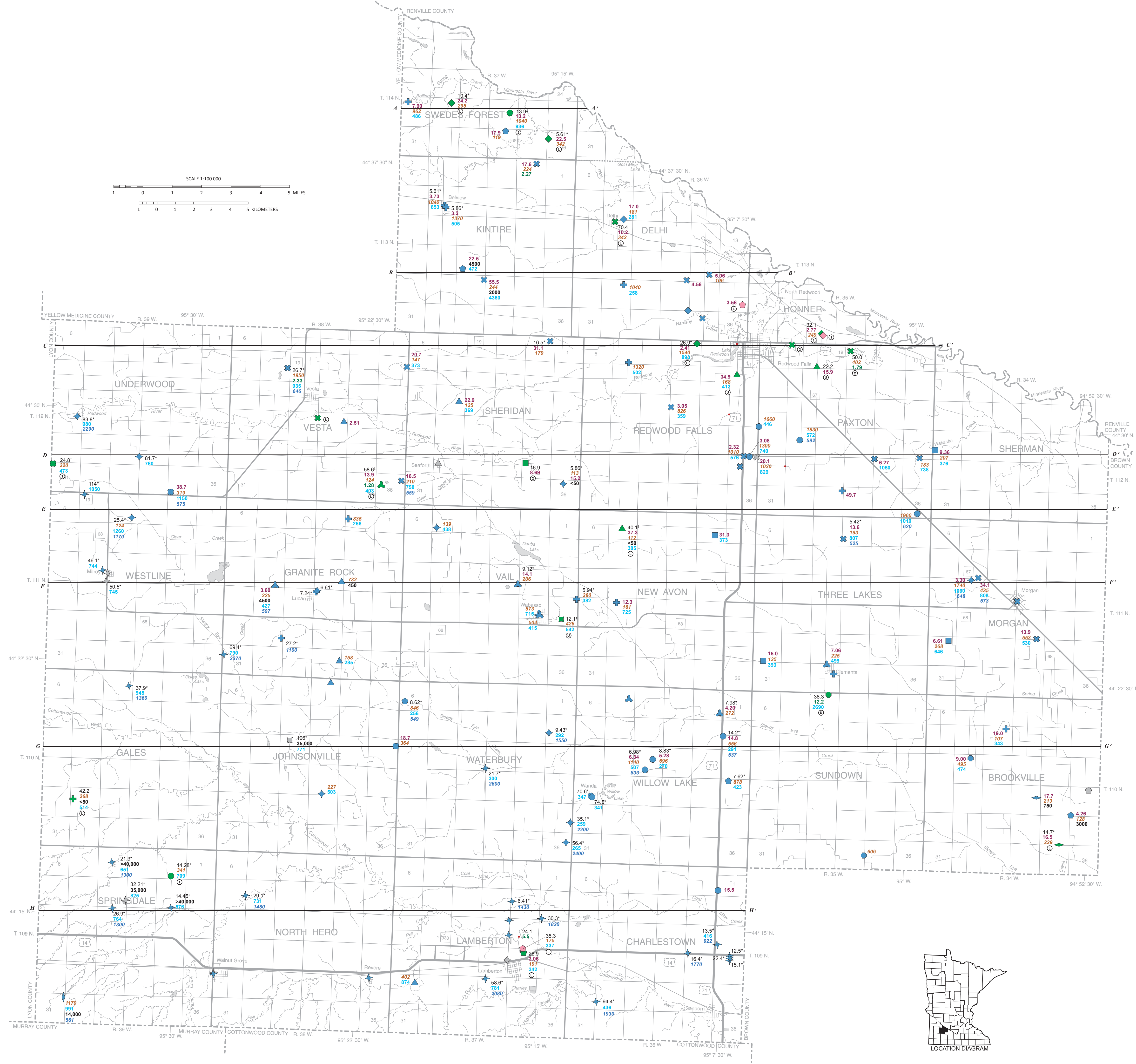


2019

To accompany atlas Report and Plates 7-8.



Map Explanation

Water sample and aquifer symbols
Symbol color indicates tritium age of water sample.
See Figure 4 in the report for geologic unit correlation.

- Unconsolidated aquifers**
- a
 - sd
 - sm
 - s1
 - s2
 - s3
 - s4
 - s5
 - ws
 - wr
 - vs
 - su
 - sb
- Bedrock**
- Cretaceous sandstone
 - Cretaceous undifferentiated (Ku)
 - Saprolite (weathered bedrock)

Tritium age
Symbol color indicates tritium age of water sample.

- Recent: water entered the ground since about 1953 (8 to 15 tritium units (TU)).
- Mixed: water is a mixture of recent and vintage (greater than 1 TU to less than 8 TU).
- Vintage: water entered the ground before 1953 (less than or equal to 1 TU).
- Not sampled for tritium.

- Symbols and labels**
- 16.9 Chloride: if shown, concentration is ≥ 5 ppm. (* naturally elevated, * multiple sources, * source unknown)
 - 22.9 Arsenic: if shown, concentration is ≥ 2 ppb.
 - 179 Manganese: if shown, concentration is ≥ 100 ppb.
 - 1.79 Nitrate: if shown, concentration is ≥ 1 ppm.
 - 4500 Carbon-14 (^{14}C): estimated groundwater residence time in years.
 - 709 Sulfate: if shown, concentration is ≥ 250 ppm.
 - 1300 Boron: if shown, concentration is ≥ 500 ppb.
 - Surface water
 - Line of cross section (Part B)
 - Body of water

- Groundwater conditions**
- Water from the surface moves through a thin layer of overlying fine-grained material to an underlying aquifer.
 - Groundwater moves from an overlying surficial aquifer to a buried aquifer.
 - Groundwater flows laterally.
 - Groundwater flowpath is unknown.

This map was compiled and generated in a geographic information system. Digital data products are available from the DNR County Atlas Program at mndnr.gov/groundwatermapping.
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Base modified from Minnesota Geological Survey, Redwood County Geologic Atlas, Part A, 2016.
Universal Transverse Mercator projection, zone 15N, North American Datum of 1983. North American Vertical Datum of 1988.

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