

Citizen's Guide to the Michigan Wellhead Protection Program



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Michigan Rural Water Association's
Source Water Protection Program Article Series

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THE MICHIGAN WELLHEAD PROTECTION PROGRAM: PROTECTING YOUR DRINKING WATER

THE IMPORTANCE OF GROUNDWATER

In the United States, groundwater is the source of drinking water for half of the total population and 95% of the rural population. Groundwater is also used for raising livestock, agriculture, and industry. Within Michigan, approximately 50% of the population relies on groundwater to supply their drinking water needs. Community drinking water systems are at risk from many possible contamination sources and no community wants to face the loss of its drinking water.

In an effort to protect this valuable resource, the State of Michigan established the Michigan Wellhead Protection Program (WHPP). This program is a voluntary program for communities that use groundwater to supply their wells.



WHAT IS THE WELLHEAD PROTECTION PROGRAM?

First, it is important to determine the area which contributes groundwater to the public water wells. Communities will hire a consulting firm to do a thorough review of the groundwater that is supplying the drinking water wells. This study will determine how fast the groundwater is flowing and in what direction the groundwater is flowing. This area is called the Wellhead Protection Area (WHPA). At the edge of this area, it would take ten years for contamination to reach the community wells. This is the area that communities will manage and protect. Steps to manage and protect this area include:

1. **ESTABLISH A TEAM.** Identify people that play an important role in groundwater protection. Examples include managers, water superintendents, zoning administrators, teachers, fire department officials, business leaders, farmers and residents.
2. **CONTAMINANT SOURCE INVENTORY.** Identify known and potential sites of contamination within the WHPA and include in a contaminant source inventory list and map.
3. **MANAGEMENT STRATEGIES.** Provide mechanisms that will reduce the risk of contamination. Examples include plugging abandoned wells and implementing zoning ordinances.
4. **CONTINGENCY PLANNING.** Develop a contingency plan in case of a water emergency.
5. **PLAN FOR NEW WELLS.** Provide information on existing groundwater availability, the need for new wells and the vulnerability of the existing wells to contamination.
6. **PUBLIC EDUCATION.** Educate the public about drinking water protection through brochures, placemats, presentations, newsletters and other educational activities.

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