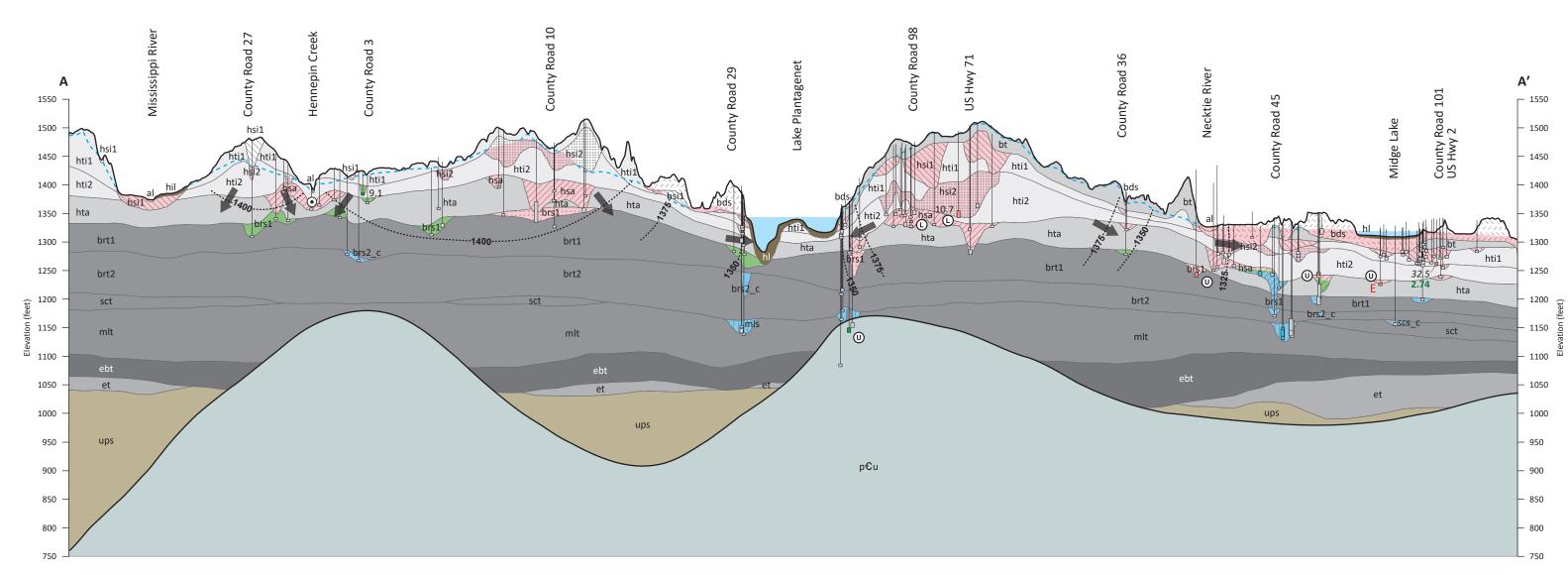
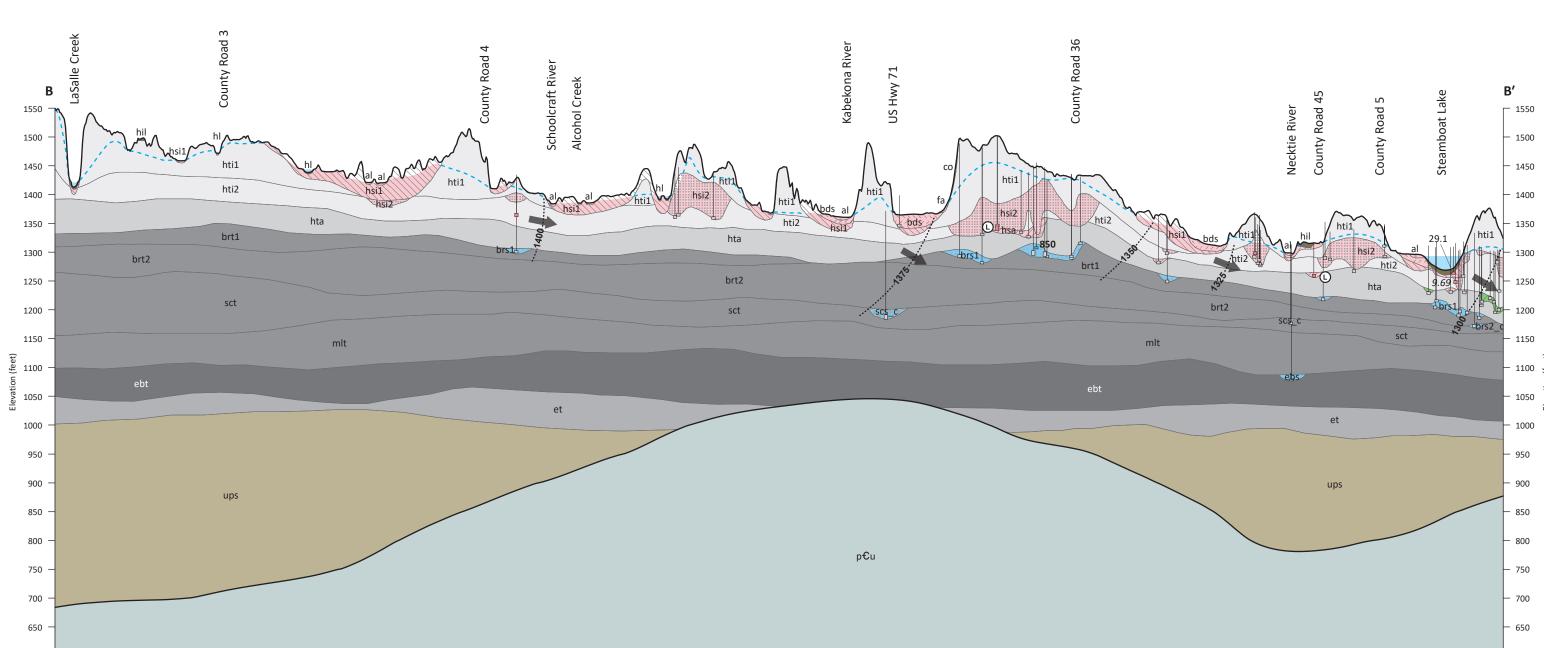
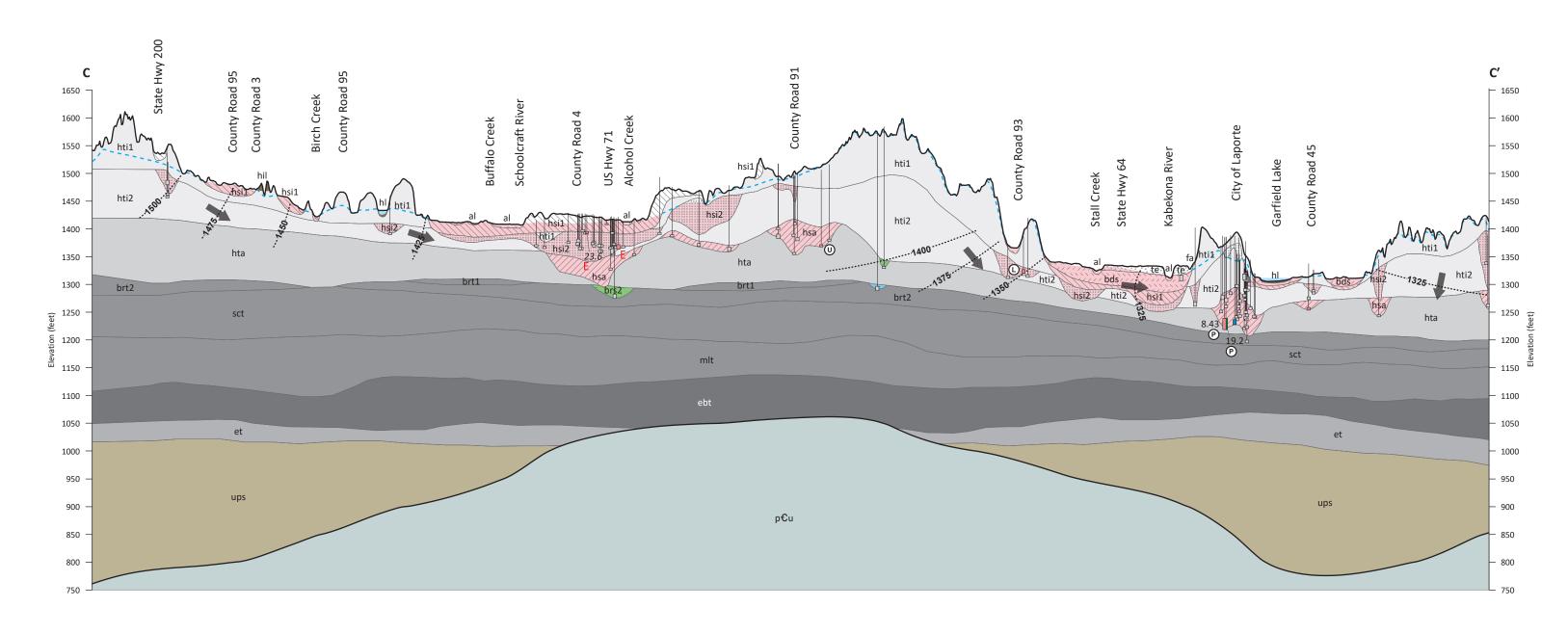
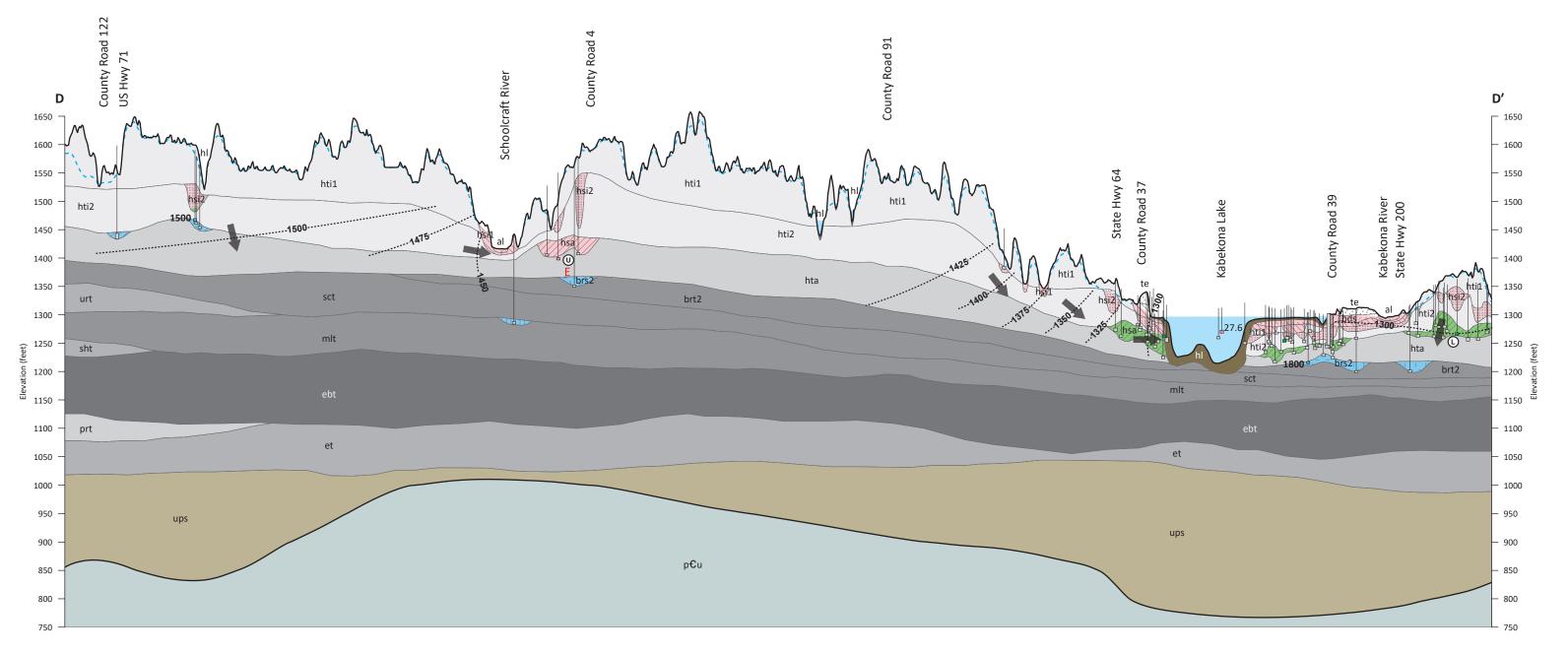
2024

To accompany atlas Report and Plates 7 and 9.









This map was compiled and generated in a geographic information system. Digital data products are available from the DNR Groundwater Atlas Program. 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,

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Base modified from Minnesota Geological Survey, Geologic Atlas of Hubbard County, Part A, 2018.

Liniversal Transverse Mercator projection, Zono 15N, North American Datum (1988).

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

## DEPARTMENT OF NATURAL RESOURCES

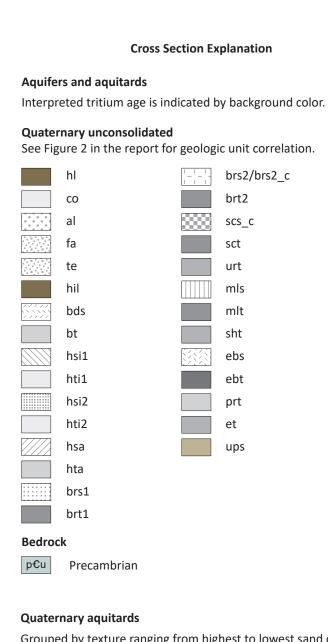
500 Lafayette Road St. Paul, MN 55155-4025 888-646-6367 or 651-296-6157

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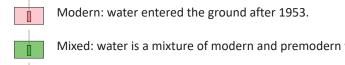


Grouped by texture ranging from highest to lowest sand content indicating relative hydraulic conductivity.

Geolo	gic unit code	Percent sand
	hti1, hti2, co	>60%
	hta, bt, prt	>50% and ≤60%
	et, sht, urt	>40% and ≤50%
	sct, mlt, brt1, brt2	>30% and ≤40%
	ebt	≤30%

## Tritium a

Darker color in small vertical rectangle (well screen symbol) indicates tritium age of water sampled in well. Lighter color indicates interpreted age of water in aquifer.



Mostly premodern\*: water likely entered the ground before 1953 but may contain a small amount of modern water.

Premodern: water entered the ground before 1953.

Well 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

10.7 Chloride: if shown, concentration is ≥5 ppm.(\*naturally elevated, \*source unknown; italicized labels indicate source was adjusted)

2.74 Nitrate: if shown, concentration is >1 ppm.
 850 Carbon-14 (<sup>14</sup>C): estimated groundwater

residence time in years

E Groundwater sample with evaporative signature

General groundwater flow direction

Approximate equipotential contour; contour interval 25 feet

---- Geologic contact
---- Land or bedrock surface

## ---- Water table Lake

Groundwater conditions

© Lateral flow: aquifer may have received lateral recharge

from upgradient areas of higher pollution sensitivity.

Pumping: high-volume pumping may have enhanced recharge rates and changed local groundwater flow.

Unknown: neither the pollution sensitivity model nor groundwater conditions explained the presence of

mixed or modern tritium-age water.Groundwater movement out of cross section.

