

City of Wrenshall's Wellhead Protection Plan

The City of Wrenshall recently amended a wellhead protection plan in order to protect the groundwater which supplies the needs of our community. The goal of this plan is to: Promote public health, economic development and community infrastructure by maintaining a potable public drinking water supply for community. It is important that each one of us recognize that we can have a direct influence on the quality of the groundwater which Wrenshall uses.

WHAT IS WELLHEAD PROTECTION?

Wellhead protection is, simply stated, protecting the land area surrounding a well in order to prevent contamination of the groundwater that is likely to be drawn into the well during pumping.

Wellhead protection plans are encouraged by agencies such as the Minnesota Department of Health, Department of Natural Resources, Pollution Control Agency and the Carlton County Water Planning.

These agencies are responsible for setting safe drinking water standards and for protecting natural resources, such as groundwater.

WHAT IS GROUNDWATER?

Many people think of groundwater as an underground river or lake, but actually it occurs wherever water fills the tiny spaces in between grains of any earth material (rock or soil). Earth materials that can transmit large quantities of water through these "pore" spaces are called AQUIFERS. Sand and gravel typically are good aquifers, while materials such as clay and shale (a type of rock) are not.

Groundwater occurs beneath the land surface in Minnesota. In many places it lies just a few feet underground. However, in some aquifers the groundwater lies several hundred feet beneath the surface.

Groundwater usually begins as rain and melted snow which falls across the land and then seeps into the ground. Because this water was once at the surface, human activities can affect the quality of the groundwater. We need to be aware that the things we do at the earth's surface can affect the quality of the water we cook with, wash with, and of course, drink.

WHY PROTECT GROUNDWATER?

First of all, polluted groundwater can pose health hazards to those who drink it. Second, once it is contaminated, groundwater is very difficult to clean (if it can be cleaned at all). If the groundwater near Wrenshall were to become contaminated, the city would likely be required to install filters to purify the water, or be forced to find an alternative source of water for its citizens. This can be very expensive.

When it comes to protecting groundwater, the old saying, "An ounce of protection is worth a pound of cure" applies. Fortunately, the city wells of Wrenshall do not have a contamination problem at this point. The wellhead protection plan address's potential contamination sources in the Drinking Water Supply Management Area to help assure that Wrenshall maintains the quality of its groundwater. Proper management of potential contamination sources will assist in the assurance of safe quality drinking water for decades to come.

If you have any questions, feel free to call Alieca Johnson with the City of Wrenshall (218) 384-3680.