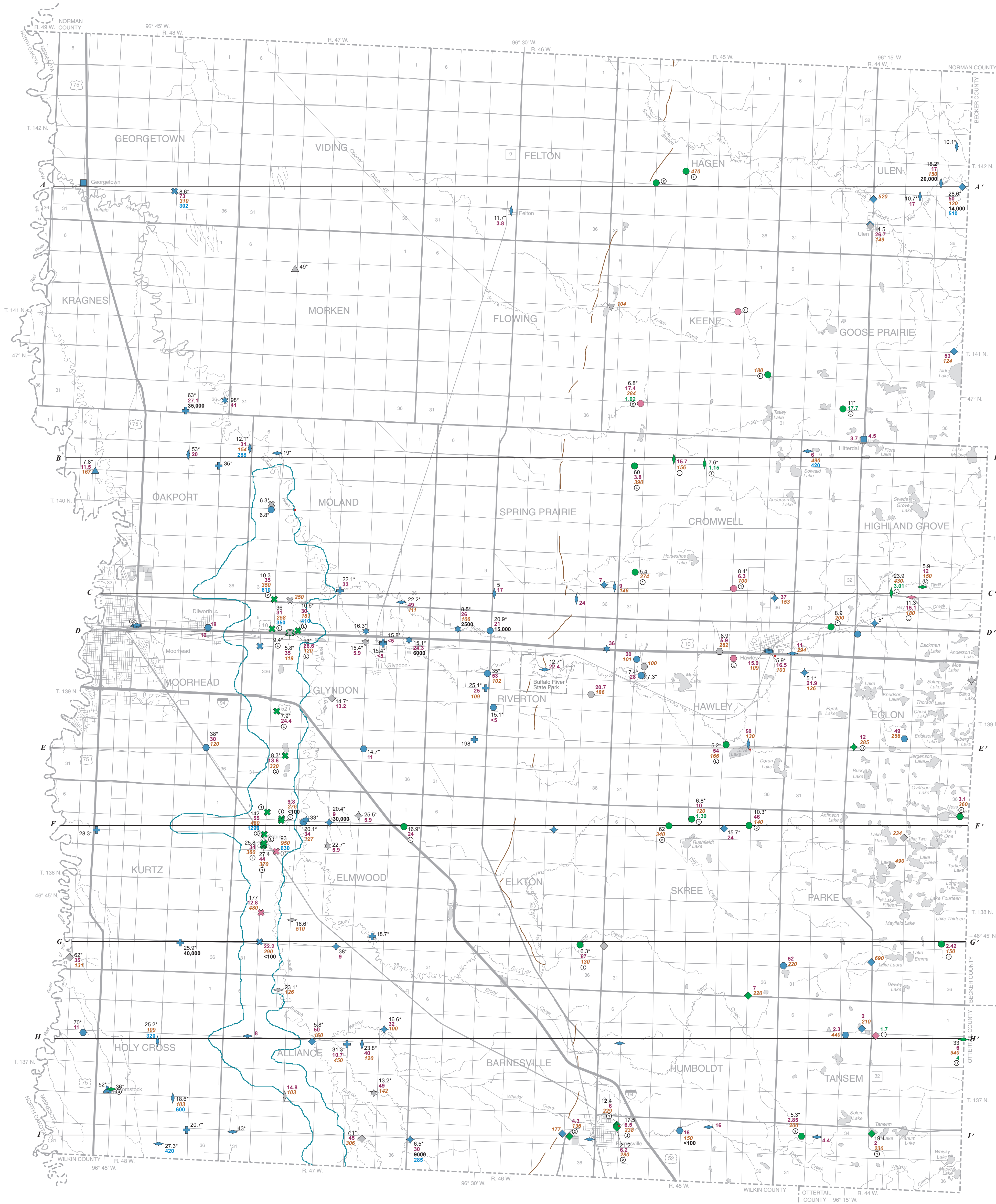


To accompany these atlas components
Report, Plates 7 and 8



MAP EXPLANATION

Water sample and aquifer symbols
Symbol color indicates tritium age of water sample. See report figure 4.

- Surficial and buried sand aquifer or aquifer group**
- ▼ ss
 - ▲ prf
 - ✱ rif
 - gr
 - ◆ nh
 - ot/nv
 - ✚ dg/br
 - ◄ h1
 - ◄ h2
 - ◆ h3/h4
 - bv/x
 - ★ qu
 - ▲ unknown

Tritium age
Symbol color indicates tritium age of water sample.

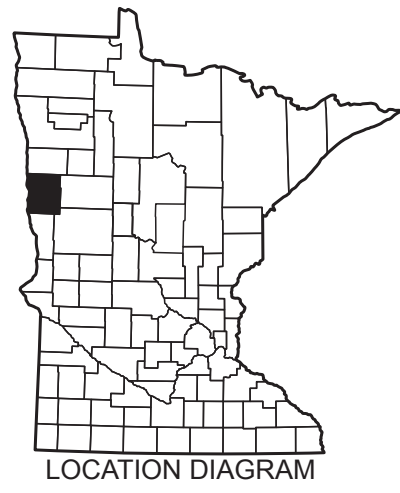
- Recent: water entered the ground since about 1953 (8 to 15 tritium units [TU]).
- Mixed: water is a mixture of recent and vintage (greater than 1 TU to less than 8 TU).
- Vintage: water entered the ground before 1953 (less than or equal to 1 TU).
- Not sampled for tritium.

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.

Symbols and labels

- 23.9 Chloride: if shown, concentration is ≥5 ppm. (* naturally elevated values, * source unknown)
- 26.7 Arsenic: if shown, concentration is ≥2 ppb.
- 180 Manganese: if shown, concentration is ≥100 ppb.
- 1.15 Nitrate: if shown, concentration is ≥1 ppm.
- 8000 Carbon-14 (¹⁴C): if shown, estimated groundwater residence time in years.
- 288 Sulfate: if shown, concentration is ≥250 ppm.
- Surface-water sample
- Approximate east edge of Lake Agassiz clay
- Boundary of the Buffalo aquifer
- B—B' Line of cross section (Part B)
- Body of water



This map was compiled and generated in a geographic information system. Digital data products are available from the DNR County Geologic Atlas Program at mndnr.gov/groundwatermapping.
This map was prepared from publicly available information. Every reasonable effort has been made to ensure the accuracy of the factual 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, Clay County Geologic Atlas, Part A, 2014.
Universal Transverse Mercator projection, zone 15N, North American Datum of 1983. North American Vertical Datum of 1988.

MINNESOTA DEPARTMENT OF NATURAL RESOURCES
500 Lafayette Road
St. Paul, MN 55155-4025
888-646-6367 or 651-296-6157
mndnr.gov
This information is available in alternative format on request.
The Minnesota DNR prohibits discrimination in its programs and services based on race, color, creed, religion, national origin, sex, public assistance status, age, sexual orientation, or disability. Persons with disabilities may request reasonable modifications to access or participate in DNR programs and services by contacting the DNR ADA Title II Coordinator at info.dnr@state.mn.us or 651-259-6157. Discrimination inquiries should be sent to Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4049; or Office of Civil Rights, U.S. Department of the Interior, 1849 C Street NW, Washington, DC 20240.
© 2018, State of Minnesota, Department of Natural Resources and the Regents of the University of Minnesota

