

Map Explanation

Water sample and aquifer symbols

Symbol color indicates tritium age of water sample. See Figure 5 in the report for geologic unit correlation.

Unconsolidated aquifers

- ▼ ss
- ▲ sh
- sd
- ◆ sm
- ▲ s1
- s2
- ✕ s3
- ◆ s4
- se
- ✕ su
- ◆ sz

Bedrock

- ◆ Dakota (Kd) or unnamed Cretaceous (Ka)\*
- Mt. Simon
- ◆ Phanerozoic undifferentiated\*

\* Unit is not defined in Part A or shown on Figure 6. This unit designation is from CWI.

Tritium age

Symbol color indicates tritium age of water sample.

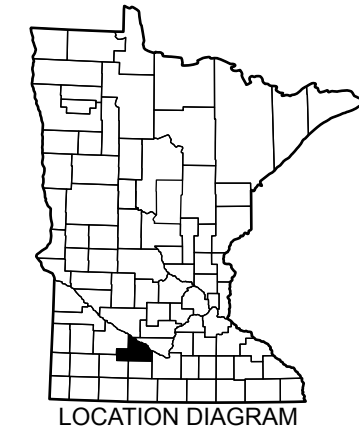
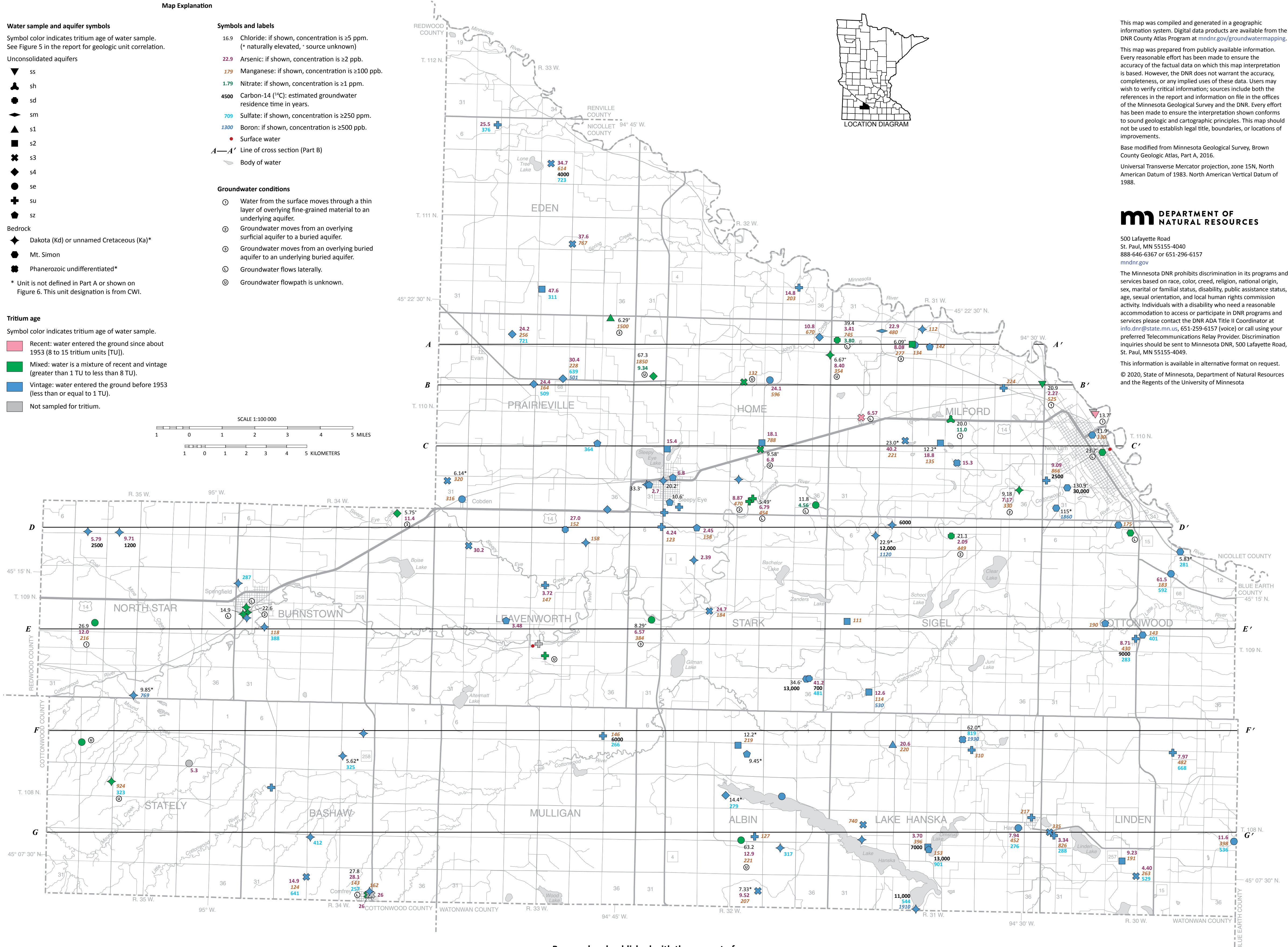
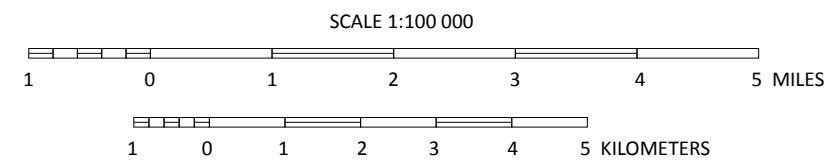
- Recent: water entered the ground since about 1953 (8 to 15 tritium units [TU]).
- Mixed: water is a mixture of recent and vintage (greater than 1 TU to less than 8 TU).
- Vintage: water entered the ground before 1953 (less than or equal to 1 TU).
- Not sampled for tritium.

Symbols and labels

- 16.9 Chloride: if shown, concentration is  $\geq 5$  ppm. (\* naturally elevated, - source unknown)
- 22.9 Arsenic: if shown, concentration is  $\geq 2$  ppb.
- 179 Manganese: if shown, concentration is  $\geq 100$  ppb.
- 1.79 Nitrate: if shown, concentration is  $\geq 1$  ppm.
- 4500 Carbon-14 ( $^{14}\text{C}$ ): estimated groundwater residence time in years.
- 709 Sulfate: if shown, concentration is  $\geq 250$  ppm.
- 1300 Boron: if shown, concentration is  $\geq 500$  ppb.
- Surface water
- A—A' 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 moves from an overlying buried aquifer to an underlying 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](http://mndnr.gov/groundwatermapping).

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Base modified from Minnesota Geological Survey, Brown 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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