

Managing Your Wellhead Protection Area

Every Nebraska community has a wellhead protection area map and were all pretty familiar with it's purpose: to display the land area that contributes groundwater to a community's drinking water wells. After a community identifies potential contaminants within the wellhead protection area, the next step is to prioritize which contaminants are the most significant and develop a management strategy for protecting groundwater that is also used a drinking water. Management typically falls within two broad categories: regulatory and non-regulatory. We should take a few moments to discuss each of these.

Regulatory management of a wellhead protection area is fairly straightforward. This can include passing ordinances that are protective of groundwater/drinking water, zoning to control land uses around and within the wellhead protection area, and establishing permit requirements for certain activities (such as drilling a well). These options may or may not be available to every community, depending on the community's legal jurisdiction and the location of community wells. If a community's wells are not located within the it's legal jurisdiction, non regulatory management methods become even more important as a way to protect the source of your drinking water.

Non regulatory management may be as easy as promoting the programs and services of local agencies to the public. Here are a few examples.

- Recycling programs can be an important part of wellhead protection. A gallon of used oil can contaminate a million gallons of fresh water, so the impact on soil, surface water, and groundwater is significant. Used oil contains toxic metals such as lead, arsenic, and cadmium so even small amounts of used oil should be recycled. Many used oil recycling programs are administered at the county level, or there may be a local auto parts store that will accept used oil and send it to a recycling facility.
- Education is also an essential part of wellhead protection management. Many communities have developed useful ways to share information with the public. Newsletters, articles in the local newspaper, water bill inserts, posters and brochures are all excellent ways to reach the public. Several communities take 4th and 5th grade school children on an annual field trip to the wellfield, treatment facilities, water tower, and other parts of the water system. This allows students to learn a few things about how a water system works and why they are able to turn on the tap for a glass of water at any time.
- Each of the Natural Resources Districts (NRD's) offer cost share for activities that provide benefits to both farmers and communities with wells that could be impacted by farming practices. NRD cost share programs often include deep soil testing and irrigation water analysis for nitrates. Hopefully you have already heard that there is currently 100% cost share available through your local NRD and the Nebraska Department of Environmental Quality to properly decommission unused or abandoned wells located in a wellhead protection area

and the corresponding community. Another noteworthy program is the Conservation Reserve Program (CRP). Administered by the Farm Service Agency, the program encourages farmers to establish permanent vegetation on land that needs protection from erosion. CRP in a wellhead protection area can help assure the safety of municipal water supplies from fertilizers and pesticides. Some landowners in the wellhead protection area may be eligible for an additional payment above the normal CRP incentive.

So whether you are developing a wellhead protection plan for the first time or revisiting your existing plan, feel free to give me a call if you would like assistance. I look forward to hearing from you.