



**Nebraska Wellhead Protection Network
Meeting Notes**

Monday, February 25, 2013 9:30 a.m. - 12:00 p.m.
Kearney Holiday Inn
110 South 2nd Avenue, Kearney, Nebraska

Present: Daryl Andersen, Little Blue NRD; Ryan Chapman, Nebraska Department of Environmental Quality (NDEQ); Edward Drozd, Lower Loup NRD; Dick Ehrman, Lower Platte South NRD; Laura Johnson, NDEQ; Terry Julesgard, Lower Niobrara NRD; Marty Link, NDEQ; David Miesbach, NDEQ; Jason Moudry, Lower Loup NRD; Pat O'Brien, Nebraska Association of Resources Districts; Ryan Reisdorff, South Platte NRD; Harold Reynolds, Midwest Assistance Program (MAP); Craig Romary, Nebraska Department of Agriculture; Mary Schroer, NDEQ; Jenny Sidlo, Hastings Utilities; Alyssa Smola, Nebraska Association of Resources Districts; Annette Sudbeck, Lewis and Clark NRD; Courtney Woodman, Upper Big Blue NRD; Cindy Kreifels and Jamie Kelley, The Groundwater Foundation (TGF).

Jamie Kelley (The Groundwater Foundation) -welcomed the participants to the meeting and went over the agenda for the day. Dave Miesbach mentioned that the WHPN meeting could possible qualify for CEUs for well driller certification. Kelley will look into that possibility and see if we can get CEUs in arrears for those needing them. Harold Reynolds asked about CEUs for Water and Wastewater certification. Kelley introduced Miesbach as the first speaker.

Presentation: *Nebraska Geology 101*, David Miesbach, NDEQ

Miesbach discussed Nebraska geology and the importance of understanding the many aquifers which underlie the State and how they came to be. Miesbach talked about the changing hemispheres, uplifts and faulting, seas advancing and retreating, deposition and erosion, and global climate change throughout time. The last 65.5 million years are when things changed that impact us most today such as the seas receding for good, the formation of the Rocky Mountains, volcanism in the West, global climate change, erosion and deposition, and uplifts. He also talked about the many geologic formations that make up Nebraska and the aquifers that were formed as a result. Everything we know about geology we have learned from what is left of the earth. Miesbach noted the important role that University of Nebraska Conservation and Survey play in mapping what is known about groundwater in Nebraska. Miesbach's PowerPoint presentation is available on the WHPN website page at www.groundwater.org/pe/newhp.html.

Presentation: *Economics of Water*, Laura Johnson, NDEQ

Johnson shared information from "The Importance of Water to the US Economy" report that was published by EPA's Office of Water in September 2012. In addition to sharing some economics background information, Johnson shared information about the value of water in several key sectors including public water supply systems, agriculture, manufacturing, mining & energy extraction, and electric power. In the end, Johnson pointed out that if water is so valuable to us in these many sectors of our lives, shouldn't we spend more to ensure product (water) sustainability. Johnson's PowerPoint presentation is available on the WHPN website page at www.groundwater.org/pe/newhp.html.

Nebraska Wellhead Protection Program Updates

Kelley introduced the Program Update portion of the meeting. She encouraged everyone to participate in the round robin, ask questions, and provide updates on recent Wellhead Protection field work or programs.

Jason Moudry (Lower Loup NRD) - shared that the NRD received funding from NDEQ for the monitoring of the vadose zone and sampling. He will be working with six communities that have nitrate levels over 5 parts per million. Also need to review and update delineation maps. Genoa had to move a well field. Litchfield and Elba are working towards their state approved wellhead protection plans.

Terry Julesgard (Lower Niobrara NRD) - is conducting a feasibility study for a regional water supply system that would supply Niobrara, Center, Santee, and possibly a rural water system. Test holes were dug 220 - 230 feet deep.

Ryan Reisdorff (South Platte NRD) - working with Lodgepole on wellhead protection plan. Cabella's Corporate offices built a bio retention cell but with no more than it rained last year it remains to be seen how useful it will be.

Ed Drozd (Lower Loup NRD) - working with Olsson Associates on a 3-year study age dating the water and isotope sampling. The NRD may be looking at possible metering and working on well abandonments in wellhead protection areas. Columbus is working to update their wellhead protection plan.

Annette Sudbeck (Lewis and Clark NRD) - working with Coleridge on wellhead protection plan. The Lewis and Clark, Lower Elkhorn, Lower Niobrara and Upper Elkhorn Natural Resources Districts (NRDs) are holding a public meeting to explain the Bazile Groundwater Management Area (BGMA) plan and to allow for public input. The public meeting will be held at the Community Center in Plainview at 6:00pm on Wednesday, March 27, 2013.

Mary Schroer (NDEQ) - shared that she works closely with the 319 program/grants as well as the Source Water Protection grant program. The Source Water Protection RFP will come out later this year, probably the end of June with funding available in October.

Laura Johnson (NDEQ) - works on the Integrated Report for Nebraska and the TMDL program.

Dave Miesbach (NDEQ) - working to get the Water Well Standards changed - they are currently on the Governor's desk. The main change is that all water wells will need a five foot seal instead of two foot seals. This will be a better standard for future construction. Cedar Bluffs is serving as a pilot for a study that expands on the Grout Study to determine if the annular space can be sealed in abandoned wells.

Cindy Kreifels (The Groundwater Foundation) - shared information about The Groundwater Foundation's National Conference which will be held October 15-17, 2013 at Mission Inn Resort near Orlando, Florida. The theme for the conference is "Tools for Groundwater Sustainability." The Groundwater Foundation is also working with the Nebraska MEDs (Medication Education Disposal Strategies) group to get pharmacies in Lincoln to take-back unused medications for proper disposal. This project hopes to go state-wide in the next 2-3 years. In the interim, there are DEA take-back days throughout the state on April 27, 2013.

Jamie Kelley (The Groundwater Foundation) - shared information about The Groundwater Foundation's new mobile app for iPad and iPhone called Water1der. The app poses questions about groundwater in several formats. The app will be formally launched on March 1 at the

Michael Forsberg Gallery from 3:30 to 8:00 p.m. Kelley also discussed the WHPN Legislative Breakfast coming up on March 15th, 7:00 - 9:30 a.m. at the State Capitol. There is limited poster space available - contact Kelley if interested. NDEQ has easels available if needed. The WHPN Education Committee will be working on a brochure about "Why Wellhead Protection?". This will be a supplement to the current Wellhead Protection 101 brochure and will discuss the benefits of wellhead protection including water for the future, economic impacts, regulatory impacts, and emergency planning.

Ryan Chapman (NDEQ) - MUD is working on a wellhead protection plan and has public meetings scheduled for this fall at both plants. Lincoln completed a model for groundwater delivery model for system. Working with Ord to update delineation maps. Mentioned it is a good idea to keep wellhead protection ordinance separate from the approval of the wellhead protection delineation maps so if maps need to be changed or updated, you don't have to address the whole wellhead protection plan again. Chapman also wrote the 2012 Monitoring Report which is now available.

Jenny Sidlo (Hastings Utilities) - providing management training for ag producers and lawn care training. Hastings is providing data to the Ag Chemical Clearinghouse.

Daryl Anderson (Little Blue NRD) - working on the Aquifer Storage Restoration plan to clean up and store nitrates through the creation of a mound west of Hastings to decrease nitrates. If this works it could be a model for other communities. Working with Edgar to gather baseline data from monitoring wells. Working with Juniata to abandon wells.

Courtney Woodman (Upper Big Blue NRD) - has prepared a database for reporting fertilizer usage and water use in the Hastings Management area. All farmers have a sensor in at least one field. Polk is sampling beyond the wellhead protection area and recording information every two years to get complete dataset for a baseline. Starting to work with Aurora on their contaminant source inventory and they want to develop a management strategy similar to Hastings.

Harold Reynolds (MAP) - works with communities in Nebraska, Iowa, and now southern Minnesota providing technical assistance to small water and wastewater systems. Currently working with Auburn, Norfolk, Humphrey, Platte Center on rural water systems. **Study with JEO on the water system for the South Sioux area to Bancroft for results.** The Wausa, Magnet, McLean, Coleridge, Beldin system is now running.

Alyssa Smola (NARD) - Sending a press release and social media about National Groundwater Awareness Week. Providing media/information about the Bazile Groundwater Management project.

Craig Romary (Nebraska Department of Agriculture) - working on an NRD analysis project. Working with NDEQ on the Ag Chemical Clearinghouse to get data online. Revising the Pesticide Management Plan to create a more formalized process.

Presentation: *Impacts of Hydraulic Fracturing, Marty Link*

Due to time limitations, Link did not give a full presentation at this meeting and will do so at a future meeting. Link acknowledged that people have concerns about fracking and the chemicals that are being injected into the earth. She asked people to visit www.fracfocus.org to get specific information by location as to what chemicals are being used.

The Education Committee met briefly to discuss future plans and will meet again in April.

Next Meeting: The WHPN will have its Legislative Breakfast Meeting at the State Capitol on Friday, March 15, 2013 from 7:00 to 9:30 a.m.