

# PEPIN COUNTY

## CASE STUDY: A Systems Thinking Approach to Solving Water Quality Issues

A team with representatives from Pepin County's (a county in Wisconsin) Land Conservation and Land Management Departments worked on a project to address water quality concerns by applying systems thinking. The end goal of the project was to improve drinking water quality by building community capacity to address water quality issues. The team started by developing a shared mental model of the issue of nitrates in groundwater and its impact on public health.

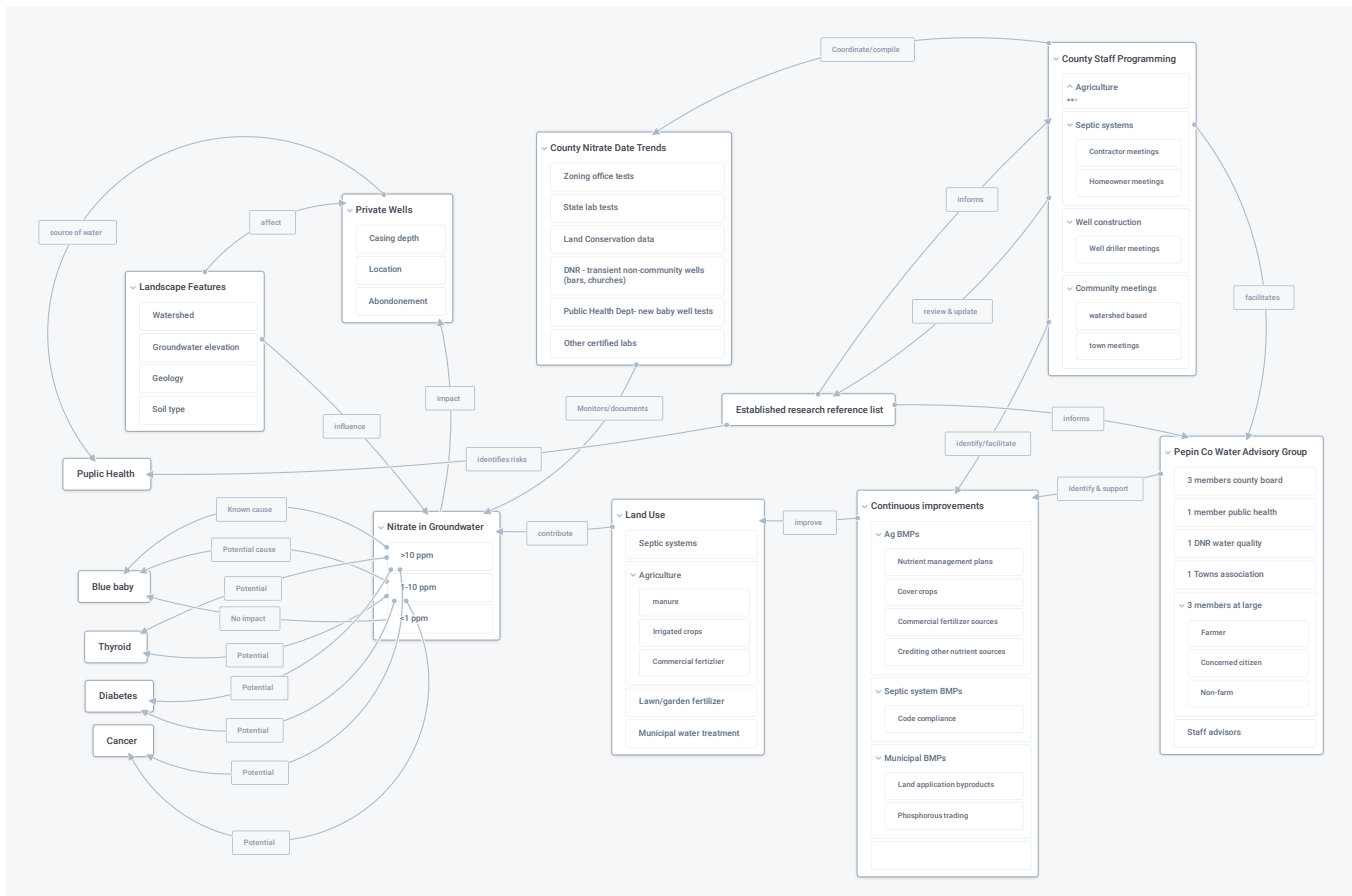


Fig 1: Map depicting the issue of nitrates in groundwater in Pepin County and its impact on public health

This step helped the team better understand the various parts of the water quality system and appreciate the various perspectives that need to be incorporated when considering a program to build community capacity. It was decided that a Water Advisory Group, comprising of a diverse group of stakeholders, would be established through which community capacity to address groundwater quality could be enhanced. This Water Advisory Group was invited to community conversations around groundwater, the structure for which was developed using [MAC \(Map-Activate-Check\)](#).

Systems thinking helped this team:

- Discern the root of the groundwater contamination problem in the county
- Build a shared understanding of the issue
- Engage a diverse group of stakeholders and perspectives with the issue
- Set reasonable boundaries around the program

To learn more about this case, visit: [www.youtube.com/watch?v=QJgwAn4TwN8](http://www.youtube.com/watch?v=QJgwAn4TwN8)