



NE WHPN Meeting Notes

Tuesday, November 13, 2007, 10:00 a.m. to 2:30 p.m.
Nebraska Department of Environmental Quality's Van Dorn Facility
2717 S. 8th Street, Lincoln, NE

Present: Daryl Andersen, Little Blue Natural Resources District (NRD); Deana Barger, Nebraska Department of Environmental Quality (NDEQ); Dick Ehrman, Nebraska Association of Resources Districts; Steven Fischbein, NDEQ; Belinda Fowler, NDEQ; Russ Gierhart, Upper Big Blue NRD; Randy Gunn, South Central NE RC&D; Bruce Hanson, NDEQ; Sara Hartzell, Lincoln/Lancaster County Planning Department; Rachael Herpel, The Groundwater Foundation (TGF); John Keith, Lincoln Water System; Ed Kouma, City of Lincoln; Cindy Kreifels, TGF; Marty Link, NDEQ; Amanda Meder, City of Lincoln; Steve Merkel, Landscapes Unlimited; David Miesbach, NDEQ; Matt Morrissey, Campbell's Nursery; Jamie Oltman, TGF; Jim Pelster, City of Sidney and Cheyenne County; Ralph Pulte, Nebraska Department of Health and Human Services; Harold Reynolds, Midwest Assistance Program; Craig Romary, Nebraska Department of Agriculture; Mary Schroer, NDEQ; Elbert Traylor, NDEQ; Don Vogel, Nebraska Corn Growers Association; Jason Vogel, U.S. Geological Survey; Scott Wilke, Firethorn Golf Club.

I. Welcome and Introductions

Rachael Herpel welcomed participants to the meeting and asked everyone to introduce themselves and share whatever they would like to related to wellhead protection in Nebraska. Daryl Andersen informed the group that Chester, Hebron, and Blue Hill were working on wellhead protection area management with Charles Bausch of the Nebraska Rural Water Association (NRWA). Harold Reynolds informed the group that he was working with two rural water systems – one near Wausau and another in Polk County. Belinda Fowler is focusing on updated wellhead protection area maps. Dick Ehrman mentioned that the Upper Loup NRD in Thedford is working on a small Clean Water Act Section 319 program grant to do water quality monitoring. Dave Miesbach mentioned that NDEQ is working on livestock facility reviews; these facilities may have an impact on drinking water if they are located in a wellhead protection area.

II. Nebraska Wellhead Protection Program Updates

Dave Miesbach gave an overview of the wellhead protection plans that have been approved by NDEQ; a total of 77 wellhead protection plans have now been approved. He handed out a list of the plans. Chadron's is the latest plan to be approved.

The group continued to discuss how best to provide assistance to communities as they develop state-approved wellhead protection plans. For example, a *Wellhead Protection Area Management Planning Manual* is currently being developed by The Groundwater Foundation with support from NDEQ; communities interested in using a community-based process to develop their wellhead protection plan could use the manual as a guide.

As was mentioned at the previous meeting, town clerks and water system operators could be recruited and trained as local wellhead protection advocates and leaders. In support of this idea, Herpel informed the group that the next NE WHPN meeting would be held as part of the NRWA conference in Columbus on March 19, 2008. The group suggested that the session provide an overview of wellhead protection basics, along with case studies, information about grant funds, and opportunities to ask questions. The group reaffirmed that they would like to put on a similar session at the town clerks' conference. For more information about the NRWA Annual Conference, visit <http://www.nerwa.org>.

Herpel informed the group that she is planning a session for the Nebraska Planning and Zoning Association Conference called "Source Water Protection: Planning to Protect Your Water Supply." The session will be held on Wednesday, February 20, 2008 at the Mid-Town Holiday Inn in Grand Island and is made possible by support from the NDEQ Source Water Protection grant program. Herpel anticipates that the session will reach a number of planning and zoning officials that are not yet familiar with the source water protection process. For more information about this conference, visit <http://www.npza.org/conference.htm>.

III. Controlling Run-off to Benefit Water Quality – Part I

Mary Schroer of NDEQ gave a storm water management overview. Schroer provided information on the kinds of permits and regulations that are in place to manage storm water and safeguard water quality and quantity. Current regulations focus on:

- Phase 1 – storm water discharges associated with industrial activity, include construction sites larger than five acres, and municipal separate storm sewer systems (MS4) serving populations over 100,000;
- Phase II – storm water discharges associated with construction sites between one and five acres and MS4s serving populations between 10,000-100,000;
- Industrial Storm Water – eleven industrial activities are regulated, ranging from facilities with effluent limitations to light industrial activity;
- Construction Storm Water – permits are required for construction sites over one acre or less than one acre if the site is part of a larger common plan of development or scale; and
- MS4 – manages the pollutants discharging into the storm sewers of all municipalities with populations over 10,000. These municipalities must develop a storm water management plan that include six minimum control measures.

For more information, a complete copy of Schroer's presentation is available for download at <http://www.groundwater.org> - simply jump to the Nebraska Wellhead Protection Network page. Anyone with questions may also contact Schroer directly at 402-471-8330.

Steve Fischbein of NDEQ provided information on storm water injection wells, which are governed by Nebraska Title 122. The goal of the Title 122 program is to protect underground sources of drinking water from contamination by fluids (i.e., any material or substance which flows or moves whether in a semi-solid, liquid, sludge, gas, or any other form or state). For more information, a complete copy of Fischbein's presentation is available for download at <http://www.groundwater.org> - simply jump to the Nebraska Wellhead Protection Network page. Anyone with questions may also contact Fischbein directly at 402-471-4290.

IV. Controlling Run-off to Benefit Water Quality – Part II

Amanda Meder with the City of Lincoln Watershed Management Division and Matt Morrissey with Campbell's Nursery provided an urban watershed perspective by presenting a case study of the Holmes Lake Watershed Project. Meder described how Holmes Lake Watershed is a sub-watershed within the Antelope Creek Watershed; after 40 years of residential and commercial development, Holmes Lake had extensive nutrient and sediment deposits. The lake was dredged – 173,000 pounds of phosphorus and 289,000 pounds of nitrogen were removed as part of the excavated material. The Holmes Lake Watershed Water Quality Improvement program is now in place to promote the use of no phosphorus fertilizer, rain barrels, and rain gardens. Morrissey described how to build a rain garden; he pointed out that the University of Nebraska-Lincoln Extension has also published a series of NebGuides on how to build, design, and plant a rain garden. For more information, a complete copy of Meder and Morrissey's presentation is available for download at <http://www.groundwater.org> - simply jump to the Nebraska Wellhead Protection Network page. Anyone with questions may also contact Meder directly at 402-441-7075.

Steve Merkel with Landscapes Unlimited and Scott Wilke with Firethorn Golf Club provided a green space perspective. Merkel described the Groundwater Guardian Green Site (GG Green Site) program, which was developed by a committee convened by TGF. The goal of the program is to recognize good stewards of groundwater by encouraging managers of highly-managed green spaces to implement, measure, and document their groundwater-friendly practices. Highly-managed green spaces can include, but not be limited to:

- Golf courses
- Ball fields
- Educational campuses
- Residential, recreation, and office parks

Site managers complete a GG Green Site application to collect data and document the environmental impact of their practices, along with the nature of their site and both internal and external education efforts. The application serves dual purposes – first, as a way to objectively and uniformly evaluate each site's practices; and second, as an educational tool for site managers and staff to learn about the positive impact of the work they do. Wilke described what it is like for a site manager to fill out the GG Green Site application. He emphasized that the application does compel a manager to think about how their facility impacts water quality, in addition to their use of water. Both Merkel and Wilke made the point that water is expensive and site managers are learning more and more about how to minimize both their chemical and water inputs.

The GG Green Site program is administered by TGF; all information submitted by the sites to TGF is confidential and will not be shared without the permission of the site. For more information about the GG Green Site program, visit www.groundwater.org and jump to Groundwater Guardian Green Site or contact Rachael Herpel at 402-434-2740.

Tom Franti with the Biological Systems Engineering Department at the University of Nebraska-Lincoln provided a rural watershed perspective by giving a presentation on how to control agricultural non-point source pollution to protect water quality. The primary agricultural non-point source concerns are pesticide runoff, nutrient runoff, sediment, and land applied animal “stuff.” A number of agricultural practices have been identified as best management practices (BMPs) because they reduce non-point source pollution, are cost effective, are willingly adopted by farmers, and do not create other problems. For more information about which BMPs work best in particular circumstances, a complete copy of Franti’s presentation is available for download at <http://www.groundwater.org> - simply jump to the Nebraska Wellhead Protection Network page. The following NebGuides also focus on controlling runoff to benefit water quality in watersheds:

- *Understanding Watersheds*, NF631 – <http://www.ianrpubs.unl.edu/sendlt/nf631.pdf>
- *Protecting Your Watershed*, NF632 – <http://www.ianrpubs.unl.edu/sendlt/nf632.pdf>

V. 2008 Meeting Plans – Next Steps

Herpel reminded everyone that the next NE WHPN meeting would be held as part of the NRWA Annual Conference in Columbus on March 19. She then thanked everyone for coming. The meeting adjourned before 3.