

Joint meeting of NSWMC and NGWMAC, 10/10/2012

Meeting minutes as recorded by Dave Rus, USGS

1. Attendees
 - a. Dave Rus, Alan Kolok, Dick Ehrman, Howard P. Isaacs, Elizabeth Esseks, Craig Romary, Ryan Chapman, Patrick Hartman, Mike Archer, John Miyoshi, Dan Schultz, Jim Newman, Dan King, Aaron Young, Clancy Dempsey, Tyler Naprstek, Pat O'Brien, Marty Link, Dan Inman, Jane Griffin, George Cunningham, Karen O'Connor, Scott McIntyre, Lyle Christensen, Richard Holland, Ken Bazata, Dana Divine, Colleen Steele, Rick Wilson, Dan Snow, others that the sign-in sheet never made it to.
2. NSWMC update: Dave looked into a replacement for the Google Docs page that could provide an online way of sharing documents that is easy and neutrally hosted. He didn't think the alternatives out there warranted it. He's looking now at a web page that could archive meeting minutes. Marty Link offered that NDEQ might be a good host agency for such a web page.
3. Agency updates
 - a. USGS
 - i. New web-based data portal developed that provides access to EPA-STORET data and USGS-NWIS data simultaneously; <http://www.waterqualitydata.us/>
 - ii. NAWQA entering it's 3rd decade of sampling
 - iii. Don Rosenberry, USGS research scientist will be presenting at the USGS office in Lincoln on 10/16; See attached flyer
 - iv. UV Nitrate probe currently deployed at Platte River at Louisville. Sensor requires lots of power and is comparatively expensive, but seems to be providing good data:
http://waterdata.usgs.gov/ne/nwis/uv?cb_00630=on&site_no=06805500
 - b. NDEQ
 - i. Working on getting data into STORET
 - ii. 20 x 319 grants have been submitted; Getting GW projects proposed is a challenge (Bazile Cr); Patrick Hartman is the new coordinator
 - iii. Wellhead protection plans have been submitted
 - iv. Nitrate verification study: Compared newly drilled shallow monitoring wells to irrigation wells that have shown high levels; Comparisons ongoing
 - v. Edgar project: Retrofitting wells to seal off grout along the well casing to prevent contamination
 - vi. Fish kills in the Platte Basin
 - vii. Light year for toxic algae
 - c. HHS
 - i. New well construction/decommissioning standards being developed based on the Edgar study; Hope to make a big impact on nitrate

- ii. 80 public water systems that implemented mandatory/voluntary water restrictions; Some systems found that they didn't have ordinances to implement such restrictions; Some were close, but no well failures
 - iii. New contaminants: Chromium6, perchlorate, ...
 - iv. Wildfires: Forest service was taking finished water to help with fire fighting; This has since been resolved
- d. NRD updates
 - i. LPSNRD: Getting inquiries about new wells and neighbors regulating neighbors; Doing nitrate and pesticide monitoring; One report of saltwater intrusion near Bellwood;
 - ii. LPNNRD: Several calls, but most were remedied by lowering the wells; In some areas with wells across multiple aquifers, there's been some dewatering of the upper aquifer; Pumping of the MUD/Lincoln well systems were regulated to prevent the Mead ordinance plant plume from breaking the containment system.
 - iii. Lower Loup: Wells being lowered is solving problems; Lots of applications for new permits; NET grant funding flowmeters; Installing pressure transducers
 - 1. GWMA contract with Olsson's Associates from Fullerton to Columbus along the Loup River: Isotopes for N sources, age-dating for flow paths, hydrogeologic study of how much water, where it's coming from, ...University collaboration; No one answer for the whole state but it looks like cover crops will be an important tool
- e. Agrichemical contaminant database update
 - i. <http://dnrdata.dnr.ne.gov/clearinghouse/>
 - ii. Clearinghouse status as of 10/10/12
 - 1. 201,646 wells; 449,350 analyses; 241 analytes; 101,735 nitrate values; 24,535 wells with nitrate values
 - 2. USGS and LENRD wells are caught up through 2011
 - iii. Dana Divine is taking over Mary Spalding's position with the clearing house;
 - iv. Work will be based out of the CSD department at UNL
- f. Nebraska Dept of Ag
 - i. Provide immunoassay sampling for pesticides: Atrazine only right now; Used to include the -chlor pesticides but they weren't frequently detected
 - ii. Trying to develop a state management plan for pesticides and water quality;
 - iii. Buffer strip program continues
- g. NARD
 - i. 14 different NRDs used immunoassay techniques for pesticides (319 funded):
 - ii. Annual report in progress
 - 1. Ryan Chapman taking Dave Miesbach's duties as he is tasked on the Keystone pipeline
 - iii. Bazile GW Management Area: 4 different NRDs overlap the area; Group put together to address high nitrates in the area

- iv. Ion-selective nitrate probes: Multiple vendors; Didn't see good comparability between the probe data and lab data;
- 4. Presentation by Scott McIntyre, NDEQ coordinator for the response to the Nemaha oil spill: Multiple phases of the response
- 5. Presentation by Alan Kolok, Ph.D., Director, Aquatic Toxicology Laboratory, UN-O
 - a. Supporting information from the presentation can be found at <http://www.unomaha.edu/envirotox/index.php>
 - b. Those interested in becoming a friend of the Nebraska Watershed Network (receiving periodic updates of NWN activities) can email Alan Kolok, akolok@unomaha.edu
- 6. Discussion of next meeting dates were tabled in lieu of the barbeque arriving. Dave and Clancy will be sending out dates to the respective group members in the coming months.
- 7. BBQ lunch from Phat Jacks with thanks to LPSNRD for hosting, Pat O'Brien for providing sodas, and Marty Link for providing peanut butter bars that were a meal in itself.

USGS Presents: Donald O. Rosenberry, PhD., Research Hydrologist

When: October 16, 2012 at 3:00pm
Where: Nebraska Water Science Center
5231 S. 19th St., Lincoln



The importance of groundwater to lakes, wetlands, and streams: New methods, new understanding, the sediment-water interface

The concept that groundwater and surface water are actually one resource, linked at the sediment-water interface of lakes, wetlands, and streams, is now widely accepted by water-resource scientists and managers alike. Recent improvements in tools and measurement resolution have led to better understanding of the physical, geochemical, and biological processes that occur at this important ecotone. These processes and linkages are directly relevant to the public, particularly when they affect property values or endangered species. Don will present examples from out-of-control wetlands and lakes in North Dakota and Minnesota, to highly controlled lakes and rivers in Washington, California, Pennsylvania, and New Hampshire. The lecture will illustrate the dynamic nature of the linkage between groundwater and surface water.

Professional Summary: <https://profile.usgs.gov/rosenber/>

Peanut Butter Bars

(a.k.a. GW-SW Monitoring Committee Bars)

I don't know where I got this – it is cut out from a magazine and says this below the title: “Doris Buddecke, Lake Havasu City Arizona, in the Peanut Butter Treats Category, April 2004”

Crust Ingredient	8x8 cake pan	11x7 cake pan
Dried cranberries	½ cup	1 cup
Boiling water	¼ cup	½ cup
Butter, softened	¼ cup	½ cup
Chunky peanut butter *	½ cup	1 cup
Brown sugar, packed	1/3 cup	2/3 cup
All-purpose flour	1 cup	2 cup
Peanuts, finely chopped	½ cup	1 cup
Filling		
Cream cheese, softened (lower fat ok)	6 oz	12 oz
Granulated (white) sugar	¼ cup	½ cup
Egg	1	2
Chunky peanut butter *	2/3 cup	1 1/3 cup
Lemon juice	1 Tbsp	2 Tbsp
* Do not use Natural Peanut Butter		

- Doubled ingredients in (_) in recipe below....

1. Preheat oven to 350°. Grease pan, set aside. In a small bowl, combine cranberries and water. Cover and let stand 20 minutes. Drain.
2. In a large mixing bowl, beat the butter and ½ (1) cup peanut butter with electric mixer until well combined. Beat in brown sugar. Beat in flour on low speed (mixture will be crumbly). Stir in peanuts and cranberries. Reserve ~ 1 (2) cup of crumb mixture. Press remaining crumb mixture into bottom of greased pan.
3. Bake for 12 minutes.
4. Meanwhile, for filling, beat cream cheese and granulated sugar in a medium bowl with electric mixer until smooth. Add egg(s), 2/3 (1 1/3) cup peanut butter, and lemon juice. Beat until well combined. Spread evenly over baked crust. Sprinkle reserved crumb mixture over top, pressing lightly into filling.
5. Bake ~ 25 min. more or until top is lightly browned and edges are puffed. Cool on a wire rack. Cut into bars.