

FOR EXECUTIVE COMMITTEE USE
SCOPE STATEMENT FOR PROGRAM EVALUATION TOPIC PROPOSAL
(Subject to revision)
29 April 2019

Proposing Supervisor: Chair Sharon Corrigan

Departments/standing committees with which supervisor will discuss proposed topic: EANR, Land and Water Resources, Public Health, Dane County Extension

Proposed Topic: An assessment of private drinking water wells in Dane County

The work of the Healthy Farms/Healthy Lakes Task Force in 2017-2018 raised awareness of the link between agricultural practices, water, and public health. A recent study of residential drinking water wells in Grant, Iowa, and Lafayette Counties has further highlighted the issue of drinking water contamination and has raised questions about what we currently know about the state of residential/private well water in Dane County.

WHO: County Board Supervisors, Public Health Madison Dane County, various county departments, and state DNR staff all need a comprehensive understanding of the state of the health of private wells in Dane County in order to make effective, evidence-based policies.

WHAT: A study to comprehensively assess the quality of water in Dane County's private wells, to enumerate and document findings, and, if contamination exists, to recommend best practices and policies that are available to Dane County and within its jurisdiction to make sure every resident has water that is safe to drink.

This study could be modeled on the recent Southwest Wisconsin Groundwater and Geology (SWIGG) study, which tested water from hundreds of wells in Grant, Iowa, and Lafayette Counties to assess whether drinking water contamination issues exist and, if so, what is causing the contamination.

WHEN/TIMELINE: In the next year. If completed by May 2020, findings and recommendations could be used to inform the 2021 budget.

WHY/PURPOSE: There appear to be some gaps in the information we have regarding the state of contaminants of private wells in Dane County.

After the release of the SWIGG well study, the County Board Office contacted staff at Public Health Madison Dane County to inquire about information on Dane County private water wells and whether Dane County had conducted any similar assessments and gathered the following information:

Monitoring/Testing of private water wells in Dane County:

- During permitting, PHMDC looks at all new wells being drilled to make sure they are constructed properly and not near sources of contamination, however:
- Well monitoring /testing is voluntary
- Public Health MDC provides tests for residents of Dane County upon request
- WI DNR also offers well testing, again it is voluntary not mandatory

- *If* the owner of the DNR tested well lists their well #, then DNR keeps a record for that well, but well #s are not required for testing.
- There may be some overlap of the wells tested through PHMDC and those tested through DNR and there are also differences, but neither DNR nor PHMDC maps the private residential wells that get tested.
- The County is not mapping or monitoring well testing results for private wells in Dane County
- *Exception to mapping of well testing in Dane County:* Any well that serves the public (a local church, library, restaurant, etc.)—a “transient well”—is sampled every year and those records are kept.
- According to PHMDC, because the testing is voluntary and likely requested/performed when a resident suspects a problem with their well, mapping results would likely be skewed as only the problematic /contaminated wells would be represented. Example: Dane County gave out well tests after the flooding in summer 2018. PHMDC has this data but this data may be skewed because it was in an area with a higher likelihood of tainted samples due to the flooding/
specific sites selected.
- The test results from the public wells would provide a more accurate representation because they are all sampled annually.
- *Municipal* water supplies in the county are sampled daily by each municipality.

Bottom Line: Outside of transient, public-serving wells, Dane County does no consistent, mandatory monitoring of private residential wells in the county and, with a few exceptions, does not map or track well monitoring results.

Outcomes/What will this information help Dane County to do? It will provide Dane County with more comprehensive information regarding the health and safety of private residential wells in the county and provide recommendations for best policies and practices for consideration by the County Board and other county decision makers. Wells are tested and regulated by a patchwork of state and county provisions, but this information would allow Dane County to create policy and implement practices (such as mapping of monitored wells, if recommended) in areas over which it has jurisdiction to ensure every Dane County resident has water that is safe to drink.