



Hartland Township Wellhead Protection Program (WHPP)

Hartland Township depends upon groundwater sources to supply drinking water to select areas of the Township. The Township provides water to residents and businesses within these areas through a municipal water system. The Township has developed and implemented a Wellhead Protection Plan (WHPP) to protect the Township's groundwater supplies from contamination by formulating and implementing a set of actions and management practices to protect the water supply from potential sources of contamination.

The Township's WHPP was prepared in accordance with guidance documents available from the Michigan Department of Environmental Quality (MDEQ). Michigan's Wellhead protection program was developed in response to the 1986 amendments to the federal Safe Drinking Water Act (SDWA). Wellhead protection is a voluntary program which is implemented on a local level through the coordination of activities by local, county, regional and state agencies. Funding for the development of the WHPP was provided by the Township and the state of Michigan through the Wellhead Protection Grant Program.

A copy of the Township's WHPP is on file at Township Hall. If you have questions, or for more information on WHPP, please contact the Department of Public Works at dpw@hartlandtwp.com or call (810) 632-7498.

What Is Wellhead Protection?

The Township's WHPP provides background information about the Township's water supply system, recommended procedures for maintaining the WHPP, an implementation schedule, and a guide to resources that can be used as the WHPP is implemented.

The mission of the Hartland Township Wellhead Protection Program is as follows:

To assure Hartland Township residents and businesses a clean, safe, reliable, and secure drinking water source that is both sustainable for current needs and adequate for realistic future development by responsibly promoting the protection of the resource through public awareness and education.

Hartland Township's WHPP addresses the following seven elements:

1. Roles & Responsibilities – Identifies the individuals that are responsible for the development, implementation, and long-term maintenance of the WHPP.
2. Wellhead Protection Delineation Area – Identifies the area which contributes groundwater to the Township municipal water supply system.
3. Contaminant Source Inventory – Identifies known and potential sources of contamination within the WHP Delineation Area.
4. Wellhead Protection Area Management – Provides mechanisms which will reduce the risk of existing and potential sources of contamination from reaching the Township's municipal water supply well(s).
5. Contingency Plan – Provides information that is useful for planning in the event of a water supply emergency.
6. New Wells - Establishes criteria for siting and development of new groundwater supply wells for expansion of the Township's municipal water supply system.
7. Public Education and Outreach – A plan to generate community awareness of Wellhead Protection by focusing on public education and dissemination of WHP information.

The Township has a WHP Team that meets regularly to assure that the WHPP is implemented and updated.

Goals of Hartland Township's Wellhead Protection Program

The Township's primary goal for the WHPP is the formulation and implementation of a set of actions and management practices to protect the water supply from potential sources of contamination. To accomplish the objectives of the WHPP, the Township has identified specific goals described below.

Goal 1: Provide the local governmental framework, such as regulations and policies to prevent groundwater contamination from occurring at and around businesses and industries which store, use or generate quantities of hazardous substances or petroleum products in the Township's delineated WHP protection areas.

Goal 2: Provide for the protection of the Township's drinking water supply through comprehensive planning and the development of a WHP Protection Overlay Zone Policy.

Goal 3: Enhance communication and coordination between local and state agencies on pollution incidents to assure adequate cleanup for natural resource and public health protection.

Goal 4: Update the inventory and mapping of all known potential sources of contamination within the WHP Delineation regularly.

Goal 5: Notify local, state, and federal agencies to minimize the impacts of listed sites of environmental contamination to groundwater resources within the Township's WHP Delineation Area.

Goal 6: Site new wells properly to maximize yield and minimize potential contamination.

Goal 7: Establish WHP Delineation Areas based on the 10 year capture zone identified in the delineation process when new wells are developed.

Goal 8: Maintain an up-to-date contingency plan for alternative drinking water supplies to help mitigate contamination of the current water supply.

Goal 9: Inform landowners of the potential impacts of abandoned wells within the WHPA; complete an inventory of abandoned private wells within the WHP Delineation Area; and seek funding to work towards properly abandoning any such wells.

Goal 10: Implement a public education program to inform residents and businesses on the importance of clean groundwater and what they can do to protect their drinking water.

Goal 11: Seek additional funding from local, state and federal sources to implement the WHPP.

Wellhead Protection Delineation Area

A WHP Delineation Area is defined as “the surface and subsurface areas surrounding a water well or well field, which supplies a public water system, and through which contaminants are reasonably likely to move toward and reach the water well or well field within a 10-year time of travel.” The WHP Delineation Area, or area that contributes groundwater to the Township’s Municipal water supply well network was approved by the MDEQ in 2011. The WHP Delineation Area is the portion of the Township that is the of the WHPP efforts. The WHP Delineation Area will, from time to time be modified to reflect the changes in well capacity, well field expansion, or other factors.

[Here](#) is a diagram that depicts the location of the Township’s approved WHP Delineation Area.

Contaminant Source Inventory

The goal of a contaminant source inventory (CSI) is to identify and locate existing and potential sources of environmental contamination, within the Township’s WHP Delineation Area. The purpose of this CSI is to identify facilities within the wellhead protection areas that may represent a “threat” to the Township’s municipal water supply system. A comprehensive knowledge of these “threats” is essential in the development and implementation of effective management and public education strategies for the WHPP.

[This diagram](#) displays all identified potential sources of contamination within the delineated wellhead protection area on the diagrams included and also provides a listing of the sources. This CSI diagram depicts the WHP Delineation Area in relation to the following:

- Properties of known contamination based on regulatory database listings of released hazardous substances or petroleum products
- Properties that are potential sites of contamination based on regulatory database listings documenting the use, storage or disposal of hazardous substances or petroleum products, and
- Properties where zoning allows land uses that could include the storage and use of significant quantities of hazardous substances or petroleum products

- Properties where zoning allows land uses that could include the storage and use of significant quantities of hazardous substances or petroleum products

Wellhead Protection Overlay Zone Policy

While there are numerous state and federal laws governing environmental protection, the first line of responsibility falls to the local government. Land use planning and zoning is the most appropriate place for local government to institute regulations that will protect groundwater resources.

The development of additional environmentally-based site plan review standards to augment existing standards is a prudent approach to groundwater protection in the WHP Delineation Area. Site plan review is a process by which proposed developments are examined to determine if they comply with zoning and other regulations. In this process, the Township Planner and Engineer review the proposals and provide their recommendations to the Planning Commission which has the authority to approve or deny a site plan. The Township uses an enhanced site plan review processes to help prevent land-use activities that can cause groundwater contamination. This is accomplished through enforcement of a [Wellhead Protection Overlay Policy](#) and through continued use of an Environmental Checklist.

Wellhead Protection – Public Education and Outreach

Successful implementation of the Township's WHPP requires active involvement of the people who live and conduct business in the WHP Delineation Areas. Wellhead protection cannot be completed without establishing strong partnerships and cooperation throughout the community. To improve the quality of the program and improve its chance for success, the Township will attempt to involve citizens in the development and implementation of each of the program elements.

The local Team which meets regularly with the goal of determining processes to inform the community of the source of the Township's drinking water and the importance of protecting it. The Township will also be working toward developing strategies to educate local businesses owners and residents who own property in the delineated wellhead protection area about wellhead protection.

Some additional information regarding the Township's WHP efforts can be found below:

[Brochure](#)

[Consumer Confidence Report](#)