

Groundwater Specialist
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Nearly everyone in the drinking water business is familiar with the essential steps of wellhead protection: 1) define the area to be protected; 2) identify potential threats that exist in the wellhead protection area; 3) manage the potential threats in order minimize their impact; 4) plan for the future by developing emergency and contingency plans; 5) educate and involve the public. I'd like to take a few moments to focus on the first three steps of wellhead protection. At this time, every community has been provided with a wellhead protection area map. The purpose of the map is to display the geographic area that a town should focus their efforts upon in order to protect the source of their drinking water. If you have misplaced your wellhead protection area map, don't hesitate to call Nebraska Rural Water or the Nebraska Department of Environmental Quality (NDEQ) to get another copy. Your local natural resources district (NRD) should have a copy as well.

Within the last few months I have had the opportunity to assist several communities with identifying threats to groundwater within their wellhead protection areas. This is known as a contaminant source inventory (CSI). A few items that might be documented during a CSI include bulk fuel storage, a dry cleaner business, livestock operations, septic systems, abandoned wells, and land uses. We should take a moment to talk a little more about abandoned wells. It is not uncommon to find abandoned wells during a CSI. Many old, vacant farmsteads are going to have one (or more) old well that needs to be properly decommissioned. Wells such as this pose a significant risk to our drinking water as they provide a direct pathway for contaminants to enter an aquifer. They are also a safety hazard to people, livestock, and pets. Now for the good news: there is 100% cost share to properly decommission wells within and next to wellhead protection areas. Your local NRD will cover 60% and currently NDEQ has funding available to cover the other 40% of the cost. This opportunity won't last forever so it is in a towns best interest to seek out abandoned wells now rather than later.

This brings us to our next topic: management of the wellhead protection area. Many towns have discovered that it takes a combination of regulatory and non-regulatory activities to provide effective management of their wellhead protection area. Regulatory strategies might include a backflow prevention program, or permit requirements for certain activities such as drilling a new well in town or the wellhead protection area. Non-regulatory activities would include working with landowners to utilize cost-share to decommission wells, or by sending useful information to rural residents about how to properly operate and maintain their septic systems. As always, I encourage anyone with questions to give me a call to discuss wellhead protection (800/842/8039-office or 402/480/3596-cell). Thanks for your time.