

# RURAL matters

2010  
Issue 2/6

The magazine of the Rural Community Assistance Partnership

A photograph of a construction site in a rural area. A large yellow Hyundai excavator is the central focus, with its arm extended over a deep trench. Several workers in high-visibility yellow and orange safety vests and hard hats are visible. One worker is kneeling in the foreground, while others stand nearby. In the background, there is a tan building with a red door and another excavator. The scene is set outdoors with trees and a clear sky.

## Recovery Act funds at work in rural America

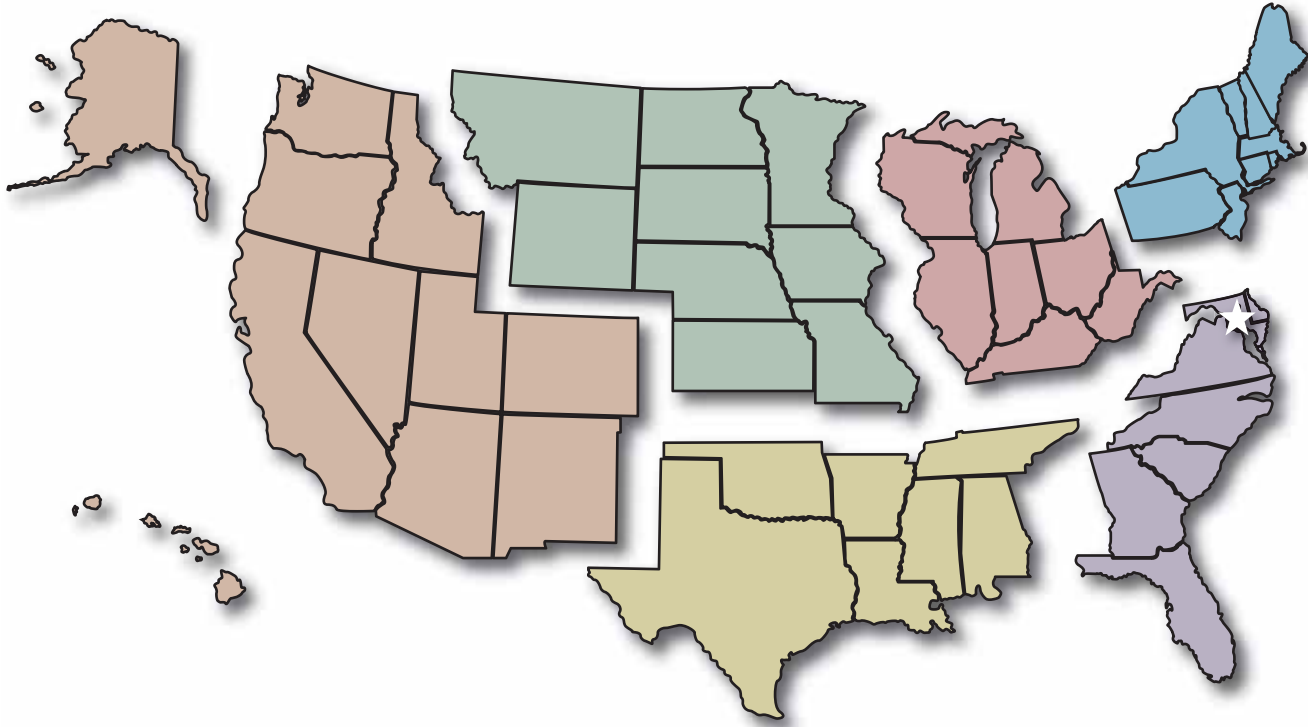
*Also in this issue:*

RCAP on Capitol Hill

The important role of laboratories in emergency response



# Rural Community Assistance Partnership: A network of six regions and a national office



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# RURAL matters

The magazine of the Rural Community Assistance Partnership

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# Improving the quality of life in rural communities

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# Director's letter



Robert Stewart  
RCAP Executive Director

Now that winter is behind us, many rural communities will be seeing the results of water and wastewater infrastructure funding provided through the American Recovery and Reinvestment Act (ARRA). Since this act was passed on Feb. 18, 2009, RCAP has been working with hundreds of small communities across the U.S. to ensure that they are able to access these critically needed funds. A recent review of our efforts indicated that the RCAP regional partners had provided assistance to nearly 400 separate projects under ARRA USDA Rural Development and EPA State Revolving Funds. These projects amounted to approximately \$575 million in ARRA funding to local communities. In March, RCAP received additional funds from USDA Rural Development to provide an even higher level of support for our work to assist ARRA-eligible communities.

In the regulatory arena, EPA is moving toward a more comprehensive and coordinated approach to drinking water regulations. EPA is considering a more cost-effective approach of addressing contaminants within a group rather than individually, as well as the development of new treatment technologies that address health risks posed by a broad array of contaminants. At the same time, EPA continues to identify individual carcinogenic compounds for which regulations will be proposed. RCAP field staff, working under EPA and state primacy agency programs, continue to assist small, rural communities with compliance matters, including the fairly recently implemented Groundwater Rule that impacts the vast majority of small water systems.

Another EPA initiative covered in this issue of *Rural Matters* concerns the Water Laboratory Alliance (WLA). Formed to provide the water sector with an integrated, nationwide network of laboratories, the WLA possesses the analytical capability and capacity to support monitoring, surveillance, response and remediation in the event of an intentional, unintentional or natural water contamination.

RCAP has devoted considerable time and effort to assisting small communities plan for and respond to natural disasters, contamination events and safety and security concerns. I suggest you visit our Safe Drinking Water Trust website at [www.watertrust.org](http://www.watertrust.org) for additional information, materials and access to technical and financial assistance. While you are there, please sign up for our "eBulletin" that will provide you with timely articles and resources on these matters.

Congratulations go out to our Northeast RCAP, RCAP Solutions, as it marks 40 years of helping rural communities and families with housing, environmental, and development issues. RCAP Solutions was one of the original organizations that came together to form our national organization. Over the years, RCAP Solutions has grown and increased its ability to assist small communities, including developing capacity within small communities, offering assistance to small businesses, conducting regional source water protection programs, facilitating mobile home park conversions into resident-owned communities, and much more. ■

# rural developments

## Study finds hundreds of pollutants in nation's tap water

### Release of updated tap water databases and drinking water quality analysis

WASHINGTON (EWG) – Tap water in many large metropolitan areas is polluted with a cocktail of chemical contaminants. These pollutants usually don't violate any legal standards, but they often come in potentially toxic combinations that raise serious questions about the long-term safety of drinking the water. Pensacola, Fla.; Riverside, Calif.; and Las Vegas top the list of major cities with the most contaminated tap water.

In an unprecedented analysis of 20 million tap water quality tests performed by water utilities between 2004 and 2009, Environmental Working Group (EWG) found that water suppliers detected a total of 316 contaminants in water delivered to the public. The U.S. Environmental Protection Agency (EPA) has set enforceable standards for only 114 of these pollutants.

Another 202 chemicals with no mandatory safety standards were found in water supplied to approximately 132 million people in 9,454 communities across the country. These "unregulated" chemicals include the toxic rocket fuel component perchlorate, the industrial solvent acetone, the weed killer metolachlor, the refrigerant Freon, and radon, a highly radioactive gas.

"The nation's tap water has been compromised by weak federal safeguards and piti-



ful protection of drinking water supplies," said Jane Houlihan, Senior Vice President for Research at EWG.

By failing to clean up rivers and reservoirs that provide drinking water for hundreds of millions of Americans, EPA and the Congress force water utilities to spend heavily to make contaminated water drinkable. According to industry market studies, utilities spend more than \$4 billion a year on water treatment chemicals alone. Less than one-twentieth that amount is invested in source water protection and pollution prevention, an average of \$207 million a year.

"Utilities do the best job that they can treating a big problem with limited resources," said Houlihan, "but we must do better. It is not uncommon for people to drink tap water laced with 20 or 30 chemical contaminants. This water may be legal, but

it raises serious health concerns. People expect better water than that, and they deserve it."

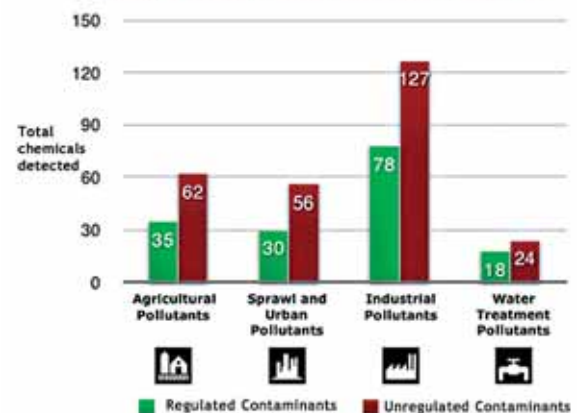
Federal law does not require tap water to be safe for long-term consumption; the long-term risks of cancer and other health threats are balanced against the cost and feasibility of purification. As a result, health officials acknowledge that legally binding contamination limits typically allow exposure to levels of pollutants that present real health risks. For hundreds of other contaminants, there are no legal limits at all – any amount is legal.

Some communities have made the commitment to deliver safer water, with dramatic results. Boston had a serious contamination problem that peaked in 2004-2005. After installing a new filtration system and changing treatment techniques, the regional water system now

316 contaminants found in nation's tap water; more than half have no safety standards



Where drinking water contaminants come from



delivers some of the highest-rated big-city water in the country. It has also committed to a well-protected reservoir system, a key to preserving the long-term effectiveness of the new techniques.

Tap water contaminants come from a wide variety of sources. EWG's analysis revealed 97 agricultural pollutants, including pesticides and chemicals from fertilizer- and manure-laden runoff; 205 industrial chemicals linked to factory discharges and consumer products; 86 contaminants that originate in polluted runoff and wastewater treatment plants; and 42 byproducts of water treatment processes or pollutants that leach from pipes and storage tanks.

"In most U.S. households, pouring a glass of tap water means exposing families to hundreds of distinct chemicals and pollutants, many of them completely unregulated," said Houlihan.

Across the country, consumers are seeing higher bills for their water even as the number of unregulated pollutants, from pharmaceuticals to fuel additives, is also rising.

There is plenty of evidence that Americans already have doubts about the safety of their water. In March 2009, a Gallup poll found that Americans rank water pollution as their number one environmental concern. A startling 84 percent reported being worried "a great deal" or "a fair amount" about pollution in their drinking water.

As a result, millions of Americans have taken to buying bottled water in the misguided belief that it's safer, even though the source of many very popular brands is nothing more than treated tap water.

Until the federal government invests significant resources on modernizing infrastructure and enforcing tough safety standards, the only option left to most Americans is to filter their own tap water.

EWG's searchable database of water test results allows the public to check out the quality of the water in their community: [www.ewg.org/tap-water](http://www.ewg.org/tap-water)

*Environmental Working Group is a non-profit research organization based in Washington, D.C., that uses the power of information to protect human health and the environment.* [www.ewg.org](http://www.ewg.org) ■



## United Nations study examines global challenges in obtaining clean water

A United Nations report says that use of bottled water is increasing worldwide, but it takes more than three quarts of water to produce one quart of bottled water. In the United States alone, production of bottled water takes an additional 17 million barrels of oil.

Worldwide, 200,000 million liters of bottled water are produced every year, also creating an enormous waste problem from discarded plastic bottles.

The report was released March 22 on U.N.-designated World Water Day by the global body's Environmental Program.

Titled "Sick Water? The Central Role of Wastewater Management for Sustainable Development," the report focuses on global water challenges, especially in developing countries, where the problem of securing clean water is most acute. But the report also identifies examples of more afflu-

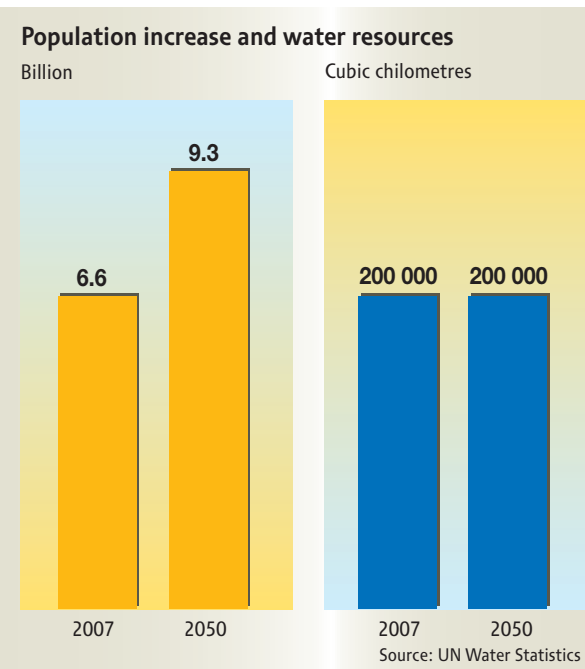
ent methods of water consumption such as bottled water that have high costs on both the production and post-production ends.

The report says transforming wastewater from a major health and environmental hazard into a clean, safe and economically attractive resource is emerging as a key challenge in the 21st century.

Unless decisive action is taken, according to the report, this challenge will continue to intensify as the world undergoes rapid urbanization, industrialization and increasing demand for meat and other foods.

Urban populations are projected to nearly double in 40 years, from a current 3.4 billion to over six billion people – but already most cities lack adequate wastewater systems due to aging, absent or inadequate infrastructure.

[continued on next page](#)



*The world's water resources will not change, but the human population and its demands on supply are growing rapidly. Meeting these demands will require wise investment in how we use and reuse our water.*

<http://maps.grida.no/go/graphic/population-increase-and-water-resources>

Among the solutions the report proposes to reduce dirty water are investing and re-investing in natural purification systems, which include wetlands, mangroves and salt marshes.

Studies in the Mississippi Valley indicate that the value of a restored wetland may be as high as more than \$1,000 a hectare if its full range of services, from water filtration to recreational use, is factored in.

Establishing markets and economic instruments for such services could offer the kind of financial incentives that favor conserva-

tion and restoration over draining wetlands for farmland.

Achim Steiner, U.N. Under-Secretary General and Executive Director of the U.N. Environment Program (UNEP), said: "If the world is to thrive, let alone to survive, on a planet of six billion people heading to over nine billion by 2050, we need to get collectively smarter and more intelligent about how we manage waste including wastewaters."

"But the report also points to the abundant Green Economy opportunities for turning a mounting challenge into an opportunity with multiple benefits. These include the savings from reduced fertilizer costs for farmers and incentives for conserving ecological infrastructure such as wetlands alongside new business and employment opportunities in engineering and natural resource management," said Steiner.

A recent report by the UNEP Green Economy Initiative underlined the economic benefits of investing in clean water. It argues that every dollar invested in safe water and sanitation has a payback of \$3 to \$34 depending on the region and the technology deployed.

Download the full "Sick Water? The Central Role of Wastewater Management for Sustainable Development" report at [www.grida.no/\\_res/site/file/publications/sickwater/SickWater\\_screen.pdf](http://www.grida.no/_res/site/file/publications/sickwater/SickWater_screen.pdf)

Visit the Sick Water? website at [www.grida.no/publications/rr/sickwater](http://www.grida.no/publications/rr/sickwater) ■

## NEWS AND RESOURCES FROM EPA

### **EPA administrator marks one-year anniversary of Recovery Act in Ohio, acknowledges RCAP**

U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson joined

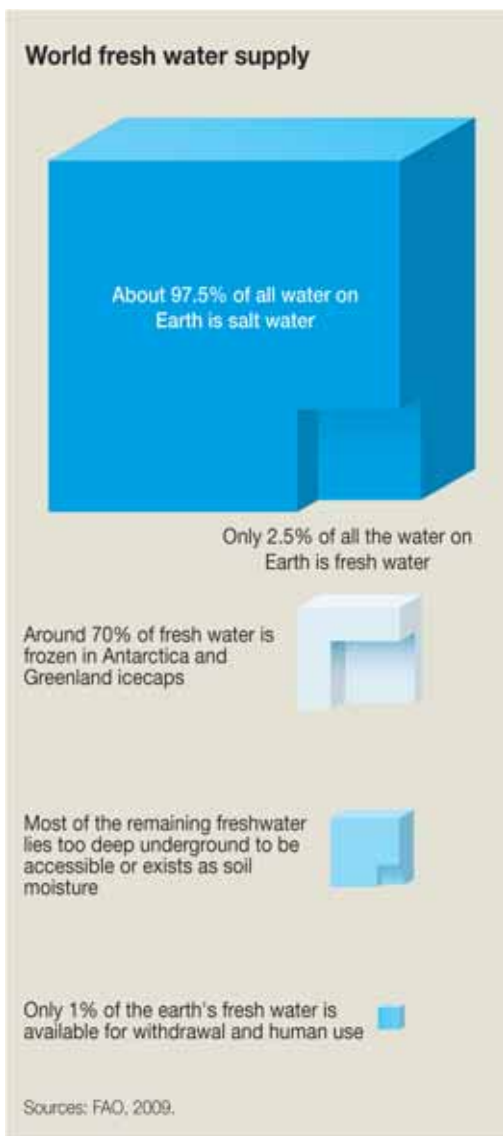


photo by Randy Hunt, Ohio RCAP

Ohio First Lady Frances Strickland and Ohio officials at a press conference Feb. 18 in Columbus to mark the one-year anniversary of the American Recovery and Reinvestment Act (ARRA).

Jackson announced that Ohio is among the leaders nationally in the number of ARRA-funded water pollution-control and safe drinking water projects. EPA provided the state with \$220.6 million in Recovery Act funds for water pollution-control projects and \$58.46 million for drinking water projects. Those projects alone will improve water quality across the state, impacting 5.6 million Ohioans in 187 communities and creating or saving more than 700 jobs, according to EPA. Those projects range from new or upgraded sewers in communities to improvements to drinking water facilities across the state.

Ohio RCAP was instrumental in being a means to putting those economic stimulus funds to use in small, rural communities and as such received a mention by name by Jackson during her remarks at the press conference. Randy Hunt, RCAP's state director in Ohio, said, "Ohio RCAP received a lot of praise and recognition."



<http://maps.grida.no/go/graphic/world-fresh-water-supply>



Hunt was seated in the front row, next to congressional staffers, in the audience at the press conference. He said Ohio EPA Director Chris Korleski, who spoke before Jackson, recognized and thanked Ohio RCAP early in his remarks. “The director referenced the work that Ohio RCAP did in helping EPA get the projects funded for both the drinking water and wastewater programs several times during his remarks,” said Hunt.

Jackson acknowledged the contributions of Ohio RCAP and thanked RCAP for its work and partnership with EPA. Hunt said he spoke to several Ohio EPA managers, all of whom were complimentary of RCAP’s work.

### **EPA increases transparency of proposed regulations**

WASHINGTON (EPA) – The U.S. Environmental Protection Agency (EPA) is launching a new website giving the public additional opportunities to participate in the agency’s rulemaking process, part of President Barack Obama’s desire to provide a more transparent and open government.

The Rulemaking Gateway serves as a portal to EPA’s priority rules, providing citizens with earlier and more concise information about agency regulations. It also allows users to search for EPA rules that relate to specific interests, including impacts on small business; children’s health; environmental justice; and state, local and tribal government.

Rulemaking Gateway provides information as soon as work begins and provides updates on a monthly basis as new information becomes available. Time-sensitive information, such as notice of public meetings, is updated on a daily basis.

Rulemaking Gateway complements *Regulations.gov*, the federal government’s main

portal for tracking rules from all federal agencies, by providing brief overviews of specific EPA rules and additional ways to search rules based on the phases they are in (e.g., pre-proposal, proposal), the topics they relate to (e.g., air, water), and the impacts they might have (e.g., on small businesses or environmental justice). The new website offers a distilled “snapshot” of a rule, with just enough information for a citizen to determine his or her interest in the rule. The individual then can use Rule-making Gateway links to *Regulations.gov* and to other EPA sources where comprehensive information is available.

In addition, EPA has established a Rule-making Gateway discussion forum to allow the public to suggest enhancements to the site. The forum will be open through July 16, 2010, after which EPA plans to make enhancements based on ideas received.

More information on Rulemaking Gateway and the discussion forum: [www.epa.gov/rulemaking/](http://www.epa.gov/rulemaking/)

More information on Regulations.gov website: [www.regulations.gov](http://www.regulations.gov)



### **EPA releases water-quality scorecard**

EPA is releasing a first-of-its-kind water-quality scorecard that will help communities in rural, suburban and urban settings incorporate green infrastructure practices to protect local water quality and improve both the built and natural environment.

The Water Quality Scorecard was developed to help local governments identify opportunities to remove barriers and revise and create codes, ordinances and incentives to better protect water quality. The scorecard guides municipal staff, stormwater managers, planners, and other stakeholders through a review of relevant local codes and ordinances to ensure that these codes work together to support a green infrastructure approach. The scorecard also provides policy options, resources, and case studies.

More information at [www.epa.gov/smartgrowth/water\\_scorecard.htm](http://www.epa.gov/smartgrowth/water_scorecard.htm)

### **Two more new WARN fact sheets**

Two new fact sheets on WARN – Water/Wastewater Agency Response Networks – are available from the U.S. Environmental Protection Agency. They provide background on WARN and describe their benefits to state primacy agencies and wastewater systems.

The fact sheets are an ideal resource for increasing WARN membership by assisting with WARN outreach efforts. They complement similar fact sheets for small water systems and tribal water systems released earlier.

The mission of WARN is to provide water systems with expedited access to specialized resources that are needed to respond to and recover from natural and human-caused events that disrupt public and private drinking water and wastewater utilities.

State Primacy Agencies:

A Vital Component of WARN:

[www.epa.gov/safewater/watersecurity/pubs/WARN\\_stateprimacy\\_fs.pdf](http://www.epa.gov/safewater/watersecurity/pubs/WARN_stateprimacy_fs.pdf)

Wastewater Systems:

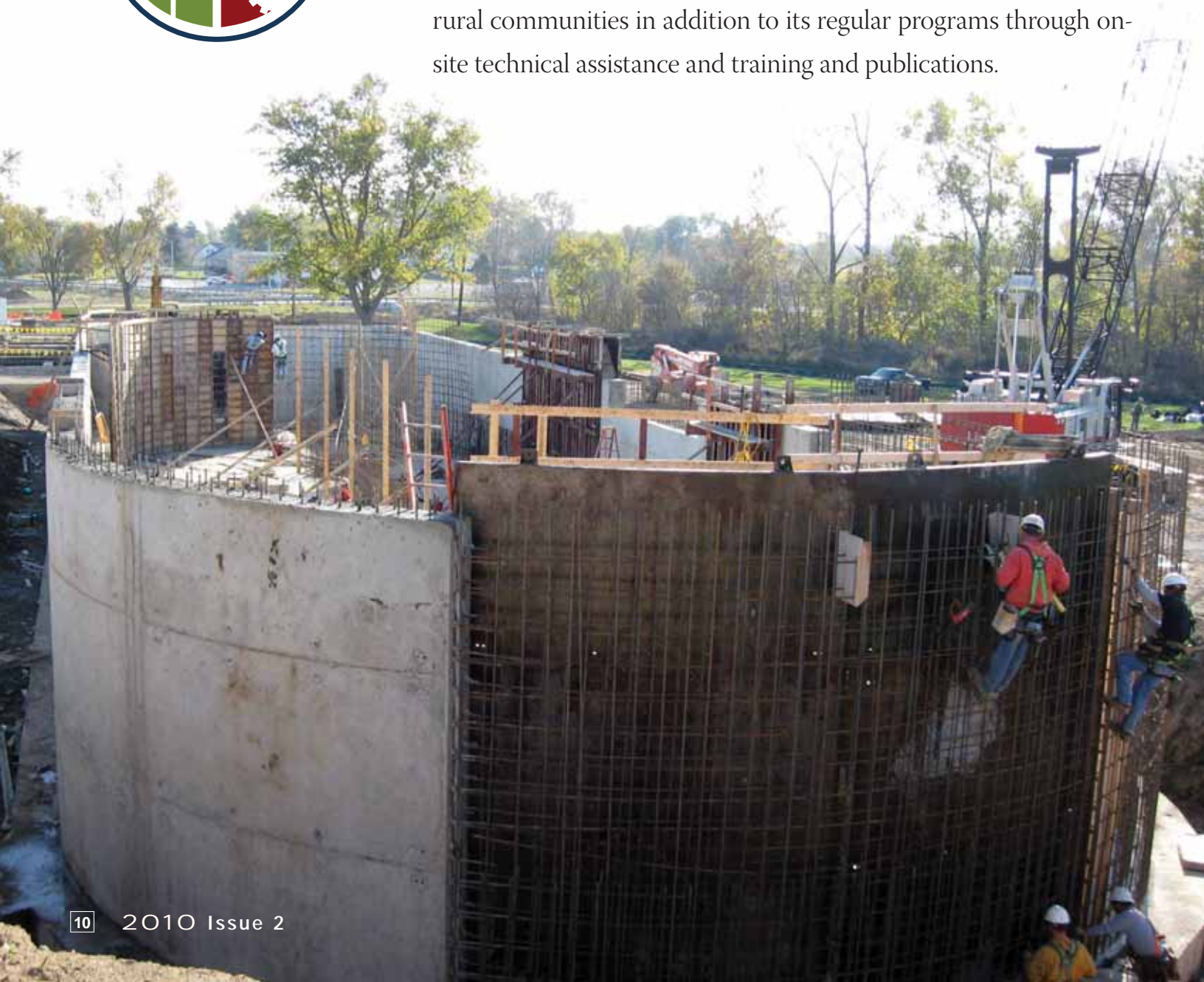
A Vital Component of WARN:

[www.epa.gov/safewater/watersecurity/pubs/WARN\\_wastewatersystems\\_fs.pdf](http://www.epa.gov/safewater/watersecurity/pubs/WARN_wastewatersystems_fs.pdf) ■

# RCAP receives \$5 million in Recovery Act funds from USDA



Rural Community Assistance Partnership, Inc. (RCAP) has been awarded a \$5 million grant of American Recovery and Reinvestment Act (ARRA) funds through U.S. Department of Agriculture Rural Development. RCAP will use the economic stimulus funds to provide help to water and wastewater systems in rural communities in addition to its regular programs through on-site technical assistance and training and publications.



"We are excited to be given the opportunity to assist more communities with ARRA funds," said Robert Stewart, RCAP Executive Director. "This grant to RCAP will complement and support our efforts to ensure that small communities receive the technical support they need to not only complete their infrastructure projects but also to ensure that their systems are properly managed to provide for long-term sustainability."

USDA Secretary Tom Vilsack announced RCAP as the recipient of the funds on March 8. The funds are being provided through the Technical Assistance and Training Grant program administered by USDA Rural Development. RCAP submitted its application for the funds in the competitive process in January.

"The Obama Administration supports the construction of new sanitation infrastructure that safeguards the health of rural residents," said Vilsack. "These funds will help ensure that operators of rural utility systems receive the training needed to plan new, safe reliable water systems."

RCAP plans to begin the year-long Technitrain ARRA program on May 1 using the grant's funds. The majority of the funds will be disbursed through RCAP's six regional partners to carry out technical assistance and training to 420 water and wastewater systems across the U.S. The regional partners expect to hire additional staff to implement the program in communities.

RCAP will coordinate with state and area Rural Development offices to select water and wastewater systems to receive assistance from RCAP's Technitrain ARRA program. All of the chosen systems will be applicants or recipients of ARRA funding through USDA Rural Utilities Service (RUS). RCAP will focus on assisting



RUS borrowers to comply with ARRA provisions. Approximately 25 percent of the communities receiving assistance will be in persistent-poverty counties.

Part of the grant will be used to produce several publications for RUS borrowers and on effective management, operations and maintenance of small, rural water and

that were made through the ARRA funds," said Stewart. He explained that RCAP's approach is to improve the capacity of small communities to build, operate and manage crucial water and wastewater services for their customers.

"RCAP is eager to tackle this new opportunity that will assist rural areas as they work toward improving public health and promoting economic growth and job creation," added Stewart.

The Technitrain ARRA program is an extension of RCAP's regular programs. RCAP's ongoing Technitrain program has been funded by USDA since 1988.

President Obama signed The American Recovery and Reinvestment Act of 2009 into law on Feb. 17, 2009. It was designed to jumpstart the nation's economy, create or save millions of jobs, and address many infrastructure needs in urban and rural areas. ■

*RCAP's approach is to improve the capacity of small communities to build, operate and manage crucial water and wastewater services for their customers.*

wastewater systems. RCAP hopes to distribute these publications in print and on the web.

"The assistance RCAP will provide to communities will secure the investments

*Photos courtesy of Ohio EPA*

# legislative matters

## RCAP staff and board members come to Washington, D.C., for congressional visits

RCAP's national office hosted the network's annual fly-in of regional staff and national and regional board members for congressional visits Feb. 23 to 25 in Washington, D.C.

Sixty-eight people from across the country participated in the event, and more than 130 visits to senators and representatives were scheduled.

"This year's event was a great success," said Robert Stewart, RCAP Executive Director. "We were pleased with the receptiveness of congressional offices to our advocacy on behalf of small water and wastewater systems."

Participants spoke to legislators about three appropriations bills under which the RCAP national network and the regional partners receive funding. Participants also discussed reauthorization of the Clean Water and Drinking Water State Revolving Funds and authorization of a water trust fund that would provide \$10 billion in financing for water and wastewater infrastructure.

Guy Sepich, a Technical Assistance Provider for Community Resource Group, the Southern RCAP, in Tennessee, visited the



He has participated in RCAP's organized congressional visits for the past few years. Although making the trip to Washington, D.C., for the fly-in is a special effort outside his daily work in the field, Sepich believes it is important for him to participate. He is RCAP's only TAP in Tennessee, and it is good for staff to know what is happening in the state, he said.

"A telephone call or letter isn't the same," he explained about the benefits of making a visit to a legislator's Washington office. "I think it's important to keep our name before them."

Stewart said the main purpose of the annual fly-in is to educate congressional offices on RCAP activities while providing RCAP staff and regional board members with an organized process for visiting the lawmakers from their regions. Staff also make regular visits to their legislators' offices at the district and state levels.

offices of Sen. Lamar Alexander (R-Tenn.) and two of the state's representatives.

Sepich met with staff of the lawmakers in all three cases. "They were attentive, understanding and interested," he said. "For the most part, I was well-received."

"RCAP technical assistance providers are in the field every day helping small, rural communities to operate and improve their water and wastewater utilities," he said. "However, they also work to establish strong relationships with legislators



to ensure that small, low-income, rural communities receive federal support that is crucial to ensuring public health and promoting economic prosperity in rural America.”

Clarence Martin, Glasgow, Va., a member of the board of directors of the Southeast Rural Community Assistance Project (SERCAP), the Southeast RCAP, made his first visit to Congress during February’s fly-in.

“I really enjoyed the experience of being on the Hill,” he said.

Martin was a part of small groups that visited representatives from Maryland and Delaware to bring the work of SERCAP and the national network to the attention of legislators in his region.

Martin said it was important for him as a board member of an RCAP regional partner to be present and to make the visits. He said the visits are very important to the functioning of RCAP as an organization. “The federal government is needed in these programs,” he said.

“I hope that won’t be my last visit,” Martin added.

Staff and board members brought handouts with information about RCAP projects in their regions with them on their visits.

A group of RCAP staff from Ohio was asked by an aide for Rep. David Obey (D-Wisc.), chairman of the Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, for more information on RCAP projects in Obey’s district to show constituents how federal tax dollars are being spent.

The same group from Ohio met with staff of Sen. Sherrod Brown (D-Ohio) to discuss legislation that would create a technical assistance program to aid communities seeking to apply for community development funding. ■

## RCAP staff member testifies before House subcommittee



*Chris Fierros (second from left), Chief Operating Officer of Midwest Assistance Program, the Midwest RCAP, testifies before a House subcommittee hearing to review efforts to improve rural water infrastructure. Photo by Aaron Fischbach, RCAP*

Chris Fierros, Chief Operating Officer of Midwest Assistance Program, the Midwest RCAP, testified March 23 before the House Agriculture Committee’s Subcommittee on Rural Development, Biotechnology, Specialty Crops, and Foreign Agriculture. The subcommittee’s Capitol Hill hearing was to review U.S. Department of Agriculture (USDA) Rural Development program efforts to improve rural water infrastructure.

Representing the national RCAP network, Fierros was on a panel of five people who testified during the hearing. She spoke of the challenges that small, rural communities have in meeting their water and wastewater needs and how the USDA Rural Development program provides services and funds that benefit communities, public health and the environment.

“There is a point at which an infrastructure project is simply not affordable without federal assistance. Without grants and subsidized long-term loans, most projects in rural America – many of which are

only marginally affordable even with these funds – are simply not feasible,” Fierros told the subcommittee. She provided examples of RCAP’s work in communities in her statement.

Fierros’ recommendations to the committee were to increase annual appropriations for Rural Development programs, improve the grant-to-loan ratio in USDA’s Water and Waste Disposal Program, and increase technical assistance funding to allow RCAP and other providers to keep pace with growing demand.

Also testifying at the hearing was Jonathan Adelstein, Administrator, Rural Utilities Service (RUS) at USDA. In his statement, Adelstein cited RCAP as an organization of technical assistance providers that RUS has used to implement the American Recovery and Reinvestment Act.

“In early March 2010, we awarded a \$5 million Technical Assistance and Training Grant, made possible by ARRA, to the

[continued on next page](#)

Rural Community Assistance Partnership,” said Adelstein in his testimony (see article on page 10). “RCAP’s field teams will continue our efforts to identify communities with water and wastewater infrastructure needs, particularly those in areas of persistent poverty. The technical assistance providers have been a tremendous resource for recipients of RUS funding for rural water and wastewater infrastructure.”

The RUS administers the Water and Waste Disposal Program, which provides loans, grants, loan guarantees and technical assistance for drinking water, wastewater, solid waste and storm drainage facilities in rural communities with populations under 10,000 people.

“The majority of community water systems in America serve small populations, which makes their long-term health vital to those of us who represent rural con-

stituencies,” said Subcommittee Chairman Mike McIntyre (D-N.C.). “At today’s hearing we heard how RUS is meeting the demands for clean water and how they are assisting communities like those on our second panel, who know the importance of clean water systems to the growth of their communities.”

The full text of Fierros’ statement is on the RCAP website at [www.rcap.org/Fierrotestimony](http://www.rcap.org/Fierrotestimony) ■

## Legislative update

By Aaron Fischbach

RCAP staff and board members who participated in February’s congressional visits, organized by the RCAP national office (see related article, page 12), spoke to their lawmakers about funding that supports and affects RCAP’s work. Below are the funding issues the participants highlighted with some background and a look forward on these legislative matters.

### **Fiscal year 2011 appropriations**

The official process for enacting the federal “budget” each year involves the president submitting a proposed budget to Congress, Congress passing a budget resolution that sets spending ceilings for the year, then Congress enacting a series of 12 appropriations bills that are sent to the president for his signature or veto. All of this is supposed to occur by October 1, the start of a federal fiscal year (FY).

The RCAP network receives funding to support its technical assistance work via three of the appropriations bills – Labor-HHS-Education, Interior & Environment, and Agriculture.

President Obama submitted his FY 2011 budget to Congress on Feb. 1. Congress has begun its work on the budget process. As in recent years, however, it is expected that Congress will not complete work on most of the appropriations bills by October 1. Instead, a Continuing Resolution will likely be enacted that runs until after the November election, after which Congress will finish work on the bills.

### **State Revolving Funds reauthorization**

In March 2009, the House of Representatives passed the Water Quality Investment Act of 2009 (H.R. 1262), which would reauthorize the Clean Water State Revolving Funds (CW-SRF) and other programs. State CW-SRF programs fund sewer and storm sewer projects and related activities.

In July 2009, the Senate Environmental and Public Works Committee approved the Water Infrastructure Financing Act (S. 1005), which would reauthorize both the CW-SRF and the Drinking Water SRF (DW-SRF) and related programs. The Senate may take up the bill this year, but discussions continue regarding the state funding allocation formula and other matters.

The House Energy and Commerce Committee oversees the DW-SRF, but has yet to take up reauthorizing legislation because it has been preoccupied with climate change and health care reform legislation.

Through the work of RCAP and others, both the House and Senate bills include new provisions that would benefit small water and wastewater systems, including increased authorizations for technical assistance.

### **Water Trust Fund**

Last year, the Government Accountability Office issued a report on potential funding mechanisms (taxes and fees, tax loophole closures, etc.) for a federal trust fund to finance water infrastructure. Following its release, Rep. Earl Blumenauer (D-Ore.) introduced the Water Protection and Reinvestment Act of 2009 (H.R. 3202), which would establish a trust fund to dedicate \$10 billion annually for water and wastewater infrastructure and related programs (including small-system technical assistance). The trust fund would be supported by revenues from taxes on bottled beverages, flushable products, and pharmaceuticals, as well as a corporate clean water restoration (income) tax.

RCAP has helped secure provisions in the trust fund bill that benefit small systems.

At present, the legislation has 31 cosponsors, and supporters are working to educate representatives and their staffs about the bill and increase the number of cosponsors to build momentum for passage. ■

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*Fischbach is the Director of Policy Development and Applied Research in the RCAP national office.*

# RCAP Solutions marks 40 years of helping communities improve their quality of life

RCAP Solutions, the Northeast RCAP, is celebrating 40 years of helping communities improve their quality of life. Founded in 1969 as Rural Housing Improvement (RHI) in Westminister, Mass., RCAP Solutions began marking its four decades of existence last year and is continuing the year-long celebration into 2010.

The organization received its first grant from the U.S. Department of Housing and Urban Development to rehabilitate eight buildings that were then sold to low-income families.

By the mid-1970s, RHI's efforts to develop safe, affordable housing had expanded to include rural water and wastewater programming in New England. In 1977, RHI was selected by the National Demonstration Water Project to participate in a program focusing on rural water and wastewater issues in New England.

Two years later, because of RHI's efforts on behalf of communities in Massachusetts to develop and maintain safe, affordable housing, along with its successful oversight of water and wastewater issues, the organization was named one of the two

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original Rural Community Assistance Partnerships (RCAP, Inc.), a network that expanded into six partnerships nationwide in 1979.

Since then, the organization has changed its name to reflect the comprehensive range of community development activities it carries out and to tie itself to RCAP's national network. Today, RCAP Solutions employs nearly 100 people in nine states, Puerto Rico and the U.S. Virgin Islands, providing safe, affordable housing; building and managing water and wastewater facilities; helping communities develop the critical infrastructure they need to thrive; advocating on their behalf; and providing the training and education that helps build knowledge, expertise, and capacity. In addition, RCAP Solutions recently launched a new program for small-business lending.

## RCAP Solutions' technical assistance program

RCAP Solutions operates a rural technical assistance program with an annual budget of approximately \$3 million. The organization's staff in the field assists small communities in planning and funding water and wastewater projects. RCAP Solutions typically leverages \$40 million or more a year in federal, state and private-sector financing to fund these projects.

Like all RCAP regions, RCAP Solutions assists under-served communities and works with a range of them, from resort areas like Martha's Vineyard and Cape Cod to small towns or villages such as Morris Run in Tioga County, Penn. There, RCAP Solutions provided assistance in developing a regionalization project and helped obtain \$1.6 million in funding from the Pennsylvania Infrastructure Investment Authority to replace an aging and deteriorating drinking water system.

In Herminie, Penn., near Pittsburgh, RCAP Solutions helped secure \$18 million in government financing to build a



new water collection and treatment system after aging pipes caused raw sewage to seep into the town's supply of drinking water.

"We work with hundreds of rural communities to help resolve a host of issues. What we're good at is finding out what are the needs of the community instead of saying, 'This is what we can do for you.'" said Scott Mueller, program manager.

Sometimes the process takes years. In Stonington, a small community on the southern edge of Deer Isle in Penobscot Bay, Maine, RCAP Solutions worked with town committees for more than three years on watershed protection and a source water protection ordinance. Over time, RCAP Solutions' field contributions blossomed into wastewater management and comprehensive community planning.

"We do everything except put the pipes into the ground," said RCAP Solutions' President and CEO, Karen Koller. "We'll



assist in the Request for Proposal process to find the proper contractors, oversee a project's development and construction, and provide training and education to the community and its governing boards to properly manage their water systems."

RCAP Solutions recently helped residents of a failing mobile home park in Westborough, Mass., to become owners of the park. RCAP Solutions helped residents of the mobile home park purchase the park and become a nonprofit organization, creating a resident-owned community, the Turnpike Park Co-operative, Inc. RCAP Solutions is providing interim management services until the residents can take over themselves. It was the first successful resident-owned community conversion in Massachusetts.

"The mobile home park has a lot of water and wastewater issues, and we are helping them resolve those issues and advising them on hiring professionals to correct the infrastructure problems," said Paul Teixeira, RCAP Solutions' vice president of community resources.

## An eye toward the future

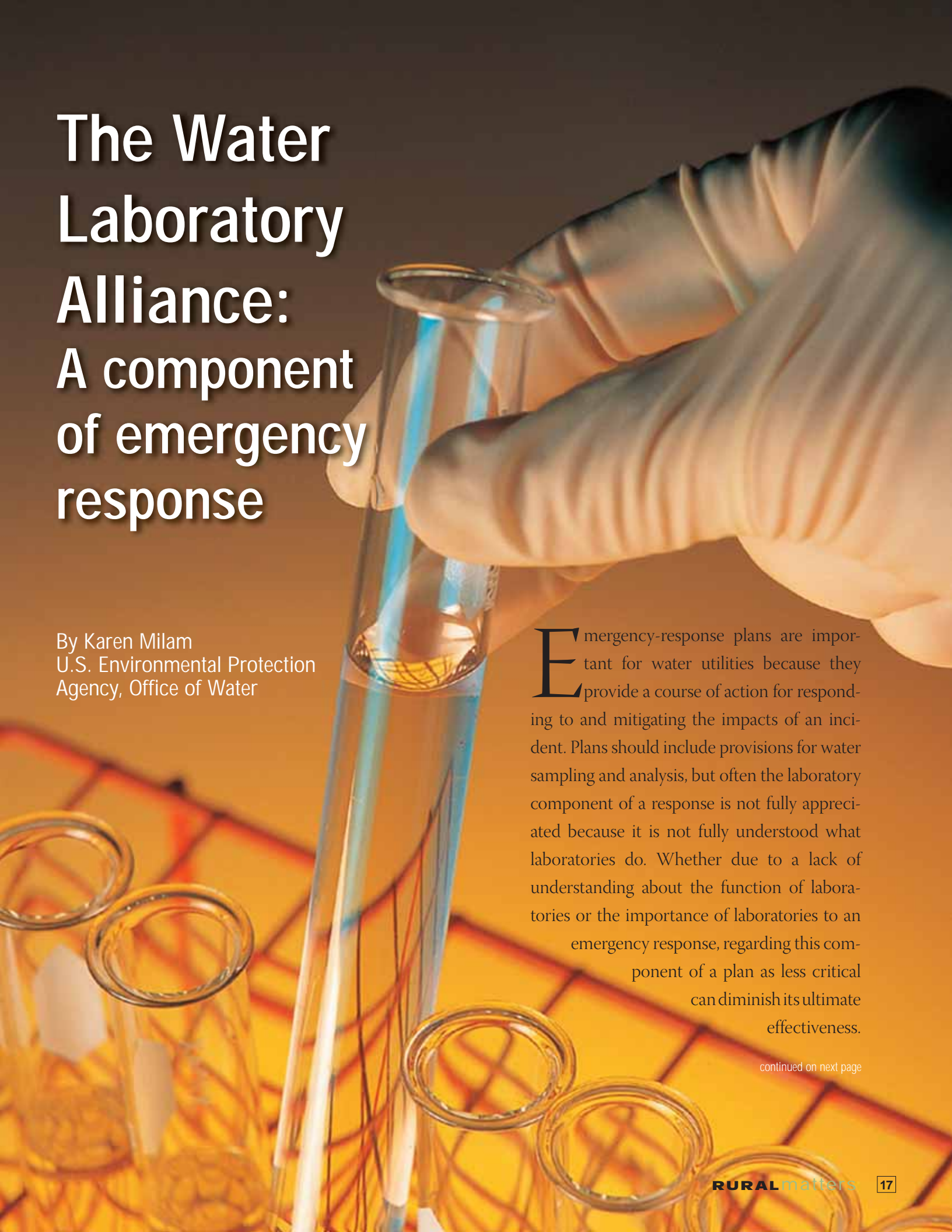
In 2009, *Worcester (Mass.) Business Journal* named RCAP Solutions as the number 10 Top Growth Non-Profit in Worcester County.

Many of the communities served by RCAP Solutions face pending infrastructure crises caused by aging water and wastewater pipes. Sharyn Rice, chair of the board, noted, "The increasing need for infrastructure improvements is moving to the forefront in many communities. RCAP Solutions is prepared to assist towns with our services."

"We are more committed than ever to our mission," said Koller. "We look forward with resolve to the important work that lies ahead." ■

photo courtesy of Ohio EPA



A close-up photograph of a gloved hand holding a test tube containing a yellow liquid. The background is a warm, orange-toned grid pattern, possibly a laboratory floor or wall. Other test tubes are visible in the foreground and background, some containing liquids of different colors.

# The Water Laboratory Alliance: A component of emergency response

By Karen Milam  
U.S. Environmental Protection  
Agency, Office of Water

**E**mergency-response plans are important for water utilities because they provide a course of action for responding to and mitigating the impacts of an incident. Plans should include provisions for water sampling and analysis, but often the laboratory component of a response is not fully appreciated because it is not fully understood what laboratories do. Whether due to a lack of understanding about the function of laboratories or the importance of laboratories to an emergency response, regarding this component of a plan as less critical can diminish its ultimate effectiveness.

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photo courtesy  
of EPA

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The analytical services of drinking water laboratories are essential to the provision of safe water. In a water-contamination incident, laboratories provide the analysis and confirmation of an unknown or known contaminant so that emergency responders can take appropriate actions to protect themselves, the community and the environment and restore the utility to service.

Because laboratories have a significant role in emergency responses, emergency planners need to understand the laboratories' capabilities and capacities, along with their limitations and constraints. The Environmental Protection Agency's Water Laboratory Alliance and related tools support laboratories in building their capabilities and capacities and, by extension, support utilities and their communities in emergencies.

## The Water Laboratory Alliance

The mission of the Water Laboratory Alliance (WLA) is to provide the water sector with an integrated, nationwide network of laboratories with the analytical capability and capacity to support monitoring and surveillance and response and remediation in the event of an intentional, unintentional or natural water contamination.

There are several components of the program that are used to accomplish this mission. For example, EPA's Office of Water has augmented existing drinking-water monitoring methods by targeting an additional 16 unregulated contaminants of relevance to the water sector. With the development and validation of supplementary analytical methods, laboratories and utilities will enhance their preparedness to identify an unknown contaminant.

Laboratories that comprise the WLA include drinking water, public health, environmental, and select commercial

laboratories. These laboratories provide support to the WLA during a drinking water contamination incident. The WLA is a component of EPA's larger network of laboratories, the Environmental Response Laboratory Network (ERLN). The ERLN focuses on analyses of all environmental matrices (soil, air, wipes and water). The ERLN, along with laboratory networks formed under other federal agencies, including the Centers for Disease Control and the Department of Homeland Security, comprise the overall laboratory network, the Integrated Consortium of Laboratory Network (ICLN).

The ERLN/WLA is now formally accepting applications for membership. Interested laboratories should visit [www.epa.gov/erln](http://www.epa.gov/erln) for additional information. If you are a utility that uses an outside laboratory, it is worth inquiring if it is a member of the WLA and encouraging it to join if it is not.

There are many benefits to the laboratory sector for joining the WLA, including: improved preparedness for analytical support to respond to any emergency situation; improved communication with peer laboratories; partnership with neighbor-

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# Tools for the water sector

To further increase the preparedness and resiliency of the water sector, the EPA has developed several tools to give utilities and laboratories access to critical information on possible contaminants, laboratory contacts, analytical methods, and sampling procedures. All of the following tools are accessible through the WLA website at [www.epa.gov/watersecurity](http://www.epa.gov/watersecurity)

## **Water Contaminant Information Tool**

This tool was developed to specifically support the water sector and its response partners, such as laboratories and emergency responders. The tool is a secure online database that contains information for 102 chemical, biological and radiological contaminants of concern. It was developed to support preparedness planning, incident response, response training and contaminant research (see sidebar).

## **Lab Compendium**

The Laboratory Compendium is a secure, web-based tool that provides real-time laboratory contact, capability and capacity information. The database includes a broad spectrum of laboratories. ERLN and WLA laboratories must enter their information into the compendium.

## **National Environmental Methods Index for Chemical, Biological and Radiological Methods (NEMI-CBR)**

EPA collaborates with the U.S. Geological Survey to give laboratories and utilities access to EPA methods through this tool. NEMI-CBR is an online compendium of analytical methods, both confirmatory and screening. This database is used to search and download (or link to) full analytical methods as well as compare costs and other features of available methods. Analyses in NEMI-CBR can be flagged according to their inclusion in EPA's Standardized Analytical Methods (SAM).

## **Standardized Analytical Methods (SAM)**

SAM, a product of EPA's National Homeland Security Research Center, identifies

the best confirmatory analytical method to be used by laboratories and utilities when analyzing environmental samples following a natural, unintentional, or intentional contamination incident. SAM is updated yearly by a technical workgroup and is uploaded onto the WLA website as a reference for laboratories and utilities.

## **Sampling Guidance for Unknown Contaminants in Drinking Water**

Published by the EPA, this is a comprehensive guidance document that outlines the steps a drinking water utility should take to prepare for a contamination event. The guidance is a planning tool to provide examples of several different sample analyses, kits, and equipment to help utilities

prepare with the various resources a utility may have on their site.

The Water Laboratory Alliance Program, along with the Water Contaminant Information Tool and other tools, are used today by laboratories to prepare for an emergency. These efforts are being made to prepare the laboratory community to effectively and efficiently respond to the request of utilities and their communities for contaminant analysis in the event of a natural disaster, unintentional, or intentional contamination incident. The laboratory community has an important role in emergency preparedness and should support the utilities and their communities in a systematic, coordinated response.

## **WCIT – a robust tool for the water sector**

The Water Contaminant Information Tool (WCIT) can be used in emergency planning, response and recovery by the entire water sector, including utilities and small communities. WCIT, which is password-protected, is a free online database that currently contains information for 102 chemical, biological and radiological contaminants of concern. The functionality of WCIT along with its content was shaped and validated by water-utility professionals, scientists and public health experts. This tool is useful to the water sector because it provides comprehensive, useful information on contaminants of concern in a one-stop, easy-to-use tool.

Some of the categories of data found in WCIT that the water sector may find useful include:

- Water-quality indicators
- Medical information (e.g., clinical symptoms, health effects and routes of exposure)
- Drinking water and wastewater-treatment processes
- Infrastructure decontamination information

Jack Bennett, Section Chief of Environmental Chemistry at the State of Connecticut Department of Public Health, said, "WCIT is a valuable resource for information on a wide variety of contaminants. It collates and summarizes information ranging from analytical methods and toxicological profiles to treatment technologies."

When asked how the tool benefits the water sector, he stated that it will allow utilities and laboratories to have "a readily available starting point to find information that would otherwise be difficult to quickly pull together,"

Visit [www.epa.gov/wcit](http://www.epa.gov/wcit) for more information about WCIT and how to apply for access.

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ing laboratories to support surge capacity needs; knowledge of neighboring laboratory analytical capability and available personnel; and coordination and standardization of data reporting systems.

These benefits translate directly into a laboratory that is better prepared to provide prompt, reliable data to a water utility when analytical services are requested. The WLA also provides opportunities to participate in exercises with utilities and the emergency-response community, preparing the water sector for a unified response.



EPA's 10 regions throughout the country. The RLRPs provide a framework for efficient laboratory responses to water-contamination events. They include forms and other resources to facilitate communication between the requestor of the analysis and the laboratories participating in the response. The documents provide guidance on coordination of laboratory support during a water contamination incident including: sample brokerage, tracking and transport; analysis; data review and validation; data transfer and reporting; and shipping and packaging protocols.

## Water Laboratory Alliance Response Plan

In 2009, EPA developed the WLA Response Plan (WLA-RP) for laboratories to use in preparing for and responding to a contamination incident. This comprehensive plan provides a coordinated, multi-laboratory response to a confirmed or possible water contamination.

The WLA-RP provides federal, regional and state environmental and public health laboratories, as well as water-utility laboratories, with a structure for a systematic and coordinated response to a water-contamination incident. The WLA-RP covers a spectrum of activities, including preparedness, response, remediation and recovery.

The WLA-RP is intended for use in a response on a regional and multi-regional scale. However, the guidance and procedures in the WLA-RP are applicable to smaller, multi-laboratory responses. Many aspects of the plan, including sample anal-

ysis, sample tracking, data review, and data transfer can also be applied to single-laboratory responses.

In September 2009, EPA tested the WLA-RP in a multi-regional exercise to assess the effectiveness of laboratories in responding to a simulated terrorist attack using biological and chemical agents. During the exercise, laboratories were sent actual samples for analysis.

A laboratory evaluator of the exercise said, "It was a good way to see if the things we have been planning for will actually work in a real situation. I think that it's easy to say that something will work in a planning situation, but there are many issues that don't come out until you do it for real, and this exercise showed that."

## Regional laboratory response plans

In 2007, EPA's Office of Water and Regional Laboratories developed Regional Laboratory Response Plans (RLRPs) for each of

Throughout 2007 and 2008, EPA conducted both table-top and functional exercises to test the usefulness of the RLRPs within each region. The functional exercises not only gave participating laboratories and utilities the opportunity to work with federal, state and local partners, but also gave the laboratories and utilities a chance to revise the RLRPs based on lessons that they learned during the exercises. Some of these lessons included suggested changes to internal laboratory procedures such as defining procedures for handling emergency calls, training personnel in the shipment and receipt of hazardous samples, and having multiple personnel familiar with the response plan.

The table-top exercises and functional exercises give laboratories an ability to practice their response effort, address gaps, and bolster their preparedness protocols. By incorporating the lessons learned into the WLA-RP and RLRPs, laboratories have access to a tried-and-tested course of action for responding to an incident. ■

# Ground Water Rule: A Quick Reference Guide

Overview of the Rule	
Title	Ground Water Rule (GWR) 71 FR 65574, November 8, 2006, Vol. 71, No. 216 Correction 71 FR 67427, November 21, 2006, Vol. 71, No. 224
Purpose	Reduce the risk of illness caused by microbial contamination in public ground water systems (GWSs).
General Description	The GWR establishes a risk-targeted approach to identify GWSs susceptible to fecal contamination and requires corrective action to correct significant deficiencies and source water fecal contamination in all public GWSs.
Utilities Covered	The GWR applies to all public water systems (PWSs) that use ground water, including consecutive systems, except that it does not apply to PWSs that combine all of their ground water with surface water or with ground water under the direct influence of surface water prior to treatment.

Public Health Benefits	
Implementation of the GWR will result in . . .	<ul style="list-style-type: none"> <li>▶ Targeted protection for over 70 million people served by ground water sources that are either not disinfected or receive less than 4-log treatment.</li> <li>▶ Avoidance of 42,000 viral illnesses and 1 related death annually.</li> </ul>
Estimated impacts of the GWR include . . .	<ul style="list-style-type: none"> <li>▶ The annualized present value of the GWR is \$19.7 million, with a 90-percent confidence interval of \$6.5 to \$45.4 million.</li> <li>▶ Mean annual cost per household is estimated to be less than \$1.00 for approximately 96 percent of affected households.</li> </ul>

## Critical Deadlines and Requirements For Drinking Water Systems

November 30, 2009	New ground water sources put in place after this date must meet triggered source water monitoring requirements or conduct compliance monitoring.
December 1, 2009	By this date, GWSs conducting compliance monitoring because they provide at least 4-log virus inactivation, removal, or a state-approved combination of these technologies before or at the first customer, must have notified the state and must begin compliance monitoring. The written notification to the state must include engineering, operational, and other information the state requests.
December 1, 2009	GWSs must conduct triggered source water monitoring if the GWS does not provide at least 4-log virus inactivation, removal, or a state-approved combination of these technologies before or at the first customer and the GWS is notified that a sample collected for the Total Coliform Rule (TCR) is total coliform-positive.
December 1, 2009	GWSs for which the state has identified a significant deficiency and GWSs at which at least one of the five additional ground water source samples (or at state discretion, after the initial source sample or an assessment source sample) has tested positive for fecal contamination must comply with the treatment technique requirements.

For States	
August 8, 2008	States are encouraged to submit final primacy applications or extension requests to EPA.
November 8, 2008	Final primacy revision applications for GWR must be submitted to the EPA regional administrator, unless state is granted an extension.
August 8, 2010	States with approved extension agreements are encouraged to submit final primacy applications to EPA.
November 8, 2010	Final primacy applications must be submitted to the EPA regional administrator for states with a full 2 year extension.
December 31, 2012	States must complete initial sanitary survey cycle for all community GWSs except those that meet performance criteria.
December 31, 2014	States must complete initial sanitary survey cycle for all noncommunity GWSs and all community GWSs that meet performance criteria.

Analytical Methods for Source Water Monitoring		
Fecal Indicator	Methodology	Method Citation*
<i>E. coli</i>	Colilert Colisure Membrane Filter Method with MI Agar m-ColiBlue24 Test E*Colite Test EC-MUG NA-MUG	9223 B. 9223 B. EPA Method 1604.  9221 F. 9222 G.
Enterococci	Multiple-Tube Technique Membrane Filter Technique Membrane Filter Technique Enterolert	9230 B. 9230 C. EPA Method 1600.
Coliphage	Two-Step Enrichment Presence-Absence Procedure Single Agar Layer Procedure	EPA Method 1601. EPA Method 1602.

\*Footnotes regarding methods can be found in 40 CFR 141.402



## Major Provisions

### Compliance Monitoring

Treatment Technique Compliance Monitoring	<ul style="list-style-type: none"> <li>▶ In order not to be subject to triggered source water monitoring, a GWS can notify the state that it provides at least 4-log treatment of viruses using virus inactivation, removal, or a state-approved combination of 4-log virus inactivation and removal before or at the first customer. The GWS must then begin compliance monitoring designed to show the effectiveness of their treatment processes.</li> <li>▶ GWSs that use chemical disinfection and serve more than 3,300 people must continuously monitor their disinfectant concentration. GWSs must maintain the minimum disinfectant residual concentration determined by the state.</li> <li>▶ GWSs that use chemical disinfection and serve 3,300 people or fewer must take daily grab samples or meet the continuous monitoring requirements described above for GWSs serving more than 3,300 people.</li> <li>▶ GWSs using membrane filtration for 4-log treatment of viruses must monitor the membrane filtration process according to state-specified monitoring requirements.</li> <li>▶ GWSs may use alternative treatment technologies (e.g., ultraviolet radiation [UV]) approved by the state. GWSs must monitor the alternative treatment according to state-specified monitoring requirements, and must operate the alternative treatment according to compliance requirements established by the state.</li> </ul>
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### Source Water Monitoring

Triggered Source Water Monitoring	<ul style="list-style-type: none"> <li>▶ GWSs that do not conduct compliance monitoring and are notified of a total coliform-positive routine sample collected in compliance with the TCR (40 CFR 141.21) must conduct triggered source water monitoring.</li> <li>▶ GWSs must collect at least one ground water source sample from each source in use at the time the total coliform-positive sample was collected. The triggered source water sample must be analyzed for the presence of a fecal indicator as specified in the rule.</li> <li>▶ If the triggered source water sample is fecal indicator-positive, the GWS must either take corrective action, as directed by the state, or if corrective action is not required by the state and the sample is not invalidated by the state, the GWS must conduct additional source water sampling.</li> <li>▶ States may waive the triggered source water monitoring requirement if the state determines and documents, in writing, that the total coliform-positive routine sample is the result of a documented distribution system deficiency.</li> <li>▶ States may develop criteria for distribution system conditions that cause total coliform positive samples. A GWS can document to the state that it met the state criteria within 30 days of the total coliform-positive sample and be exempt from collecting triggered source water sample(s).</li> <li>▶ States may invalidate a fecal indicator-positive ground water source sample under specific conditions. If a fecal indicator-positive source sample is invalidated, the GWS must collect another source water sample within 24 hours of being notified by the state of its invalidation decision.</li> </ul>
Additional Source Water Sampling	<ul style="list-style-type: none"> <li>▶ If the state does not require corrective action in response to a fecal indicator-positive triggered source water sample, the GWS must collect five additional source water samples (from the same source) within 24 hours of being notified of the fecal indicator-positive sample.</li> </ul>
Assessment Source Water Monitoring	<ul style="list-style-type: none"> <li>▶ States have the opportunity to target higher risk GWSs for additional testing. States independently can determine on a case by case basis whether monitoring is necessary and when corrective action needs to be taken.</li> </ul>

### Treatment Technique Requirements

GWSs with Significant Deficiencies or Source Water Fecal Contamination	<ul style="list-style-type: none"> <li>▶ GWSs must take corrective action if a significant deficiency is identified, or if the initial source sample or a GWR assessment monitoring source sample (if required by the state) or one of the five additional ground water source samples tests positive for fecal contamination. The GWS must implement at least one of the following corrective actions: <ul style="list-style-type: none"> <li>▶ Correct all significant deficiencies.</li> <li>▶ Provide an alternate source of water.</li> <li>▶ Eliminate the source of contamination.</li> <li>▶ Provide treatment that reliably achieves at least 4-log treatment of viruses (using inactivation, removal, or a state-approved combination of 4-log virus inactivation and removal) before or at the first customer for the ground water source.</li> </ul> </li> </ul>
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### New Sources

New Ground Water Sources	<ul style="list-style-type: none"> <li>▶ New sources which come on line after November 30, 2009 are required either to conduct triggered source water monitoring as required by the GWR, or provide at least 4-log inactivation, removal or a state-approved combination of these technologies and conduct compliance monitoring within 30 days of the source being put in service.</li> </ul>
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### Sanitary Surveys

All Ground Water Systems	<ul style="list-style-type: none"> <li>▶ States are required to conduct sanitary surveys of all GWSs in order to identify significant deficiencies, including deficiencies which may make a system susceptible to microbial contamination.</li> <li>▶ Following the initial sanitary survey, states must conduct sanitary surveys every 3 years for most CWSs and every 5 years for NCWSs and CWSs that provide at least 4-log treatment of viruses or have outstanding performance records, as determined by the state.</li> </ul>
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For additional information on the GWR

Call the Safe Drinking Water Hotline at 1-800-426-4791; visit the EPA web site at [www.epa.gov/safewater/disinfection/gwr](http://www.epa.gov/safewater/disinfection/gwr); or contact your state drinking water representative.

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