FROM THE DESK OF MIKE PAQUE

Perceptions of risk are often driven by the media attention given to a particular subject. One of the best examples of this is the hysteria created by some in the media over the topic of hydraulic fracturing. Although there are few if any cases of hydraulic fracturing causing contamination of groundwater, it is viewed by many in the public as a serious cause for concern. Unfortunately, the concerns raised over hydraulic fracturing are totally out of proportion to the real risk it poses. On the other hand some of the most common and serious causes of groundwater contamination such as misused industrial and residential septic systems, nutrients and stormwater are all but ignored. The question is, why? Perhaps it is because if the media points the finger at these causes of contamination it cannot tie them to a particular industry and therefore there is no point of attack. Perhaps it is because these contamination sources are more difficult to pin down. Whatever the reasons, if we want to decrease groundwater pollution we must focus on known causes of contamination.

EPA RELEASES FINAL FY 13 EN GRANT SOLICITATION NOTICE

EPA has released the FY 2013 National Environmental Information Exchange Network Grant Program Solicitation Notice. States, Federally recognized Tribes, and Territories are eligible to apply. The Notice is available at www.epa.gov/exchangetnetwork/grants. Applications are due 9 November 2012.

In FY 2013, EPA expects to award an estimated $10,000,000 for 40-50 grants of up to $300,000 for individual applicants and $500,000 for partnerships. The number of awards will depend on the final amount of EPA’s appropriation for the Grant program, the number of applications received, the amounts of proposed budgets, and the outcome of EPA’s reviews. Applications may be submitted as hardcopy or electronically at Grants.gov. EPA anticipates that it will inform applicants of its selection decisions in or around April 2013 and plans to issue awards by 31 July 2013.

Questions should be directed to EPA’s Salena Reynolds at 202.566.0466 or reynolds.salena@epa.gov.

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Special points of interest:

- Updates on hydraulic fracturing legislation and regulation
- What’s Happening at the GWPC
- Upcoming events
- Becoming a supporter of the Research & Education Foundation
STATES TAKING THE LEAD ON HYDRAULIC FRACTURING CHEMICAL DISCLOSURE

The map shown at right details the status of states with respect to chemical disclosure and the use of FracFocus. As further details about chemical disclosure legislation and rule making become available they will be conveyed in this space. Some recent legislative activity includes the following states:

- Oregon (Currently developing recommendations to Executive and Legislative branches)
- Utah (Currently undertaking rule making)
- North Carolina (Legislation pending HB 1064)
- Michigan (Supervisor of Wells Instruction 1-2011)

The GWPC will hold its annual UIC Conference this coming January, in Sarasota, Florida. The main focus of the conference this year will be on Class I municipal wells and Class V wells used for groundwater recharge, saltwater intrusion prevention and aquifer storage and recovery. We will also cover issues related to hydraulic fracturing, aquifer exemption, CO2 geosequestration and much more.

In addition we also plan to hold a separate workshop on well mechanical integrity demonstrations, hold the only Class I UIC operators training available in 2013 and conduct an operator training session for FracFocus 2.0.

Please join us for this important underground injection control conference.

SAVE THE DATE JANUARY 22-24, 2013 (PLEASE NOTE NEW DATES)

More details will soon be available at http://www.gwpc.org/events
WHAT’S GOING ON AT THE GWPC!

- The GWPC Board of Directors will be reviewing updates to the 2007 Groundwater Report to the Nation at the Annual Forum in Nashville next week. New chapters for consideration include: Water Energy Sustainability, Groundwater and Alternative Water Supplies. For more information contact Dan Yates at dyates@gwpc.org.

- Since going live in April, 2011 the FracFocus system has received over 27,000 disclosure records from 261 Companies. The website has been visited by more than 315,000 people from over 134 countries. An updated version of FracFocus is scheduled for testing beginning at the end of September with a full version available this November.

- Source Water and Stormwater Management webinars are available online. Both can be seen at http://www.gwpc.org/resources/webinars.

- GWPC submitted comments to USEPA concerning its draft diesel fuel use in hydraulic fracturing guidance.

- GWPC participates in the Advisory Committee on Water Information and on the ACWI’s Subcommittee on Ground Water. At the ACWI meeting in July, a new Water Resources Adaptation to Climate Change Workgroup (hereafter the “Workgroup”) was formed to promote, support, and provide information for effective management and protection of water resources in the United States as the climate changes and to advise the Department of the Interior and other Federal agencies on water policy as it relates to climate change adaptation. GWPC participated in the creation of the terms of reference for the workgroup and will be participating in its activities. There was an extensive report back from the Subcommittee on Ground Water of which the GWPC is an active member. For more information Contact Mary Musick at musick_ambrose2@msn.com.

- A joint GWPC/NGWA brochure on what landowners need to know about water sampling and analysis near oil and gas production is now available. Contact Mike Nickolaus at mnickolaus@gwpc.org for further details.

CADIZ PLAN TO PUMP GROUNDWATER HEADED TO COURT

An article in the September 5th edition of Pacific Swell (A publication of Southern California Public Radio) says that a private company wants to drill wells into massive aquifers underneath the desert 100 miles east of Barstow and pull billions of gallons of water a year out of the ground. The project’s backers say precipitation will recharge the underground storage. But independent scientists have countered that the project’s more like mining than pumping.

After environmental review, the Santa Margarita Water District approved the Cadiz plan at the end of July. Now the Center for Biological Diversity, the National Parks Conservation Association, and others are suing to block it.

The groups argue that the project’s description is misleading, that the Santa Margarita Water District neglected its responsibilities under the state’s environmental quality act, that San Bernardino County, not the district, should have scrutinized the project, and that the project’s backers should have consulted with state agencies and the Metropolitan Water District.

That water agency would have to move the pumped water, but has not yet committed to the task.

GREAT PLAINS AQUIFER CONFERENCE

The National Ground Water Association (NGWA) is holding an aquifer conference on “Great Plains Aquifers (Beyond the Ogallala)” on October 25-26, 2012, in Omaha, NE. At the conference you will learn about potential solutions to issues affecting the U.S. Great Plains aquifer system – which represents a microcosm of all the challenges facing water allocation and land management today.

**Keynote session:** Impacts of Water Scarcity – Ann S. Bleed, Ph.D., PE, Adjunct Professor, School of Natural Resources, University of Lincoln-Nebraska

**Two panel sessions:**
- How Should We Value Conserved Water?
- Designing More Effective Well Systems

**2012 McElhiney Lecture:** Life-Cycle Economic Analysis of Water Wells – Considerations for Design and Construction

Presentations include the following:
- Accounting for Water Supply and Uses in the Republican River Basin
- Balancing Science and Policy in Water Resources Management
- Basinwide Opportunities for Conjunctive Management in Nebraska
- Beyond (and Beneath) the Ogallala: Water Resources in the Dakota Aquifer in Kansas
- Changing Climate and Land Use Effects on Surface Water and Groundwater Use in the Canadian River Basin
- Climate Variability and Its Implications to Future Irrigation Requirement in Nebraska
- Comparison of Seepage Rates in Playa Lakes in Grassland and Cropland Basins, Texas High Plains
- Denitrification Potential in Vegetated and Nonvegetated River Islands: A Paired Island Monitoring Study
- Field Monitoring of Contamination from Produced Water/Hydraulic Fracturing with Simultaneous pH and Conductivity Sensors
- Improving Water Well Management: Pulling It All Together
- Modeling for Integrated Water Management on the High Plains
- Recharge of 2011 Floodwaters: Flood Mitigation, Aquifer Storage and Recovery Benefits
- Water Mass Balance to Assess the Status of the Ogallala Aquifer in the Texas Panhandle

**Education credits:** This program has been submitted for 13 hours of credit to the Nebraska Water Well Standards and Contractors Licensing board for CEUs applicable to a Nebraska license. Other entities may recognize this conference to fulfill continuing education requirements.

To register for the conference go to [http://www.ngwa.org/Events-Education/conferences/5028/Pages/5012oct12-registration.aspx](http://www.ngwa.org/Events-Education/conferences/5028/Pages/5012oct12-registration.aspx)
STATE WATER ORGANIZATION ELECTS NEW LEADERS

Steve Gunderson, Director of the Water Quality Control Division of the Colorado Department of Public Health and Environment, is the newly elected President of the Association of Clean Water Administrators (ACWA). Gunderson and other officers and directors were confirmed on August 15 in Park City, Utah at the conclusion of the non-profit organization’s 51st Annual Meeting.

“I am honored to have been elected President of the Association of Clean Water Administrators. I look forward to working with the Association’s partners, especially the U.S. Environmental Protection Agency, to ensure that the state and interstate perspective is appropriately considered in the development of national policy related to the quality of the waters in our streams, lakes, reservoirs, and coastal areas,” said Gunderson following his election.

Also serving in new leadership roles following the election are Vice President Shellie Chard-Clary, Director, Water Quality Division, Oklahoma Department of Environmental Quality and Region Ill Board Representative Collin Burrell, Associate Director, Water Quality Division, Department of the Environment, Government of the District of Columbia. Several other Board members and officers were elected to a second term or reappointed.

ACWA is the independent, non-partisan, national organization of state and interstate water program directors, responsible for the daily implementation of the Clean Water Act’s water quality programs. “There is no other national group whose entire agenda is set by a Board of Directors composed only of state and interstate water quality program administrators who are experts in this field,” notes Executive Director and General Counsel Alexandra Dapolito Dunn.

AUTHOR OF BOOK ABOUT WATER SAYS WE ARE WASTING THE DROUGHT!

Charles Fishman, author of the book “The Big Thirst: The Secret Life and Turbulent Future of Water” believes we are wasting an opportunity to use the current drought facing the country to tackle long-ignored water problems and to re-imagine how we manage, use and even think about water. In the August 16, 2012 edition of the New York Times, Mr. Fishman points out that for decades, American have typically handled drought the same way. We are asked to limit lawn-watering and car-washing, to fully load dishwashers and washing machines before running them, to turn off the tap while brushing our teeth. But when the drought is over we all go back to our old water habits.

According to Mr. Fishman, our nation’s water system is a mess, from cities to rural communities, for farmers and for factories. For example, he states that Water utilities go to the trouble to find water, clean it and put it into water mains for delivery, but before it gets to any home or business, leaky pipes send 16 percent or about one out of every 6 gallons back into the ground. This means that utilities lose enough water every 6 days to supply the nation for a day. Shorter showers will not make up for that. However, Mr. Fishman points out that there are steps we can take to change how we use and value water; and some of them can be taken right now.

The average American uses 99 gallons of water at home each day. In the summer, half of that water goes to our lawns, way more than needed. There’s no reason to water in the middle of the day because the sun steals much of the water. There is not even a reason to water every day. Mr. Fishman asserts that lawn watering restrictions placed by cities during droughts should be made permanent. This has been done in Las Vegas and Fresno, California and there is no reason not to do it elsewhere.

The nation’s 55,000 water utilities need to redesign water bills with iPad style graphics that clearly show how many gallons each customer used this month; how that amount compares to last month, and the same month last year; and how it compares to average use by families in the neighborhood. Americans are naturally competitive; customers who know how much water they consume, compared with their neighbors, typically cut their use.

Finally, we must get over our aversion to recycled water. Water recycling should be as routine as every other kind of recycling.
COLLABORATION FOR SAFE DRINKING WATER
BY ANDREWS TOLMAN, ASSISTANT DIRECTOR, MAIN DRINKING WATER PROGRAM

Back in 2003, we completed assessments of risks to public water sources in Maine, with a lot of help from our public water systems. We were surprised to find that the biggest risk to safe and secure drinking water was future development near water sources. With hindsight, we shouldn’t have been surprised. Most water systems had carefully chosen the cleanest, least threatened source they could afford to develop. What they hadn’t been able to do, with a few notable exceptions, is control all the land that provided that source with clean water. As Maine’s population dispersed from town centers to the country in the last thirty years, much of that development encroached on water supply areas.

Neither water systems nor the Drinking Water Program have the tools or authority to manage land use and development, short of buying land. Once the Assessment results sank in, we increased our efforts to find allies who could help us in ensuring safe and secure drinking water for future generations. We looked for entities with common interests in clean water, and in land uses that help generate clean water. Developing alliances like this is a long process, and almost a decade later, we’re still working on it. We do have some examples of progress that encourage us to continue to work with a wide variety of allies.

The Portland Water District has been working on source protection for over a century. Much of their work has concentrated in the Lower Bay of Sebago Lake, where, through a sustained program, they have reached the point where they have ownership or control of nearly all the shoreline area, and have established the Sebago Lake Land Reserve on 2,500 acres of land, where low intensity recreation is allowed by permit. Sebago has a very large basin, and this level of effort is not achievable for an area that includes 440 square miles and parts of 24 towns. Recognizing that reality, PWD has worked with the Lakes Environmental Association on regulatory issues in the upper basin and with numerous land trusts to conserve key parcels. In the Crooked River Basin, the core of the upper watershed, they are working with the Maine Forest Service, Manomet Center, American Forest Foundation, Trust for Public Land, among others. They have also worked effectively with the Soil and Water Conservation District to utilize Clean Water Act Section 319 funds to maintain and improve water quality. Their list of collaborators is more than a page long, and they all have found common ground in supporting land uses that protect and sustain drinking water resources. Portland is receiving an AWWA national award for exemplary source protection this year.

The Kennebec Woodland Partnership was founded in 2009 by the Kennebec Land Trust and the Maine Forest Service to ensure a sustainable future for the forested landscape in Kennebec County. The Partners recognize that our local economy, wood products markets, recreational opportunities, wildlife habitat, water quality, and quality of life are directly connected to the long-term stewardship of our forests and farmlands and the watersheds they protect. The Partnership’s goal is to promote forest stewardship by providing landowners with tools and strategies that will help them make informed decisions about their woodlands for the benefit of both present and future generations. The Maine DWP joined the partnership and has worked with water systems to provide opportunities for participation. One result of this collaboration is that the Kennebec Water District is working with the Maine Forest Service and the Soil and Water Conservation District to see if it’s feasible for them to host a skidder bridge that allows forestry operations to take place with less stream disturbance. The Salmon Falls River forms part of the border between Maine and New Hampshire, so the 330-square mile watershed is shared by 21 towns in the two states. Municipal water systems in both states use the river as a water supply source. The Salmon Falls River is also the largest tributary to the Piscataqua-Great Bay Estuary system, which is the focus of the Piscataqua Region Estuaries Partnership (PREP). The Great Bay Estuary is a natural gem but its water quality is considered impaired.

The Salmon Falls Collaborative was initially launched with seed money and in-kind support from the national Source Water Collaborative (EPA funds), the NH DES, and the Maine CDC Drinking Water Program, with project management provided by PREP and coordination and facilitation by the Wells Reserve Coastal Training Program. EPA Region 1 has provided significant staff support and connections with federal agencies such as USDA-NRCS. The work of the Collaborative has built upon ongoing 319, storm water, MS4, land trust, municipal conservation, lake association, Rural Water and other allied efforts. The Collaborative brings together a number of groups and individuals who were already doing great work in the watershed. We all have common interests in protecting land and water. There is a core group active in planning and coordinating the Collaborative’s activities, a larger circle of about 30 active participants, and about 140 subscribers to a monthly e-newsletter.

The Collaborative developed an Action Plan to help guide future work and address priority actions; it contains five goals: Conservation, Best Management Practices, Prevent Pollution, Clean up existing pollution, and Inspire engagement by communities. The Action Plan identified areas where existing work has left gaps, and the Collaborative is bringing resources, like the NRCS-funded Conservation Activity Plans, to help fill those gaps. The Salmon Falls Collaborative is proud to be the recipient of a 2012 US Water Prize for its work so far.

There are more stories to tell, and more water systems doing excellent work developing networks of partners to help protect shared values and water resources. They include Kennebunk, Kennebunkport and Wells, Sanford, York, Kittery, Biddeford-Saco, and many more. The impetus to do this kind of work has been strongest in southern Maine, where the risk of inappropriate development around water sources is highest.

The Wells National Estuarine Research Reserve Coastal Training Program outreach and facilitation have been a key part of bringing water systems and other interested parties together to work on common water resource issues. The lessons we have learned in those areas can help us work proactively in the rest of the state.
USGS SAYS METHANE IN NEW YORK GROUNDWATER SAMPLES INDICATES NEED FOR MONITORING, OTHER ACTION

Environment Reporter, September 7, 2012

ALBANY, N.Y.—The U.S. Geological Survey released a study Sept. 4 that found naturally occurring methane present at levels that warrant monitoring or other action in 9 percent of groundwater samples taken in New York state.

The study is intended to provide baseline water quality data for dissolved methane as the state considers regulations to limit the use of the natural gas drilling method known as fracking. The state has been reviewing public comments on its draft rules for several months.

"In order to manage water resources in areas of gas well drilling and hydraulic fracturing in New York, the natural occurrence of methane in the state’s aquifers needs to be documented," the report said.

"While many of the greater concentrations of dissolved methane appear to be associated with wells drilled in black shale bedrock or in unconsolidated deposits overlying black shale bedrock, the limited set of existing data does not allow a more concise analysis at this time."

"This study does indicate the need for continued collection of methane data and analysis for individual and public water-supply wells to document methane concentrations for water wells in New York State."

200 Wells Sampled

The study is based on samplings from 200 wells taken from 1999-2011. It found no dissolved methane or methane levels that do not require monitoring in 91 percent of the samples. Methane levels above 10 milligrams per liter—the level at which well owners should monitor or remediate—were found in 7 percent of the samples, according to the study.

Methane levels above 28 milligrams per liter were found in 2 percent of the samples. According to the USGS, such high levels of methane require the removal of potential ignition sources and venting the gas away from confined spaces to avoid explosions.

"Methane in groundwater has been much in the news on account of the potential association with unconventional energy development, but citizens need to be aware that methane occurs naturally in some groundwater systems," Marcia McNutt, the USGS director said in a statement.

"This study reaffirms that methane has natural origins and is commonly present in drinking water aquifers in New York and other parts of the country," John Conrad, a principal in the Poughkeepsie, N.Y., office of PVE Sheffler, said in a statement released by the Independent Oil and Gas Association of New York.

"Gas well operators in the Marcellus Shale natural gas … will test nearby residential wells before, during, and after drilling, which will better document the occurrence of methane in groundwater in New York and Pennsylvania."

NEBRASKA AGENCY DEVELOPS KEYSTONE XL PIPELINE PUBLIC INFORMATION WEBSITE

The Nebraska Department of Environmental Quality has developed a website to keep the public informed about the evaluation being undertaken by NDEQ concerning the Keystone XL Pipeline. The website contains information about the role of the NDEQ in the process, public meetings and documents, press releases, maps, reports and frequently asked questions. It also tells people how to contact the agency to receive additional information. The site explains how people can access the public documents submitted to the agency as part of the review and allows citizens to post their own comments on the review process. The site can be accessed at https://ecmp.nebraska.gov/deq-seis/default.aspx.
GWPC Mission

“The Ground Water Protection Council is a national association of state groundwater and underground injection control agencies whose mission is to promote the protection and conservation of groundwater resources for all beneficial uses, recognizing groundwater as a critical component of the ecosystem.”

“The Ground Water Protection Council provides a forum for stakeholder communication and research in order to improve governments’ role in the protection and conservation of groundwater.”

GROUND WATER RESEARCH AND EDUCATION FOUNDATION

The Ground Water Research & Education Foundation would like to welcome all of the oil and gas companies that have become a part of the FracFocus hydraulic fracturing chemical disclosure registry. Your participation in the registry is an important step towards providing transparency and allaying public concerns about the process of hydraulic fracturing. Continuing this critical work requires support from governmental agencies and private entities alike. The GWREF is a 501 (c)3 corporation that works closely with the Ground Water Protection Council to bring the best available science to the areas of groundwater protection and education.

Financial supporters of the foundation are recognized as the leaders in their respective industries. We would welcome your support of the GWREF.

To become a Supporter contact Len Erikson at 405-516-4972 or lerikson@gwpc.org. Thank you.