



## AN ENVIRONMENTAL PUBLIC HEALTH TRACKING STORY

# TARGETED WELL TESTING AND SOURCE TESTING IN A SMALL WISCONSIN VILLAGE

Portage County, Wisconsin

## THE PROBLEM

Village of Nelsonville residents expressed concerns with the quality of their drinking water, which comes from private wells. The [Wisconsin Well Water Viewer](#) showed there had been a lack of private well water quality tests in the area. Of the 70 samples collected within the village, 40% had nitrate levels higher than is recommended, although only 13 of the samples had been taken within the past 10 years. Due to this lack of data, residents were unsure if their water was safe to drink.

## WHAT THE HEALTH DEPARTMENT DID

In fall 2018, Portage County Health Department staff tested 60 private wells for bacteria, nitrate, and other possible contaminants. Of the 60 wells tested, 28 exceeded the groundwater nitrate standard of 10mg/L. Of the wells with elevated nitrate levels, 25 went through additional source testing, which helps identify possible sources of contamination. Local health department staff held public meetings to discuss sources of nitrate contamination, identify potential contaminants, and demonstrate how to properly take samples.

## THE PUBLIC HEALTH IMPACT

Before this project, there was insufficient nitrate well testing data to understand groundwater quality in Nelsonville. This project filled that data gap and provided more information on sources of potential nitrate contamination. Without this project some residents would not otherwise have had the capacity to test their water and learn from the results. These new data will guide future decisions for planning, groundwater management, and land use. Several health departments have contacted Portage County Health Department to learn more about replicating this project in their communities.

This project's work has sparked a seven-county study of groundwater management in the Central Sands region of the state.

EXPLORE YOUR COUNTY'S  
WATER QUALITY DATA:

[dhs.wisconsin.gov/epht](https://dhs.wisconsin.gov/epht)

### WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM

Bureau of Environmental and Occupational Health

[dhs.wisconsin.gov/epht](https://dhs.wisconsin.gov/epht) | APRIL 2020 | [dhstracking@wi.gov](mailto:dhstracking@wi.gov)

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