

Nebraska Wellhead Protection Network Meeting Notes
Thursday, August 28, 2003, 11:00 a.m. – 3:30 p.m.

Lake McConaughy Visitor's Center
Ogallala, Nebraska

Attending: Vince Alfano, Paul's Repair; Daryl Andersen, Little Blue Natural Resources District (NRD); Verlon Barnes, Natural Resources Conservation Service; Paul Baumgartner, Keith County Groundwater Guardian Team and Paul's Repair; Sara Christopherson, University of Minnesota Cooperative Extension; Clancy Dempsey, The Groundwater Foundation (TGF); Dick Ehrman, NARD; Elaine Frasier, Dundy County Planning and Zoning; Russ Gierhart, Upper Big Blue NRD; Jim Goeke, University of Nebraska Conservation & Survey Division; Jeff Gottula, Nebraska Department of Environmental Quality (NDEQ); Bruce Hansen, NDEQ; Rachael Herpel, TGF; Rick Houck, Keith County Planning and Zoning; Gerald Huntwork, Frontier and Hays County Zoning; Jan Hygnstrom, University of Nebraska Cooperative Extension; Dan Inman, NDEQ; Deana Kelley, NDEQ; Marty Link, NDEQ; Chris Loeffler, Perkins County; Lynn McGaha, Keith County Groundwater Guardian Team; Wayne Madsen, Trenton Groundwater Guardian Team; Jonathan Mohr, NDEQ; Jason Moudry, Upper Niobrara White Natural Resources District; Ralph Pulte, Nebraska Department of Health and Human Services (NHHS); Mike Sousek, Lower Platte North Natural Resources District; Elbert Traylor, NDEQ; Darla Walther, Frontier County; Hope Wise, NRWA.

I. Welcome

Special thanks went to everyone who was able to attend the meeting.

II. Geology of Keith County and Its Impact on Groundwater Quality and Quantity

Jim Goeke began his presentation by reminding the group that freshwater is a finite resource, groundwater feeds many of the streams in Nebraska, and the Ogallala Aquifer formation is unpredictable vertically as well as horizontally. Goeke presented information on rainfall, drought cycles, and irrigation development in Nebraska. All have a major impact on the availability and use of groundwater in the state. For example, the years leading up to 1975 were incredible boom years for the installation and use of irrigation wells. Data showed that if pumping rates were to continue to increase at pre-1980 levels, the future of Nebraska's groundwater resources would be uncertain at best, depleted at worst. From 1980 to 1996 massive water table declines across Nebraska did not occur (except in the Republican River Basin). During this sixteen-year period, the state experienced heavy rainfall that served to keep groundwater levels steady. Now that we have entered another cycle of severe drought, this may change.

Goeke went on to describe the uniqueness of the geology in Keith County. At least five different aquifer types are present and each presents its own opportunities and challenges.

This is only a small part of Jim Goeke's presentation. Those who weren't able to make it to Ogallala are encouraged to hear his Groundwater 101 presentation at the next NE WHPN meeting November 5.

III. On-Site Wastewater Management in Nebraska

Jan Hygnstrom gave an overview of on-site wastewater treatment systems and some of the challenges related to their use. Estimates are that up to 40% of systems in the United States are failing (e.g. backing up, causing effluent to surface, or are not built to code). An estimated 10% are backing up. An average of 6,000 new systems are installed in Nebraska per year.

Currently in Nebraska there is no on-site wastewater treatment system registration or licensing required. A task force was created to address issues related to on-site wastewater treatment systems in Nebraska. The task force created the Nebraska On-Site Wastewater Association (NOWWA) to work with contractors and installers. NOWWA also has worked to develop legislation to govern the installation and maintenance of systems, such as LB 94 that became effective August 31, 2003. LB 94 requires all contractors (i.e. anyone who sites, lays out, constructs, reconstructs, alters, modifies, repairs, inspects, or pumps on-site wastewater treatment systems) to be licensed or certified beginning January 1, 2004. An advisory committee is currently working on the specifics of how to implement LB 94. Hygnstrom also reviewed the *Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems*. More information about the national guidelines is available on the U.S. Environmental Protection Agency's web site – <http://www.epa.gov/owm/mtb/decent/index.htm>.

IV. A Closer Look at Conventional and Alternative On-Site Wastewater Systems

Sara Christopherson presented information on conventional and alternative on-site wastewater treatment systems. She began by describing the function and use of systems in her home state of Minnesota. She then provided information on alternative systems, including: aerobic tanks, sand filters, peat filters, constructed wetlands, recirculating filters, drip distribution and textile filters. For more information about septic systems and the education and information resources made available by the University of Minnesota Cooperative Extension, visit their web site at <http://septic.umn.edu>.

VI. Next Meeting Date and Time

It was clear at the meeting that the group needed a longer meeting that allowed for much more networking time. Consequently, the **next NE WHPN meeting** will be held from **9:00 a.m. to 4:30 p.m.** at the **Embassy Suites (1040 P St.) in Lincoln**. The primary purpose of the meeting will be to get an update on wellhead protection-related activities in Nebraska from members of the network and look for opportunities for collaboration.