

Risk Communication Training to Combat Nitrate Contamination

By Sara Brock, The Groundwater Foundation

The Nebraska Department of Environmental Quality (NDEQ), in collaboration with JEO Consulting Group, Inc. (JEO), has developed a series of five risk communication workshops for community leaders and stakeholders that are working to reduce nitrate contamination in groundwater. These workshops are a step towards establishing a statewide campaign on nitrates, including a wide array of partners, and developing a unified message on reducing nitrate contamination by completing the following goals and objectives:

1. Workshop participants, including Natural Resources District (NRD) staff, project partners and stakeholders, encourage the public to adopt best management practices at public meetings, stakeholder meetings, public open houses, and by talking to land owners or producers.
2. Provide participants with a working understanding of science-based risk communication principles and techniques to overcome communication barriers that can occur between communities, producers, municipalities, and regulatory agencies in voluntary solutions for nonpoint source contamination management.
3. Complete hands on training, group exercises, and group-specific scenarios to 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.

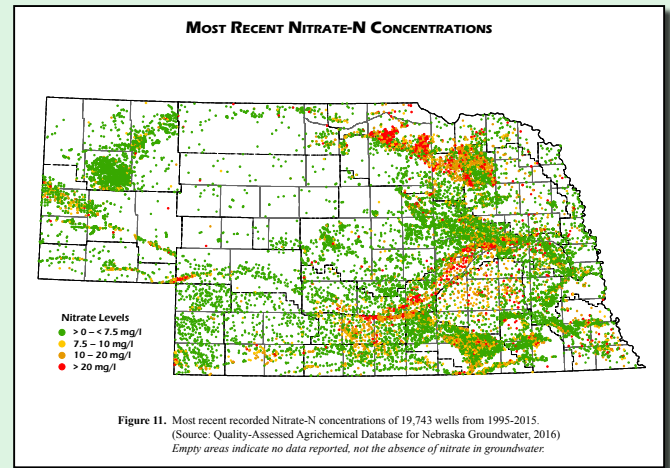
The first workshop was August 22-23 in Norfolk, Nebraska, which lies just south of the newly designated Bazile Groundwater Management Area (BGMA), which encompasses parts of four NRDs, three counties, and eight towns. It was led by Steve Wolf, senior facilitator and public involvement strategist with JEO, who has 37 years of experience in issues management that includes several years with the U.S. Department of Defense Environmental Public Affairs Policy Advisory Board. Risk communication,

Wolf stresses, is a two-way street: a purposeful exchange of information between the public, the experts, and decision makers. With so many individuals involved in the BGMA, effective risk communication is essential. To that end, the participants at the workshop were a diverse group of stakeholders with interests inside the BGMA, including commodity groups such as the Nebraska Cattlemen's Association and Farm Bureau, agencies like the NRDs, and representatives from local utility districts.

"The universal goals of risk communication are firstly, to establish trust and credibility in the message and the messenger and secondly, to create a collaborative environment in which to solve a problem," Wolf states.

Nitrate contamination and treatment is a highly controversial topic in an agricultural state so readily supplied with fresh groundwater, like Nebraska. In 2012, an acute drought caused groundwater shortages throughout the state and contributed to a spike in nitrate concentrations in the Lower Elkhorn NRD (LENRD), bringing attention and support to finding a solution for this issue that was long in the making.

Brian Bruckner, LENRD assistant general manager, recalled the wake-up call to treat drought as a natural disaster, i.e. something to plan for and take measures to reduce negative impact on residents in the area. When developing Wellhead Protection (WHP) plans with communities, it is not uncommon to meet stiff resistance from farmers and producers who are worried about government regulation over their operations. Without the assistance of local zoning councils or NRDs, comprehensive WHP plans are virtually impossible to pass and enforce because many WHP area boundaries lie outside a community's jurisdiction. Wolf emphasizes this point time and time again in his workshop curriculum.



Agencies hoping to significantly change farming practices in Nebraska need to reframe their message so that the public is informed but not needlessly bogged down with technical information. Likewise, agencies can't ignore the years of experience and stewardship of landowners who must inform the agencies whether or not these formal assessments are valid.

The focus of the workshops is not just a study in how and why people react the way they do. They are also a concerted effort to provide community leaders, with various public affairs experience, a toolbox with which they can effectively communicate the hot-button topic of nitrate contamination. Armed with realistic scenarios provided by NDEQ, Wolf is able to provide hands-on training on how to give presentations at public meetings using risk communication skills participants learn in the workshops. Examples of how to avoid contentious public hearings and increase public education by employing an "open-house" style public hearing was a unique and popular tool according to first workshop's participants. The LENRD plans to use this innovative format to hold a public hearing around drought mitigation in late 2017. Bruckner explained that informational booths would be displayed outside of the hearing room, in a sort of quasi-open house layout, thus shifting the hearing's atmosphere from one of dominance to one of dialogue. A station or room would be dedicated to providing written testimony, giving supporters and opponents a chance to be heard without the pressure of speaking publicly.

Recognizing Service to Groundwater

Jack Daniel to Receive 2017 Kremer Award

Jack Daniel, retired Administrator of the Office of Drinking Water and Environmental Health at the Nebraska Department of Health and Human Services (DHHS), has been selected to receive the 2017 Maurice Kremer Groundwater Achievement Award.

The Kremer Award is presented annually by the Groundwater Foundation to an outstanding Nebraskan who has made a substantive contribution to the conservation and protection of Nebraska's groundwater.

"Jack has been important to Nebraska's water resources," said Groundwater Foundation President Jane Griffin. "Nebraska's groundwater has benefited from Jack's decades of work. On behalf of all of us at the Groundwater Foundation I am honored to recognize Jack with the Kremer Award."

The Kremer Award is chosen each year by a selection committee appointed by the Groundwater Foundation's Board of Directors. It is named for Senator Maurice Kremer, who spent 20 years in the Nebraska Legislature where he was best known for his contributions toward protecting the state's water resources, earning him the nickname "Mr. Water."

Daniel is a native of Crete, Nebraska. He earned a degree in Wildlife Biology from South Dakota State University in 1967. He served in the Nebraska National Guard as a field radio specialist before an honorable discharge in 1972, then went on to receive a Masters of Environmental Science Degree from the University of Oklahoma.

Daniel started at the Nebraska Department of Health in 1968, then served at DHHS from January 1997 through his retirement in December

2014. He worked primarily with the department's Public Water Supply Program, Water Well Contractors' licensure program, and other environmental health programs. He also served two terms on the Association of State Drinking Water Administrators.

Since retiring, Daniel continues his hobbies of beekeeping, bird-watching, and managing the land to promote wildlife. He manages 170 acres of CRP ground focused on pollinator-related crops and flowers. Daniel believes long-term land management is critical to promoting environmental diversity, and that strong leadership is important to ground and surface water management.

Selection committee member and past Kremer recipient Lee Orton nominated Daniel for the award. "My main reason for nominating Jack was because of his 'can do' management style," Orton said. "His attitude about finding ways to get things done versus finding reasons why something could not be done helped Nebraska become a leader in groundwater research, management and national leadership contributions."



▲ Jack Daniel, retired Administrator of the Office of Drinking Water at Nebraska Department of Health and Human Services.

For more information about the Maurice Kremer Groundwater Achievement Award, please visit www.groundwater.org/kremer.

PAST KREMER AWARD WINNERS

2016: Tom Carlson	2008: Ann Bleed	1999: Richard Harnsberger	1992: Ted Filipi
2015: Susan Seacrest	2007: Jim Cook	1998: Les Sheffield	1991: Ralph Marlette
2014: Robert Kuzelka	2006: Ed Schrock	1997: Robert B. Daugherty	1990: Warren Fairchild
2013: Ron Bishop	2005: Roger Patterson	1996: Frank A. Smith	1989: Val Kuska
2012: Dayle Williamson	2004: Darrell Watts	1995: Fred Salmon and Family	1988: Eugene Reed
2011: Lee Orton	2003: Chris Beutler	1994: Virginia Smith	1987: Maurice Kremer
2010: J. Michael Jess	2002: Eugene Haarberg	1993: Robert B. Crosby	1986: Vincent Dreeszen
2009: Vance Anderson	2001: Jim Goeke		
	2000: Wayne Madsen		

Jason Kvols, Northeast Regional Director of Farm Bureau, noted that in previous public hearings, leaders or board members were often situated on a stage or platform with members of the gallery seated slightly lower. The style presented by Wolf, however, removed that power dynamic and placed opponents and proponents on an even footing, moving the perception of the hearing away from "Us against You" to encouraging dialogue.

Both Kvols and Bonita Lederer, Nebraska Cattlemen's Association, are working to incorporate this dialogue-centric style of hearing into their internal

communication. Lederer believes that an important next step for the Association is to include outreach articles in their news publication, and begin introducing NRDs and other regulatory agencies outside times of crisis. Preemptively establishing trust between the members the public and those regulating WHP or groundwater management areas is a vital step in creating an environment where everyone works together to combat nitrate contamination. Lederer and Kvols, who represent the interests and experience of producers and farmers, returned to their organizations with a clear, unified message of

groundwater protection.

Developing a statewide effort to reduce nitrates in groundwater first requires the establishment of trust and credibility in the message and the messenger. While many communities struggle with fear, doubt, and denial, it is possible to reframe the message into education and voluntary cooperation where scientists, decision-makers, and farmers can learn from each other and create an integrated groundwater management model.

For more information about the risk management workshop series, please visit www.deq.state.ne.us.

Read the entire *Aquifer*