

Utah State University

DigitalCommons@USU

Publications

Community and Natural Resources Institute

2023

Chesapeake Bay Watershed Residents' and Farmers' Views on Water Quality

Edem Avemegah

Utah State University, edem.avemegah@usu.edu

Jessica D. Ulrich-Schad

Utah State University, jessica.schad@usu.edu

Follow this and additional works at: https://digitalcommons.usu.edu/canri_publications



Part of the [Water Resource Management Commons](#)

Recommended Citation

Avemegah, Edem and Ulrich-Schad, Jessica D., "Chesapeake Bay Watershed Residents' and Farmers' Views on Water Quality" (2023). *Publications*. Paper 2.

https://digitalcommons.usu.edu/canri_publications/2

This Report is brought to you for free and open access by the Community and Natural Resources Institute at DigitalCommons@USU. It has been accepted for inclusion in Publications by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.





Chesapeake Bay Watershed Residents' and Farmers' Views on Water Quality

Edem Avemegah and Jessica D. Ulrich-Schad

Poor water quality is an issue in the Chesapeake Bay Watershed (CBW). In this rapidly urbanizing landscape, both farmers and non-farm residents contribute to nutrient pollution of rivers and streams. Understanding these important stakeholders' views of water quality problems and how to address them is essential for creating an economically thriving and environmentally beneficial agricultural system that all residents depend upon. To understand stakeholder views on water quality both locally and regionally, researchers from Utah State University and the Pennsylvania State University surveyed residents of the CBW and agricultural producers of the southern part of the CBW (Maryland, Delaware, and Virginia) in 2021 and 2022, respectively.

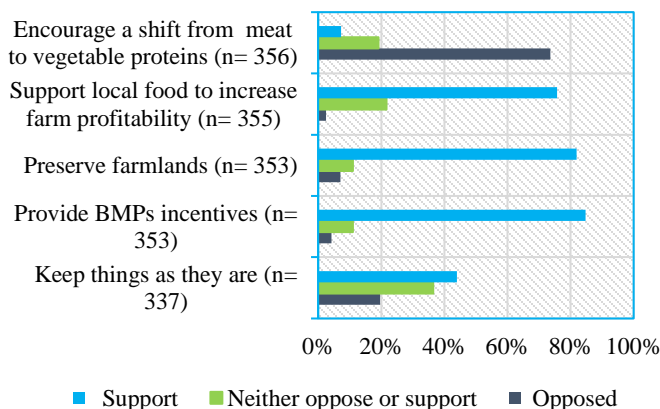
While the survey asked about many topics, in this brief we share results related to respondents' views on water quality issues in local streams and waterways and the CBW in general and their views

on the importance of nutrient reduction. Questions were also asked about perceptions of the future of agriculture in urbanized areas, including potential future trends developed by the Thriving Agriculture research team (<https://thrivingag.org/>) to explore alternative approaches to achieving long-term economic and environmental sustainability for agriculture in urbanized landscapes like the CBW.

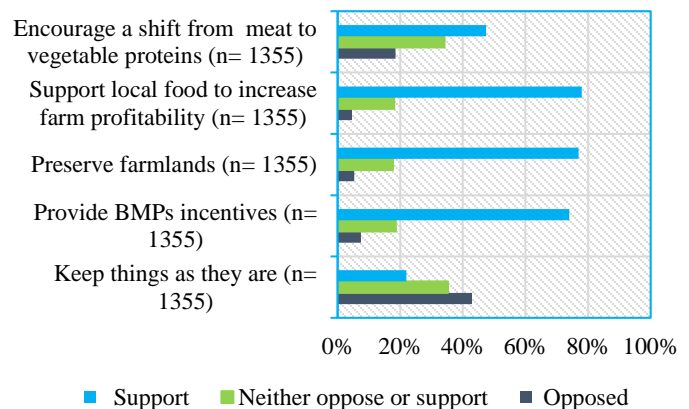
For the resident survey, respondents were recruited by Qualtrics through an online panel. Respondents from metro counties accounted for 84.6% (n=1,146) of responses and 15.4% (n=209) were from non-metro counties. For the farmer survey, a sample was purchased from DTN, a private contact vendor. A random sample of 2,382 producers with 50+ acres were sent a survey that could be taken online or by mail. The survey focused on crop and livestock producers, but not hobby farmers. Of those sent the survey, 117 were not eligible and 365 responded to the survey for a response rate of 16.1%.

Farmers and residents expressed a high level of support to preserve farmlands, increase farm profitability through enhanced local food efforts, and provide incentives that help farmers engage in best management practices (BMPs) as strategies to sustain agriculture in the CBW.

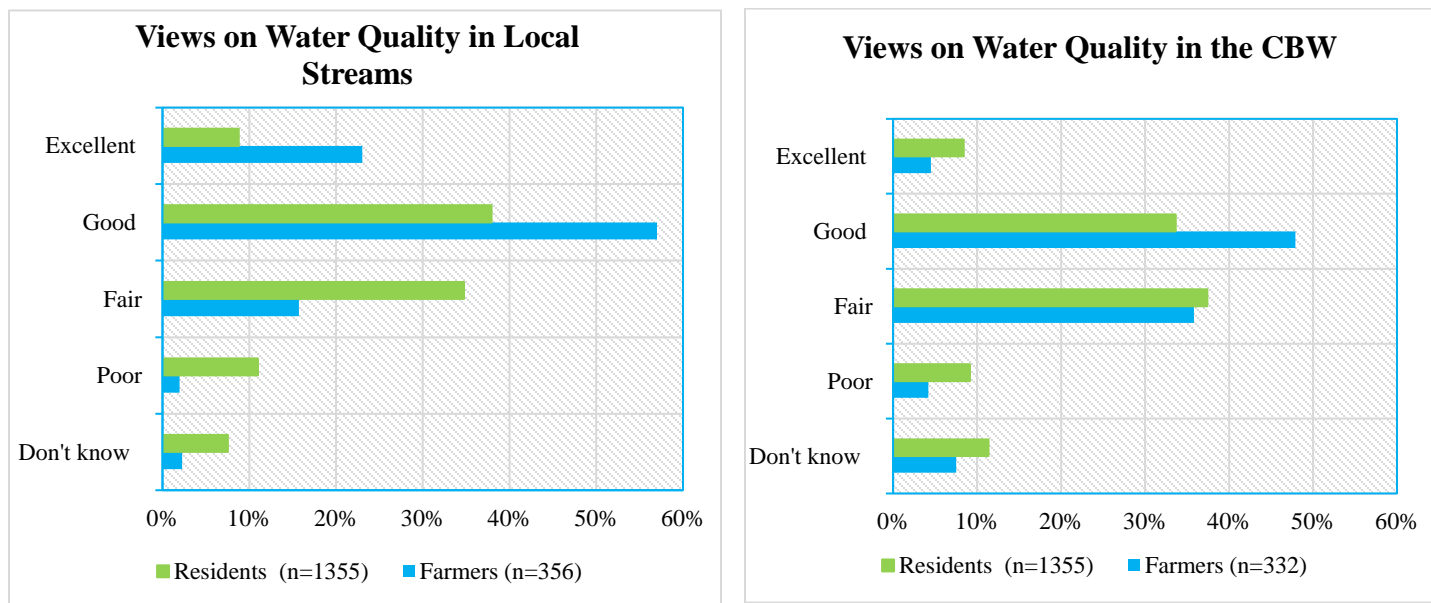
Farmers' Support for Project Potential Future Trends



Residents' Support for Project Potential Future Trends



Farmers perceive higher water quality than residents in local streams. However, residents are slightly more likely to see water quality in the CBW as excellent, while less likely to see the water as good than farmers.



Residents expressed a higher level of importance for reducing nutrients in their local waterways and the CBW than farmers. For example, while 23% of farmers said it was extremely and very important to reduce nutrient pollution in local waterways, 66% of residents said the same. With regards to the CBW, 33% of farmers said it was extremely and very important to reduce nutrient pollution and 66% of residents said the same.

