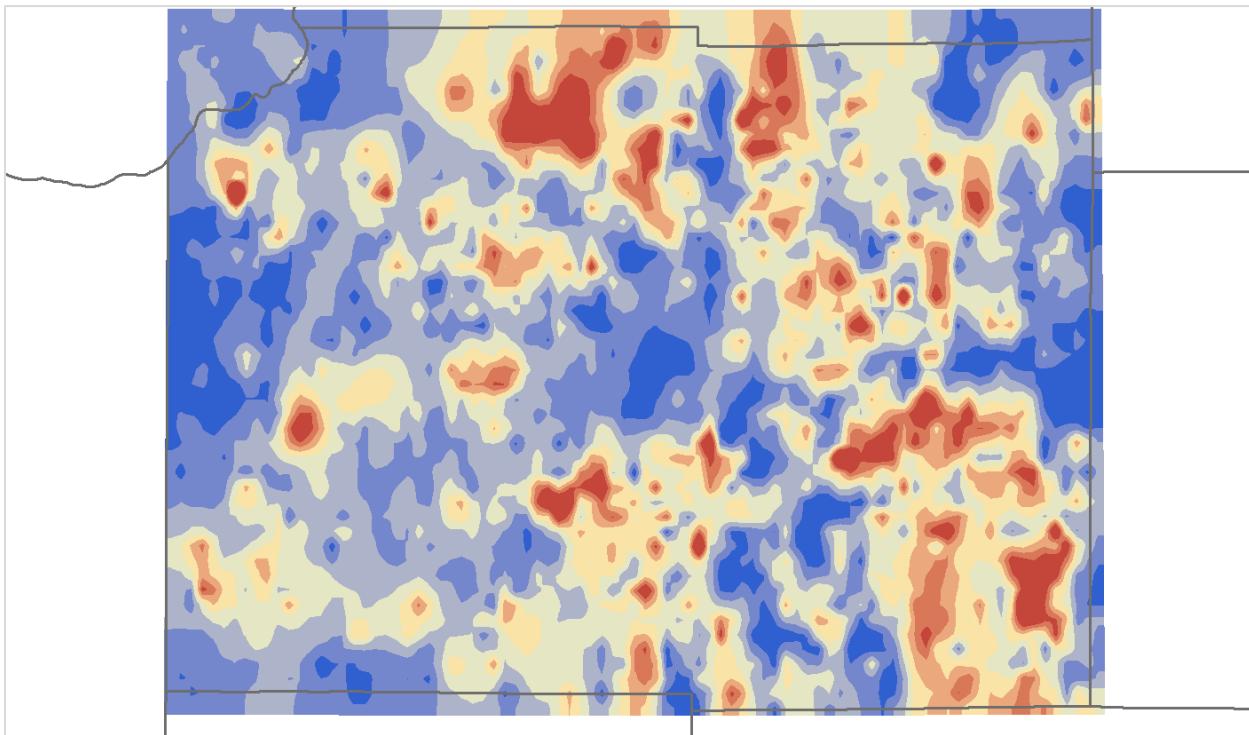


## GIS Data Available on Nitrates in Groundwater



Nitrate contamination of groundwater is a concern because of the potential human health effects of exposure to high levels ( $> 10 \text{ mg/L}$ ) of nitrate in drinking water. Data from the study, [Characterizing the Sources of Elevated Groundwater Nitrate in Dane County, Wisconsin](#), is now available in Geographic Information System (GIS) format through the Capital Area Regional Planning Commission's [Open Data Portal](#).

This study was a collaborative effort involving the Wisconsin Department of Natural Resources, Wisconsin Geological and Natural History Survey, Public Health Madison Dane County, and Capital Area Regional Planning Commission. It compiled a database of over 61,000 nitrate records dating back to the 1970s from wells distributed across Dane County, and evaluated the spatial distribution of nitrate concentrations using GIS mapping, statistical analysis, and groundwater modeling techniques using the updated [regional groundwater flow model](#).

The study identified the location of nitrate "hotspots" where there is an increased risk for high nitrate levels in domestic and municipal wells. This data provides valuable information for communities to consider when locating new municipal wells and for private well owners to bear in mind when determining their frequency of well testing.