Minnesota’s groundwater provinces

Water for three quarters of Minnesotans and most of Greater Minnesota comes from underground.

5 **Western Province**: Heavy clay glacial drift that water moves through slowly and runs off quickly. Contains limited sand and sandstone aquifers on top of bedrock.

4 **Central Province**: Thick sandy and clay soil from glacial drift holds numerous sand aquifers over the bedrock. Aquifers recharge quickly but are also easily contaminated.

2 **South-Central Province**: Thick clay glacial drift with limited extent sand aquifers overlie sandstone, limestone, and dolostone aquifers.

6 **Arrowhead Province**: Granite bedrock exposed at the surface through very thin glacial drift. Groundwater is almost non-existent, found mostly in fractures.

1 **Metro Province**: Sand aquifers in thick sandy and clay glacial drift overlying sandstone, limestone, and dolostone. Plentiful water, recharges well.

3 **Southeastern Province**: Thin clay glacial drift overlies sandstone, limestone and dolostone aquifers. A karst region of limestone and dolostone rock, characterized by caverns and steep erosion-carved bluffs.

Information courtesy of MN Dept. of Natural Resources. www.dnr.state.mn.us/groundwater/provinces/index.html
Minnesota’s smallest communities tend to also have the oldest wastewater infrastructure.

Average age of wastewater treatment facilities by county (among those responding):
- 30 years and older
- 20-29 years
- 10-19 years
- 0-9 years

Twin Cities 7-county area

Data source: Minn. Pollution Control Agency.

Number of communities in Greater Minnesota with wastewater treatment facilities more than 30 years old:

- Population less than 1,000: 105
- Population greater than 1,000: 36

* Out of 558 cities or sanitary sewer districts outside the Twin Cities seven-county area responding to the PCA’s Wastewater Infrastructure Needs Survey for 2013. Communities in the Twin Cities were not counted since most of them are served by a regional wastewater system.