## What are the steps in preparing a wellhead protection plan?

- Determine how vulnerable the wellhead protection area is to pollution.
- Identify land use and possible sources of pollution in the wellhead protection area.
- Identify ways to prevent groundwater pollution.
- Identify an alternate way to supply water if the public well becomes polluted.

## What can you do?

**To help prepare a plan:**

- Serve on workgroups.
- Attend wellhead protection meetings.
- Help identify land uses and possible sources of pollution.

**To protect local groundwater:**

- Recognize and manage possible sources of pollution on your property.
- Use hazardous products as directed, and dispose of them properly.
- Conserve water.

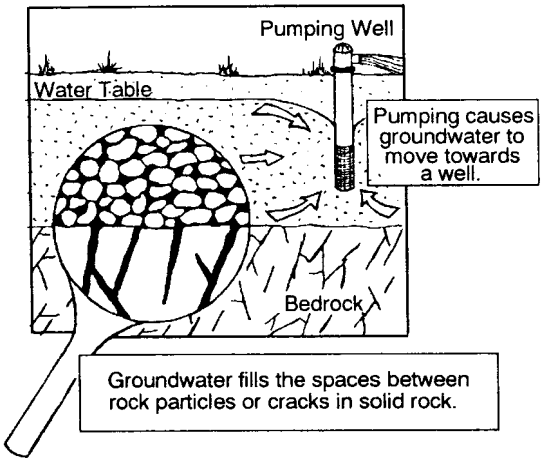
## What is groundwater?

Groundwater is the water which fills the small spaces between rock particles (sand, gravel, etc.) or cracks in solid rock. Rain, melting snow, or surface water becomes groundwater by seeping into the ground and filling these spaces. The top of the water-saturated zone is call the **"water table."**

When water seeps in from the surface and reaches the water table, it begins moving towards points where it can escape, such as wells, streams, or lakes.

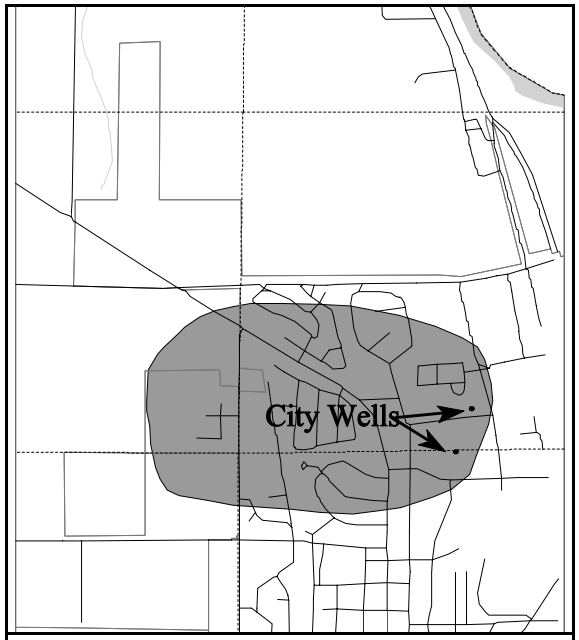
An **aquifer** is any type of geologic material, such as sand or sandstone, which can supply water to wells or springs.

The groundwater which supplies wells often comes from within a short distance (a few miles) of the well. How fast groundwater moves depends on how much the well is pumped and what type of rock particles or bedrock it is moving through.




# PROTECTING DRINKING WATER THROUGH

# WELLHEAD PROTECTION




**Shading Shows the Wellhead Protection Area for Two City Wells**

MINNESOTA MDH DEPARTMENT OF HEALTH
Division of Environmental Health
Source Water Protection Unit
Wellhead Protection Program

## A statewide effort to protect public wells

**The Minnesota Department of Health** is working with communities and state and local agencies to protect public wells which supply drinking water. This cooperative effort is called the "Wellhead Protection Program." The goal of this program is to prevent pollution of public supply wells.

This first step is to find out where the water comes from which supplies the wells. Then possible sources of pollution are identified in this area, and the community develops a plan to manage them so they will not threaten drinking water.

The Minnesota Department of Health is the lead agency for the state's program and will assist communities with defining wellhead protection areas and developing plans to protect wells.

If you would like more information or would like to obtain this brochure in another format, please contact:

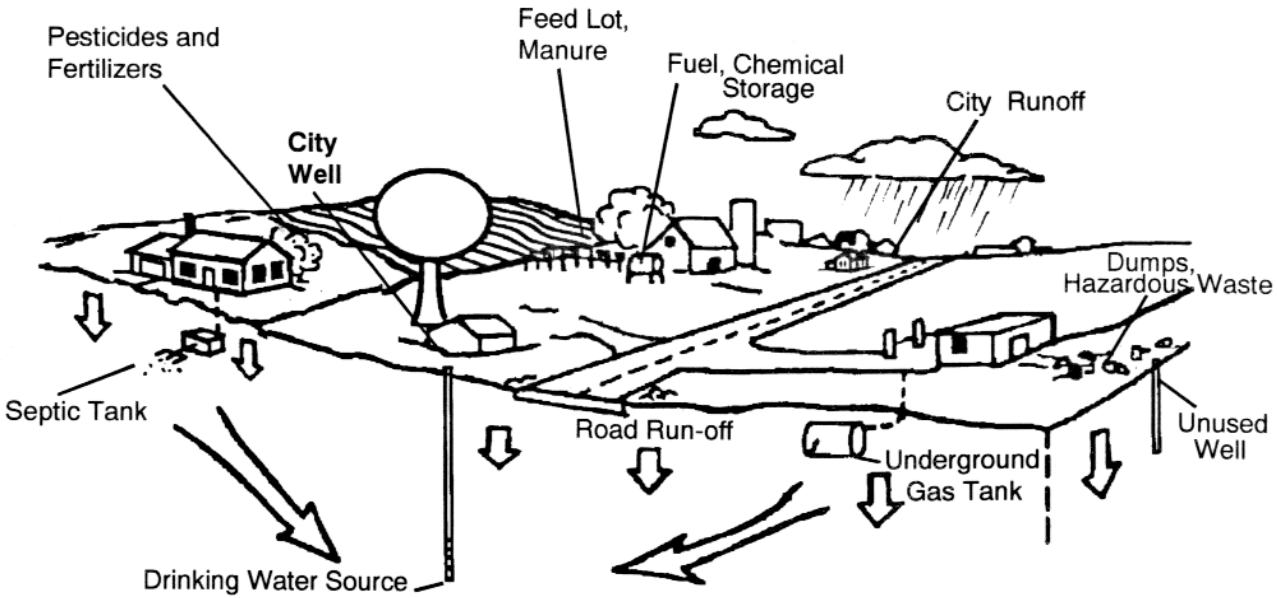
Minnesota Department of Health
Source Water Protection Unit
Drinking Water Protection Section
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: (651) 201-4700
Division TTY: (651) 201-5797

IC #141-0168 (8/09)

## *Most people in Minnesota get their drinking water from wells. Why do wells sometimes become polluted?*

Wells become polluted when substances that are harmful to human health get into the groundwater. Water from these wells can be dangerous to drink when the level of pollution rises above health standards.




**Possible Sources of Drinking Water Pollution**

Many of our everyday activities can cause groundwater pollution. Much can be done to prevent pollution, such as wise use of the land and chemicals. The expense of treating polluted water or drilling new wells can also be avoided.

**Wellhead protection** is a way to prevent drinking water from becoming polluted by managing possible sources of contamination in the area which supplies water to a public well. Wellhead protection will be an ongoing need for communities. Everyone has an important part to play in **protecting drinking water wells — today and for the future**.