

## **CITY OF BIG FALLS WELLHEAD PROTECTION PLAN**

The city of Big Falls has developed a wellhead protection plan in order to protect the groundwater which supplies the needs of our community. One of the goals of this plan is to increase resident's awareness about the vulnerability of Big Falls' groundwater to contamination. It is important that each one of us recognize that we can have a direct influence on the quality of the groundwater which Big Falls 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 being developed across Minnesota, as it is now mandated by the MN Department of Health for all public water suppliers.

### **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 materials (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.

Ground water 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 and then seeps into the ground. Because this water was once at the surface, human activities 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 Big Falls 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 prevention is worth a pound of cure", applies. Fortunately, the city wells of Big Falls do not have a contamination problem at this point. The wellhead protection plan will address potential contamination sources in the wellhead area and help assure that Big Falls maintains the quality of its groundwater.

### **HOW CAN YOU HELP?**

- Inform the water department of any potential contamination sources (see list below). Be sure to indicate the type and location of each source.
- Have abandoned water wells properly capped and sealed.
- Conserve water: Some contaminants are naturally degraded within soils. The less groundwater you use, the longer it stays in the ground, and the greater chance that it can clean itself.
- Be aware that your activities at the land surface can have a direct effect on the water you use every day.

### **SOME POTENTIAL CONTAMINANT SOURCES:**

- Abandoned Wells
- Underground Storage Tanks
- Surface Storage Tanks
- Past Spills/Leaks
- Car Washes
- Vehicle Repair or Salvage Operations
- Landfills/Dump Sites

Please help our city protect its water supply by supporting the wellhead protection plan. To view a complete copy of the city's Wellhead Protection Plan, please stop by the city office. Or, it can be viewed on the city's website at [www.bigfalls.govoffice.com](http://www.bigfalls.govoffice.com). (Located under the "Government" tab, then under "Utilities.")