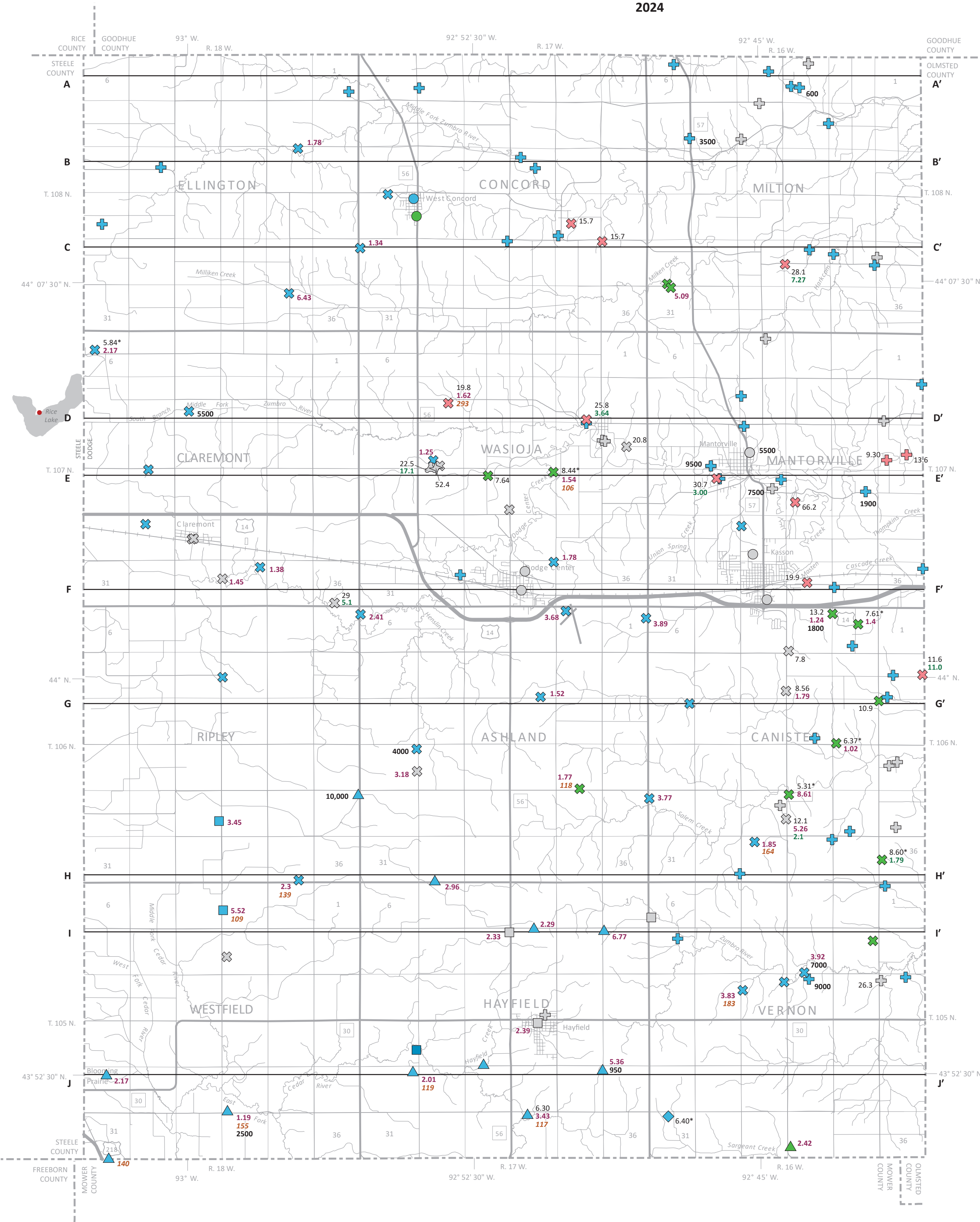


2024

To accompany atlas Report and Plates 8–9.



Map Explanation

Water sample and aquifer symbols

Symbol color indicates tritium age of water sample. See Figures 2 and 4 in the report for geologic unit correlation.

Unconsolidated

- ▲ water-table (bl aquitard)
- ◆ rs (surficial)
- ◆ rs (buried)

Bedrock

- ▲ Upper carbonate aquifer system: Little Cedar–Maquoketa
- ✕ Upper carbonate aquifer system: Galena
- Upper carbonate aquifer system: Cedar Valley–Galena, Spillville–Galena, Maquoketa–Galena
- ⊕ St. Peter–Shakopee aquifer system
- Jordan

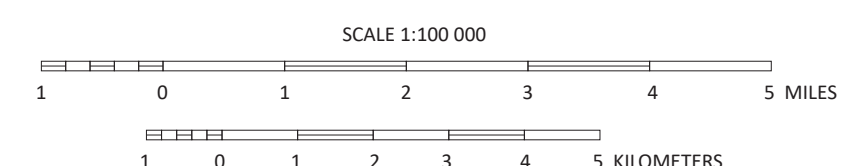
Tritium age

- Symbol color indicates tritium age of water sample.
- Modern: water entered the ground since about 1953.
 - Mixed: water is a mixture of modern and premodern.
 - Mostly premodern*: water entered the ground before 1953 but may contain a small amount of modern water.
 - Premodern: water entered the ground before 1953.
 - Not sampled for tritium.

*These samples are referred to as “premodern” in the report. Both “mostly premodern” and “premodern” are shown on plates and figures for consistency with the dataset.

Symbols and labels

- 15.7 Chloride: if shown, concentration is ≥5 ppm. (*naturally elevated)
- 1.24 Arsenic: if shown, concentration is ≥1 ppb.
- 106 Manganese: if shown, concentration is ≥100 ppb.
- 7.27 Nitrate: if shown, concentration is >1 ppm.
- 5500 Carbon-14 (¹⁴C): estimated groundwater residence time in years.
- Surface-water sample
- A—A' Line of cross section (Part B)
- Body of water



This map was compiled and generated in a geographic information system (GIS). GIS data files for individual counties can be downloaded from the DNR Groundwater Atlas Program’s County Geologic Atlas Series page.

This map was prepared from publicly available information. Every reasonable effort has been made to ensure the accuracy of the data on which this map interpretation is based. However, the DNR does not warrant the accuracy, completeness, or any implied uses of these data. Users may wish to verify critical information; sources include both the references in the report and information on file in the offices of the Minnesota Geological Survey and the DNR. Every effort has been made to ensure the interpretation shown conforms to sound geologic and cartographic principles. This map should not be used to establish legal title, boundaries, or locations of improvements.

Base modified from Minnesota Geological Survey, Geologic Atlas of Dodge County, 2019. Universal Transverse Mercator projection, Zone 15N, North American Datum of 1983. North American Vertical Datum of 1988.



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