



*A Publication of the Water Systems Council*

## WSC MEMBER NEWS

### WSC Calendar

October 8-9, 2009

- **NC Water Law & Policy Conference**  
Quorum Center  
Raleigh, NC

November 11-12, 2009

- **WSC Fall 2009 Members Meeting and Golf Tournament, WSC Board of Directors Meeting**  
Rosen Shingle Creek Resort  
Orlando, FL

February 23-25, 2010

- **WSC Spring 2010 Members Meeting & WSC Board of Directors Meeting**  
Washington Court Hotel  
Washington, D.C.



### Water Systems Council to Sponsor N.C. Water Law and Policy Conference

The 1st Annual North Carolina Water Law and Policy Conference has been scheduled for October 8-9 at the Quorum Center in Raleigh. Water Systems Council is the lead sponsor for the event. The North Carolina Association of County Commissioners and the North Carolina League of Municipalities are also lead sponsors. Each of these sponsors also has a member on the organizing committee. Other organizing committee members include representatives from the U.S. Environmental Protection Agency, Region IV and the North Carolina Department of Environment and Natural Resources.



Increasing development and increasing incidence of drought has put water issues at the forefront in South Atlantic region and North Carolina has witnessed intense activity at the state and local level on water issues. Nationally recognized speakers from across the country will join the nationally known experts in North Carolina to present a timely and informative agenda.

The agenda includes sessions on Groundwater and Public Trust Doctrine, the Riparian Rights Doctrine, Water Regulatory and Management Programs, Interbasin Transfer of Water, North Carolina Water Allocation Issues, and Interstate Water Conflicts. For more information, to register or to become a sponsor, go to [www.ncwaterlawconference.com](http://www.ncwaterlawconference.com).

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### AROUND THE STATES

#### Colorado Supreme Court Rules that Coalbed Methane Production Requires Water Rights Permit

The Colorado Supreme Court recently decided a very important case involving the large amounts of groundwater used in coalbed methane production. In *Vance v. Wolfe*, 205 P.3d 1165 (2009), a group of ranchers filed suit against coalbed methane producers. The ranchers held priority water rights in the same aquifer that the coalbed methane operators were producing. The ranchers alleged that the coalbed methane operators' use of water interfered with their priority rights.

Coalbed methane natural gas is naturally absorbed on the internal surface of coal while in the ground. Groundwater fills the cleats of the coal and the hydrostatic pressure keeps the methane in place. Coalbed methane is produced

## WSC MEMBER NEWS.....

### WSC Launches New Website

WSC's launched its new and improved website in May of this year. The new website provides access to all of the great resources that WSC has available, in a more intuitive and easier to navigate format.

Changes to the website include:

- Access to WSC's wellcare® information sheets via the home page;
- A button (also on the home page) where Well Owners can sign up for WSC's new wellcare® Well Owner's Network;
- A Well Owners page, with easy access to the wellcare® Hotline, Frequently Asked Questions, and more;
- A State Associations page, with quick access to information of interest to state associations, including WSC Special Reports, Water Well Standards, and state-specific well data; and
- A new store where members and others can purchase and/or download WSC's publications. The store now accepts credit cards via PayPal.

Check us out at [www.watersystemscouncil.org](http://www.watersystemscouncil.org) or [www.wellcarehotline.org](http://www.wellcarehotline.org). If you have any comments or questions about the new website, contact Angela Stanley at [astanley@watersystemscouncil.org](mailto:astanley@watersystemscouncil.org) or 202/625-4387.

### wellcare® Hotline Update



The wellcare® Hotline responded to 1,435 calls and e-mail requests between January and June of this year, reports Hotline Specialist Charlene Greenstreet. Sixty-eight percent of calls came from well owners. Thirty percent of callers had questions regarding possible contaminants, and 39% of questions concerned testing and treatment. Calls came from 49 states (all except Hawaii) and many countries, as well as Canada and Puerto Rico. States with the highest number of calls during this period were Arizona and New York (6% each), followed by Pennsylvania, Florida, California and Virginia (5% each).

As of June, the Hotline had distributed all of its free UL test kits to low income families and those impacted by flooding or other natural disasters. One hundred free test kits were distributed to well owners in 29 states, including Louisiana and Florida, two states that have been hit especially hard by natural disasters in recent years.



### Help Us Spread the Word about WSC's New wellcare® Well Owner's Network!

Since its launch last May, hundreds of well owners have joined WSC's new wellcare® Well Owner's Network. To reach our goal of 10,000 Network members by next spring, we need your help! If you have a private water well or know someone who does, learn more about how you can ensure that it will provide safe drinking water for years to come by joining the wellcare® Well Owner's Network. To sign up, call the wellcare® Hotline at 1-888-395-1033 or visit our website at [www.watersystemscouncil.org/network.php](http://www.watersystemscouncil.org/network.php).

Network members enjoy access to information and tools to help them better understand their drinking water source; a quarterly e-newsletter with information on wells, well water and practical tips for protecting the nation's groundwater resources; annual reminders to test their well water; an opportunity for discount well water test kits, and more...**And all of this is FREE!**

## Florida Senator Carey Baker Receives FGWA's "Water Conservation Champion" Award

Florida Senator Carey Baker (R-20) recently received the coveted "Water Conservation Champion" award from the Florida Ground Water Association (FGWA). The award was presented at the close of the 2009 legislation session in Orlando at the FGWA's Annual Convention on May 9, 2009.

Senator Baker, representing District 20, is serving his second term in the Senate and serves as Chair of the General Government Appropriations Committee, the Transportation, Agriculture, Ethics & Elections committee, Judiciary committee, the Policy Steering committee on Social Responsibility and the Ways and Means committee.

This year, Senator Baker sponsored SB 2530, the licensing criteria legislation for water well contractors, and was instrumental in preserving support of the Inland Protection Trust Fund, which provides resources for the clean-up of fueling stations with leaking fuel tanks, thus providing valuable protection for Florida's groundwater. For more information, please visit the FGWA website at [www.fgwa.org](http://www.fgwa.org).



Above: Senator Carey Baker accepts the "Water Conservation Champion" award from FGWA Leadership.

## Florida Representative Debbie Boyd Honored by FGWA

The Florida Ground Water Association recently presented the "Water Conservation Champion" award to Representative Debbie Boyd (D-11). The award was given at the close of the 2009 legislation session in Orlando at the Florida Ground Water Association's Annual Convention on May 9, 2009.

Debbie Boyd was elected to the State House of Representatives in 2006 and represents District 11. She serves on the Natural Resource Appropriations committee, the Agriculture and Natural Resource committee, Full Appropriations Council on General Government and Health Care and the Military and Local Affairs committee.

Representative Boyd was honored for her efforts to keep the Inland Protection Trust Fund active to protect Florida's groundwater from contaminating fueling stations and her efforts to make sure Water Well contractors are properly licensed and trained.



Above: FGWA Leaders present the "Water Conservation Champion" award to Representative Debbie Boyd.

For more information, please visit the FGWA website at [www.fgwa.org](http://www.fgwa.org).

### Not a member? Join WSC! WSC Membership benefits include:

- ◆ Discounts on publications (up to 25%)
- ◆ Free Membership Directory and a hotlink to your website from WSC's website
- ◆ Free listing in PAS-97(04) and ANSI/WSC PST 2000-2005, if qualified (included in dues)
  - ◆ Access to Members-Only Forum where you will find monthly updates on state legislative issues impacting our industry in Around The States
- ◆ Networking possibilities at WSC's spring and fall membership meetings, and more!

To become a member or for more information, contact [memberservices@watersystemscouncil.org](mailto:memberservices@watersystemscouncil.org) or visit [www.watersystemscouncil.org/joinNow.php](http://www.watersystemscouncil.org/joinNow.php)

# WSC MEMBER NEWS.....

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## Colorado Supreme Court Rules that Coalbed Methane Production Requires Water Rights Permit

in the area by drilling wells 2,000-3,000 feet below the surface and pumping the groundwater. The removal of the water reduces the hydrostatic pressure, bringing the methane gas to the surface. The water that was removed is generally later reinjected with underground injection control wells into formations that lie deeper than the aquifer from which the methane was produced.

The key question in the case involved whether the extraction of the water in coalbed methane production constituted a “beneficial use,” which requires a permit and priority water rights. “Beneficial use” is defined under Colorado law as “the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made.” C.R.S. § 37-92-103(4).

The coalbed methane operators (and the State Engineer) argued that the groundwater was an unwanted byproduct of the process and therefore “beneficial use” did not exist. The court disagreed, holding that the operators “used” the water, by extracting it from the ground, to “accomplish” the “purpose” of releasing methane gas. Therefore, coalbed methane operators must obtain priority water rights and a permit to withdraw the water.

This case is extremely important in that it establishes that existing groundwater rights are superior to the rights of the coalbed methane operators to withdraw the water. The effects could ripple across the country and have a huge impact on coalbed methane production.

### Hydraulic Fracturing Bill Generates Controversy

On June 9, 2009, Senator Robert P. Casey, Jr. introduced Senate Bill 1215. The purpose of the bill is to repeal a 2005 exemption of hydraulic fracturing from the Safe Drinking Water Act. The companion bill is House Bill 2766. The introduction of the bill has generated much controversy across the country. “Hydraulic fracturing” is also referred to as “hydrofracturing,” “hydrofracing” and “fraking.”

The bill, and the controversy, focus on hydraulic fracturing for oil and gas development. Originally, the U.S. Environmental Protection Agency (EPA) declined to regulate hydraulic fracturing under the Underground Injection Control (UIC) program.

In 1997, an environmental group filed suit against

the EPA, alleging that the Safe Drinking Water Act required the EPA to regulate hydraulic fracturing. *Legal Envtl. Assistance Foundation v. U.S. E.P.A.*, 118 F.3d 1467 (11<sup>th</sup> Cir. 1997). The EPA had approved Alabama’s UIC program, which failed to regulate hydraulic fracturing. The 11<sup>th</sup> Circuit Court of Appeals held that the Safe Drinking Water Act clearly commanded the EPA to regulate all underground injection under the UIC program.

After this case, EPA commenced a study of hydraulic fracturing. The study, released in 2004, concluded that the process did not present significant environmental concerns (U.S. Envtl. Prot. Agency, “Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs”, EPA 816R04003). In response, the U.S. Congress amended the Safe Drinking Water Act in 2005 to exempt hydraulic fracturing from the act.

The Energy Policy Act of 2005 amended the definition of “underground injection” in Section 1421 of the Safe Drinking Water Act to read:

The term “underground injection”-

- (A) Means the subsurface emplacement of fluids by well injection;
- (B) Excludes-
  - (i) The underground injection of natural gas for the purposes of storage; and
  - (ii) The underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas or geothermal production activities.

This amendment left regulation of hydraulic fracturing to the states. Predictably, some states have enacted relatively stringent regulations addressing hydraulic fracturing, while other states have little regulation in place. The Ground Water Protection Council released a report in May 2009, which concludes that state regulation of oil and gas production adequately protects water resources. *State Oil and Natural Gas Regulations Designed to Protect Water Resources*, available at [www.gwpc.org](http://www.gwpc.org) (last visited June 26, 2009).

The bill, entitled the “Fracturing Responsibility and Awareness of Chemicals (FRAC) Act,” would define “underground injection” as follows:

- (1) UNDERGROUND INJECTION-
  - (A) IN GENERAL- the term “underground injection” means the subsurface emplacement of fluids by well injection.
  - (B) INCLUSION- The term “underground injection” includes the underground injection of fluids or propping agents pursuant to hydraulic fracturing operations relating to oil or natural gas production activities.

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- (C) EXCLUSION- The term “underground injection” does not include the underground injection of natural gas for the purpose of storage.

Water Systems Council has expressed the concern that the failure to include hydraulic fracturing activities relating to water well production or geothermal production activities may imply that those activities fall within the Safe Drinking Water Act. Geothermal production activities are presently expressly excluded, so the omission in the bill may be inadvertent.

### North Carolina Introduces Bill to Make Groundwater Part of the “Public Trust”

A bill has been introduced into the N.C. General Assembly that would make groundwater the property of the state as a public trust resource (see N.C. Senate Bill 907, N.C. House Bill 1101). The pertinent part of the bill would amend the N.C. Code to read:

#### **§ 143-350.1. Declaration of policy.**

The following principles constitute the water resources policy of the State. All administrative and judicial decisions regarding water use and allocation by the State, its agencies, subdivisions, and units of local government shall be governed by these principles.

- (1) Water is a public trust resource. – The waters of the State are a natural resource owned by the State in trust for the public and subject to the sovereign power of the State to plan, regulate, and control the withdrawal and use of those waters, under law, in order to protect the public health, safety, and welfare by promoting economic growth, mitigating the harmful effects of drought, resolving conflicts among competing water users, achieving balance between consumptive and nonconsumptive uses of water, encouraging conservation, protecting ecological integrity, and enhancing the productivity of water related activities....

The public trust doctrine in the U.S. has its roots in the notion that the state holds the title to beds of navigable tidal waters in trust for the people. *Illinois Central Railroad Company v. Illinois*, 146 U.S. 387, 13 S.Ct. 110, 36 L.Ed. 1018 (1892). The main focus of the doctrine appears to be the preservation of the navigability of the waterways. *Id.*

With this bill, North Carolina attempts to join other state legislatures that have recently attempted to expand the doctrine far beyond this core proposition, to include even groundwater itself. When the bill was introduced in April, the North Carolina Ground Water Association sprung into action. Water Systems Council and the South Atlantic Well Drillers Jubilee have assisted the state association. Despite early fears of quick legislative action, the session ended on June 29<sup>th</sup> with the bill still in committee. All involved expect the bill to be pursued with renewed

### Federal Court Rules Interstate Groundwater War Must Be Heard by U.S. Supreme Court

The Fifth Circuit Court of Appeals decided a significant groundwater case involving interstate water wars in June. *Hood, ex rel Mississippi v. City of Memphis, Tennessee*, \_\_\_ F.3d \_\_\_, 2009 Westlaw 1564160 (2009). In a rare interstate war over groundwater, the state of Mississippi filed suit against the City of Memphis, Tennessee, alleging that, in pumping groundwater for public water supply, Memphis had pumped water that belonged to the State of Mississippi. Memphis pumped water from the Memphis Sands Aquifer, which is located between parts of Tennessee, Mississippi, and Arkansas. The aquifer also makes up the primary water sources for DeSoto County, Mississippi, across the state border from Memphis.

The U.S. District Court for the Northern District of Mississippi dismissed the lawsuit, finding that the State of Tennessee was an essential party. The State of Mississippi appealed, and the Fifth Circuit Court of Appeals affirmed.

The Fifth Circuit agreed with the reasoning of the court below. The Memphis Sands Aquifer has never been apportioned between Tennessee and Mississippi. Before the court can determine whether Memphis has infringed upon the waters of Mississippi, the aquifer must be apportioned. Only the U.S. Supreme Court may apportion the aquifer. Therefore, the dismissal of the case was appropriate. Mississippi must include Tennessee in the lawsuit and the lawsuit must be filed in the U.S. Supreme Court.

Note that this case involves the complex issue of apportioning water resources between states. When the U.S. Supreme Court divides water resources between states, the Court does not give “ownership” of the waters to the state. However, state water rights can only apply to water that comes under the domain of that particular state. Therefore, water must be apportioned in times of scarcity so that individual water rights may be appropriately determined. Although apportionment cases are fairly common in the west, they are rare in the east. However, these types of cases will likely become more common as drought and increased demands for water combine to exacerbate scarcity.

### California AB 1953 Goes Into Effect on January 1, 2010 in California and Vermont

California AB 1953 requires that the lead in the material that delivers consumable water from a fixture cannot exceed 0.25% of the material. The law applies only to fixtures that provide water for cooking and drinking. The law goes into effect in California and Vermont (S152) on January 1, 2010.

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## AROUND THE STATES

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As the effective date nears, confusion and controversy continue to shroud California AB 1953. The questions include the following:

- What agency will administer and enforce the law?
- How will enforcement be handled?
- Who will interpret the law?
- What are the penalties for noncompliance?
- What products are exempt?
- How does the law apply specifically to water well components?

Despite some confusion, compliance with Annex G of NSF/ANSI 61 does not prove compliance with AB 1953. Obviously, this provision has huge implications for Water Systems Council members.

WSC Policy and Research Advisor, Jesse Richardson, attended a seminar in California in July to learn more directly from the source. In addition, there will be a speaker at the WSC Fall Meeting in November addressing AB 1953 issues. Look for more in the near future as WSC helps the industry prepare for AB 1953 implementation.

## wellcare® SPECIAL REPORT

### USGS Releases Report on Domestic Well Water Quality

The United States Geologic Survey (USGS) recently released a report, *Quality of Water from Domestic Wells in Principal Aquifers of the United States, 1991-2004*, which examines water quality for domestic water wells. About 15% of the U.S. population, over 42 million people, rely on domestic water wells for drinking water. The report emphasized that the quality and safety of the water from domestic wells is not regulated by the Safe Drinking Water Act or most state laws. Homeowners are responsible for monitoring the quality and safety of their domestic wells.

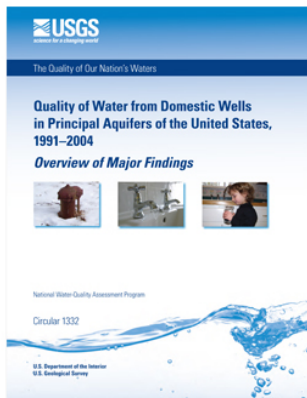
Available data on water quality of domestic water wells is sparse. Past studies generally show few issues of contamination and contamination levels, when found, are at levels unlikely to have adverse effects. These past studies were generally focused on specific areas of the country and/or specific contaminants.

This study by the National Water-Quality Assessment (NAWQA) Program of the USGS sampled approximately 2,100 domestic water wells to assess water quality. The sampled wells include wells in 48 different states and 30 different principal aquifers. The wells were not classified as to whether they were drilled or dug, or with respect to the quality of construction, but approximately 90% were drilled and had steel or PVC casings 4 to 8 inches in diameter. The wells averaged 174 feet in depth, with most wells between 50 and 335 feet in depth. The wells averaged 20 years of age, with most between 10 and 45 years old.

Two hundred nineteen properties and contaminants were measured in at least some of the wells. One thousand three hundred eighty-nine of the wells were sampled for uniform and complete analysis.

The study found that most groundwater in the United States is of good quality and safe to drink. Twenty-three percent of sampled wells contained at least one contaminant at a level greater than the benchmark. Inorganic compounds were most often found at levels exceeding the benchmark. Of these compounds, all but nitrate are naturally occurring. Radon, nitrate, fluoride and several trace elements (including arsenic and uranium) were each found at levels exceeding the benchmark in 1-7% of wells sampled (using the higher of the two USEPA proposed MCLs for radon).

Although man-made organic compounds, like herbicides, solvents and refrigerants, were found in low levels in 60% of the wells, less than 1% of wells contained man-made organics exceeding the benchmark. In addition, only 7 of the 168 organic compounds analyzed (2 insecticides, 2 solvents, 1 herbicide, and 2 fumigants) were found at levels exceeding the benchmark.



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## Amended Clean Water Restoration Act Advances in Congress

The Spring 2008 (Volume 25) edition of *Well Connected* discussed the potential impact of the Clean Water Restoration Act of 2007 on the water well industry (“Does the Proposed Clean Water Restoration Act of 2007 Threaten the Water Well Industry,” page 1). An amended version of the act (Senate Bill 787) has now surfaced in Congress.

The bill attempts to clarify the waters over which the federal government has jurisdiction. Much confusion has resulted from the U.S. Supreme Court’s decision in *Rapanos v. United States*, 126 S.Ct. 2208 (2006). In this case, the Court split 4-4-1, with each decision widely divergent from the rest.

The original version of Senate Bill 787 sought to broadly interpret “waters of the United States” to include all possible waters. There were concerns that groundwater may be under federal control under that bill.

The amended version seeks to return federal authority to that which existed prior to the *Rapanos* case. However, much uncertainty exists as to exactly what that means. The U.S. Supreme Court was attempting to determine that scope in the *Rapanos* case.

The amended bill attempts to address concerns that the jurisdiction of the federal government would include groundwater if passed. Section 3 (9) of the bill states, “ground waters” are treated separately from “waters of the United States” for purposes of the Federal Water Pollution Control Act and are not considered “waters of the United States” under this Act. Although this language seems fairly clear, uncertainty remains. Agricultural groups, some states and others are still concerned that passage of the bill will increase the uncertainty of what waters are subject to regulation under the Clean Water Act.

On June 18, 2009, the Senate Environment and Public Works Committee approved the bill by a vote 12-7. Prospects for passage of the bill, or even whether the bill will make it to full Senate for a vote, are uncertain.

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## wellcare® SPECIAL REPORT

Only 397 wells were tested for microbial contaminants. *Escherichia coli* (*E. coli*) were found in 7.9% of these wells, while total coliform bacteria were detected in 34% of the 378 wells sampled. Neither contaminant is typically harmful but may indicate the presence of pathogens.

Forty-eight percent of wells sampled exceeded USEPA’s Secondary Maximum Contaminant Levels (SMCLs) for aesthetic quality of water for at least one contaminant. pH, dissolved solids, iron and manganese exceeded the levels in 15-21% of wells, while fluoride levels were greater than its SMCL in 4% of wells.

Although 73% of the wells contained two or more contaminants, only 4% contained mixtures of two or more contaminants at concentrations individually greater than the benchmark. More research is needed to determine whether certain mixtures pose any health concerns, making the implications of these findings unclear.

The study is limited in several ways. The sampled wells may not be representative of all water wells. In addition, water samples were collected prior to in-home plumbing or treatment, so do not represent the quality of water consumed by homeowners.

All water supplied by public water supply contains contaminants, since treatment chemicals are, by definition, contaminants. In general, the study does not compare contaminant levels between public water supply and domestic water wells. One exception is arsenic, for which the study finds levels in public water supply and domestic wells to be similar (page 22 of the report).

The study results emphasize the need for education, testing and further research. Water Systems Council has been active in all three of these areas and is well-positioned to address the needs raised by the report.



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## UPCOMING MEMBER EVENTS



**NOVEMBER 11-12, 2009:**  
*WSC FALL MEMBERS MEETING AND  
9<sup>TH</sup> ANNUAL WSC GOLF TOURNAMENT,  
WSC BOARD OF DIRECTORS MEETING  
ROSEN SHINGLE CREEK RESORT,  
ORLANDO, FL*

**FEBRUARY 23-25, 2010:**  
*WSC SPRING MEMBERS MEETING,  
WSC BOARD OF DIRECTORS  
MEETING  
WASHINGTON COURT HOTEL,  
WASHINGTON, DC*



Contact [memberservices@watersystemscouncil.org](mailto:memberservices@watersystemscouncil.org) for more information.