease, asthma, and other respiratory illnesses. In fact, studies show that children living in homes with gas stoves have a 42 percent higher risk of asthma than those living in homes with electric stoves.







#### Methane emissions and appliances

By E. Anne Riley, PhD

The year 2021 was the year of METHANE, 2021, finally! This is said by U.N. Secretary Guterres to be "the make it or break it year." The very popular CAP26 pavilion, "METHANE MOMENT," in Glasgow, Scotland was sponsored by 30 organizations. Its slogan was: "Most Powerful Way to Slow Warming NOW." The CAP26 Global Pledge goal is to reduce methane by 30% by 2030, which isn't very ambitious. But at least 15 of the over100 Pledge countries are the highest methane emitters. China's emissions, the worst, exceed those of the entire developed world! Russia, the third worst, also did not sign the pledge. Neither of the two country's heads even attended CAP26. The US is 2<sup>nd</sup> only to China, yet we have the world's highest per capita emissions.

Methane is colorless and odorless but is 86 times more powerful than CO2 over 20 years. It is the main component of natural gas.

My College Park house had a gas stove, water heater and furnace, which I loved. My Delaware beach house had all propane, which is much more polluting. I had no idea that either of these were bad environmentally. The choice of electric was also the more expensive energy choice then. A recent study revealed that many methane leaks in home appliances are coming from pipes and valves even when the gas is turned off! Heat pumps are now designed to be much more efficient and cost-effective alternative, even down to zero degrees. For lower operating costs and less air pollution, more and more people are choosing electric heat pumps to replace oil and gas for heating and cooling.

Consider changing and urging your children/grandchildren to replace gas and buy efficient electric appliances. You might even offer to help to pay the difference.

Getting rid of methane leaks from existing oil and gas operations is the easiest way to cut greenhouse gas (GHG) emissions. It gets the most bang for the buck. Methane is responsible for almost <u>half</u> of the 1.2 degree Celsius temperature rise since the industrial revolution beginning in the 1750s. But, shockingly, the worst of it has occurred since the 1950s. That's us! The goal is to keep it to 1.5 Celsius (or 2) degrees but we are on track to reach a disastrous 2.5 degrees or more by 2100!

Of the human-caused areas where methane is most problematic now, the oil and natural gas sector is huge. Those companies could cut methane emissions by 75% with technology available now. The Environmental Defense Fund (EDF) says "You can't solve climate change without solving methane." We need to let our legislators at every level know how important this is.

#### PLASTIC: THE ENEMY WITHIN

How It Affects Our Health and How to Use Less of It

#### By Janis Oppelt

A June 2019 study commissioned by the World Wildlife Fund found that, on average, people could be ingesting about 5 grams of plastic every week, the equivalent weight of a credit card.<sup>1</sup> This amounts to about 2000 tiny pieces of plastic every week, about 21 grams a month, and just over 250 grams a year.

"It's not just the photos of whales, albatrosses, and sea turtles washing ashore, stomachs clogged with the stuff, or the stories about swirling ocean vortexes collecting litter from around the globe—although these are sobering. Reliable research now shows that tiny bits of plastic are in our food, drinking water, the air we breathe, and, yes, inside our bodies."<sup>2</sup>

Marco Lambertini, WWF International Director General, declared these findings "a wake-up call to governments." He said, "Not only are plastics polluting our oceans and waterways and killing marine life--it's in all of us and we can't escape consuming plastics. … If we don't want plastic in our bodies, we need to stop the millions of tons of plastic that continue leaking into nature every year. In order to tackle the plastic crisis, we need urgent action at government, business and consumer levels…"<sup>3</sup>

The study might be easy to ignore if you didn't also know that toxic chemical additives to plastic products to enhance their performance properties are also finding their way into human tissues and bloodstreams. Here's a partial list of the plastics, their common uses, and their health effects.<sup>4</sup>

Plastic	Common Uses	Human Health Risks
Polyvinylchloride	Food packaging, plastic wrap, containers for	Can cause cancer, birth defects, genetic changes, chronic
(PVC) (#3)*	toiletries, cosmetics, crib bumpers, floor tiles,	bronchitis, ulcers, skin diseases, deafness, vision failure,
	pacifiers, shower curtains, toys, water pipes	indigestion, and liver dysfunction
Polycarbonate,	Water bottles	Scientists have linked very low doses of BPA exposure to
with Bisphenol A		cancers, impaired immune function, early onset of
(BPA) (#7)*		puberty, obesity, diabetes, and hyperactivity, among
		other problems (Environment California)
Polystyrene (#6)*	Many food containers for meats, fish, cheeses,	Can irritate eyes, nose and throat and can cause
	yogurt, foam and clear clamshell containers, foam	dizziness and unconsciousness. Migrates into food and
	and rigid plates, clear bakery containers, disposable	stores in body fat. Elevated rates of lymphatic and
	cutlery, throw-away hot drink cups	hematopoietic cancers for workers.
Polyethelyne	Water and soda bottles, chewing gum, coffee	Suspected human carcinogen
(PET) (#1 PET)	stirrers, drinking glasses, food containers and	
	wrappers, heat-sealed plastic packaging,	
	kitchenware, plastic bags, squeeze bottles, toys	

<sup>\*</sup>The American Academy of Pediatrics recommends avoiding use or storage in recycling codes 3, 6, and 7.

Source: Ecology Center. 2021. "Factsheet: Adverse Health Effects of Plastics," Berkeley, California. See the complete list and original sources at: <a href="https://ecologycenter.org/factsheets/adverse-health-effects-of-plastics/">https://ecologycenter.org/factsheets/adverse-health-effects-of-plastics/</a>

Another unhealthy fact about plastic relates to the presence of per- and polyfluorinated alkyl substances (PFAS), "forever chemicals." PFAS chemicals have been linked to many serious health effects, among them: reduced fertility,

<sup>&</sup>lt;sup>1</sup>Dalberg Advisors. 2019. "No Plastic in Nature: Assessing Plastic Ingestion from Nature to People." An Analysis for the World Wildlife Fund of a study from the University of Newcastle, Australia. <a href="https://awsassets.panda.org/downloads/plastic\_ingestion\_press\_singles.pdf">https://awsassets.panda.org/downloads/plastic\_ingestion\_press\_singles.pdf</a>

<sup>&</sup>lt;sup>2</sup> Loria, Kevin. 2020. "How to Eat Less Plastic," Consumer Reports. April: <a href="https://www.consumerreports.org/health-wellness/how-to-eat-less-plastic-microplastics-in-food-water-a8899165110/">https://www.consumerreports.org/health-wellness/how-to-eat-less-plastic-microplastics-in-food-water-a8899165110/</a>. See also the Consumer Reports video: <a href="https://www.consumerreports.org/video/view/healthy-living/news/6154082526001/how-to-eat-less-plastic/">https://www.consumerreports.org/video/view/healthy-living/news/6154082526001/how-to-eat-less-plastic/</a>

<sup>&</sup>lt;sup>3</sup> World Wildlife Fund (WWF), 2019. "Revealed: Plastic ingestion by people could be equating to a credit card a week," on-line posting, June 12. <a href="https://wwf.panda.org/wwf\_news/?348337%2FRevealed-plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week">https://wwf.panda.org/wwf\_news/?348337%2FRevealed-plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week</a>.

<sup>&</sup>lt;sup>4</sup> See also Loria, Kevin. 2019. "Most Plastic Products Contain Potentially Toxic Chemicals, Study Reveals," *Consumer Reports*, September. <a href="https://www.consumerreports.org/toxic-chemicals-substances/most-plastic-products-contain-potentially-toxic-chemicals/">https://www.consumerreports.org/toxic-chemicals-substances/most-plastic-products-contain-potentially-toxic-chemicals/</a>

developmental impacts on children, increased risk of certain cancers, reduced immune response to infection, and hormonal interference.<sup>5</sup>

According to the Environmental Defense Fund (EDF), the "fluorination of plastic is commonly used to treat hundreds of millions of polyethylene and polypropylene containers each year ranging from packaged food and consumer products that individuals buy to larger containers used by retailers such as restaurants...to store and transport fluids." The fluorination of plastic forms a barrier on its surface and strengthens packaging, but unintentionally causes development of PFAS and may, EDF states, "be another reason these 'forever chemicals' show up in many unexpected places."

#### How to Eat and Use Less Plastic

Although it's practically impossible to totally eliminate plastic from our world, we can reduce the amount that makes its way into our lives and eventually into our bodies. Here are a few simple tips.

- **Drink water from your tap,** instead of from plastic bottles, unless you know your tap water is contaminated. Bottled water has about twice as much plastic as tap water, on average.
- Eat fresh foods, instead of processed food wrapped in plastic. The more processed or packaged a food is, the higher the likelihood that it may have come into contact with materials that can leach into the food. Even cans of food may be lined with Bisphenol A (BPA).
- **Don't heat food in plastic.** Microwave food in glass or ceramic containers, or heat in on the stove or the oven. Refrain from putting plastic items in the dishwasher.
- Buy food and other products in glass containers, not plastic containers.
- Store food in glass, ceramic, silicone, or foil containers, not plastic containers or plastic wrap.
- Avoid plastic food containers that are #3 (PVC), #6 (polystyrene), and #7, including disposable cutlery. These may indicate the presence of harmful chemicals, unless they're labeled bio-based or greenware.
- Minimize house dust. Vacuum frequently to reduce inhalation of house dust with microplastics.
- Buy detergent power and bar soap, instead of liquid detergent, soap, and hand sanitizer in plastic bottles.
- Bring reusable bags when shopping, instead of taking single-use plastic bags at the store.

#### Take Action Locally!

Join the Maryland Sierra Club's Zero Waste Team! sierraclub.org/maryland/zero-waste.

Join the Prince George's Sierra Club's Zero Waste Team's monthly meeting! Our objectives are to promote zero waste by reducing, reusing, refurbishing, composting, and recycling. Join our campaign to end single-use plastic! Contact <a href="Martha.Ainsworth@mdsierra.org">Martha.Ainsworth@mdsierra.org</a> and visit our website: <a href="maitsierraclub.org/maryland/prince-georges/zero-waste">Sierraclub.org/maryland/prince-georges/zero-waste</a>. We are planning tours of County waste facilities when COVID restrictions are lifted.

Ask your three Prince George's County Council members to support CB-14-2022, a bill that would require that retailers provide straws, stirrers, utensils, condiments, cup sleeves, and napkins only if the customer requests them. It will reduce waste, reduce single-use plastic litter, and save money for businesses!

<sup>&</sup>lt;sup>5</sup> EPA. https://www.epa.gov/pfas/our-current-understanding-human-health-and-environmental-risks-pfas. See also the Plastic Health Coalition: "Does Plastic Make Us Sick?" https://www.plastichealthcoalition.org/.

<sup>&</sup>lt;sup>6</sup> Nelter, Tom. 2021. "Beyond paper: PFAS linked to common plastic packaging used for food, cosmetics, and much more," Environmental Defense Fund blog, August 11. <a href="http://blogs.edf.org/health/2021/07/07/beyond-paper-pfas/">http://blogs.edf.org/health/2021/07/07/beyond-paper-pfas/</a>

#### Reduce unnecessary single-use food service accessories

by Martha Ainsworth, Chair of Zero Waste Team

Are you frustrated with all of the unwanted single-use utensils, condiments, and other stuff thrown in your takeout, drive-through, and home delivery food orders? Sick of seeing plastic forks, straws, and condiment packets in the gutters and on the side of the road?

A new County Bill, CB-14-2022, "Accessory Disposable Food Service Ware," may help put a stop to this unnecessary waste! It would require that food service businesses provide straws, utensils, condiment cups and packets, cup sleeves, splash sticks, stirrers, and napkins only upon request by the customer or at a self-service dispenser. Businesses would have to provide options for

customers to request these items across all ordering platforms (digital, telephone, in-person, whether for onsite dining, takeout, or delivery, and on a third-party food-ordering platform). The bill would be enforced as of February 1, 2023.

By providing these items only to customers who ask for them, the bill will reduce waste while cutting costs for businesses. It will reduce contamination of the recycling stream by removing items that can't be recycled. It will reduce litter that pollutes the Anacostia



River and other waterways. The bill is strongly consistent with a law already in effect in Washington, D.C., an advantage for education programs, customers, businesses, and enforcement in both jurisdictions.

Please write to (and phone) your <u>three</u> County Council members (two at-large and one district-based) asking them to <u>cosponsor</u> the bill. You can personalize it with information from your own cleanups, from ordering home delivery or takeout food during the COVID pandemic, or by adding a photo of littered utensils, straws, stirrers, condiments near your home. If your Council member is a sponsor already (Glaros, Dernoga, and Ivey), thank them for sponsoring it!

#### At-Large members (serve all districts - write to both):

Council Chair Calvin Hawkins: <u>At-LargeMemberHawkins@co.pg.md.us</u> 301-952-3600 At-Large Council Member Mel Franklin: <u>mfranklin1@co.pg.md.us</u> 301-952-2638

#### **Council members by District**

District 1: Tom Dernoga: CouncilDistrict1@co.pg.md.us 301-952-3887

District 2: Deni Taveras: <a href="mailto:DLTaveras@co.pg.md.us">DLTaveras@co.pg.md.us</a> 301-952-4436

District 3: Dannielle Glaros: DMGlaros@co.pg.md.us 301-952-3060

District 4: Todd Turner: TMTurner@co.pg.md.us 301-952-3094

District 5: Jolene Ivey: <a href="mailto:CouncilDistrict5@co.pg.md.us">CouncilDistrict5@co.pg.md.us</a> 301-952-3864

District 6: (appointment pending): CouncilDistrict6@co.pg.md.us 301-952-3426

District 7: Rodney Streeter: CouncilDistrict7@co.pg.md.us 301-952-3690

District 8: Edward Burroughs: CouncilDistrict8@co.pg.md.us 301-952-3864

District 9: Council Vice-Chair Sydney Harrison: CouncilDistrict9@co.pg.md.us 301-952-3820

#### Join the Zero Waste Team!

www.sierraclub.org/maryland/zero-waste



# Climate Change Action Plan (CCAP) Priority Recommendations

Prepared by the PGCPS Board of Education Climate Change Action Plan Focus Work Group







# Our children deserve a healthful learning environment and a livable planet for years to come

The Prince George's County Board of Education is considering a draft Climate Change Action Plan for County Schools.

Priority recommendations include:

- 1. Support environmental justice through climate curriculum, training, and partnerships.
- 2. Reduce carbon footprint from PGCPS buildings.
- 3. Commit to renewable energy sources for a net-zero-emissions future.
- 4. Commit to low-carbon school transportation.
- 5. Reduce food waste and grow climate-friendly food.
- 6. Commit to sustainable materials management and procurement.
- 7. Commit to climate-resilient land management.
- 8. Lead by example to support transformational change.

#### Speak up!

Tell the School Board to Adopt the Climate Change Action Plan.

https://docs.google.com/forms/d/e/1FAlpQLSdY7-V7Rt0-vc2Tpi15nhmVlkLWhVfdEv4P9KLZLRPiGvQXQA/viewform





#### Healthy people need a healthy planet

The Climate Action Plan includes recommendations that will protect human health while decreasing greenhouse gas emissions and improving our climate resilience. Tell county leaders that Prince George's County residents want climate action now to protect our health and prosperity as the climate changes.

Use this QR code to go an Action Alert link to write a quick note to the County Council Member who represents your district and At-Large Members Calvin Hawkins and Mel Franklin.



**Adopt and implement the Climate Action Plan**