



Virginia Seafood AREC
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Date: February 26, 2023

Attn: Maryland State Legislature / To whom it may concern

Re: Letter of support for Senate Bill 434

Esteemed Senators and Representatives,

I would hereby like to express my support for Senate Bill 434, introduced on February 2nd, 2023 by Senator Klausmeier. The bill seeks to establish a “Restorative Aquaculture Pilot Program” within the state of Maryland, to be administered by the Department of Natural Resources. I echo the General Assembly in asserting the beneficial and restorative nature of aquaculture in Maryland waters; which is soundly supported by the best available scientific research (Shumway et al. 2003; Shumway 2011; Alleway et al. 2019; Theuerkauf et al. 2019; Theuerkauf et al. 2022). Furthermore, the bill seeks to support the development of financial incentives for aquaculture farmers in recognition of the restorative benefits of aquaculture. As an assistant professor and Extension Specialist at the Virginia Seafood Agricultural Research and Extension Center (VSAREC) with Virginia Tech and a self-described “aquaculture economist”, I have closely studied the economics of U.S. aquaculture at the micro-economic level (van Senten & Engle 2017; Engle et al. 2019; Engle et al. 2020; Kumar et al. 2020; van Senten, Smith & Engle 2020; van Senten et al. 2020; Boldt et al. 2022); including specific investigation of the Maryland shellfish aquaculture industry (van Senten et al. 2019, Engle et al. 2021). I am excited to see this bill put forward to the Maryland legislature. Our research on the complexity and cost of regulations on U.S. aquaculture have demonstrated several key challenges affecting the industry: (1) the number of agencies involved in regulating aquaculture at local, state, and federal levels; (2) duplication of reporting requirements for aquaculture producers across multiple agencies; (3) the prescriptive nature of aquaculture permits; (4) the effects of economies of scale and compliance costs for aquaculture farmers. Together these factors conspire to form a barrier to entry for would-be aquaculture farmers and limit the ability of existing aquaculture farmers to expand to meet market demand for shellfish products. Simultaneously this also results in lost opportunities for environmental and restorative benefits derived from aquaculture. The recognition of benefits derived from aquaculture activities is an opportunity to support farmers and the continued operation of Maryland aquaculture farms. The creation of incentives for the restorative aspects of aquaculture will give farmers an opportunity to diversify their activities and compensate them for generating environmental benefits and subsequent positive spillover effects. Diversification can serve as an important risk mitigation strategy for farmers,

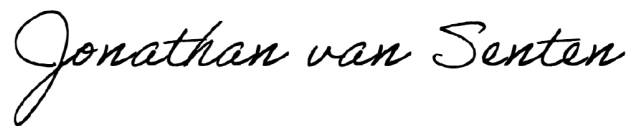
allowing them to be better positioned for market instability or disruptions. As was observed by our investigations during the COVID-19 pandemic, shellfish producers were particularly hard hit by market and supply chain disruptions (van Senten et al. 2020, van Senten et al. 2021). Programs that engaged existing farmers in restorative aspects of aquaculture were of benefit to the industry and provided an alternate source of revenue to farms in their time of need.

I therefore encourage the Maryland legislature to support this proposed legislation and create more opportunities for aquaculture farms.

Please do not hesitate to contact me for clarification or additional information with respect to my comments in this letter.

Thank you for your time and consideration.

Sincerely,



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