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# Chesapeake Bay Watershed Residents’ and Farmers’ Concerns and Perceptions of Water Quality

*Edem Avemegah and Jessica D. Ulrich-Schad*

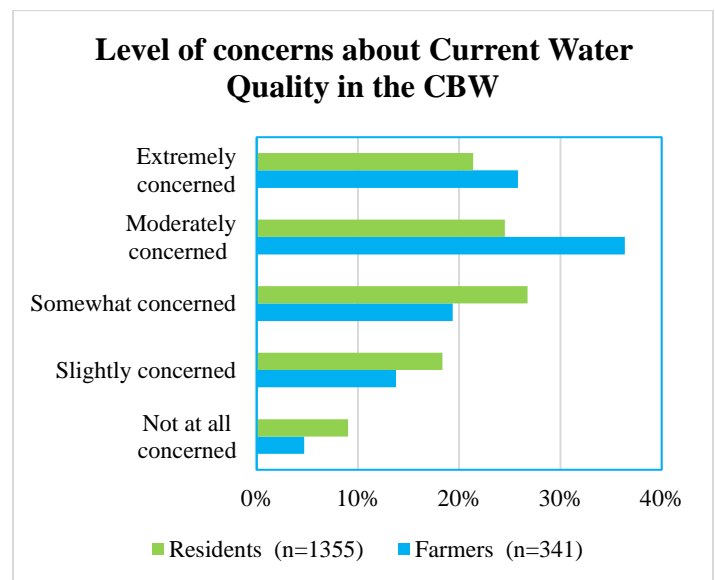
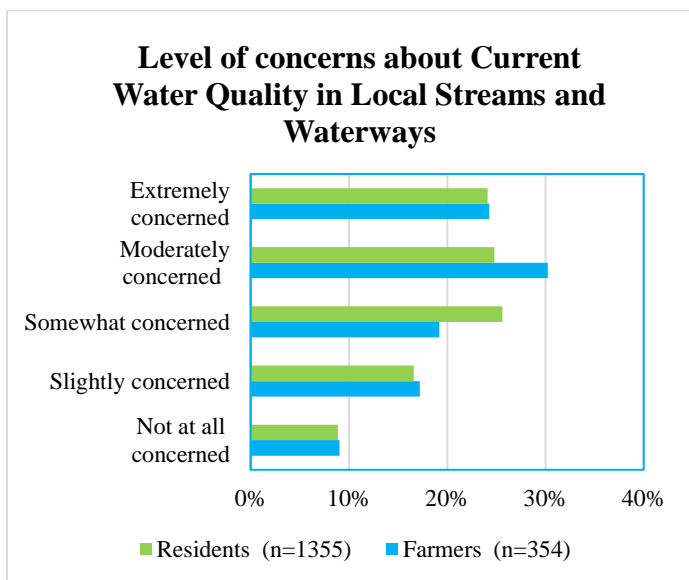
Poor water quality is an issue in the Chesapeake Bay Watershed (CBW). In this rapidly urbanizing landscape, both farmers and non-farm residents contribute to nutrient pollution of rivers and streams. Understanding these important stakeholders’ views of water quality problems and how to address them is essential for creating an economically thriving and environmentally beneficial agricultural system that all residents depend upon. To understand key stakeholders’ 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’

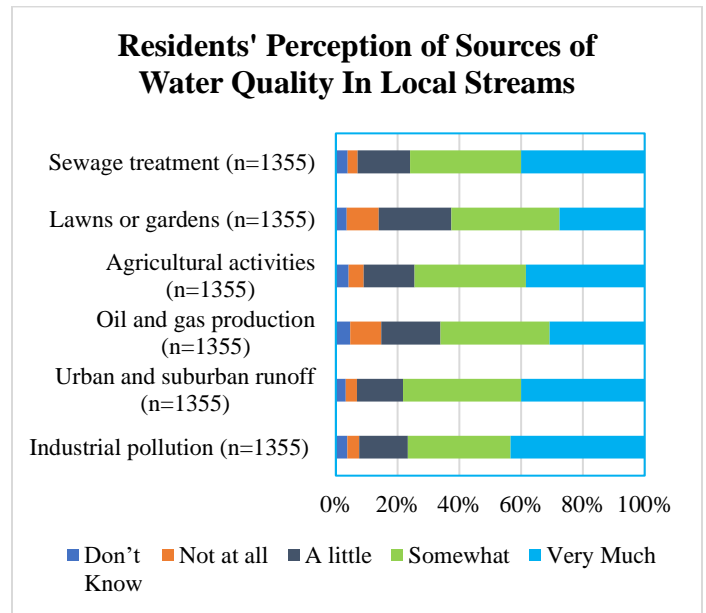
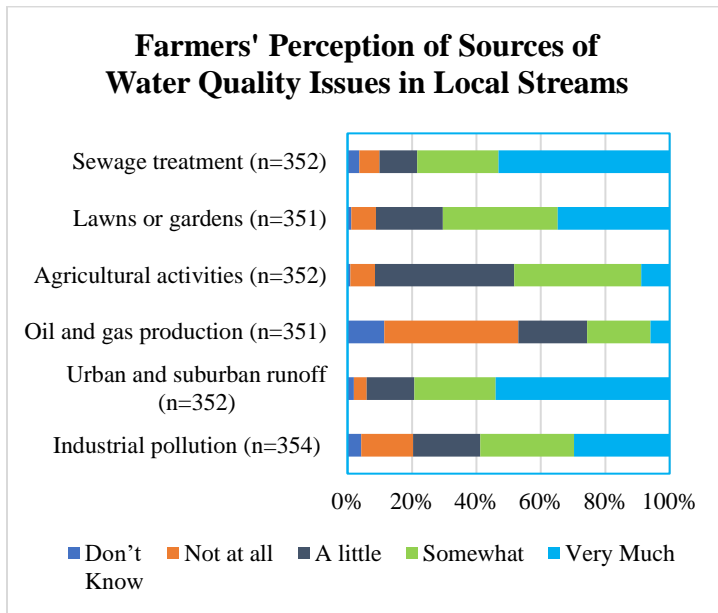
concerns about water quality issues in their local streams and waterways, and the CBW in general. We asked questions about farmers’ and residents’ perceptions of how different sources contribute to their water quality issues in their local streams and the CBW in general.

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 expressed a higher level of concern about water quality issues both in local streams and waterways and the CBW than residents. For example, 54% and 62% of farmers were extremely and moderately concerned about water quality issues in both local streams and waterways compared to 48% and 46% of residents respectively.**



**Farmers perceive urban and suburban runoff and sewage treatment as major sources of water quality issues in the local streams while seeing themselves as lesser contributors. Residents view industrial pollution as the main contributor but consider agricultural activities more of a contributor than farmers.**



**Like in local streams and waterways, farmers view urban and suburban stormwater runoff and sewage treatment as major contributors to water quality issues in the CBW, while seeing their own contributions as relatively minor. Conversely, residents consider industrial pollution as the primary source of water quality issues, but they perceive agricultural activities as having a greater impact compared to farmers.**

