



ARKANSAS DRINKING WATER UPDATE

Volume 22, No. 2

ENGINEERING SECTION – DEPARTMENT OF HEALTH

Summer 2009

Green projects solicited for Stimulus funds

Richard Dawson, P.E., Arkansas Natural Resources Commission

The American Recovery and Reinvestment Act of 2009 (ARRA) or “the Stimulus Package” was recently made available to the State of Arkansas. The state received an estimated total of 2.9 billion dollars in ARRA funds, with \$24.5 million designated for the Drinking Water Revolving Loan Fund

(DWSRF) and \$25.8 million for Clean Water Revolving Loan Fund (CWRLF). The funds will be administered by the Arkansas Natural Resources Commission (Commission) and are designed to promote jobs and future economic growth.



Any project that meets the requirements of either the DWSRF or CWRLF program is eligible for funding assistance. A few examples of eligible projects are water and sewer lines; storage tanks; treatment plant upgrades; stormwater prevention; and streambank restoration. All projects funded with Stimulus monies must be ready to begin construction, comply with all reviews and requirements of the applicable funding program, and be under contract for construction by February 2010. Approvals need to be secured and the project ready to bid by late September or early October of 2009.

In addition to the traditional projects mentioned above, ARRA reserves at least 20 percent of its funds for “Green” infrastructure projects. To be considered Green, a project must meet one of four requirements: energy

See **Stimulus** page 3

Surveys show \$\$ billions needed for infrastructure

Two recent reports estimating the capital needs of the U.S. water industry predict hundreds of billions of dollars of infrastructure improvements are needed. The US EPA released in March its survey, conducted every four years, of the projected nation cost to replace deteriorated drinking water structures, comply with federal regulations and to protect public health. The American Society of Civil Engineers also released in March its annual report card on all US infrastructure, including drinking water. That report was similar to the EPA estimate in its scope but also included some drinking water infrastructure excluded by the EPA.

EPA estimates that \$335 billion will be needed over the next 20 years for drinking water. ASCE projects that the current expenditures on drinking water from all sources will be short by \$11 billion per year over the same period.

The EPA estimated need for Arkansas water systems totaled \$5.3 billion with the greatest portion, \$3.7 billion, needed for distribution improvements and \$1 billion needed for treatment improvements. The figures were based on the extrapolation of survey responses from 96 Arkansas public water systems to the entire state and were part of the 3250 systems surveyed nationally.

State estimates are used by EPA to prorate the allocation of federal capitalization dollars to the Drinking Water

See **\$ Billions** page 2

Report: aquifer pumping rates unsustainable

Only about half of the current withdrawal rates for the alluvial and Sparta aquifers in eastern and southern Arkansas are sustainable long term according to a recent state report. That information was contained in the Arkansas Ground Water Protection and Management Report for 2008, an annual report assessing groundwater usage in the state and published by the Arkansas Natural Resources Commission.

The report's summary continues a long standing warning about excessive withdrawals from the area aquifers, and calls for continued conservation, education, and the promotion of surface water alternatives to groundwater. It also states that if those measures are unsuccessful the state will have to consider regulatory alternatives to preserve the aquifers.

The report estimates that of the 6.5 billion gallons pumped daily from the state's alluvial aquifer, approximately 46 percent is sustainable. For the 159 million gallons pumped daily from the Sparta aquifer, only 55 percent is sustainable.

Arkansas ranks No.4 among the 50 states in groundwater use with an estimated 6.9 billion gallons of groundwater pumped daily in 2006, over 90 percent of which is for agricultural irrigation. Intensive pumping in alluvial aquifers and in the Sparta aquifer have created severe cones of depression in several counties. The Commission has established critical ground water designations for two areas. The Grand Prairie Critical

See **Study** page 3

Inside the <i>Update</i>	Page
Pulaski Co amends subdv code....	2
Crypto monitoring update.....	4
NIMS.....	5
Infrastructure mapping.....	6
Water license renewal.....	7
BF testing cert. vs licensing	8
Service area maps to web.....	10
Licensing Committee.....	14
Training.....	5,16

\$ Billions *continued from page 1*

State Revolving Fund. The results of the survey will be used to allocate SRF grants for fiscal years 2010 through 2013. EPA's estimate does not include projects ineligible under the SRF program such as dams and reservoirs, projects primarily needed for population growth, and operation and maintenance costs.

ASCE's report card gave the nation's drinking water infrastructure a grade of D minus. While the report notes that billions of dollars are spent annually for drinking water, funding from all sources will still be insufficient to meet the need. Like the EPA estimate, ASCE's projected shortfall does not account for any growth in drinking water demand during the study period.

The ASCE report points out that of the nation's nearly 53,000 community water systems, approximately 83% serve 3,300 or fewer people and those systems provide water to only 9% of the total U.S. population served by all community systems. The report states that smaller systems face significant financial, technological, and managerial challenges in meeting a growing number of federal drinking water regulations.

EPA's report projected that 16% of the 20 year estimate or \$52 billion is needed for regulatory compliance.

Copies of the reports can be found at EPA's website www.epa.gov/safewater/needssurvey/ and at ASCE's website www.infrastructurereportcard.org/.

ARKANSAS DRINKING WATER

UPDATE is published quarterly by the Engineering Section, Arkansas Department of Health to inform readers of issues and activities affecting this industry. Articles and information in the newsletter can be reproduced without restriction if credit is given for the source. Potential contributors of articles for the **UPDATE** and persons wishing to be added to the mailing list should contact Robert Hart, P.E. at the return address listed on the last page.

Pulaski County amends subdivision code to protect Lake Maumelle

The Pulaski County Quorum Court adopted revised subdivision regulations in April which incorporate measures to protect Lake Maumelle, the principal supply for the state's largest drinking water utility, Central Arkansas Water. The adoption came in spite of opposition from several Quorum Court members who said the measure did not go far enough in its protection of the lake.

The revision to the county regulations was the first to have occurred in 37 years and was the result of two years of negotiations with stakeholders. The need for the regulations was detailed in a 2007 Lake Maumelle watershed management plan developed by Central Arkansas Water. Even though Central Arkansas Water developed the plan, as a utility it does not have the power to enforce building or land use restrictions and needs local and state governments' to implement the plan's measures. The lake's watershed encompasses primarily unincorporated areas.

The revised Pulaski County regulations apply to subdivided parcels smaller than 10 acres and include storm water limits on phosphorous, sediment, and total organic carbon from new developments. The regulations also prohibit any surface wastewater discharge except for permitted storm water discharges. Compliance with the contaminant limits can be achieved through engineered best management practices, by a conservation design utilizing minimum undisturbed areas, or by a combination of the two so long as the design is certified by a registered professional engineer. The regulations also require Pulaski County to develop and adopt a storm water management manual within a year.

Not included in the regulations, and a component of the 2007 watershed management plan, was a minimum lot size requirement of five acres. Proponents of this requirement felt the subdivision regulations would be inadequate without its adoption. However, Pulaski County Judge Buddy Villines opposed the idea stating that such a requirement constituted zoning and that the county first needed a land use plan before it could enact zoning regulations. A March opinion from Arkansas Attorney General Dustin McDaniel stated that there was no legal impediment to incorporating lot size restrictions without a land use plan so long as the restrictions were reasonable, but the opinion did not dissuade Villines' opposition. A last minute attempt to adopt the five acre requirement as part of the revisions to the subdivision regulations was defeated in a vote by the Quorum Court. Several court members then voted against the adoption of the regulations because of its failure to contain a lot size restriction. Villines has promised to develop a land use plan as soon as possible.

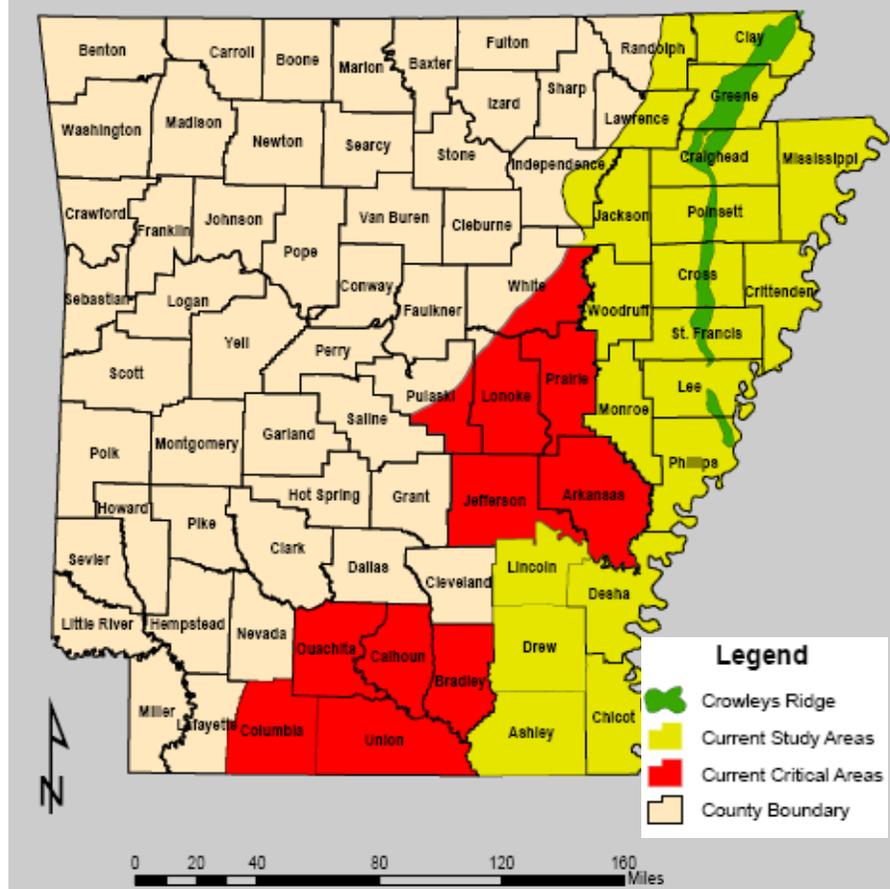
The Quorum Court also approved an agreement with Central Arkansas Water whereby the utility will pay approximately \$250,000 annually for the county to hire staff and purchase equipment to implement the regulations. The utility will also assume the expense of any lawsuits or court judgments against the county by property owners who claim a taking of their property.

Lake Maumelle's watershed covers 88,000 acres in three counties, 49 percent of which are located in Pulaski County. Central Arkansas Water supplies drinking water for about 400,000 people including more than 90 percent of the residents of Pulaski County.

Still to be decided at the state level is a request by Central Arkansas Water for the Arkansas Pollution Control & Ecology Commission to amend its regulations to prohibit wastewater discharges in the entire Lake Maumelle watershed.

Information on the Pulaski County subdivision regulations can be found at Central Arkansas Water's website - www.carkw.com/. ♦

Critical Ground Water Designations



Source: Arkansas Natural Resources Commission

Study continued from page 1

Groundwater Area includes Arkansas, Jefferson, Prairie, Lonoke, along with parts of White and Pulaski counties. The South Arkansas Critical Groundwater Area includes Columbia, Union, Ouachita, Calhoun, and Bradley counties. In addition, the Commission's staff is studying similar designations for some of the remaining counties in eastern Arkansas. A critical groundwater designation means the area is a priority for state and federal conservation measures, and recommends local interests develop a plan of action to address the problem. There is no regulation of water associated with a critical groundwater designation

Water well levels throughout the state are monitored by the ANRC, and by the federal Natural Resources Conservation Service and U.S. Geological Survey. The overall change in aquifer levels are reported annually. While fluctuations in groundwater levels may be observed over a short time period, long term records indicate a serious decline in groundwater levels. Over a 24 year period, a statewide decline of 0.3 feet per year has been measured in the alluvial aquifer with declines of as much as six feet per year in the past ten years in some areas.

Overpumping of an aquifer can increase dissolved solids due the infiltration of deeper level brackish water. It can also lower the potentiometric water level below the top of the aquifer causing a compaction of the aquifer sands which results in a permanent loss in the yield of the aquifer.

A copy of the study can be found at the Commission's website: www.anrc.arkansas.gov/ . ♦

Stimulus continued from page 1

efficiency, water efficiency, green infrastructure or environmentally innovative. The Commission is working with the US EPA to further define these categories, but encourages project developers to think Green whenever possible. EPA Region 6 personnel in Dallas, TX must review and qualify every Green project.

The Commission recently advertised for Stimulus project applications. One hundred-ninety projects requested over \$550 million of ARRA funds. The majority of the requests were for traditional construction projects. Twenty were listed as potentially Green, while another fifty would have to present a case to the Commission and EPA for potential Green eligibility. Sixty percent of the requests were for drinking water; the other forty percent were for wastewater.

Half of the Stimulus funds available are required to be in the form of a grant, a negative interest loan, or a principal forgiveness loan; and the other half may be a loan. Interest rates have yet to be established for the loans, but the rates are projected to be anywhere from one percent (1%) to the standard three and a quarter percent (3.25%). Any grant is required to be provided to communities that could not otherwise afford a DWSRF or CWRLF loan. In other words, grants will be based on income level.

Currently there are three websites that provide additional information about the Stimulus program and Green projects. The Commission will maintain a website dedicated solely for the funds administered by the Commission. That address is www.anrc.arkansas.gov/ and will be updated periodically. The State of Arkansas, through Governor Beebe's office, also maintains a website that hits all available State funding; that site can be found at www.recovery.arkansas.gov. Finally, the federal government maintains information at www.recovery.gov/.

If you have any questions regarding the process and what the Commission can do for you, please feel free to contact Mike Chandler at (501) 682-0547 or e-mail him at Mike.Chandler@Arkansas.gov. ♦

Crypto monitoring for systems over 10,000 population completed

Don Fiegel, Environmental Specialist

Source water monitoring under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) was completed in February for Arkansas public water systems classified as “large”, those whose service population is greater than 10,000. This includes Schedules 1 through 3 under the LT2. The LT2 rule applies to systems whose water source is a lake, river, stream or spring; or a groundwater under the direct influence of surface water. Sampling and analysis for Schedule 4 systems, those less than 10,000 population, is ongoing.

Monitoring for Schedules 2 and 3 systems began in January, 2007 and continued each month for 24 months. The two Schedule 1 systems in the state had their source water data grandfathered under the LT2. The rule requires the large systems to have samples analyzed for *Cryptosporidium* and *E. coli*, and to record turbidity at the time the samples were pulled.

Sample collection equipment and analysis are being provided by an EPA certified laboratory under contract with the Department of Health. All of the cost for analyses as well as the shipping costs are being paid by the Department’s drinking water program utilizing public water system fees. To date, approximately \$380,000 has been paid to the contract laboratory for LT2 monitoring and an additional \$275,000 is projected to be spent to complete the first round of sampling for systems less than 10,000 population. These dollar amounts do not include the lab cost for source water *E.coli* analyses required by the LT2 for systems less than 10,000 population and analyzed by the Arkansas Public Health Laboratory. If the *E.coli* levels exceed a trigger level, a system moves to *Cryptosporidium* sampling.

Based on the average number of oocysts detected for each source, water systems are placed into one of four bin classifications with the higher bin classifications requiring additional treatment. Letters were sent in February notifying the large systems of

their average monthly oocyst concentrations and their bin classification.

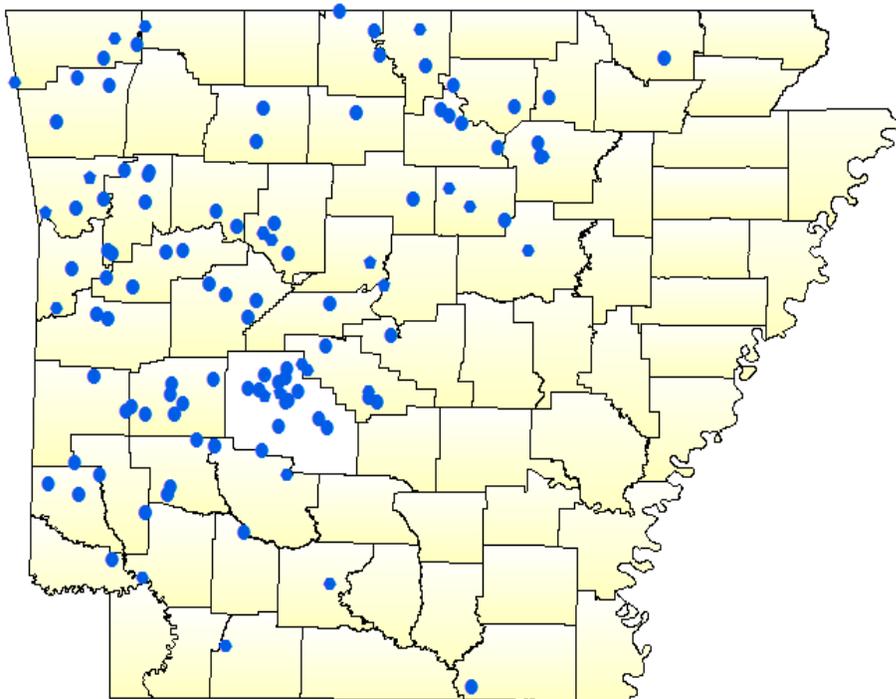
A total of 23 sources for 21 large water systems were monitored over the two year period. Fourteen of the sources were a lake or reservoir and nine sources were rivers or streams. Eleven of the systems tested positive for *Cryptosporidium* in their source water. Nineteen sources were classified in the lowest treatment bin, Bin 1, which carries no additional treatment requirements beyond the current 2-log treatment removal requirement. Four sources were classified in Bin 2, two each from Sampling Schedule 2 and Schedule 3, which requires an additional 1 log of treatment.

Systems in Bin 2 will select from a wide range of treatment and management strategies in the LT2 microbial toolbox in order to comply. These strategies include source protection and management, pre-filtration, treatment performance criteria, additional filtration, and/or alternative disinfection. The deadline

for compliance is April 2, 2012 for Schedule 1 systems; October 1, 2012 or Schedule 2 systems; and October 1, 2013 for Schedule 3 systems. States may allow up to an additional two years for complying with the treatment requirement for systems making capital improvements.

All systems regulated by the LT2 will be required to conduct a second round of monitoring six years after completing the initial round to determine if source water conditions have changed significantly. Treatment requirements will then be adjusted accordingly in the same manner at that time.

For more information on the LT2 or the implementation efforts in Arkansas, contact Don Fiegel or Lyle Godfrey within the Engineering Section – Source Protection Program of ADH at (501) 661-2623. For copies of the Federal Register notice of the regulation or technical fact sheets, visit the EPA website at <http://www.epa.gov/safewater/disinfection/index.html>. ♦



Cryptosporidium Monitoring Locations for Surface Water Systems

Mandatory Training Course Schedule

Most Current Listing is at: <http://www.healthyarkansas.com/eng/autoupdates/oper/mandtrngall.htm>

Class	Start Date	End Date	OpCert Grant Eligible?	City	Location All classes begin at 8 am	Sponsor
Advanced Water Treatment	07/01/09	07/15/09	Yes	Internet	Contact AEA for Registration	AEA
Basic Water Distribution	07/07/09	07/09/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Advanced Water Distribution	07/07/09	07/09/09	Yes	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	ARWA
Intermediate Water Treatment	07/13/09	07/15/09	Yes	Hot Springs	Wastewater Training Facility, 798 Adams	AEA
Basic Water Distribution	07/14/09	07/16/09	Yes	Jonesboro	CWL Service Center, Johnson & Main	ARWA
Advanced Water Distribution	07/15/09	07/31/09	Yes	Internet	Contact AEA for Registration	AEA
Basic Water Treatment	07/21/09	07/23/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Math	07/28/09	07/28/09	Yes	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	ARWA
Applied Water Math	07/29/09	07/29/09	Yes	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	ARWA
PWS Compliance	07/30/09	07/30/09	Yes	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	ADH
Basic Water Math	08/03/09	08/17/09	Yes	Internet	Contact AEA for Registration	AEA
Intermediate Water Treatment	08/03/09	08/05/09	Yes	Fayetteville	Operations Center, 2435 S Industrial Dr.	AEA
Intermediate Water Distribution	08/04/09	08/06/09	Yes	Jonesboro	CWL Service Center, Johnson & Main	ARWA
Basic Water Treatment	08/10/09	08/12/09	Yes	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	AEA
Applied Water Math	08/17/09	08/31/09	Yes	Internet	Contact AEA for Registration	AEA
Basic Water Math	08/17/09	08/17/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Applied Water Math	08/18/09	08/18/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Intermediate Water Treatment	08/18/09	08/20/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
PWS Compliance	08/19/09	08/19/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Basic Water Treatment	08/24/09	08/26/09	Yes	Russellville	Tri-County Water , 5306 North Arkansas	AEA
Advanced Water Treatment	08/25/09	08/27/09	Yes	Jonesboro	CWL Service Center, Johnson & Main	ARWA
Basic Water Treatment	09/01/09	09/15/09	Yes	Internet	Contact AEA for Registration	AEA
Intermediate Water Treatment	09/01/09	09/03/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Advanced Water Distribution	09/01/09	09/03/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Treatment	09/01/09	09/03/09	Yes	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	ARWA
Intermediate Water Distribution	09/14/09	09/16/09	Yes	Maumelle	Wastewater Plant, 425 B Hyman Drive	AEA
Basic Water Distribution	09/15/09	09/30/09	Yes	Internet	Contact AEA for Registration	AEA
Basic Water Math	09/15/09	09/15/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Water Math	09/16/09	09/16/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
PWS Compliance	09/17/09	09/17/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Intermediate Water Treatment	09/28/09	09/30/09	Yes	Russellville	Tri-County Water , 5306 North Arkansas	AEA
Intermediate Water Treatment	10/01/09	10/15/09	Yes	Internet	Contact AEA for Registration	AEA
Basic Water Distribution	10/06/09	10/08/09	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
PWS Compliance	10/12/09	10/13/09	No	Hot Springs	ARWA Conference, Convention Center	ADH
Intermediate Water Distribution	10/12/09	10/14/09	Yes	Camden	Arkansas Environmental Academy, 100 Carr Road	AEA
Applied Water Math	10/12/09	10/13/09	No	Hot Springs	ARWA Conference, Convention Center	ARWA
Basic Water Math	10/12/09	10/13/09	No	Hot Springs	ARWA Conference, Convention Center	ARWA
Intermediate Water Distribution	10/15/09	10/30/09	Yes	Internet	Contact AEA for Registration	AEA
Advanced Water Treatment	10/20/09	10/22/09	Yes	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr.	ARWA
Basic Water Math	10/26/09	10/26/09	Yes	Fayetteville	Operations Center, 2435 S Industrial Dr.	AEA
Applied Water Math	10/27/09	10/27/09	Yes	Fayetteville	Operations Center, 2435 S Industrial Dr.	AEA

*OpCert Grant Eligible Course – Meal and lodging expenses may be reimbursed for operators from Community or Non-Transient Non Community Public Water System serving a population of 3300 or less. The course may be space limited.

All courses require pre-registration. The course sponsor must be contacted to register for each course and to confirm course information that is subject to change or cancellation. Contact information for the sponsors is shown below.

ADH – Arkansas Department of Health – Contact Martin Nutt – (501) 661-2623 – Martin.Nutt@arkansas.gov

AEA – Arkansas Environmental Academy – Contact Letitia Rusch – (870) 574-4550 – lrusch@sautech.edu

ARWA – Arkansas Rural Water Association – Contact Carol Shaw – (501) 676-2255 – info@arkansasruralwater.org

Additional courses are shown on the internet at: <http://www.healthyarkansas.com/eng/autoupdates/oper/opcertlinks.htm>

NIMS: The National Incident Management Systems

Jeff Stone, P.E., Chief Engineer

In the Spring 2009 issue of this newsletter, an article on security and emergency planning tools mentioned NIMS, the National Incident Management System. It also mentioned that first responders, which includes water operators, are required to receive some training with regards to NIMS. The purpose of this article is to provide more detail concerning NIMS.

To state the obvious, the response to an emergency or an incident is an inherently chaotic phenomenon. The various organizations and individuals that attempt to respond to an emergency typically do not know each other, do not know each others capabilities, do not necessarily know who is in charge of the effort, and probably do not have the ability to effectively communicate with each other. Due to the need to avoid chaos and prevent waste in responding to emergencies, a management system was created that eventually developed

into NIMS. The management system that eventually became NIMS began in California, during the 1970's, and was focused on the need to effectively fight wildfires. There was a series of catastrophic fires that resulted in millions of dollars of property damage, injuries, and some deaths. Studies of these firefighting efforts revealed that response problems were many times the result of management failures rather than a lack of resources. Management problems included: unclear chains of command, poor communication and communication systems, lack of an orderly and systematic planning process, no pre-planned methods to integrate inter agency requirements, and no coordination between "freelancing" volunteers with other first responders.

The management system that California developed was called the "Incident Command Structure" or ICS. The goals of ICS were to: be adaptable to emergencies of different

sizes, allow personnel of different agencies to meld rapidly into a common management structure with common terminology, provide logistical and administrative support to operational staff, and to be cost effective by avoiding duplication of efforts. ICS has been characterized as a "first on scene" structure, where the first responder of a scene is in charge until either the incident has been resolved, a superior ranking responder takes over, or another incident commander is appointed.

This system was adopted nationally when the Department of Homeland Security mandated the use of ICS for emergency services throughout the United States as a condition for receiving federal preparedness funding. ICS is now a component of the federal National Incident Management System: or NIMS. This system has also been adapted to manage responses to certain non-emergency "events" that draw upon similar resources such as mass gatherings (concerts, parades, fairs, etc.)

The training requirement for water operators is not particularly burdensome. The training requirement consists of two modules, ICS-100 and ICS-200. ICS-100 is titled "Introduction to Incident Command System". ICS-200 is titled "Basic Incident Command System". Information regarding the availability of this training can be found on the website of ADEM, the Arkansas Department of Emergency Management. The address of the webpage that is of most relevance is <http://www.adem.arkansas.gov/documents/portal/Training/em.html>.

Both ICS-100 and ICS-200 can be completed on-line. The completion of these two modules should provide the water operator with the basic familiarity needed to fulfill their role within the framework of the ICS. Other courses applicable to water utilities are MGT 342 and MGT 343, but must be presented onsite by Arkansas Department of Emergency Management personnel. The links to the on-line training, offered by FEMA, can be found at the ADEM or FEMA website listed in the adjacent box. ♦

Homeland Security / FEMA / Arkansas Department of Emergency Management Courses

Available Online

IS-100.a (ICS 100): *Introduction to the Incident Command Systems*

IS-100.Pwa: *Introduction to the Incident Command Systems for Public Works Personnel*

IS-200.a (ICS 200): *ICS for Single Resources and Initial Action Incidents*

IS-700.a: *National Incident Management System, An Introduction*

IS-701: *Multi Agency Coordination System (MAC)*

IS-703: *NIMS Resource Management*

IS-800: *National Response Framework, An Introduction*

Onsite Presentations Required by ADEM

IS-300: *Intermediate Incident Command System*

IS-400: *Advanced Incident Command System*

More information can be found at www.adem.arkansas.gov/ or at <http://training.fema.gov/IS/>.

Sustainable Infrastructure Mapping Initiative

Brad Jarrett, Environmental Specialist

The Engineering Section of the Arkansas Department of Health (ADH) and its contractor Magnolia River Services, Inc. (MRS) are collaborating on a program called the Sustainable Infrastructure Mapping Initiative (SIMI). The program is for small systems of 3300 population or less, and produces a geographical information systems (GIS) map of the water infrastructure in the system. The only costs to the water system are a commitment to obtain a personal computer, if one is not already in use, and to contribute time in locating the system's infrastructure components.

The GIS map produced will show the location of mains, valves, hydrants, and master meters as well as larger structures such as a pump station, tank, or treatment plant.

The program was born out of the observation that most small systems lacked a map of its water main locations. The ADH proposed a mapping project to EPA and EPA funded the project, treating it as a pilot project with the potential for adoption in other states.

ADH and EPA understand the need

for GIS & GPS as a tool that helps small systems with emergency planning, asset management and long range planning.

GIS mapping is the assembling, storing, manipulating, and displaying of geographically referenced information. In layman's term this means that all points and lines on the map produced have data linked to them which can be anything from size of mains to water usage at a particular meter. The components are located utilizing a global positioning system (GPS) which utilizes signals from several satellites to determine precise coordinates of a location on the earth's surface. By combining the ease of use GPS unit with the powerful tool of GIS, maps with sub-foot accuracy can be generated.

Generating a map involves a four step process of system assessment, data collection, mapping of mains, and then implementation & training.

The initial step involves a brief telephone assessment to determine the size of the proposed project. The data collection process starts with the water system personnel flagging the

location of all water system components in order to minimize the time spent in the field collecting data. After the system has flagged all of its infrastructure, MRS sends out a GPS specialist who, along with the water system personnel, collect the GIS data and populate the data fields with information. The data fields for the SIMI project include the asset's description along with size, type, and unique identifying number.

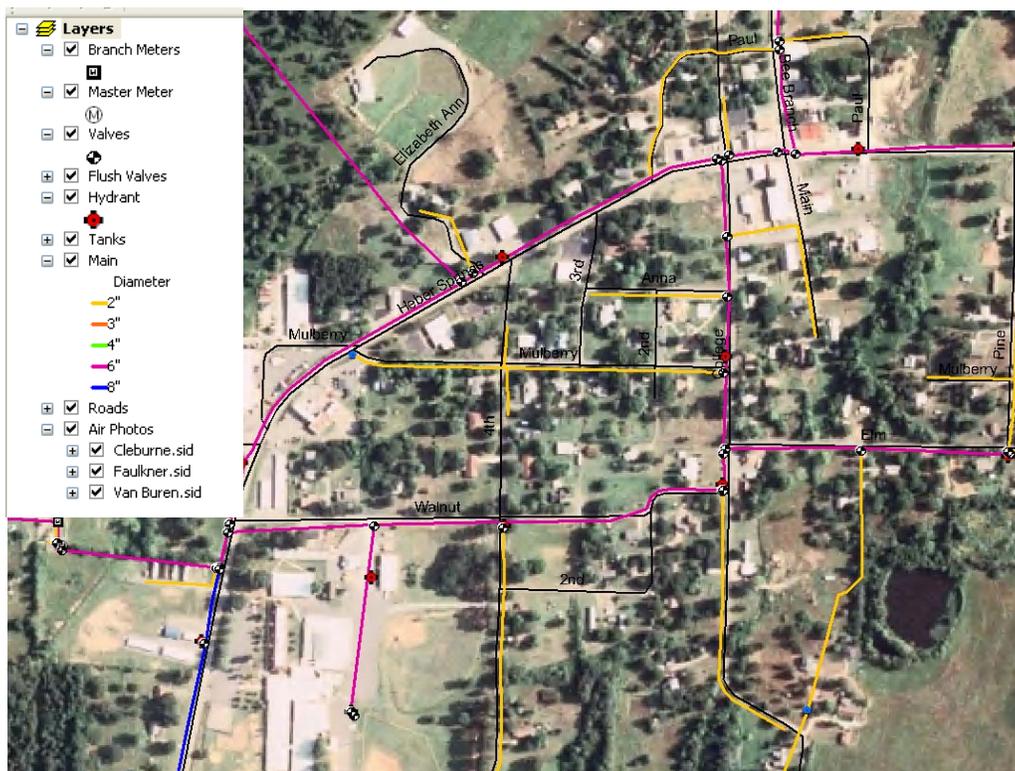
Once field data collection is complete, MRS maps the main locations from a variety of resources. Digitization begins with any available paper maps, as-builts, or preliminary drawings available from the system. Not uncommonly, this information is out of date or inaccurate. To correct for this, MRS uses the historical knowledge of water system personnel regarding the location and size of mains as well as data from records of main break repairs. MRS downloads geographical information from the state of Arkansas' GeoStor website including 2 meter resolution color aerial photos, roads, lakes, and, when available, parcel data.

The final step involves MRS staff producing a useable GIS map, and providing training on the use of the map to the water system.

In the pilot year of the SIMI mapping project, MRS has completed projects on the following systems: Walker Creek State Line Water, Hwy 4 & 24, Redhill, Concord Water, Maumelle Water, Haskell, Bee Branch, Quitman, City of Keiser, Blue Mountain, Town of Subiaco, Ash Flat and Marked Tree.

Among the benefits of the maps cited by water managers have been improved emergency preparedness, easier infrastructure maintenance and rehab, better planning capability, and its use as a tool in presentations to city councils and water system boards.

For more information about the project, contact Brad Jarrett, ADH Project Manager of SIMI (brad.jarrett@arkansas.gov), or Paul Michael, MRS Project manager (pmichael@magnolia-river.com).



Water License Renewal Notice

All active water treatment and distribution licenses must be renewed in 2009. If you hold a license, by now you should have received your renewal documents. In order to renew you must pay the renewal fee of \$10 and have 24 hours of approved training, at least 12 hours of which must be approved as direct training. The other 12 hours can be additional direct training or indirect training. If you have two licenses, the same hours will renew both licenses.

Renewal training may be verified at the following internet sites.

- The Arkansas Department of Health's internet site - <http://www.healthyarkansas.com/eng/oper.htm>. If all your training is not listed, space is provided, on the printable form, to document other training which will be verified when auditing your renewal.
- The Arkansas Rural Water Association's internet site - <http://www.arkansasruralwater.org/resources/training.asp> has ARWA training only.
- The Arkansas Department of Environmental Quality's internet site - http://www.adeq.state.ar.us/water/branch_enforcement/wwl/wwlicdata.sql.asp has primarily wastewater training.

All sites utilize a "fuzzy" search feature. For example, searching for "Jim," will not find "James," but will find "Jimmy." Inputting the letter "J" will find all three.

It is critical to include the renewal invoice, fee payment, water system name and training documentation in the same envelope to ensure that the fee is correctly applied to your account and proper credit given for training.

Please remember that water license renewal and wastewater license renewal are being conducted at the same time, but that each program resides in different agencies. Water license renewals are to be sent to the Arkansas Department of Health. Wastewater license renewals are to be sent to the Arkansas Department of Environmental Quality. If your wastewater renewal is mailed to the Department of Health, it will be returned to you.♦

Backflow Assembly Testers – Certified vs. Licensed What's the difference?

Teresa Lee, P.E., Cross Connection Control Engineer

What is the difference between a backflow tester certificate and a license? A certificate is presented to someone who successfully completes a backflow tester training class. If the certificate holder submits the certificate to ADH's Protective Health Codes, he or she may sit for a state license exam.

There is no cost to sit for the state exam or, if passed, to hold a state license. The exams are given on the last Friday of each month at the Department of Health on Markham Street. In order to be eligible to take the exam, a notarized application, including a copy of the certificate from the training class, must be received by the fifteenth of the month. The state license is good for two years. In order to keep a license current, a tester must take an eight hour recertification training course. A copy of the certification from this course may be mailed or faxed to Protective Health Codes, and the tester's status will be updated. A copy of the application and instructions may be found under "Forms Online" at www.HealthyArkansas.com/phc, or you may call 501-661-2642.

Will a public water system accept a certificate in lieu of a license? That depends on the wording in the water system's cross-connection control ordinance. At the present time, the *Rules and Regulations Pertaining to Public Water Systems* (RRPPWS) states that the mandatory testing of backflow prevention devices shall be performed by "certified testers." The Engineering Section of the Department of Health is considering changing the RRPPWS to require a State license instead of accepting third party certifications. Currently most water systems require testers to be licensed by the State, but some public water systems accept reports from testers who have a training certificate but do not have a state license.

Engineering Section staff has recently become aware of several individual testing backflow assemblies without a current license or certification. Water systems should routinely check to make sure that the tester actually holds a current license, or at least certification. A list of currently licensed testers is available on the Engineering Section's website at www.HealthyArkansas.com/eng. You can find the list under the drop down menu: "XConn – Testers and Repairmen" listed by county and also in "XConn – Download Reports and Documents" listed alphabetically by last name. For water systems not requiring a State license, a copy of the tester's current certification should be kept on file.

For additional information about backflow assembly tester licensing requirements or the Cross-Connection Control Program, contact Teresa Lee with the Engineering Section at Teresa.S.Lee@arkansas.gov or 501-661-2623.

Questionnaires on service connections mailed

All community water systems were mailed letters in May from the Engineering Section which requested verification of the number of service connections in that system. If the number of connections in the letter is incorrect, the water system is to list the correct number and return the letter. For those systems where the number of connections listed is correct, no action is required. The number of connections applies to residential, commercial, and industrial water meters. It does not include irrigation or fire sprinkler meters. The letter also requested emergency phone, fax and e-mail contact information

The number of connections is used to calculate the annual Public Water System Supervision Fee which is 30 cents per meter per month. Billings for the fee will be issued in late June and July. If any questions on the letter or the fee, contact Cathy Gaston at 501-661-2623 or Cathy.Gaston@Arkansas.gov.

Water Operator Licenses Issued

February 1, 2009 through March 31, 2009

Licensee Name	Grade/Type	System Name
ARLEDGE WAYNE	D - I	WABBASEKA WATERWORKS
ATKINSON DALE	D - I & T - II	ARSENAL WATER SYSTEM
BAILEY JAMES	D - IV	HACKETT WATERWORKS
BATES TYRUN	D - III	WASHINGTON WATER AUTHORITY WWA
BIGGS KENNETH	D - II	WATSON CHAPEL WATER ASSOC
BLANKENSHIP DANIEL	T - IV	ENGINEERING SECTION, ADH
BRADLEY DAVID	D - III	WASHINGTON WATER AUTHORITY WWA
BREIDT CATHERINE	D - VSS	LITTLE PORTION HERMITAGE
BREMER TERRY	D - I	GEORGIA PACIFIC PAPER MILL
CHOATE JOHN	D - IV	TRI-COUNTY WATER DISTBR DIST, TRI COUNTY RWDD -MOORES CHAPEL & SOUTHWEST ATKINS WATER USERS
COOPER RICKEY	D - II	REMINGTON ARMS COMPANY
CURTIS BRUCE	D - IV	CONWAY CO REGIONAL WATER DIST
DICKEY DREW	D - IV	BEAVER WATER DISTRICT
DUNHAM MICHAEL	T - IV	MAUMELLE WATER MANAGEMENT
ESTES MICHAEL	D - IV	RIVIERA UTILITIES
GILBRETH CHRISTINA	D - IV & T - IV	NO WATER SYSTEM PROVIDED
GUESS GREGORY	T - II	ALMA WATERWORKS
HARTNESS CLAY	D - III	WOOSTER WATERWORKS
HAVENS ERIC	D - IV	GREENBRIER WATERWORKS
HUGHES SHAWN	T - II	PANGBURN WATERWORKS
IRISH FRENCH	D - IV	VILONIA WATERWORKS
JACKSON RANDY	D - I	ASHDOWN WATERWORKS
JACKSON TOMMY	D - IV	MAUMELLE WATER MANAGEMENT
JENNINGS BRANDY	D - IV	CITY CORPORATION
LACKEY BRANDON	D - III	CENTRAL ARKANSAS WATER
LAWRENCE JOSEPH	D - II	MAYFLOWER WATERWORKS
MCDONALD KENNETH	T - IV	CENTRAL ARKANSAS WATER
MICHAELS ROBIN	D - II	ENGINEERING SECTION, ADH
MOSS PAUL	T - I	PLAINVIEW WATER DEPARTMENT
NORMAN PATRICK	D - IV	TRI-COUNTY WATER DISTBR DIST, TRI COUNTY RWDD -MOORES CHAPEL & SOUTHWEST ATKINS WATER USERS
NORTHERN JOHN	D - II	ENGINEERING SECTION, ADH
NUTT A. MARTIN	D - IV & T - IV	ENGINEERING SECTION, ADH
PALMER MICHAEL	D - IV	WATALULA WATER ASSOCIATION
PAYTON TERRY	D - IV	TRI-COUNTY WATER DISTBR DIST, TRI COUNTY RWDD -MOORES CHAPEL & SOUTHWEST ATKINS WATER USERS
REEP TENAY	D - III	WARREN WATERWORKS
RICHARDS MICHAEL	D - IV	SEARCY WATERWORKS
RITCHIE KENNETH	D - IV	BELLA VISTA POA
RUTH DANNY	D - I	LOCKESBURG WATERWORKS
RUTH JUSTIN	D - I	LOCKESBURG WATERWORKS
SAUNDERS GERALD	T - II	ENGINEERING SECTION, ADH
SAVARY THOMAS	D - II	MAYFLOWER WATERWORKS

Continued on page 10

Licensee Name	Grade/Type	System Name
SPINKS RYAN	D - IV	TUMBLING SHOALS WATER ASSOC
ST CLAIR DAVID	T - II	MAUMELLE WATER MANAGEMENT
STRAIGHT JAMES	D - IV	BENTON-WASHINGTON REGIONAL PWA
TEAGUE RONDA	D - II	MOUNTAINBURG WATER AND SEWER
VANN JOSHUA	D - IV	CABOT WATERWORKS
VEAZEY JOHN	D - II	WATSON CHAPEL WATER ASSOC
WAGONER TRAVIS	D - II	HARRISON WATERWORKS
WASSON ANDREW	D - III	FAYETTEVILLE WATERWORKS
WATKINS JAMES	D - III	FAYETTEVILLE WATERWORKS
WILLIAMSON GARY	D - I	MONTROSE WATERWORKS
WOFFORD MICHAEL	D - IV	FORT SMITH WATER UTILITIES
WORKS LC	D - VSS	TOLLETTE WATER
WRONE TRUMAN	D - IV	HARRISON WATERWORKS

WATER OPERATOR LICENSE EXAMINATIONS

Up to date listing: <http://www.healthylarkansas.com/eng/autoupdates/oper/operexam.htm>

Listed below are the dates and locations of examination sessions. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Drivers License or equivalent) will be required to sit for an Exam. Cell phones and other electronic communication devices are not allowed in exam sessions. Non-programmable calculators are allowed.

DATE	CITY	LOCATION	TIME
07/10/09	Camden	Arkansas Environmental Academy, 100 Carr Road	9:00 AM
07/10/09	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	9:00 AM
07/16/09	Hot Springs	Wastewater Training Facility, 798 Adams (off of Golf Links)	9:00 AM
07/17/09	Jonesboro	CWL Service Center, Johnson & Main	9:00 AM
07/24/09	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
08/06/09	Fayetteville	Operations Center, 2435 S Industrial Dr.	9:00 AM
08/07/09	Jonesboro	CWL Service Center, Johnson & Main	9:00 AM
08/13/09	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	9:00 AM
08/21/09	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
08/27/09	Russellville	Tri-County Water , 5306 North Arkansas	9:00 AM
08/28/09	Jonesboro	CWL Service Center, Johnson & Main	9:00 AM
09/04/09	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	9:00 AM
09/04/09	Camden	Arkansas Environmental Academy, 100 Carr Road	9:00 AM
09/04/09	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
09/17/09	Maumelle	Wastewater Plant, 425 B Hyman Drive	9:00 AM
10/01/09	Russellville	Tri-County Water , 5306 North Arkansas	9:00 AM
10/09/09	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
10/14/09	Hot Springs	ARWA Conference, Convention Center	9:00 AM
10/15/09	Camden	Arkansas Environmental Academy, 100 Carr Road	9:00 AM
10/23/09	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	9:00 AM
10/30/09	Midway/Mt Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	9:00 AM

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. You may confirm the exam session and its location by contacting your District Specialist or Engineer at (501) 661-2623.

Please verify that your license application has been filed with the Engineering Section and that the required exam fee for each exam has been paid. The license exams require significant preparation prior to sitting for the exam. The preparation must include extensive study utilizing the study guide and recommended reference materials. Credit for the mandatory Certification Training Courses must be obtained prior to sitting for an exam.

Service area maps to be added to state GIS website

In the days following the ice storm in January that crippled the northern third of the state, dozens of water systems requested aid through the Arkansas Department of Emergency Management. Those requests included electrical generators, assistance with debris clearing, and bottled water for customers. One of the difficulties ADEM had in fulfilling the requests was in knowing where a particular water system was located and coordinating similar requests from multiple systems in the same area.

In the aftermath of the storm, ADEM expressed a desire to obtain more information about the state's public water systems, a request that was communicated to the Department of Health from the Arkansas Geographic Information Office. A meeting between AGIO and the Department of Health's Engineering Section followed at which Engineering offered to make available the service area maps that it maintains on all public water systems in the state.

The maps are polygon data maintained on the Engineering Section's Geographical Information System and will be made available to ADEM as well as to the public on GeoStor, the state of Arkansas' website for publicly available GIS information of all types. The water system information on GeoStor will include only service boundaries and the name of the water system, but will not include the location of any structures or facilities of a water system.

Concurrence with making the service area information public was obtained from the Arkansas Drinking Water Advisory and Operator Licensing Committee before a commitment was made to AGIO.

The GeoStor website is located at <http://www.geostor.arkansas.gov/>.

The site is available to the public but registration is required. To view the service area boundaries, after entering the site, select for data available from the Department of Health.



Dierks water treatment plant damaged

The Dierks water treatment plant in Howard County was struck by an EF3 tornado on April 9 knocking out water service to 1700 persons. Water to the system was provided through an emergency connection to Nashville Rural Water Association. Temporary repairs enabled the damaged plant to be back online on May 8 and the system was removed from its boil water advisory on May 13.

WATER SYSTEM IMPROVEMENTS

BURDETTE: water plant rehabilitation, two filters and reaction tank replacements.

CABOT: approximately 74,000 feet of 30-inch and 24-inch pipe connecting Cabot to Central Arkansas Water.

CENTRAL ARKANSAS WATER: NaOCl bulk storage and feed systems located at both water treatment plants.

FORT SMITH: Mountainburg Water Treatment Plant, 2 new backwash lagoons and a 4 million gallon clearwell.

GILMORE: new 300 gpm well, aerator, reaction tank, filters and a 250,000 gallon elevated tank.

JONESBORO: two new 1100 gpm wells located near the Race Street Water Treatment Plant.

MULBERRY: 0.5 MG elevated storage tank located at the Industrial Park.

NORTH EAST WHITE COUNTY WATER: 0.72 million gallon standpipe.

NORTH MALVERN WATER ASSOC: 21,000 feet 8-inch water line extension on the Hwy 270 bypass.

OLA: 1 MGD treatment plant located at Lake Ola Dale; includes raw water pumps, clarification, filtration, high service pumps and an 80,000 gallon clearwell.

NATIONAL

EPA has launched a new website called "Healthy Watersheds" which adopts a proactive conservation and protection approach to watershed protection, as compared to restoring already impaired waters. The site includes sections on conservation approaches and benefits, watershed assessment techniques, and outreach tools. Each section includes examples and the site has an extensive publications list available for download. The website's address is: www.epa.gov/healthywatersheds.

* The Water Research Foundation (formerly the American Water Works Association Research Foundation) has added to its website a section on climate change for water utilities. The website provides an overview of existing knowledge on climate change and its effects on the water cycle. It also includes case studies of how utilities have incorporated climate change in their strategic planning, and contains links to other sources of information. The WRF general website is located at: www.waterresearchfoundation.org/.

* The Association of State and Territorial Health Officials released a policy statement in March supporting community water fluoridation and the goal of optimally fluoridated water being supplied to a minimum of 75 percent of the population. The statement supports public policies and programs that advance water fluoridation, partnering with stakeholders to increase public awareness of the benefits of fluoridation, and assuring that fluoridation remain based on accurate data and up-to-date scientific information. The statement is at: www.astho.org/index.php.

* A national survey of 2100 domestic wells by the US Geological Survey found that 23 percent contained one or more contaminants at a concentration greater than a human health benchmark. A smaller survey of approximately 400 wells found as many as one-third contained microbial contaminants. The wells were located in 48 states and covered 30 regional aquifers used for water

supply. Sampling was done prior to any in-home treatment. The study can be found at the USGS website: http://water.usgs.gov/nawqa/studies/domestic_wells/.

* Proposed legislation, The Water Infrastructure Funding Act (S1005), would reauthorize the Drinking Water and Clean Water State Revolving Funds, increase the funding for both, and make changes in the eligibility of projects. The bill's language proposes a five year authorization of \$15 billion for the DWSRF and \$20 billion for the

News of Note

CWSRF. President Obama's proposed fiscal year 2010 budget proposes \$1.5 billion for the DWSRF and \$2.4 billion for the CWSRF.

ARKANSAS

* Harold R. Seifert, P.E., was the 2009 recipient of the Glenn T. Kellogg Award given by the Arkansas Water Works and Water Environment Association at its annual conference in April in Hot Springs.



Seifert is the Executive Director of the Southwest Section American Water Works Association and is a former Director of the Engineering Section of the Arkansas Department of Health. Other conference award winners: Diana Woodle with Southeast Water - Water Manager of the Year Award; Leny Baker with Riviera Utilities and Larry Langley with Benton Utilities - Outstanding Achievement Award; Rambo Water District, Bald Knob North Water, City of Foreman, and DeGray Lake State Park - Small Systems Award; and Fort Smith Water - Best Tasting Water Award.

* The State Board of Health at an emergency meeting in March upheld the recommendations of an administrative hearing panel and

ordered the closing of the All Seasons Mobile Home Park in Garland County. An enforcement hearing held in February to review violations of drinking water regulations at the park was expanded into a second hearing in March as the result of inspection reports and testimony from Engineering Section staff. The Board found there was an imminent threat to public health as the result of drinking water, wastewater, plumbing, and electrical hazards, and ordered the closing of the park until it was in full compliance with all regulations and codes. Department of Health staff in Garland County assisted some residents with finding alternate living accommodations.

ENGINEERING SECTION

* The Engineering Section is preparing a one day workshop on disinfection by-product control for consecutive systems. The workshop is in response to a specific request for such training and because of an increased number of consecutive systems in violation of the current Stage 1 disinfection by-product regulations or potentially in violation of future Stage 2 regulations. Workshops are planned for July and August, and are tentatively planned to be held in Springdale, Mountain View, Nashville, Booneville, Morrilton, Camden and Lonoke. Targeted water systems will be notified by letter of the workshop. There will be no charge. For additional information, contact Craig Corder at 501-661-2623 or Craig.Corder@Arkansas.gov.

* Caroline Johnson joined the Engineering Section in May as the Water Operator Training Coordinator. She holds a B.S. in Environmental Science from Stephen F. Austin State University in Nacogdoches, TX, and has six years of environmental



compliance experience in the private and public sectors. Caroline will be responsible for the Section's Drinking Water Compliance Course, and for coordinating the approval and tracking of water operator training courses by outside organizations.

Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems January - March, 2009

ALBERMARLE CORP WEST	BMCL 1	MOUNT SHERMAN WATER	RMCL 1,2,3
ALICIA WATER	Bmon 3	MOUNT ZION WATER	BMCL 1
ALLPORT WATER	OperLic 1	MULBERRY WATER	DMCL 1,2,3
ALTHEIMER WATER	OperLic 1,2,3	NORTH GARLAND CO REG WATER	DMCL 1,2,3
ALTHEIMER WATER	Bmon 3	NASHVILLE RURAL WATER	DMCL 1,2,3
AR STATE PARKS – MT MAGAZINE	DMCL 1,2,3	NEW LONDON WATER	DMCL 1,2,3
AURELLE WATER	OperLic 1,2,3	NSC INTERNATIONAL	BMCL 3
BEAVERFORK WSD	Bmon 3	NW ARKANSAS REG AIRPORT	DMCL 1,2,3
BEAVERFORK WSD	DMCL 1,2,3	OAK RIDGE CENTRAL SCHOOL	Dmon 1
BIG FLAT WATER	OperLic 1,2,3	ODEN-PENCIL BLUFF WATER	DMCL 1,2,3
BODCAW RURAL WATER	DMCL 1,2,3	PANGBURN WATER	TMCL 3
BRANCH WATER	Bmon 3	PARON-OWENSVILLE WATER	DMCL 1,2,3
CADDO VALLEY WATER	Bmon 1,2	PERRYVILLE WATER	DMCL 1,2,3
CHICOT JUNCTION WATER	BMCL 1	PIGGOTT WATER	BMCL 3
COMMUNITY WATER	TMCL 1,2	QUITMAN WATER	OperLic 3
CONCORD WATER PFB	BMCL 2	RATCLIFF WATER	DMCL 1,2,3
COTTER WATER	Bmon 2	RED BUD MHP	Tmon 1,3
DAMASCUS WATER	DMCL 1,2,3	RED BUD MHP	Bmon
DEER WATER	TMCL 2	SDM WATER	RMCL 1,2,3
DEER WATER	Tmon 2	SDM WATER	FMCL 1,2,3
DEER WATER	BMCL 3	SELMA WATER	BMCL 2
DOGWOOD WATER	Bmon 2	SOUTH MOUNTAIN WATER	RMCL 1,2,3
DYESS WATER	Bmon 2,3	SOUTHERN HILLS WATER	Bmon 3
EAST CASS WATER	Bmon 3	ST FRANCIS RIVER REG WATER	Bmon 2
EAST PRAIRIE CO WATER	BMCL 2	STRONG WATER	OperLic 1,2,3
FOUKE WATER	Bmon 1	SUBIACO ACADEMY WATER	DMCL 1,2,3
FOUNTAIN HILL WATER	DMCL 1,2,3	TANKSLEY APTS WATER	Bmon 2
GILLHAM REGIONAL WATER	DMCL 1,2,3	TOAD SUCK PFB	DMCL 1,2,3
GREENBRIER WATER	DMCL 1,2,3	TOLLETTE WATER	Bmon 3
GREENWAY WATER	Bmon 2	TRUMANN RURAL WATER	Dmon 3
GREENWOOD WATER	DMCL 1,2,3	TRUMAN WATER	Dmon 3
HATFIELD WATER	DMCL 1,2,3	VAN BUREN COUNTY WATER	DMCL 1,2,3
HIGHFILL WATER	DMCL 1,2,3	WANDRON WATER	DMCL 1,2,3
KEISER WATER	Bmon 1	WALKER WATER	Bmon 1
LAKEVIEW-MIDWAY WATER	DMCL 1,2,3	WARD WATER	Bmon 1
LEE COUNTY WATER	BMCL 1	WIDENER WATER	Bmon 1
MADISON CO WATER	Bmon 2		
MAYFLOWER WATER	DMCL 1,2,3		
McNEIL RURAL WATER	BMCL 1,2		
MELBOURNE WATER	Bmon 2		
MIDWAY WATER	Bmon 1		
MONTGOMERY CO REGIONAL PWA	DMCL 1,2,3		
MONTROSE WATER	OperLic 1		
MORNING STAR WATER	FMCL 1,2,3		
MOUNT IDA WATER	DMCL 1,2,3		

KEY: Bmon = Bacti Monitoring; BMCL = Bacti MCL; Dmon = Disinfection By Product Rule Monitoring; DMCL=Disinfection By Product Rule MCL or Treatment Technique; Tmon = SWTR Major Monitoring; TMCL = SWTR Treatment Technique; SWTR= Failure to Filter; RMCL = Radiochemical MCL; FMCL = Fluoride MCL; SMCL = Synthetic Chemical MCL; OperLic = Operator Licensing; 1=January, 2=February, 3=March.

Consumer Notification of Lead Results

Gerald Ward, Environmental Specialist-Lead and Copper Rule

The State of Arkansas began early implementation for portions of the “2007 Short Term Revisions and Clarifications” of the Lead and Copper Rule in calendar year 2008.

One provision of the revisions required that utilities notify customers that collected tap samples of the results collected from their homes. The requirement to notify consumers of individual tap water sample results for lead began January 1, 2008. In accordance with Rule, water systems are given 30 days from the date they received notification from the state to complete the Consumer Notice. The systems were required to provide written proof to the state within 10 days of completion of said notice. The total time for completion and reporting was estimated to be 45 days - 30 days to complete the consumer notice, 10 days to report to the state and 5 days delivery time.

A letter certifying that the Consumer Notice was actually delivered to the consumer, on or before the 30 day deadline, is required by the state. Also, a copy of the Consumer Notice; a copy of the cover letter with the name, address, and lead level for the consumer sample site; and the 90th percentile lead level for the water system are also

See **Lead** page 15

REPORT OF THE
Arkansas Drinking Water Advisory and Operator Licensing Committee

A. Martin Nutt, Training and Certification Officer

The quarterly meeting of the Arkansas Drinking Water Advisory and Operator Licensing Committee was held on April 8, 2009 at Arkansas Rural Water Association, Lonoke, Arkansas. Members present were: Charles Nickle, P.E., Chair, USI - Arkansas Inc.; Rodney Williams, P.E., Chair-Elect, University of Arkansas; Robert Hart, P.E., Executive Secretary; ADH; Terry House, Grand Prairie Bayou 2 PFB; Susan Merideth, P.E., Jonesboro City Water and Light; Scott Borman, Benton Washington RPWA; and Steve Di Cicco, City of Benton Water Utility. Department of Health staff present were Martin Nutt, Training and Certification Officer, ADH; Ida L. Hampton, Administrative Asst, ADH. Guests were Gary Oden, SAU Tech; Dennis Sternberg, Director, ARWA; Dawn Keller, Wastewater Licensing, ADEQ; Donald Robinson, Mayor, City of Altheimer; and Johnny L. Felp, City of Altheimer.

Standing Business

Nickle called the meeting to order and the Committee reviewed and approved the minutes from the January 13, 2009 meeting.

The Committee reviewed, discussed and approved Felp's high school waiver request.

Borman reported that ADH and ADEQ would be scanning training cards at the AWW&WEA Conference in Hot Springs.

In attempting to find alternative funding to the expiring USEPA OpCert Grant, House indicated until the ADH knew the status of an extension to the OpCert Grant, any attempts seeking new funds would be premature. Hart then introduced a letter from EPA stating the OpCert grant would "sunset" nationally December 2012. The letter indicated extension of each state's OpCert grant to this date would be considered. Hart indicated ADH would be requesting an extension.

Nutt addressed the goal of having each operators training shown on their renewal documents. He had talked with the agency's IT staff and it would not be possible to include the training

data into this year's renewal. Nutt said water operators could either utilize internet web sites listing their training, a hand written list of training or a combination of both. He noted ADH, ARWA, or ADEQ provided internet based listings of training (see article page 8). Discussions concerning the licensing database followed. Nutt concluded the discussion by assuring the Committee the web site address would be included with the renewal documents.

House reported that the Proactive Service Fee Education Sub-committee had completed the development of education materials and had been made available to anyone interested. The Committee discussed where the material could be presented with the greatest impact. Mayors, city councils, and water system boards were considered primary groups to have the most impact. The Municipal League Conferences were identified as a good point of entry for the target groups. Nickle concluded the discussion and thanked the ADH staff for getting the presentation completed.

Old Business

Nickle asked Nutt about the status of his replacement on the Committee and Nutt provided information about the nominees received to date. Nutt said that letters seeking nominees had been sent to the Arkansas Society of Professional Engineers, the Arkansas Water and Wastewater Managers Association, Arkansas Rural Water, Arkansas Water Works and Water Environment Association, and Arkansas Environmental Academy.

New Business

Nutt requested the Committee to advise the program on a licensing question. Nutt said he had met with Engineering Section supervisory and management staff to discuss whether the addition of an aeration/spray device inside a storage tank, to address THM concerns was considered treatment. The Committee's consensus was that it was treatment because of the need to

treat the water to lower THMs, and concurred with Engineering's opinion that it should be considered as advanced treatment under the licensing regulations.

Nutt reviewed the annual EPA Operator Certification Report and received the Committee's concurrence on the report. He also discussed internal and external reviews under the EPA OpCert Guidelines and indicated he would need additional Committee input on the matter in future meetings.

Nutt reviewed the annual Licensing Report to be presented at the AWW&WEA membership meeting. The report provided program information on Committee membership, training hours, number of exams given, and number of licenses held. He requested and received their concurrence with the report.

Committee Reports

Hart reported that the Section was working on its 2010 budget, and commented about Arkansas being fortunate, so far, as compared to some states. He discussed a long term plan by the ADH to change its indirect costs and the potential impact on the program. He discussed the new federal stimulus bill's effect on Arkansas water and waste water systems and indicated Arkansas's share of the water and sewer SRF's \$6 billion would be about \$50 million. He reviewed the processes to be followed to apply for funding and stressed that projects taking advantage of the money would have very short timeframes to start construction.

Hart provided a handout concerning legislation from 2009 Arkansas General Assembly that affected public water systems. Hart reviewed the bills on the list, their status, and potential impact, and asked Sternberg if he had any related comments. Sternberg primarily discussed the water service area bill that eventually passed and how he was concerned it would only increase litigation between utilities over rights to

Continued next page

serve or maintain service in an area.

Hart requested the Committee's input on a request from the Arkansas Geographical Information Office to place GIS service area maps of public water systems data on that agency's publicly accessible website. The Committee had no objection to such a use provided only service area data and no infrastructure details were uploaded to the internet.

Hart concluded his report by informing the Committee that Engineering's primacy packet for the Groundwater Rule had been submitted and approved by EPA. This step allowed Engineering to begin formally addressing compliance with the Rule and that the Rule's assigned staff were already offering training sessions.

In his report, Nutt reported that water license application and exam results were being processed in a very timely manner. He reviewed the exam results sheet noting that passage rates have remained stable. He reviewed with the Committee an Enforcement Actions Report noting the short timeframe that most utilities were now spending on the enforcement list, and that there was no system nearing the penalty phase of enforcement. He concluded his report by updating the Committee on the program's overall status noting the resignation of Jeremy Rowe had the program back to addressing only the critical core functions.

Oden provided the Arkansas Environmental Academy's report by reviewing its training report which showed AEA held 12 classes with 100 students between January 1 and the March 13. He announced that Jeremy Rowe had joined AEA as its Water Instructor Coordinator. He reported that the Legislative session had gone well for AEA with adequate general revenue and some capital funds being provided to add new facilities. He also reported the Academy had officially changed its name to the Arkansas Environmental Training Academy.

Sternberg provided Arkansas Rural Water Association's report which showed ARWA had held 15 classes with growing student attendance in the first quarter of the year. He invited the Committee to attend ARWA's Operator Expo in June. He briefly reviewed ARWA's efforts during the ice storm

Dunn appointed as new committee member

The State Board of Health in April appointed Matthew Dunn, P.E., Project Civil Engineer with Crist Engineers, Inc. to the Arkansas Drinking Water Advisory and Operator Licensing Committee. Dunn brings to the Committee a strong background in the water industry and will begin a six year term in July. He replaces outgoing member Charles Nickle, P.E. and will serve as the consulting engineer appointee to the Committee.

Nominations for the position were received from five organizations: the Arkansas Water and Wastewater Managers Association, the Arkansas Rural Water Association, the Arkansas Water Works and Water Environment Association, the Arkansas Environmental Academy Advisory Board, and the Arkansas Society of Professional Engineers.

The Committee at its April 2009 meeting thanked Nickle for his six years of loyal service to the Committee. He served as the Committee Chair during his last year of service.

The Committee advises the Engineering Section on drinking water program matters and the administration of the Water Operator Licensing Program.

Lead *continued from page 13*

required for state review.

Early in the monitoring period the process of having the water systems complete the Consumer Notice documents went well. However, about half way through the monitoring period it became apparent that many of the systems were unable to complete the Consumer Notification accurately and in a timely manner.

The 2008 Reduced Monitoring Period for lead and copper gave the following results for approximately 259 public and non-transient non-community water systems.

- Approximately 167 systems submitted the required Consumer Notice before the 45 day deadline. However, many of the systems submitted inaccurate or incomplete documentation.
- Approximately 70 systems submitted their Consumer Notice to the State after the 45 day time period had expired.
- Out of the 259 systems that participated in the 2008 reduced monitoring, 22 have not reported their Consumer Notice to the state.
- Of the 237 systems that completed their Consumer Notification, more than half were submitted either incomplete or with errors.

Currently the Department is not issuing violations for failing to complete the Consumer Notice during the 2008 reduced monitoring period. However, beginning June 1, 2009 violations will be issued for failing to comply with any of the Consumer Notice requirements.

For additional information, contact Gerald Ward at Gerald.Ward@Arkansas.gov.

stressing the need for utilities to have generators and closed by noting that ARWA had recently bought another electrical generator and hoped to buy a more suitable truck to transport the mobile generators.

Under other business, Borman brought to the Committee's attention recent developments in reference to the federal Department of Homeland Security re-opening the issue of the

water and wastewater industries' exemption for chemical storage. DHS is pushing to have the exemption removed and, if successful, the exemption loss could have significant impact on water and wastewater systems.

No other business was brought before the Committee. The next meeting date was set for July 8, 2009, and the meeting adjourned.♦

AWW&WEA District Meetings

See also the Division's web site www.healthyarkansas.com/eng/ for updates.

DATE	TIME	CITY	LOCATION	SPONSOR
July 2009				
2	5:00PM	Maumelle	Wastewater Plant Training Ctr	Central District, AWW&WEA
2	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
9	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
9	5:00PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
9	5:00PM	Marvell	to be announced	Eastern District, AWW&WEA
15	8:30AM	Pea Ridge	Emergency Services Bldg.	Northwest District, AWW&WEA
16	12:30PM	Jonesboro	Ron's Catfish	Northeast District, AWW&WEA
21	6:30PM	Monticello	Q & Y House	Southeast District, AWW&WEA
23	6:00PM	El Dorado	Utility Meeting Room	Southwest District, AWW&WEA
August 2009				
6	5:00PM	Benton	Brown's Country Buffet	Central District, AWW&WEA
6	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
13	5:00PM	Des Arc	to be announced	Eastern District, AWW&WEA
13	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
13	5:00PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
18	6:30PM	Crossett	Western Sizzlin	Southeast District, AWW&WEA
19	8:30AM	Harrison	Comfort Inn	Northwest District, AWW&WEA
20	12:30PM	Jonesboro	Western Sizzlin	Northeast District, AWW&WEA
27	6:00PM	Texarkana	Ole Feed House	Southwest District, AWW&WEA
September 2009				
3	5:00PM	Conway	First Church of the Nazarene	Central District, AWW&WEA
3	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
10	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
10	5:00PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
10	5:00PM	Helena	to be announced	Eastern District, AWW&WEA
15	6:30PM	Hamburg	Catfish Inn	Southeast District, AWW&WEA
16	8:30AM	Springdale	Jones Center	Northwest District, AWW&WEA
17	12:30PM	Jonesboro	Ron's Catfish	Northeast District, AWW&WEA
24	6:00PM	Camden	AEA Ross Center (tentative)	Southwest District, AWW&WEA
October 2009				
1	5:00PM	to be announced	to be announced	Central District, AWW&WEA
1	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
8	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
8	5:00PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
8	5:00PM	West Memphis	to be announced	Eastern District, AWW&WEA
14	8:30AM	Eureka Springs	Best Western Inn of the Ozarks	Northwest District, AWW&WEA
15	12:30PM	Paragould	Service Center Bldg.	Northeast District, AWW&WEA
20	6:30PM	Monticello	Western Sizzlin	Southeast District, AWW&WEA
22	6:00PM	Magnolia	Western Sizzlin	Southwest District, AWW&WEA

ENGINEERING SECTION
 ARKANSAS DEPARTMENT OF HEALTH
 4815 WEST MARKHAM, SLOT 37
 LITTLE ROCK, AR 72205-3867
 (501) 661-2623
www.HealthyArkansas.com/eng/

Presorted Standard U.S. Postage Paid Little Rock, AR Permit No. 2641

Return Service Requested