HEI energy
A Health Effects Institute Affiliate

DECEMBER 2022
Quarterly Research Update

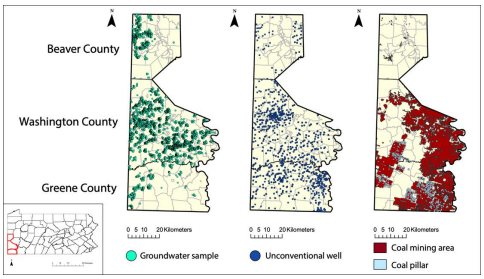
Community Exposure Associated with Water Near Unconventional Oil and Gas Development (UOGD) in Southwestern Pennsylvania

Principal Investigator: Jennifer Baka, Associate Professor, Penn State University

Study Description

ABOUT Fact sheet in English and Spanish

GOAL Conduct a community-informed analysis of water quality data to produce a framework for studying the relationship between specific UOGD processes and potential groundwater contamination. The framework will be broadly applicable to oil and gas regions in the United States.



Southwestern Pennsylvania study and sampling locations

What's happened?

- Continued to analyze water quality data for chemical patterns that indicate potential contamination from various forms of energy development.
- Continued to analyze information shared by community members during focus groups earlier this year.
- Dr. Shaheen presented research at the November 2022 meeting of the Society of Environmental Toxicology and Chemistry in Pittsburgh, PA.

What's new?

- Completing analysis of water quality data.
- Preparing for additional community focus groups in spring 2023.
- Planning for the 2023 Shale Network Workshop with a panel related to this study.

What's next?

- Host additional focus groups with communities in spring 2023.
- Write summaries of our analysis of water quality data and findings from community focus groups.
- Begin to assess community exposure to chemicals in water.

UPCOMING EVENTS

- Dr. Brantley, a research team member, will present a paper titled "Water Quality Impacts from Shale-gas Development: from Case Study to Statistical Analysis and from Pennsylvania to the USA" at the December 2022 American Geophysical Union Meeting.
- Mr. Harrington, a research team member, will present a paper titled "Something in the Water?: Exploring Uncertainty and Knowledge Gaps around Drinking Water Contamination from Unconventional Oil and Gas Drilling development in Washington County, PA" at the March 2023 American Association of Geographers Annual Meeting.

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Study Webpage

Sponsors: This program is supported with joint funding from HEI Energy's government, oil and gas industry, and foundation sponsors. All research is selected, overseen, and reviewed independently of HEI Energy's sponsors.