Annual Joint Meeting
Nebraska Ground Water Monitoring Advisory Committee (NGWMAC)
&
Nebraska Surface Water Monitoring Council (NSWMC)
Thursday, October 28, 2010, 10:00 AM-1:00 PM
Lincoln-Lancaster County Health Department
Lincoln, Nebraska

MEETING NOTES

1. Introductions

The meeting was called to order at about 10:05 AM. Those present included:

Will Meyers, NDEQ	Larry Angle, LPNNRD	Ken Bazata, NDEQ
John Lund, NDEQ	Howard Isaacs, NDHHS	Steve Gaul, NDNR
Pat O'Brien, NARD	Jane Griffin, GW Foundation	Lyle Christensen, ACEC/HDR
Dan Schulz, LPSNRD	Chris Witthuhn, LPSNRD	Ryan Rezac, LPSNRD
Dustin Wilcox, LBBNRD	Tyler Weishahn, LBBNRD	Jenny Coughlin, NDEQ
Ryan Chapman, NDEQ	Dave Rus, USGS	Ginny McGuire, USGS
Mark Burbach, UNL	Dan Inman, NDEQ	Dan Snow, UNL
Dave Miesbach, NDEQ	John Hargrave, USACE	Nicolas Cantarero, LLCHD
Dave Ihrie, NDEQ	Jim Newman, LLCHD	Keith Hayden, USEPA
Dick Ehrman, LPSNRD		

2. Short Business Meetings
   a. NSWMC

Google Groups: Will Myers provided an update on the NSWMC Google Groups listing. Google Groups will soon no longer support document uploads, so Myers is proposing to change the NSWMC to a traditional email listing utilizing attachments to distribute information.

NPDES Rule for pesticide application: Myers updated the group on NDEQ's efforts to comply with new USEPA requirements for National Pollutant Discharge Elimination System (NPDES) permits involving application of pesticides near surface water. A summary document and the draft regulations from NDEQ's website are attached providing more information on this issue.

Lyle Christensen described a four-state meeting (NE, KS, IA, MO) he attended in September 2010 involving nonpoint source (NPS) monitoring in surface water. This issue is largely being driven by concern over hypoxia in the Gulf of Mexico, and the monitoring strategy described is being patterned after similar efforts in

the Chesapeake Bay region. Discussion in this meeting focused on NPS reduction by percentages of applied material, rather than being driven by standards. It also emphasized voluntary cooperation rather than traditional regulation, with program compliance linked to possible forfeiture of Farm Program dollars or publication of noncompliant names as means of promoting compliance. Later, during the NGWMAC portion of the meeting, Christensen described the tie-in this meeting had to ground water, especially the utilization of tile drains and their effect on streams, particularly in Iowa (although similar systems are in use in various parts of Nebraska). Discussion during the four-state meeting centered around whether or not such discharges should be considered point sources, and thus regulated differently than they are now.

John Lund noted that NDEQ has completed a summary of its water quality monitoring programs, and this has been emailed to Council members. Lund stated his opinion that the collaborative efforts between local, state, and federal conservation and water quality entities has resulted in some of the best coordination in the country.

Dave Rus described some of USGS' new efforts involving analysis for imazapyr, which is used in the management of *Phragmites* infestations. There aren't yet any standard analytical methodologies for imazapyr, so the data won't be published. However, methods are being developed and hopefully data will be publishable in the future. For 2010, eight out of eleven samples taken at Louisville showed low-level detections of imazapyr.

b. NGWMAC

Pat O'Brien read an update from Mary Spalding on the Ag Chemical Clearinghouse. In 2009, 21 NRDs and the USGS submitted data for NRD nitrate monitoring. The Lower Platte South NRD was the only NRD that sampled for pesticides in 2009 and used an analytical lab. In addition, USGS submitted several years of pesticide data for the Papio-Missouri River NRD. So, with the exception of one non-reporting NRD, all available NRD-related nitrate and pesticide data are in the database, which is complete through 2009. The current database was sent to NDEQ in mid-October for their annual report, and NDNR's website should be updated early in November. A considerable amount of USGS nitrate and pesticide data is being processed. Currently, the database contains over 91,000 nitrate results for about 22,500 wells, and approximately 313,000 pesticide results for about 5,000 wells. 177 pesticides and degradates are represented in the database. Requests to NRDs for 2010 data will go out soon; UNL is requesting responses by March 1, 2011. Also, Mary and Roy Spalding and Craig Romary have been reviewing the 2006-2007 NRD ELISA data, O'Brien and Romary will be reviewing 2008-2009 data. There have been discussions on criteria and reporting limit concentrations for this data going into a database

(separate from the Clearinghouse), but the mechanics of such are still in development—i.e. a link on the Clearinghouse website or some incorporation into the database but clearly showing these are ELISA results.

Dave Miesbach gave an overview of the 2010 annual ground water report to the Legislature, which is in development. The current report makes use of the 91,000 nitrate results mentioned above, and the overall trend statewide is a decline in nitrate levels. However, Miesbach noted that about 31% of the samples are still above 10 mg/l and there has been a large amount of older data entered into the Clearinghouse, so it's not possible to say that this downward trend is actual. With the recent completion of historical data entry, this trend should be able to be more accurately assessed in the future. On the pesticide side, more pesticide degradates are being detected due to improved analytical techniques. Newman asked if municipal data can be included, as there are some restrictions on access to data on these wells. Miesbach responded that this data can only be included if it's in the Clearinghouse (e.g. if a municipal well has been sampled by an NRD). Howard Isaacs said that NDHHS data for municipal wells is often only for the finished water and may not reflect individual well water quality. He also noted that Nebraska is the only state in Region 7 that promotes wellhead protection as a means of achieving compliance, and that there is some concern that USEPA might revisit the question of whether or not this is an acceptable compliance approach. Christensen said that there is ongoing research looking at the possibility of dropping the MCL for nitrate from 10 to 5 mg/l; he asked what percentage of the Clearinghouse nitrate results are over 5 mg/l. Miesbach responded that he's not sure, but it might be as high as 80%. Isaacs noted that this research is from Iowa, and involved elderly women and thyroid conditions, so it's uncertain how it might apply to the larger population. Christensen stated that one of the looming issues, both now and especially if the MCL is reduced, is residual waste from treatment, as many systems would have no other option but treatment. Jim Newman agreed, noting that some subdivisions in Lancaster County are now requiring in-home reverse osmosis units to deal with nitrate issues.

Ryan Chapman described some new wellhead protection publications that NDEQ has produced and made them available for the group. Dick Ehrman noted that LPSNRD is currently working with eight wellhead protection areas on advanced phase nitrate management. Isaacs said that many of these nitrate issues reflect the recent grout study results, showing that even current well construction standards may allow for contamination of wells from surface sources. As a result, he said NDHHS and the Well Drillers' Board is looking at new well construction standards to address these issues. Newman noted that LLCHD has used NDHHS' downhole camera to identify construction problems with some wells in Lancaster County, and the results are similar to those of the grout study.

Jane Griffin updated the group on the Groundwater Foundations Groundwater Guardian Green Site program. There are currently 190 Green Sites in Nebraska, and the goal of these sites is to more effectively manage their green spaces (parks, golf courses, etc.) to protect ground water. Griffin highlighted the progress the program has made, pointing out that for 2009 there was a documented reduction of 4500 pounds of nitrogen in participating sites, whereas for 2010 that total skyrocketed to 106,000 pounds. In 2010, the program also generated about 36% reductions in pesticide use, and 110 million gallons of reduced water usage. She also described some of GWF's general ground water awareness programs, which are highlighting community-focused efforts in Wayne, Minden, and Crete.

Dan Snow told the group that he will be chairing a session of the Association of Analytical Chemists' meeting in Lincoln on June 11, 2011. He is thinking that the session might deal with rapid screening methodologies, and would like to have some volunteers from the NRDs and state agencies that are utilizing ELISA methods for water quality parameters. He will also be translating this effort into an international work group dealing with the same issue. Snow then stated that UNL's School of Natural Resources is in the process of recruiting a new aquatic toxicologist. They have had 40 new applicants after an unsuccessful first attempt, and he thinks that there will be interviews of and presentations by the top three applicants in November and December 2010. He will keep the group advised if anyone wants to attend the presentations. Finally, he updated the group on some reorganization at UNL's Water Center. Mark Kuzila has been named the interim director as the official search has been temporarily suspended while a director for the new Water for Food Center is hired.

c. Ideas for additional attendees/members?

Ehrman reminded the attendees that both of these groups have now been meeting for almost ten years, and it seemed like a good time to reassess the membership and see if additional members would like to join. He stated that both groups' charters allow for new members to be included by a simple majority vote of the membership, and encouraged the members present to bring forward any possible new members for consideration.

3. Presentations:

Following the business meeting, the group was treated to two informative presentations involving both surface and ground water issues:

a. Big Indian Lake 319 Project & Community-Based Planning Process—Scott Sobotka/Dustin Wilcox/Tyler Weishahn, Lower Big Blue NRD

b. HOLEY COW!!!—Catastrophic Failure of a Livestock Waste Lagoon—Dave Miesbach, NDEQ

As Ehrman was not present for the presentations (he was making a catering run), summaries of the presentations are not provided in these notes. However, if you would like more information and/or a copy of the presentations, feel free to contact Dick Ehrman, Will Myers, and/or the presenters and we'll try to arrange that for you.

4. Next meetings (tentative):
   a. NSWMC: Wednesday, April 20, 2011
   b. NGWMAC: Wednesday, April 13, 2011

   Both of these dates are tentative; Myers and Ehrman will be in contact with the groups in the next several weeks with more information.

5. LUNCH! BBQ 4 U!
   a. Again, the barbecue was great and, judging by the amount of food consumed, it met with the group's approval. Following lunch, members returned to work and/or a place suitable for a nap.

   With no further business, the meeting adjourned at approximately 1:15 PM

Respectfully submitted,

Dick Ehrman, NGWMAC Chair