## TESTIMONY

TO:	DELEGATE BEN BARNES, CHAIR, APPROPRIATIONS COMMITTEE
FROM:	TOM CROGHAN OWNER AND WINEMAKER, THE VINEYARDS AT DODON, DAVIDSONVILLE
SUBJECT:	SUPPORT FOR HB 914
DATE:	MARCH 7, 2024
CC:	DELEGATE DANA JONES

*Situation.* HB 914 proposes several technical changes to the Maryland Winery and Vineyard Economic Development Grant Program to align the statute with its original intent more closely and to facilitate its implementation. Beyond these technical corrections, the program supports small farms that are essential to the future of the State's environment, food supply, and equity.

*Background.* According to the Stockholm Resilience Centre, agriculture significantly threatens the stability of the Earth's environmental systems. These hazards include chemical and plastic pollution (unquantified), loss of biodiversity (80% caused by agriculture), nutrient pollution/eutrophication (85%), greenhouse gas emissions (30%), and changes in land use (80%) such as deforestation (Richardson *et al.*, 2023). The need for food often justifies these detrimental impacts, but here, too, agriculture is failing. One in eight families does not have a stable source of healthy food. The prevalence of obesity and diabetes is rising exponentially. The nutrient content of food has declined by 30% since 1960 (Davis, 2004), and 15% of Americans have Vitamin C levels consistent with scurvy. Diet-related illnesses are responsible for 40% of all deaths in the country. Put simply, a radical transformation of agriculture and the food system is needed.

*Analysis.* By supporting Maryland's growing wine and grape industry, the Winery and Vineyard Economic Development Grant Program facilitates the growth of the State's small farms. The program helps stem the current methodical march to environmental degradation, food insecurity, and social injustice, which is crucial to achieving Maryland agriculture's triple aim (Croghan, Baltimore Sun, March 13, 2023).

1. Small farms in general and vineyards in particular can offset public spending on the incentives needed to adapt to and mitigate climate change and environmental degradation. The Intergovernmental Panel on Climate Change, the National Climate Assessment, and the Maryland Climate Pathway conclude that no path to a habitable planet exists without removing carbon dioxide from the atmosphere. The Maryland Department of the Environment anticipates that the State must remove and store approximately 10.6 MMt of CO<sub>2</sub> from the atmosphere over the next 20 years to meet its net zero goals. These projects are complicated and expensive, and implementation of the technology has been distressingly slow (Plumer and Popovich, New York Times, December 6, 2023). Alarmingly, Maryland's recently published State Plan does not mention the need to develop and deploy direct air carbon capture technology rapidly.

At Dodon, our 31,000 grapevines use solar energy to remove carbon dioxide from the atmosphere, combine it with water, and transport the resulting sugars to the soil where, in the right conditions, they are stored for decades or centuries. Over the past decade, we have sequestered an average of 300 tons of CO<sub>2</sub> annually, more than offsetting the approximately 50 tons of emissions from farm and winery operations. Unlike the shiny steel technology developed by the direct air carbon capture firm Heirloom (Plumer, New York Times, November 9, 2023), Dodon has not identified market payments, subsidies, or tax credits for nature-based carbon capture that would level the playing field. In his book *Pastoral Song*, the author and farmer James Rebanks calls the type of farming we do "economic suicide" because current agricultural commodity subsidies put farmers who use ecological methods at a competitive disadvantage. The Vineyard and Winery Economic Grant program helps fill this gap.

There are other environmental benefits of the vineyard operation. To create the conditions needed to stabilize carbon in the soil, we have enhanced biodiversity by planting 1,600 trees, installing three acres of pollinator meadows, and encouraging diverse native and naturalized grasses and forbs within the vineyard. As woody perennials, combining grapevines and cover crops is three times more effective than cover crops alone at removing nitrogen and phosphorus before they can enter groundwater or the Bay.

2. Small farms are crucial to creating a stable, equitable, and healthy local food supply (see Croghan, Maryland Matters, November 4, 2021). The food system is fragile. Just last month, the atmospheric river in California, wildfires in Chile, and below-normal water levels in the Panama Canal resulted in a shortage of fresh vegetables (at higher prices) in local supermarkets. Moreover, easily accessible "food" is often ultra-processed and detrimental to health. Jurisdictions that ensure healthy diets for their residents will spend less on health care.

Incentivizing local farms to produce healthy food will have substantial community benefits. At Dodon, 600 of the trees we planted in 2023 produce edible fruits, nuts, and vegetables. Many of these crops require processing before they can be sold. For instance, hazelnuts and chestnuts must be shelled before they are sold, and they command a premium price when roasted. The Winery and Vineyard Economic Development Grant Program will help us invest in these value-added processes and add to the local food supply.

3. Supporting small farms will disproportionately benefit Black farmers and thus help end an inequitable social order. Black-owned farms are smaller and less well-capitalized than the state-wide average (see Zhang, ScienceLine, January 19, 2021). Most Black farmers lost their land during the twentieth century because of the United States Department of Agriculture's discriminatory lending practices. Black farmers accounted for 15% of all growers at the beginning of the century. They make up just 2% today. Moreover, Black farmers have long been excluded from state and federal agricultural assistance programs (see Sewell, The Guardian, April 29, 2019).

Supporting small farms will also benefit Maryland's non-farm Black communities. They are more likely to have diet-related chronic conditions like obesity, diabetes, and premature death than their neighbors. They are more vulnerable to the consequences of climate change. Moreover, their children are more likely to endure the consequences of poor diets on learning, social interactions, and emotional well-being.

While the benefits of the Vineyard and Winery Economic Development Grant Program help the State's disadvantaged farmers, it also helps all Maryland farms and communities. In addition to the environmental and healthy food benefits, my operation has used the funds made available by this program and its predecessor, the Winery and Vineyard Tax Credit, to pay our employees above-

market wages, offer health insurance and retirement benefits, and to partner with other like-minded growers to support our community.

*Recommendations*. As a vineyard owner, I am grateful for the support of this committee for the vineyard and winery industries. Because it would represent an investment in the health and well-being of all Maryland residents, I hope you will extend this support to the small farm and value-added agricultural sectors. I encourage your favorable report on HB 914.