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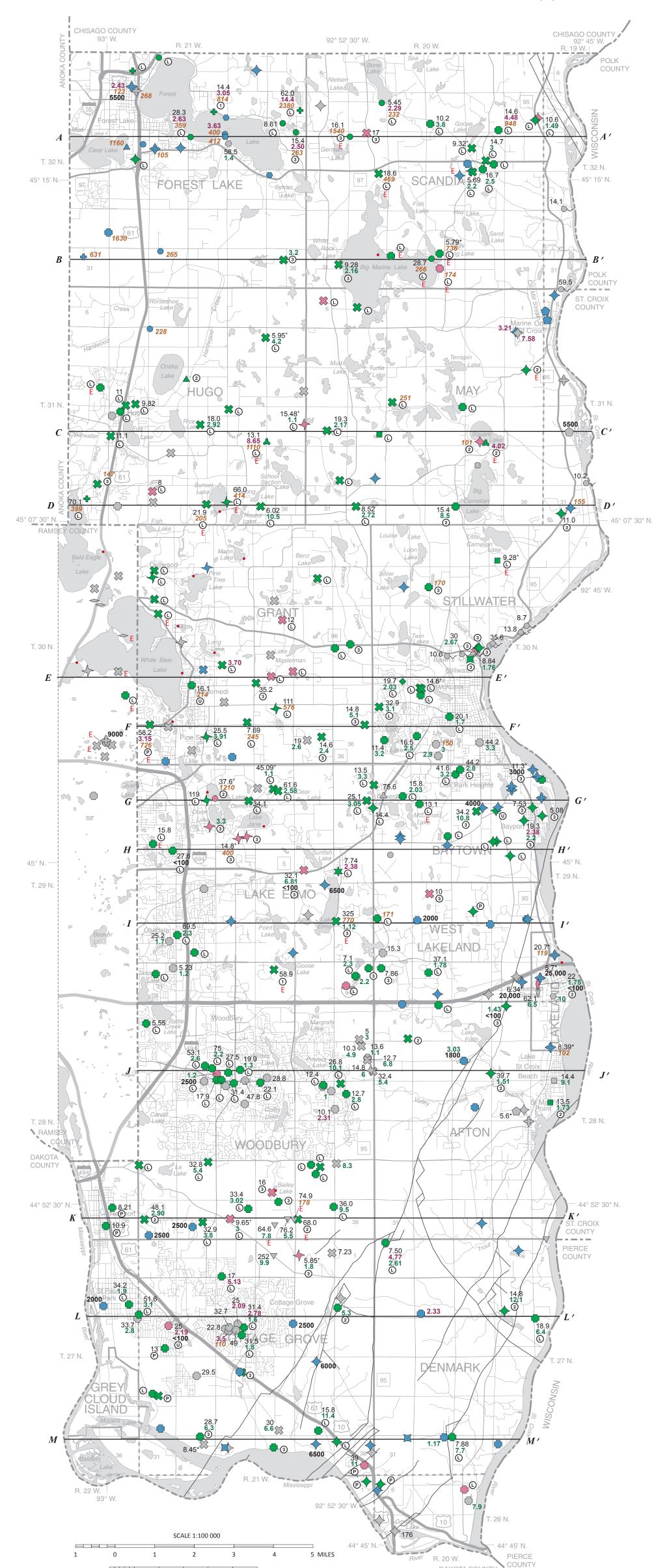
3

5 KILOMETERS

To accompany atlas Report and Plate 8 and Plate 9.



By James A. Berg



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

- SS
- s1

- s3

unknown

Bedrock

(Bedrock symbols are slightly larger to help distinguish them from unconsolidated aquifer symbols.)

- St. Peter, St. Peter–Prairie du Chien
- Prairie du Chien, Prairie du Chien-Jordan, Prairie du Chien-Tunnel City
- Jordan, Jordan-St. Lawrence, Jordan-Tunnel City
- Jordan-Mt. Simon
- St. Lawrence
- St. Lawrence–Tunnel City, Tunnel City, Tunnel City–Wonewoc
- Wonewoc, Wonewoc–Eau Claire
- Eau Claire
- Tunnel City-Mt. Simon, Wonewoc-Mt. Simon, Eau Claire-Mt. Simon, Mt. Simon, Mt. Simon-Hinckley

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

- 15.4 Chloride: if shown, concentration is ≥5 ppm. (* naturally elevated, * source unknown)
- 8.65 Arsenic: if shown, concentration is ≥2 ppb.
- 155 Manganese: if shown, concentration is ≥100 ppb.
- 3.1 Nitrate: if shown, concentration is ≥1 ppm.
- **5500** Carbon-14 (¹⁴C): estimated groundwater residence time in years.
 - Surface-water sample
- E Groundwater sample with evaporative signature Spring
- Fault

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.
- Tritium concentrations may be artificially elevated by high capacity pumping.
- Groundwater flowpath is unknown.



This map was compiled and generated in a geographic information system. Digital data products are available from the DNR Groundwater Atlas Program page (mndnr.gov/groundwatermapping).

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Base modified from Minnesota Geological Survey, Washington County Geologic Atlas, Part A, 2016.

Universal Transverse Mercator projection, zone 15N, North American Datum of 1983. North American Vertical Datum of 1988.

DEPARTMENT OF NATURAL RESOURCES

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DAKOTA COUNTY