

WATER RESOURCES DATA

INDICATOR: Number of counties with a County Geologic Atlas or a Regional Hydrogeological Assessment

WHY IS THIS INDICATOR IMPORTANT?

Hydrogeology is the study of the distribution and movement of water in the ground. Hydrogeologic information helps communities find reliable sources of water and manage water and land in a way that sustains high-quality water resources.

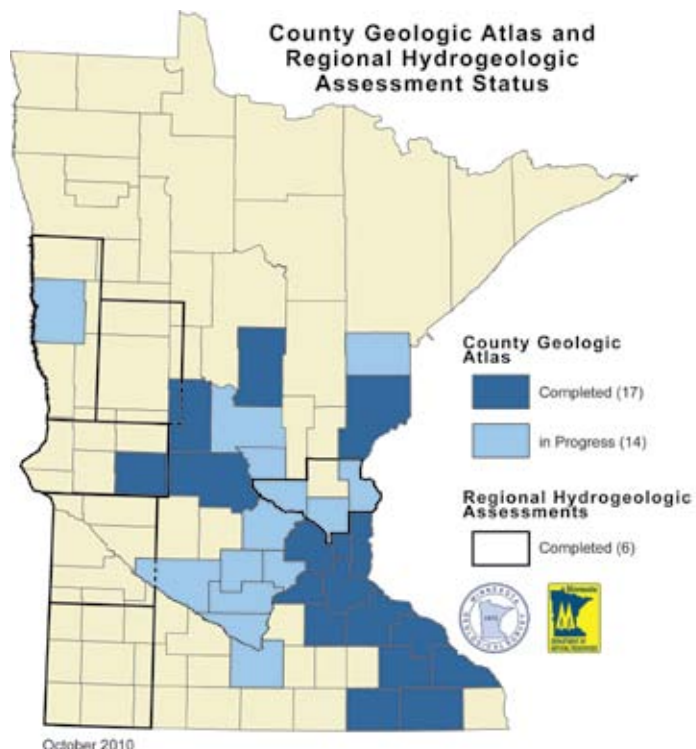
Without informed water supply planning, public water shortages may occur and surface waters (wetlands, lakes, rivers, and unique resources such as trout streams and fens) may be degraded from groundwater pumping or land-use changes.

WHAT IS DNR DOING?

DNR works with the Minnesota Geological Survey (MGS) to develop County Geologic Atlases and Regional Hydrogeological Assessments to convey geologic and hydrogeologic information and interpretations to government units at all levels, but particularly to local governments.

These studies provide information about the region's geology and groundwater's presence, direction of flow, natural quality, age, and pollution sensitivity. This information is used in planning and environmental protection efforts. Source water protection and well sealing programs are examples of local programs that need geologic and groundwater information. Other typical uses include providing information for permit applications, resource management, monitoring needs, and emergency response to contaminant releases.

TARGET: Complete two atlases each fiscal year through 2012. At this rate we will provide statewide coverage of geologic atlases within 25 years and improve our understanding of the hydrogeologic setting so that decision-makers have the best available information to aid in sustainable land and water resource management decisions. Seventeen atlases and six assessments have been completed and fourteen atlases are underway. Completed and in-progress atlases and assessments include 83 percent of the state's population and 45 percent of the state's area. We also aim to update older atlases to incorporate current data and the latest science and technology.



Information for local communities. DNR and the Minnesota Geological Survey help communities manage water resources by working together to provide hydrogeologic information.



DNR hydrogeologists collect data and develop useful information and maps for citizens and local governments.

LEARN MORE ABOUT:

- Atlases and assessments at: www.mndnr.gov/waters/groundwater_section/mapping/index.html
- County maps at: www.mndnr.gov/waters/groundwater_section/mapping/status.html
- The Minnesota Geologic Survey at: www.geo.umn.edu/mgs/index.html