

## Testimony of Thomas Croghan in Support of House Bill 8

January 14, 2021

My name is Tom Croghan. I am the owner and winemaker at The Vineyards at Dodon, 391 Dodon Rd, Davidsonville. I am also the Vice-President of Future Harvest, a regenerative agriculture organization with members throughout the Chesapeake Bay region. I am here today to testify in support of House Bill 8.

In 2017, the General Assembly established the Maryland Healthy Soils Program for several important reasons. Among them, healthy soil acts as a repository for carbon that is sequestered by plants. According to the National Academy of Sciences, carbon storage in soil is the simplest, cheapest, shovel-ready negative emission technology. We cannot overestimate the importance of this method to draw down CO<sub>2</sub>.

Healthy soil also makes farms and the food system more resilient to more frequent and severe extreme weather events. According to the Intergovernmental Panel on Climate Change, we already see climate-related reductions in crop and livestock productivity, higher food prices, and increases in food insecurity and hunger. The food system is predicted to collapse by the end of this century.

Despite the urgency of the challenge, after four years, Maryland has not made much progress. MDA's current soil health program was developed without the benefit of recommendations from its Soil Health Advisory Committee. It relies on conservation practices that may reduce erosion, improve water quality, and cut greenhouse gas emissions. Still, these are not enough to solve the problem.

For example, according to the IPCC, soil erosion on fields that have eliminated tillage is still ten to twenty times faster than the rate of new soil formation, clearly not a sustainable situation. The United Nations Food and Agriculture Organization predicts that most farms have enough topsoil for about 30 to 70 more harvests in a business-as-usual scenario. On the Eastern Shore, this loss of cropland will accelerate because of sea-level rise and saltwater intrusion.

A much more robust program is urgently needed. The methods to restore soil health are well known, but farmers need help adapting them to their cropping system and location. Maryland is justifiably proud of its nation-leading cover crop program. Crucial for soil health, this critical practice is found on only 41% of the eligible acres. We do not know why, nor do we know how to improve on this failing performance. Farmers will need financial assistance to make the transition from conventional to regenerative methods.

By providing a permanent source of funding for these initiatives, HB8 represents a necessary, but not sufficient, step toward better farm resilience and reducing the potentially devastating consequences of climate change on Marylanders.

I ask for your favorable report.