## The Generosity of Mother Nature

by Ron Klauda and Mary Hoover

According to Dr. Elliott Campbell, Acting Director of the Office of Science and Stewardship at the Maryland Department of Natural Resources, the Hunting Creek Watershed, located in the heart of Calvert County, Maryland, provides a whopping **\$26 million** worth of total ecosystem services benefits each and every year. With a total area of 19,878 acres, that generous gift translates to **\$1,308** in annual free benefits per acre.

So, what are ecosystem services? Simply stated, they are any and all benefits that people receive from the environment. Ecosystem services make human life possible. The ecosystem services concept offers a succinct description of how our well-being depends, in so many ways, on Nature. Check out this video for an informative visual description





The forests, fields, wetlands, and streams in the Hunting Creek watershed:

- **absorb and remove** 578 tons of air pollutants, helping us avoid \$192,116 in human health-related costs;
- **capture and store** 8,364 tons of carbon dioxide, equivalent to the carbon dioxide (CO2) emissions from 6,000 cars (CO2 is a major contributor to global warming and climate change);
- **recharge and replenish** 71,276,790 gallons of water to our underground aquifers that feed our wells and upon which all Calvert County residents depend, an amount equivalent to the annual groundwater usage of over 9,000 people; and
- **save** us almost \$11,000,000 in stormwater management and treatment costs.

Hunting Creek residents don't receive an annual bill for the \$26 million in ecosystem services benefits that the watershed provides. But that doesn't mean we owe nothing for these benefits. As the old expression goes, "*There is no such thing as a free lunch*." To ensure that we will continue to receive these essential ecosystem services, we have the dual responsibilities of (a) being good stewards of the environment and (b) protecting the



watershed from degradation by our careless activities.

Dr. Elliott also informed the Friends of Hunting Creek that our watershed is special in other ways. More specifically, we learned that 80% of the watershed is identified by the Maryland Department of Natural Resources as being **important wildlife habitat**.



This designation comes from either being a targeted ecological area through Maryland Bio-Net¹ or included in Maryland's Green Infrastructure Network².

With that, we thank the Hunting Creek watershed for the \$26 million worth of ecosystem services benefits that it consistently provides each year. We will strive to do everything possible to protect and enhance its ecological health to keep these benefits coming for years to come.

<sup>&</sup>lt;sup>1</sup> https://dnr.maryland.gov/wildlife/Documents/BIONET\_FactSheet.pdf)

 $<sup>^{2}\</sup> https://dnr.maryland.gov/land/Pages/Green-Infrastructure.aspx$