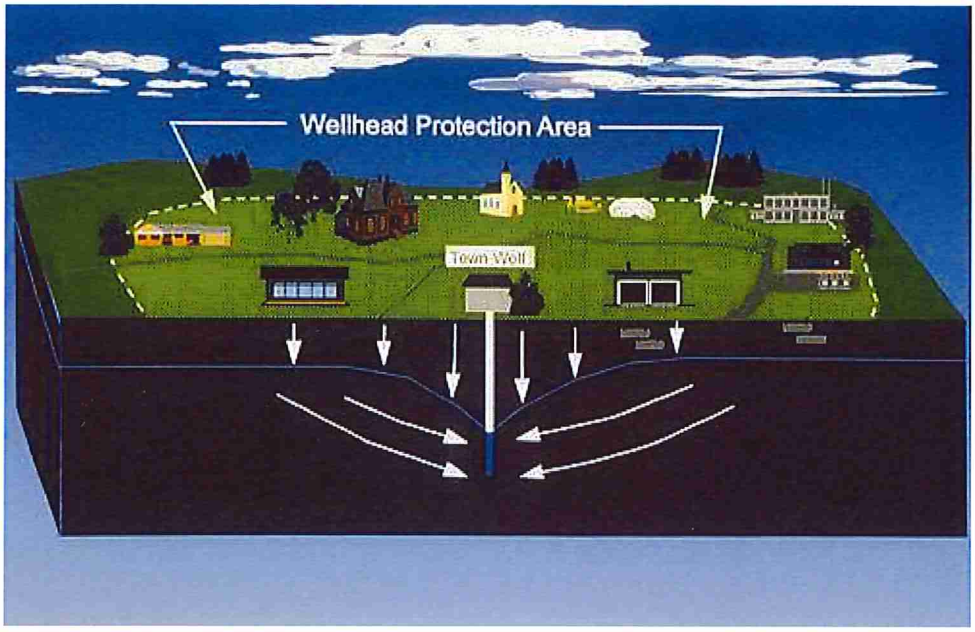
High Quality Drinking Water Starts with

Wellhead Protection



Wellhead Protection means protecting the area surrounding public drinking water supply wells, and in turn, protecting drinking water supplies. Drinking water in Lake City comes from wells right under our feet! Protection of this vital resource is important.

Expanding development within the wellhead footprint brings with it more potential sources of contamination and stresses the quantity of water available. Water quality can be affected by agricultural practices and the use of fertilizers and herbicides in urban settings is very high on a per acre basis. Water quantity can be affected by developing industries that require extensive amounts of water and by growing populations. All of these situations increases the need for more proactive management strategies. Whether a community is faced with an existing impairment to the water source or is seeking ways to prevent contamination, wellhead protection makes good social, economic and environmental sense.

Each state has a different approach to wellhead protection, but in general, wellhead protection involves:

- **Delineating the Wellhead Protection Area**

  A map is drawn to illustrate groundwater flow, time-of-travel zones, and geographic boundaries to determine the land area that could influence groundwater. The area is determined from information such as the geologic makeup of the aquifer the well draws from and the well's pumping capacity.

- **Conducting a Potential Contaminant Source Inventory**

  An inventory of all potential sources of drinking water contaminants is conducted, usually compiled from existing state regulatory databases and on-the-ground observations. Common potential contaminants can include agricultural, commercial, industrial, and other practices.

- **Contaminant Source Management**

  The potential contaminant sources identified during the inventory should be managed in a way to prevent any groundwater contamination. Local communities have many options, including ordinances, zoning restrictions, land purchases, conservation easements, voluntary actions, encouragement of best management practices, and local government cooperative efforts.

- **Contingency Planning**

  Wellhead protection includes having a plan in place to provide a replacement source of drinking water in the event of a well shut-down due to contamination, natural disaster, major mechanical or physical breakdown, vandalism, or other identified cause. The plan often includes short-term temporary sources of drinking water and options for long-term water sources, such as a new well.

- **Public Education**

  The public should be informed throughout the wellhead protection process and involved in efforts to protect groundwater and drinking water. Efforts can include making the wellhead protection plan available for public review, holding public meetings, and outreach through mailings and media.

Management Makes Sense!

Wellhead Protection Area (WHPA) Management is the next step communities can take after developing a wellhead protection plan. This step leads communities through identifying management strategies that will have the greatest effect on reducing the threat of contamination to their drinking water source.

Lake City has a Wellhead Protection Area Management Planning Manual, which lists the objectives to be addressed to protect our drinking water. Starting in 2019 the Lake City Environmental Commission will be working with Lake City's staff to implement more objectives required to safeguard our drinking water. In the meantime, think about the fact that our drinking water comes from wells within the city limits, and that what each of us does with our land will ultimately impact our drinking water.