

How can I get involved?

Contact the organizations listed below for more information on wellhead protection. They can help you get started, answer your questions and provide guidance and assistance in gathering the information for your wellhead protection plan.

Contact your water utility and local officials and offer to help develop a wellhead protection plan.

Through your efforts, your community can develop and implement a program to protect your quality of life now and for future generations. You are the key to a successful wellhead protection program. Take the time to get involved.

For more information please contact:

Wisconsin Dept. of Natural Resources
Bureau of Drinking Water and Groundwater
P.O. Box 7921 Madison, WI. 53707-7921
(608) 266-9265 or (877) 268-WELL (toll free)
email: lindod@dnr.state.wi.us
website: www.dnr.state.wi.us/org/water/dwg/gw/whp.htm

Wisconsin Rural Water Association
350 Water Way, Plover, WI. 54467
(715) 344-7778
email: wrrwa@coredcs.com
website: wrrwa.org

Central Wisconsin Groundwater Center
CNR, room 224, UW-Stevens Point
Stevens Point, WI 54481
(715) 346-4270
email: gndwater@uwsp.edu
website: www.uwsp.edu/groundwater/

Wellhead Protection:

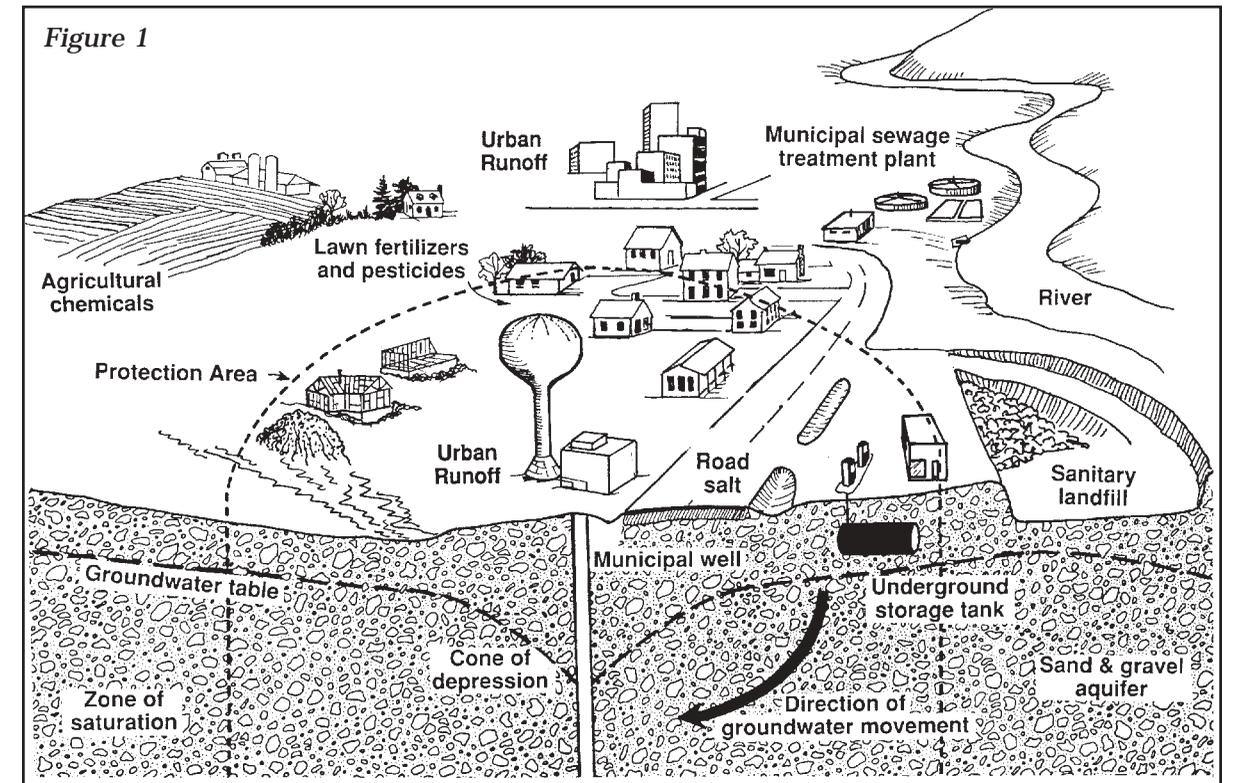


An ounce of prevention...

Investigate wellhead protection for your community today.

**Wisconsin Dept. of Natural Resources
PUB-DG-039 99REV**

Clear, clean drinking water. It's what we expect when we turn on the tap. The groundwater that supplies your community's wells comes from rain and snow that generally fall within a short distance of the wells. This water seeps into the ground and moves toward your community's wells. Sometimes, pollutants can also seep into the ground and threaten your community's wells (see Figure 1). Wellhead protection planning is one way to ensure your community has a long-term source of clean water. Does your community have a wellhead protection plan?



What is Wellhead Protection?

Wellhead protection is a preventive program designed to protect public water supply wells. The goal of wellhead protection is to prevent contaminants from entering public water supply wells by managing the land that contributes water to the wells. Your community can protect its water supply by taking the following steps:



1. Form a planning committee

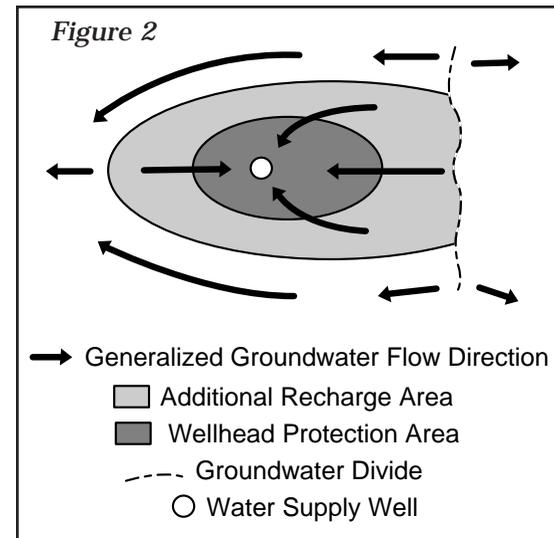
The first step is to form a committee to guide the plan development and implementation. Possible committee members could include representatives of the water utility; local health, fire, planning and zoning officials; farmers; business representatives; service organization representatives; elected officials, and interested citizens. It is important to take advantage of the knowledge and expertise that exists within your community to design a plan that will best meet the needs of your community.

The committee members can also be helpful in gaining public support for the wellhead protection effort. Educational efforts to involve the public and local media are important parts of the wellhead protection effort during the entire process.

2. Delineate the wellhead protection area

The next step is to identify the recharge area, that is, the land area which contributes water to a well (see Figure 2). Rain and snow falling within the recharge area will seep into the ground, move toward that well, and eventually be pumped out of the well into that community's water supply.

The community then needs to decide what area it will protect to prevent contamination of its wells. This area is the wellhead protection area (WHPA). Ideally, a WHPA would be the entire recharge area. Many times, however, the entire recharge area is too large to be



managed effectively or it may lie partially outside the municipal boundaries.

The WHPA may be determined by a variety of methods, from a circle drawn at a calculated radius around the well to a complex groundwater model. The Department of Natural Resources normally requires that the WHPA for a new well include at least that portion of the recharge area that contributes water within a five-year time of travel, with a minimum radius of 1200 feet around the well. Some communities square off the delineated area so that the WHPA boundaries are streets, rivers, railroad tracks or other easily recognizable landmarks.

3. Inventory potential groundwater contamination sources

Besides rain and snow, pollutants from a variety of activities on the land can seep into the ground and move toward your wells (Figure 1). A few of the many potential sources of pollutants are listed

here. If not managed properly, all of the following can have an adverse effect on groundwater. Therefore, it's important to inventory the existing and potential sources of groundwater contamination within the WHPA.

- Chemical storage
- Landspreading of sewage treatment plant sludges
- Road salt usage and storage
- Animal feedlots
- Use and spillage of fertilizers and pesticides
- Accidental spills
- Septic tanks and drainfields
- Underground storage tanks
- Underground pipelines and sewers
- Landfills
- Mines, pits and quarries

4. Manage the wellhead protection area

Once the existing and potential sources have been identified, the final step is to take actions to minimize the potential for contamination of your community's wells. Your community has a number of tools to manage the land around its wells and protect its wells from contamination. Some of the available options are adoption of zoning restrictions or ordinances, development of contamination contingency plans, working with facilities within the WHPA to minimize potential pollution problems, purchasing property around its wells and conducting a public educational program. In deciding what management tools are appropriate, the community should assess the adequacy of existing programs to protect groundwater.

Why should my community develop a Wellhead Protection Plan?

- Wellhead protection is an investment in the future of your community. Your community can take a proactive step to reduce the potential for contamination of your community's wells and to make your water supply safe for you and your children.
- Wellhead protection is a way your community can make its own decisions. Your community can tailor its wellhead protection plan to meet its specific circumstances.
- Wellhead protection is cost effective. A modest investment in a wellhead protection program can save a community tens to hundreds of thousands of dollars by preventing contamination. If a well becomes contaminated, a community can be faced with costs to clean up groundwater, treat groundwater, drill a new well, provide an alternate source of water to its customers or some combination of actions. An ounce of prevention is truly worth a pound of cure.
- Wellhead protection assures a positive climate for economic growth. A community with an active WHP program can avoid the adverse economic impacts associated with a contaminated water supply, which might include a loss of jobs or a drop in real estate value.