

Thrive Montgomery 2050
Testimony for PHED, July 9, 2021

Sally Gagné

The Place of Environmental Considerations in Making Decisions

If we had to choose, would we want healthy life in the future, or convenience products and a larger income for some individuals now?

No matter how great the economic benefits might be that result from a decision, changes to the environment must be dealt with first. Environmental damage will affect life in the future, and is generally not reversible - therefore it must be prevented.

This thinking has to be at the heart of all future decision making: that where choices must be made, we value sustainability of all life including humans more than we value economic gain.

THREE ON-GOING DESTRUCTIVE ACTIVITIES IN THE COUNTY

Three huge detrimental changes to the environment presently occurring in the county are:

- Loss of **natural land**
- Contamination of soil, water and ocean from **plastics**.
- Buildup of **greenhouse gases**

Natural Land

We need a policy that says NO to development of an acre or more of natural land for new buildings and housing communities. This is not just a matter of saving threatened species, it's a matter of maintaining a well-functioning biosphere. (Reference 1 and 2).

Where we have lost land to housing developments, we need laws to encourage the growth of native plants to retain at least some aspects of the ecosystem. (Reference 2) We also need to put resources into successful deer population control; deer are decreasing biodiversity at a rapid pace in some places in the county. (Personal observation)

Plastics

Artificial grass lawns and playing fields, plastic bags, and many **other types of plastics** make their way into soil and waterways. Artificial turf is acknowledged by EPA to contain toxic chemicals, some of which cause cancer. (Reference 3). Plastic bags with frequent harmful additives degrade slowly into microscopic bits of plastic that pollute. (Reference 4). Other plastics such as netting and 6-pack "collars" for bottles are ingested by wildlife or get tangled on body parts, killing animals unnecessarily from small zooplankton to fish and whales. (Reference 5).

Solutions: Ban Artificial turf. Ban plastic bags. (BYO bags are possible.) Enact laws that motivate residents to use less plastic, as in water bottles, and to buy fewer goods made with plastic. Support state and federal bills that are similar in intent.

Greenhouse Gases

“Between 2005 and 2018, Montgomery County's measured community wide greenhouse gas emissions decreased by 19 percent.

This is good, but at that rate it will take more than fifty years to approach point zero. Present emissions derive mostly from two sources:

Residential and commercial energy consumption, 50% (heating buildings, handling of waste, other)

Transportation-related emissions, 42%

(Reference 6)

Partial solutions: See that all new housing is built to the highest possible standards of sustainability in materials, and designed to use the least energy. Look to off-shore wind energy rather than energy for solar panels on land (in order to conserve land). Set shorter time periods for reaching goals.

Our lives are run by what benefits the economy - advertising, land development, use of natural resources for manufacture. These keep a successful economy going, but at the expense of future human needs and life on the planet.

SUMMARY OF LEGISLATION SUGGESTED ABOVE TO REDUCE ENVIRONMENTAL DAMAGE

- No development of natural land greater than an acre
- Encourage native species in homeowner yards in order to retain at least some aspects of the ecosystem
- Improve deer population control
- Ban artificial grass
- Ban plastic bags
- Motivate the use of less plastic, as in water bottles
- See that all new buildings are built to maximum energy efficiency
- Support off-shore wind energy and roof-top solar panels rather than solar panel farms that use land.

REFERENCES

Reference 1

Science Magazine

<https://advances.sciencemag.org/content/1/2/e1500052>

“ [Our] findings indicate an urgent need for conservation and restoration measures to improve landscape connectivity, which will reduce extinction rates and help maintain ecosystem services.”

Reference 2

Wildlife Conservation Society

<https://www.google.com/search?client=firefox-b-1-e&q=forest+fragmentation>

Forest fragmentation is the breaking of large, contiguous forested areas into smaller forest patches, separated by roads, agriculture, utility corridors or other anthropological developments. It is a gradual process which starts with smaller, discontinuous patches in an otherwise unbroken forest or grassland. Sep 25, 2020

Reference 3

American Association for the Advancement of Science

<https://advances.sciencemag.org/content/1/2/e1500052>

In July, the Environmental Protection Agency acknowledged that synthetic turf contains toxic chemicals, some of which are known to cause cancer.

Environmental Working Group

<https://www.ewg.org/news-insights/news/new-studies-show-pfas-artificial-grass-blades-and-backing>

Cites a specific group of chemicals, PFAs.

Reference 4

Center for Biological Diversity

https://www.biologicaldiversity.org/programs/population_and_sustainability/sustainability/plastic_bag_facts.html

“The plastic typically used in bottles, bags and food containers contains chemical additives such as endocrine disruptors, which are associated with negative health effects including cancers, birth defects and immune system suppression in humans and wildlife.⁸”

Reference 5

Futurism

<https://futurism.com/microplastics-endanger-marine-life-fish-predators>

Reference 6

Montgomery County DEP

Greenhouse gases

<https://www.montgomerycountymd.gov/green/climate/ghg-inventory.html>