



**Minnesota
Pollution
Control
Agency**

For More Information

For additional information about the MPCA's ambient groundwater quality monitoring network, contact the MPCA's Ambient Groundwater Monitoring Coordinator in the Environmental Analysis and Outcomes Division at 651-296-6300 or 800-657-3864.

Enhancing Ambient Groundwater Quality Monitoring in Minnesota

For the Clean Water, Land and Legacy Amendment

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Ground water provides drinking water to approximately 75 percent of Minnesotans and contributes water to streams, rivers, lakes, and wetlands.

The Minnesota Pollution Control Agency (MPCA) monitors the quality of our groundwater and protects it from contamination in cooperation with other state and local agencies.

What Is Ambient Monitoring?

Ambient monitoring is one important component of the MPCA's groundwater protection efforts. Data collected from ambient monitoring activities provide information about the general quality of Minnesota's groundwater and helps identify whether it is getting better, worse, or not changing. Ambient monitoring involves the sampling of groundwater across large geographic settings and provides a large-scale or "big picture" view of groundwater quality conditions across the state.

How Is This Information Used?

Data collected from MPCA ground water investigations is valuable to drinking water protection efforts and other water management activities. These data inform the state's drinking water supply protection efforts, identifies threats to groundwater quality, and guides the development of best management practices to avoid future groundwater impacts. Collected data are available on-line through the MPCA's Environmental Data Access system.

MPCA's Ambient Groundwater Monitoring Network

The MPCA's ambient monitoring network focuses on determining the amount of non-agricultural chemicals in the aquifers that are most susceptible to pollution from human activities. The network focuses on the surficial sand and gravel and Prairie du Chien-Jordan aquifers. Assessments of agricultural chemicals in groundwater are performed by the Minnesota Department of Agriculture.

A network of shallow wells is monitored by the MPCA as an early warning network in the surficial sand and gravel aquifers. Shallow groundwater typically is not used as a source of drinking water, but any changes in groundwater quality will first be detected in these wells. The early warning network detects whether human activities may be affecting groundwater quality and provides an opportunity to identify and address problems before it reaches the deeper drinking water supplies.

Enhancing the Monitoring Network

The MPCA is enhancing its monitoring network to improve the assessment of groundwater quality conditions and trends across the state. The agency will be installing additional monitoring wells, focusing on typical urban land use settings. The MPCA is contacting landowners about placing monitoring wells on their property. All costs associated with installing and sampling the wells are borne by the MPCA. Each sampling location initially will be visited about 2-3 times to install the well and prepare it for sampling. The newly-constructed wells will be sampled by the MPCA once each year for non-agricultural chemicals.

Clean Water Land and Legacy Amendment

Enhancements to the MPCA's ambient groundwater quality monitoring network are funded through the Clean Water, Wildlife, Cultural Heritage and Natural Areas Amendment. On November 4, 2008, Minnesota voters approved this amendment which increased the sales and use tax rate by three-eighths of one percent on taxable sales through 2034. Parts of these funds are used to protect, enhance, and restore groundwater, with at least five percent of the funds targeted to protect drinking water sources.