

NEBRASKA WELLHEAD PROTECTION NETWORK

Thursday November 2, 2017

McCook Public Library 802 Norris Avenue McCook, NE

Summary

Present:

Ryan Chapman – Nebraska Department of Environmental Quality (NDEQ); Sam Radford – NDEQ; Amanda Jones – NDEQ; David Miesbach – NDEQ; Beth Ramsey – Nebraska Department of Health and Human Services (DHHS); Steve Rowell – DHHS; Steve Jillson – DHHS; Vince Kuppig – DHHS; Jason Moudry – Lower Loup NRD; Jesse Dutcher – City of McCook Utilities; Chris Miller - Miller & Associates; Bruce Curtis – Upper Republican NRD; Sara Brock – The Groundwater Foundation

Sara Brock (The Groundwater Foundation) – Called the meeting to order, welcomed those present and went over the agenda.

Round Robin Notes:

The Groundwater Foundation – Sara Brock talked about the progress on the Recharging Groundwater Education project, a partnership with NDEQ, EPA Region 7, and the Nebraska Department of Education. The Recharging Groundwater Education project has a goal of conducting eight teacher workshops to get groundwater education tools into classrooms as a part of an integrated curriculum aligned with the Nebraska College and Career Ready Standards for Science.

Regarding the future of the Wellhead Protection Network, Sara announced that the date of the annual Groundwater Legislative Breakfast will be January 11th, with informational posters in the rotunda about a week before the event. Additional blog posts and articles in The Groundwater Foundation's quarterly

newsletter "The Aquifer" will summarize and promote a series of risk communication workshops headed by JEO Consulting Group and NDEQ.

NDEQ – Sam Radford announced additional dates for future risk communication workshops working towards establishing a statewide campaign on nitrates. These workshops, conducted by Steve Wolf of JEO Consulting Group, will include a wide array of partners and develop a unified message on reducing nitrate contamination. Each particular workshop touches accomplishes those goals by focusing on the following objectives:

- Target workshop participants based on NRD staff, project partners and stakeholders who
 will be presenting plan information to the public, leading stakeholder meetings or public
 open houses, or talking to land owners or producers one-on-one to encourage them to
 adopt best management practices.
- 2. Provide participants with a working understanding of science-based risk communication principles and techniques that will assist them in overcoming communication barriers that can occur between communities, producers, municipalities and regulatory agencies in resolving nonpoint source contamination program management objectives.
- Complete hands on training, group exercises, and group-specific scenarios practice risk communication techniques which will allow participants to successfully communicate and build trust in difficult situations including all forms of public presentations and public meetings.

NDEQ attended the Water Symposium, held in collaboration with the University of Nebraska – Lincoln Extension offices in late October. Sam also announced that the Source Water Protection Grant RFP will be available earlier than usual (in January) in order to be able to maximize funding efficiency to projects. Ryan Chapman clarified that 319 federal funding is split between internal sub-grants for programs, such as the Wellhead Protection Network, and on-the-ground BMP implementation that is aligned with the EPA's Nine Element Watershed Management Plan. Communities looking to develop Wellhead Protection Plans or Watershed Management Plans are ineligible for this type of funding because the planning stage of the plans is not covered under the RFP.

In specific reference to the Wellhead Protection Network, Ryan also announced that he is working to update the Groundwater Foundation's contract for the Wellhead Protection Network and consolidate some of the meetings into a full day CEU workshop.

David Miesbach shared that they are currently working to get the annual Water Quality Legislative Report ready by December 1st. With DHHS moved to be closer to NDEQ, collaborative action on this report will be much easier.

Amanda Jones is currently reviewing the Aquifer Storage and Restoration Project permit that was the focus topic of the June 2017 WHPN and state that it will be ready by January 15th, 2018.

DHHS – Beth Ramsey, Steve Jillson, Vince Kuppig, and Steve Rowell collectively announced the move of DHHS into the NDEQ building for better collaboration and ease of communication. While they are still getting used to the new set-up, they are starting to cross-train with NDEQ and are reviewing wellhead protection and wastewater plans.

Miller & Associates – Chris Miller is working to develop new technologies for nitrate treatment and in particular is focusing on ion exchange projects. He noticed, in areas that Miller & Associates had previously worked, that if there are high nitrate levels, then there tends to be a correlation with high levels of iron and manganese. By removing iron and manganese, they have found that nitrate tends to remain within acceptable levels and by moving water treatment in that direction, they hope to mitigate nitrate contamination of drinking water.

Lower Loup NRD – Jason Moudry brought up projects pertaining to Broken Bow's watershed management plan, including working to install levees in order to reduce flooding. Meetings including Broken Bow's city council, the DEQ, and Lower Loup NRD will evaluate options to develop a Wellhead Protection Plan in order to qualify for 319 funding in the future.

City of McCook Utilities – Jesse Dutcher shared that McCook has one of three Class I Non-hazardous Deep Injection Wells in the state of Nebraska. McCook is currently working with Theresa Jedd at UNL in order to develop plans for emergency water management, including management in drought conditions. McCook is nearly finished updating the water mains, some of which were cast iron pipes from the 1920's and 30's and were no longer adequate to service their 3500 connections.

PRESENTATIONS

Chris Miller addressed well-siting for public water supplies and described the necessary requirements a wellfield should meet in order to be a responsible purchase by a city council. Reference the powerpoint titled "Well Siting" for details.

Jesse Dutcher relayed the history of McCook's water use and treatment, well-field development, and the mechanisms behind the treatment and disposal for nitrate and uranium waste. Reference the power point "McCook Utilities" for details.

TOURS

Jesse Dutcher led the group on a tour of the McCook's Water Treatment Plant and Class I Nonhazardous Deep Injection Well.

Attendees earned 2 CEU hours from the Water Well Standards and 3 hours from the Water Operator categories of the DHHS.