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Articles and photographs are encouraged and appreciated. All submissions, comments, or other matters concerning this publication should be directed to:

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We do have a story to tell

As I write this report, winter is in full force, in a very unusual way across our two states. Our members have been kept quite busy dealing with the effects of the winter weather and its impacts on the water systems across both states. I hear stories of utility staff not just keep the water running, but pitching in to keep our streets open and safe during the recent ice storm that hit parts of Alabama and Mississippi. Doubt you got much good press clippings for your actions, but this is not atypical for folks in our industry. So, to each of you, kudos for going above and beyond the call of duty.

In my last report, I began a theme of sharing the good news that the AL-MS AWWA is doing, and I want to continue that theme in this report as we certainly do have a story to tell.

A story of volunteering – Having recently completed our January Planning Meeting, I watched as 40+ volunteers came together on a Sunday/Monday to meet, share, learn and plan ways to make our Section and your membership more valuable. Long gone are the days where we focus only on a single event, our Annual Conference. This is now the conclusion of our year and not the only thing we do. Do not get me wrong, the Annual Conference is a huge deal which consumes the time of about half of our volunteers, but it is not all we do. Putting on free educational seminars and on-line training, awarding those members and utilities, which set a high standard, reaching our young professionals, who will one day become the leaders in our industry, and seeking ways to improve and grow our membership are just some of the activities, which we discussed and planned during our meeting. I am certainly appreciative of the commitment our volunteers make, and each of our members should be as well.

A story of diversity – During a regional meeting two years ago of nearby Section officers, there was a lot of discussion about focusing on diversity within AWWA. Diversity in all areas, profession, gender, and color is a concern for the national organization. As AL-MS AWWA was two years ago, we are now. We recently served under the leadership of a 2nd minority (Hugh Smith, Jr.) in the past four years, elected the first woman (Amy McLeod) to be in the line of succession to Chair in Tunica, and have a Board comprised of three consulting engineers, two municipal employees, a state agency employee and a manufacturer’s rep. While the Board does pay attention to diversity, as we reported to our fellow Section officers in 2012, it just happens within our Section. For a Section from the Deep South, I am quite proud that we are leaders in the arena, and you should be as well.
A story of innovation – We continue to make small changes each year to our Annual Conference and our non-conference programs to make sure we stay relevant. As the lines from one of my favorite movies Shawshank Redemption goes, “Get busy living or get busy dying.” At the Section, we have opted to get busy living. As a lot of this focus is on our non-conference areas I discussed in my last report, i.e. on-line operator training, governmental affairs. I am pleased to report that one of those areas where I am quite proud of our innovation is in our scholarship program. Our revamped scholarship program is now entering the review phase as we evaluate the applications we have received for our college and operator scholarships. Special thanks to Danny Hutcherson (Chair), Eddie James, Andy Whelton, David Bass and Jason Barrett for their service and hard work on this committee.

A story of a good start to our 2014 Annual Conference – As I type this letter in early February, we currently have 19 exhibitors registered for the 2014 conference and our call for presentations is “on the street.” A really early and good start, which we hope will provide more opportunities to learn from both inside the Exhibit Hall and in our Technical Sessions. Add to it the opportunity to spend as much time as possible at the best resort in the two states, Marriott’s Grand Hotel in Fairhope, AL, it should be a great time. And while you are at it, go ahead and plan to come down early on Sunday and join us for our Scholarship Golf Tournament at Lakewood Country Club across the street from the Grand Hotel. If I can sneak away from last minute planning, I might be joining you.

Before I close, I would be remiss if I did not end the report with a special thanks to Ken McCool for his years of service to our Section. As I noted in my e-mail to the Section in early January, Ken has seen our Section go thru a lot of positive changes over his 11 years of service. All I have known during my time involved with the Section has been with Ken at the helm. While I am certain Jim Miller is up to the challenge to continue in Ken’s footsteps; Jim and I both know it will certainly be a challenge. I am grateful Ken will continue to assist the Board and our Section as one of our volunteers as I continue to need the advice and counsel of those wise men and women who have gone before me. Thank Ken (and Cynthia) for their commitment and passion to better our Section and our industry.

I would appreciate your feedback and input on our Section and its activities, and to learn that you actually read my report. Please feel free to contact me at david.stejskal@ch2m.com and let me know. Look forward to hearing from you.

The Annual Conference is a huge deal which consumes the time of about half of our volunteers, but it is not all we do.
First off, I would like to thank Ken McCool for his numerous years of service to our Section. Over the years, Ken has served in almost every office from Committee Chair to Section Chair, and most recently Ken served for 14 years as our Section Manager. Ken and his wife Cynthia were always there to serve AWWA in whatever capacity that was needed. Thanks Ken for a job well done.

I recently represented our Section at the AWWA Winter Meeting, which was held in Austin, Texas in January. Several items were addressed at the meeting, including the approval of new standards, bylaws and policy statements. The board also elected Gene Koontz of Lemoyne, Pennsylvania as the association’s next president-elect. He will begin his role as president-elect in June 2014 at the conclusion of AWWA’s Annual Conference and Exposition in Boston, and he will serve his one-year presidential term beginning in June of 2015.

One of the more interesting topics covered was a report on AWWA’s efforts to expand into India. Over the past six years, AWWA has worked with the India Water Works Association (IWWA) to build a relationship with the water professionals of India.

In June 2013 AWWA adopted a new Strategic Plan, which identifies its vision to develop a better world through better water, increase the number of members in strategic membership categories, and increase the relevancy of the Association’s knowledge resources for global water professionals. Related to the new strategic plan, AWWA’s International Council has included India as one of its seven target countries.

As part of fulfilling the goals of the new AWWA Strategic Plan and International Council Strategic Plan, David LaFrance, AWWA Executive Director, and Nilaksh Kothari, IC India Relationship Manager, conducted an exploratory-business assessment trip to India. The purpose of this trip was to explore the water market in India, establish business contacts, and perform the background research needed to increase AWWA’s presence in India. The 12-day, four-city trip consisted of 25 meetings with approximately 150 people from the Indian government, US Commercial Services, World Health Organization, Indian utilities, service providers, academics, consultants, associations, and AWWA Indian members.

The main goal for increasing AWWA’s presence in India is to help the water professionals improve public health by providing solutions to effectively manage water in India. AWWA has determined that it cannot easily achieve this goal without a presence in India. A presence in India will also allow North American AWWA members to learn from Indian water professionals and to share technological solutions to water problems. AWWA is already a recognized brand with Indian water professionals and our presence would fill a void that currently exists in the water market. The challenges will be steep but the opportunities to expand international membership and knowledge exchange are also significant.

As always, please let me know if you have any thoughts or concerns related to AWWA.
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They say time takes a toll, time heals, time will tell, they are doing time or we are keeping time, time is on my side and time’s—a-wastin’. Time & time again we have also heard, ‘time flies’… well, in my case it surely has. It is really difficult for me to fathom I have been your Section Manager for over 10 years; talk about overstaying your welcome! Most of you know that I will be leaving the post at the end of March and will be turning the gophership over to my well-qualified successor and friend, Jim Miller. In fact, he is that same Jim Miller who several years ago took a leadership role by influencing the rethinking of our Strategic Plan (SP). This resulted in what you may just beginning to see as the promise of a ‘value-added’, high-quality association membership.

As a Section member for 35 years, I am proud of the strides we have made and the direction we are heading. As many (not all) similar associations dwell on one big event and golf every year, we are switching into higher gears. In our past the Section held the industry and its primary product close to heart; however, we rarely took a proactive role in assuring sustainability and viability of the profession that got us to where we were. As the latest SP develops fruit, professionals at water utilities & support industries may become empowered by the Section with an expanded array of real-time information and offerings. The revamping and ongoing tweaking of our SP should by all accounts result in more benefits to all member categories, thereby profiting our utilities. Such benefits range from monitoring the affairs of our State & Federal governance to the scholarship program, to education, and to operator training & beyond. This empowerment is now becoming free for managers, consultants, administrators, operators and many others. All anyone needs to qualify is to be identified as a Section member or an employee of a member utility/company. I am glad to have played a role in helping move the Section toward this plateau.

As I end this article, I am sure you are expecting me to say ‘Goodbye’ or ‘I am outa here’, but not so fast…! I have a couple of reasons why I obviously cannot do a sayonara yet: First, and as I mentioned, I am indeed a member of the Alabama-Mississippi Section of the American Water Works Association. That membership beckons with a responsibility we all have … it’s our duty to play a part in this organization’s growth and purpose, our willingness to volunteer and our dedication to professional principle. Secondly, and certainly not least, Cynthia & I can now enjoy attendance at our events by spending more time together and with friends & with other members who will become friends.

Speaking of time (and space), mine for this writing is up and it is also time for you to become more involved in AWWA. While you are at it, involve a friend, associate or fellow employee in AWWA. Become more than just a content member of this Section; ask to join a committee, sponsor a scholarship applicant, sit in on a Board of Trustees meeting or simply help out as you can during our conference or one of our seminars.

Please offer your support and ideas to Jim (and Deb) in the upcoming months and years as he assists the Trustees & Chairs of the future – I know I intend to!

Au Revoir – KMc

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**TRUSTEE-AT-LARGE ALABAMA** – Brian Shelton  
**TRUSTEE-AT-LARGE MISSISSIPPI** – Amy McLeod  
**SECTION MANAGER** – Ken McCool

2014 Officers: Front Row: Brian Shelton, Sam Agnew, David Stejskal, Amy McLeod  
Back Row: Hugh Smith, Jim Nelson, Chris Griffin

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<th>Committee</th>
<th>Chair</th>
<th>Assistant to Chair</th>
<th>Other Members</th>
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<td>Matt McDougald</td>
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<td>Governmental Affairs Co-Chair MS</td>
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<td>LaQuoyah McDaniel</td>
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<td>Matthew Horton</td>
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<td>Grant Mitchell</td>
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<td>Water For People Chair</td>
<td>Rob Coleman</td>
<td>Lindsey McDonald</td>
<td>Sam Agnew</td>
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<td>Assistant to Chair</td>
<td>Ben Venenutti</td>
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<td>Danny Hutcherson</td>
<td>Andrew Whelton</td>
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<td>Hunter Arnold</td>
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<tr>
<td>Membership (AL)</td>
<td>Jim Watterson</td>
<td>Sam Agnew</td>
<td>Sam Agnew</td>
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The decennial United States Census (Census) included questions on drinking water sources for households through 1990. These questions provided a comprehensive, reliable and transparent method for calculating the number of persons on private wells in any state or county. Since these questions were not included in the 2000 or 2010 Census and the 1990 results have become outdated, estimating the percentage of state and county populations on private wells has become more challenging. Although Census data on population are available and estimates of population served by public water supplies are reported by the Environmental Protection Agency (EPA) Safe Drinking Water Information System (SDWIS), attempting to back-calculate the number of private well users with these datasets yields negative estimates. Some of the reasons these numbers are incompatible have been discovered during this research and other datasets and methods are being explored to more accurately calculate the number of private well users in Alabama and Mississippi. The objectives of this publication are: (1) to provide an overview of the possible data sources and methods available to calculate the populations using private wells in Alabama and Mississippi; (2) report and compare the results obtained using these methods; and (3) introduce possible approaches to accurately determine the county-level populations using private wells for drinking water. Alabama and Mississippi drinking water systems and agencies may utilize the findings to determine areas that need public drinking water supply expansion, as well as for educating the public on private drinking water wells.

Methods & Analysis

Previous articles in Pipeline (Barrett, 2013(1) and 2013(2)) reported the results of an analysis using 2010 Census population and EPA SDWIS data on the population served by public water supplies to calculate the county-level populations using private wells in Alabama and Mississippi. The objectives of this publication are: (1) to provide an overview of the possible data sources and methods available to calculate the populations using private wells in Alabama and Mississippi; (2) report and compare the results obtained using these methods; and (3) introduce possible approaches to accurately determine the county-level populations using private wells for drinking water. Alabama and Mississippi drinking water systems and agencies may utilize the findings to determine areas that need public drinking water supply expansion, as well as for educating the public on private drinking water wells.

Results & Discussion

This section includes estimates of population served by public water systems using various methods. By subtracting the population served from the total population, the population self-supplied (i.e. using private wells) in Alabama and Mississippi is calculated.
Table 1. Underestimate of self-supplied (private well) population using SDWIS data

Table 1 gives the populations for Alabama and Mississippi derived from 2010 Census and SDWIS data. The ‘Total population on water systems from SDWIS’ is the number of connections reported on SDWIS multiplied by the state’s factor of persons per connection. The state-level persons per connection estimates reported to SDWIS are higher than the persons per household numbers reported by the Census. ADEM uses 3.0 persons per connection for reporting to EPA SDWIS while the Census reports 2.48 persons per household for Alabama; MSDH uses 2.60 for Mississippi whereas the Census reports 2.58. The discrepancy between the values used by ADEM and MSDH and those reported by the Census cause EPA SDWIS to overestimate the population served by public water systems.

This is particularly true for Alabama, where the discrepancy is large. Table 1 shows that using SDWIS reported population served by public water utilities yields a number greater than the Census population.

<table>
<thead>
<tr>
<th></th>
<th>Alabama</th>
<th>Mississippi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population*</td>
<td>4,779,736</td>
<td>2,967,297</td>
</tr>
<tr>
<td>Total population on public water systems from SDWIS**</td>
<td>5,513,173</td>
<td>3,195,996</td>
</tr>
<tr>
<td>% of population on private well</td>
<td>-15.3%</td>
<td>-7.7%</td>
</tr>
</tbody>
</table>

*United States Census Data 2010 **USEPA SDWIS

Table 2. Estimate of self-supplied (private well) population using average persons per household

Table 2 gives the populations for Alabama and Mississippi derived from the SDWIS reported connections to public water systems and 2010 Census data persons per household. The ‘Estimate of population on water systems’ is equal to the number of connections reported to SDWIS multiplied by the 2010 Census ‘State average persons per household’. As a result, '% of population on private well' yields estimates of 3.7% for Alabama and -1.6% for Mississippi. Clearly, the estimate for Mississippi cannot be correct and the estimate for Alabama is also quite low. However, by using the actual Census value for person per household (instead of the estimates of persons per connection reported by ADEM and MSDH), the estimates of percentage of population on private well improve. It is likely that the number of residential connections reported by SDWIS are overstated, leading to an overestimate of citizens on a public water supply. Therefore, further corrections were necessary.

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<thead>
<tr>
<th></th>
<th>Alabama</th>
<th>Mississippi</th>
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<tbody>
<tr>
<td>Public water system connections reported to SDWIS**</td>
<td>1,856,789</td>
<td>1,168,254</td>
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<tr>
<td>State average persons per household*</td>
<td>2.48</td>
<td>2.58</td>
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<tr>
<td>Estimate of population on water systems</td>
<td>4,604,837</td>
<td>3,014,095</td>
</tr>
<tr>
<td>% of population on private well</td>
<td>3.7%</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

*United States Census Data 2010 **USEPA SDWIS

Table 3. Estimate of self-supplied (private well) population using average persons per household and reduction for non-residential connections

Table 3 presents the results of calculations using the populations for Alabama and Mississippi derived from Table 2 ‘Estimate of population on water systems’, while also accounting for ‘Percentage of connections that are non-residential’. The estimate that 15% of connections are non-residential (non-residential are connections to businesses, public buildings, places of worship, etc.) is based on an analysis by David Burt at the Mississippi office of USGS. The reduction of the ‘Estimate of population on water systems’ by the 15% non-domestic connections is to eliminate the overstatement of individuals on public water systems. As a result of this correction, an estimate of population served by private wells can be obtained for Alabama (18.1%) and Mississippi (13.7%).

<table>
<thead>
<tr>
<th></th>
<th>Alabama</th>
<th>Mississippi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of population on public water systems*</td>
<td>4,604,837</td>
<td>3,014,095</td>
</tr>
<tr>
<td>Percent of connections that are non-domestic**</td>
<td>15%</td>
<td>15%</td>
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<tr>
<td>Updated estimate of population on public water systems</td>
<td>3,914,111</td>
<td>2,561,981</td>
</tr>
<tr>
<td>% of population on private well</td>
<td>18.1%</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

*From Table 2 **Based on an analysis of Mississippi by David Burt of the Mississippi USGS office
Table 4. Summary of results of methods including comparison to USGS estimates of self-supplied population

Table 4 is a compilation of the estimates described above and collected in Tables 1-3, with a comparison between these methods and the published 2005 estimates from the USGS. The final row included in Table 4 is from the 2005 USGS water usage report, which estimates self-supplied populations in Alabama at 11.4% and Mississippi at 19%. Although USGS compiles and publishes these estimates for each state, many states, including Alabama, used the self-supplied population from the 1990 Census. In contrast, Mississippi and some other state USGS offices have developed their own methods for calculating the self-supplied population. The source(s) of the disparity between the calculations reported above and the state-wide USGS estimates is unclear. Although it is likely that the USGS estimates from the 1990 Census of the Alabama population using private wells are accurate, the magnitude of the error is unclear.

Summary

Future research will include attempting to refine state-level estimates, investigation of other possible data sources, and establishing county-by-county estimates. State records of domestic wells drilled are being explored as a potential source of improved estimates at state and county levels. Additionally, the US Census Bureau continues to collect private well data on a smaller sample of households through the American Housing Survey (AHS). AHS data will be explored as a possible source to estimate state-level and possibly county-level private well coverage.

End Notes

1Community water system is a system serving at least 15 connections or 25 people that supplies water to the same population year-round. Definition from http://water.epa.gov/infrastructure/drinkingwater/pws/factoids.cfm

2The Census data for Alabama person per household was found at http://quickfacts.census.gov/qfd/states/01000.html.

3The Census data for Mississippi persons per household was found at http://quickfacts.census.gov/qfd/states/28000.html.

4Previous methodology compared county populations from the 2010 United States Census and Primacy Agency inspections.
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In the past, many water operators thought daily turnover and fluctuation of volume was enough to mix the water in a storage tank. Today, research and tests are showing more effort may be needed to effectively mix storage tank water and improve water quality. Several water tank features can contribute to how effective water is mixed and the rate at which it ages.

A tank’s design, daily use, and location in the system should all be considered when deciding the best action for improving water quality. Tanks with high height to diameter ratio, such as standpipes, are more susceptible to aging surface water because greater water variations can develop among the many layers. As the distance between surface and bottom water increases, more effort is required for the bottom layers to reach the distant top layers. Same thing applies when inlet and outlet pipes are both placed in the bottom ring of a tank: the new incoming water is also the first to exit the tank while surface water is left to continue aging. However, if the inlet pipe is extended to allow over-the-top filling, then surface water can be pushed to the bottom and mixed with incoming water.

“Water quality is a significant concern to water distribution system managers. Disinfection by-product (DBP) formation is largely dependent on reaction time, and it can continue for several days within the distribution system. At the same time, disinfectant residual must be maintained throughout the most remote components of the system to ensure pathogen-free water. Managing the residence time of water within storage tanks is one practice available to minimize water age within the distribution system. Water system managers and engineers should consider the need for circulation of water and residence time management within storage tanks during the design phase.” AWWA M42

Although, water quality and circulation are often discussed during the design phase, they are continuing concerns for water operators. Deaths and illnesses occur daily from unhealthy water, and water operators can lose their license to operate a water system if unhealthy water is found in their system. Great responsibility comes with being a water operator and many pride themselves on providing excellent water quality. A popular method for improving water quality is to install a mixing system. Mixing systems can help prevent aging surface water that often leads to stratification, accumulation of disinfectant by-products, water quality loss and ice formation.

Stratification
Stratification occurs when water has become separated into layers. Layers are arranged according to density, and density differences are created when variations of water temperature or pH exist. The warmer, less dense, older water sits above the cooler, denser, new water coming in creating layers. The incoming water stays near the bottom and is also the first to exit the tank if an over-the-top fill has not been installed. The top layer of older water is left to age even further. Water temperature can be checked every five foot during an inspection to help determine whether stratification is a problem. If stratification is an issue, then a mixing system may be needed. Mixing systems should be designed according to the tank’s unique dimensions and needs. Most
are designed to take the denser, newer water from the bottom and mixing it with the less dense, warmer surface water. Mixing helps maintain consistent water temperatures and pH levels throughout the tank thus preventing stratification. However, mixing must occur regularly to prevent reoccurring stratification, sample inconsistencies and inaccurate disinfection treatment.

**Disinfectant by-products**

Disinfectant decay occurs when chemicals used for disinfection react with other organic material, organisms, and surfaces. These reactions create carcinogenic disinfectant by-products known as Trihalomethanes (TTHMs) and halo-acetic acids (HAAs). By-products are present in almost all chlorinated water supplies, but the key is keeping these levels as low as possible. Mixing systems can help keep these levels low by effectively blending all water with disinfectants increasing the contact time. When disinfectant contact time is increased less chlorine concentration is needed and thus fewer by-products are produced.

**Ice formation**

Most compounds become denser as they change from a liquid to a solid because the molecules become more tightly packed. But water is most dense at 39.2°F (4°C), and becomes less dense at lower temperatures causing ice to float. Water in a tank is the same and according to NFPA 25, “the temperature of water tanks shall not be less than 40°F (4.4°C).” When temperatures fall below freezing, ice can form on the surface. The ice will continue to expand and get thicker as the water temperature remains below freezing. Ice can cause serious damage to a tank: tank coatings are often damaged, pipes can become clogged, leaks and structural damage can result, and even tank failures have occurred from ice forming in water tanks.

“When a tank freezes, one or more of the following conditions usually results and cause leakage.

- Ladders or other attachments to the container are pulled out by ice, making a hole at the point of attachment.
- Ice pressure can expand and place hoop stress loads on the steel and seams, which may cause the tank wall to yield or burst.
- Leaks due to corrosion become apparent.” AWWA M42

Mixing systems can provide regular water circulation to help maintain a consistent water temperature above freezing and prevent the water from separating into layers where dangerous ice can form on the surface and sides of tanks.

**Maintaining water quality**

All tanks should be regularly monitored for mixing efficiency, but tanks with low filling cycles, high volume, or at the end of a water system should be monitored more often. These types of tanks may not only require mixing system upgrades, but may also require more frequent inspections and cleanings to maintain water quality and reduce aging surface water. Mixing systems can help prevent aging surface water, but they must be designed and installed properly to be effective. A reputable tank company with knowledge and experience in these types of upgrades should be contacted to perform the work.

For further information on water tanks and mixing systems, please contact Don Johnston at 270-748-1343 or djohnston@watertank.com

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**References**


Erika N. Henderson has a bachelor’s degree in International Relations from University of Southern Indiana. She has been published in numerous water publications, and may be contacted at 270–826–9000 ext. 228 or sales@watertank.com to answer any questions related to tanks.

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In late October of 2013, the U.S. EPA for the first time announced that fire hydrants were covered under the Reduction of Lead Act. This inclusion was surprising because utilities all over the country had been preparing for the effects of the Reduction of Lead Act for over three years and fire hydrants were never considered to be covered.

Alabama and Mississippi AWWA Section members immediately began contacting their members of Congress to support and pass a law exempting fire hydrants from the requirements of the Reduction of Lead Act. HR 3588, the Community Fire Safety Act received unanimous consent in the House, was passed by the Senate, and signed into law by President Obama prior to the January 4, 2014, implementation of the ‘lead-free’ requirements. This unprecedented quick Federal action was accomplished in large part to AWWA members who petitioned their elected leaders. Your Alabama–Mississippi Section leaders and your Government Affairs Committee members made phone calls and forwarded written appeals to Congressional offices to support this effort.

Efforts are continuing toward creating a Water Utility Council for the state of Mississippi. Issues have been identified and are in the process of being addressed so that numerous members and possible stakeholders can have a coherent voice in water-related legislative and regulatory matters in Mississippi. The interest level continues to be very high and efforts will continue until this Council is formally established. ‘Many hands make light work’, so anyone who would like to be part of the founding group of the MS WUC is welcome. Any member interested in working on this effort should contact Mark Snow or incoming AL–MS Section Manager Jim Miller.

In addition to the Section’s efforts to creating a Water Utility Council for the state, the Section also provided comments regarding the adoption of new rules and regulations governing public utility service to require the waiver of deposits for victims of domestic violence. Opposition to the proposed rule adoption was voiced in a letter to the Mississippi Public Service Commission with comments addressing impacts to the utility’s ability for debt recovery and the setting of precedence for additional waivers for other issues. Copies of the Section’s letter along with other news may be found on the Section website (www.almsawwa.org).
The Alabama-Mississippi Section became a non-voting member in good standing of the existing Alabama Water and Wastewater Institute (AWWI) in 2014. The AWWI has been an effective voice for water and wastewater utilities in Alabama governmental affairs for decades, and the overlap of AWWI members and AL-MS Section members in Alabama made this partnership a great fit. The AWWI already has an active lobbyist and legal counsel available to effectively participate in this year’s Alabama Statehouse discussions. Some of the subjects currently being tracked are listed below:

• Senate Bill (SB) 148 contemplates the mandatory participation of water and wastewater utilities in the One Call program.
• SB 260 and House Bill (HB) 339 have been introduced to protect individual utility employees acting within the scope of their official capacities from personal claims, judgments, and lawsuits. This bill involves tort reform, and therefore needs member utility support for continued progress toward passage.
• The Drought Assessment Bill, HB 49 is now out of committee in the House and in a position for final passage. The Senate companion, SB 20, has passed the Senate and has been assigned to the House Agriculture & Forestry Committee.
• SB 176, the local constitutional amendment to transfer the Prichard Water & Sewer Board to MAWSS, passed the Senate and has been assigned to the Mobile County Local Legislation Committee.
• SB 173 requiring disclosure by government entities regarding purchases of real property, was given a favorable report by the House State Government Committee. This bill is now ready for final passage by the House.

There will doubtless be additional items of legislative concern in addition to these listed items. Be sure to watch for your weekly email update from Stephanie Norrell of McMillan & Associates, and contact your Government Affairs leadership if they can be of assistance to you.

The Water Matters! Fly-In will occur April 1-2, 2014, in Washington D.C. Participating on behalf of the Alabama-Mississippi Section will be Government Affairs Co-Chairs Mark Snow (MS) and Frank Eskridge (AL). Also participating will be Section MS Trustee At-Large Amy McLeod, and Section Chair David Stejskal (AL). Also joining the Alabama contingent will be Scott Cummings representing the Water Environmental Federation (WEF). These individuals will be visiting their Congressional offices to present information regarding AWWA & WEF legislative priorities, and maintain the relationships they have developed with the Congressional Staffs during visits over the last three years.

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Montgomery, Alabama

The City of Montgomery has a history going back to 1819. Starting out as two smaller, competing towns on the Alabama River, it grew into what became the state’s capital. An important part of Montgomery’s history is its proximity to water, making it a prime spot for commerce and trade.

The importance of water was integral to the founding of the City, and continued access to healthy drinking water was a concern of the City fathers from nearly the beginning. In the mid-1850s, John Murphy, a local cotton merchant, incorporated and chartered the Montgomery Water Works Company, the first provider of water to the growing community. Additional companies sprung up, purchasing assets of their predecessors in the water supply business, carrying forward the call to provide safe drinking water to a maturing city. In the late 1890s, the City of Montgomery took over the responsibilities of operating the system until the early 1950s, when the Water Works and Sanitary Sewer Board of the City of Montgomery was formed by the Alabama Legislature. The Board is the current steward of safe, clean drinking water for the City of Montgomery and the surrounding service area. Its existing headquarters is in the restored antebellum home of Mr. Murphy, an appropriate use for the home of Montgomery’s first water provider.

Being a good steward means taking care of existing assets and planning ahead for future needs. As part of this, the Board has consistently invested in rehabilitation and maintenance of its facilities. A state of the art Asset Management System (AMS) linked with a Geographic Information System (GIS) is used to stay current with the maintenance needs of the Board’s treatment, distribution, and collection systems.

The recent acquisition of a Mobile Work Order dispatch system integrates the customer information system, the GIS, and the AMS with an Automated Vehicle Location System to wirelessly dispatch work in an efficient and cost effective way, saving time, mileage, and money.

The Board’s water production facilities consist of three drinking water plants. The C.T. Perry Purification Plant, named for a General Manager whose association with the Board lasted 40 years, was constructed in 1965 with an initial capacity of 20 MGD. Subsequent plant expansions and improvements increased the capacity to 60 MGD to keep up with the needs of a growing population.

Facts:

- Average Daily Water Production – 45MGD
- Firm Water Production Capacity – 90MGD
- Water Distribution System – 1621 miles ranging from 2-in to 60-in diameter
- Sewer Collection System – 1206 miles ranging from 2-in to 78-in diameter
- Average Daily Wastewater Treatment – 35MGD
- Number of Accounts – 82,800 (approx)
- Employees – 290 (approx)
- Water Sources – Tallapoosa River (60MGD); West Well Field (20MGD); Southwest Well Field (10MGD)
- Governance – Nine member Board of Directors appointed by Montgomery City Council
community. The plant, located 1.5 miles south of the river bridge on U.S. 231 between Montgomery and Wetumpka, has been recognized by ADEM’s Area Wide Optimization Program with the Ten Year Optimized Plant Award. The Day Street WTP, in operation since 1943 and having a firm capacity of 20 MGD, is located near the intersection of Day Street and CSX Railroad on Montgomery’s west side. The West Well Field feeds this plant, obtaining water from the Coker, Gordo, and Eutaw aquifers using 29 wells ranging in depth from 250 feet to over 1000 feet. The Richard Hanan WTP, named after the present Chairman of the Board who has over 50 years of continuous service, opened in 2006 with 10 MGD capacity. Located in southwest Montgomery, it is fed by the Southwest Well Field. There are provisions for future expansion to 20 MGD as demand requires. The Board’s groundwater plants have been recognized by the Alabama Water Pollution Control Association (AWPCA) with awards for excellence and best operation. Court Street WTP, Montgomery’s original water production facility, was recently decommissioned after continuous service since the 1870s. The future role of this historical building is currently being evaluated.

The Board’s Water Pollution Control (WPC) facilities consist of three plants and an agrarian center. The permitted treatment capacity of Catoma WPC is 35 MGD, Econchate WPC is 21 MGD, and Towassa WPC is 3 MGD. The three facilities are each named after Native American villages that were once located near each plant site. These plants have been recognized by the Alabama Water Environment Association and AWPCA for excellence and for best operation. The Agrarian Center is the Board’s award winning biosolids disposal site. After earning a first place finish for EPA Region IV’s Beneficial Reuse Award and an honorable mention at the national level, it continues its role in the final treatment of bio-solids. The Farm, as it is known by many employees, consists of approximately 2000 acres of farmland with some wooded areas. The treated biosolids are applied to the land as fertilizer for rye and Johnson grass that is later harvested as hay. This process is an environmentally-friendly alternative to disposing of the biosolids in landfills. The hay, baled in 1200 pound round bales, is sold to the general public for feeding cattle. The typical annual hay production is approximately 8,000 bales but has been as high as 10,000 bales. In addition to the hay, corn is planted for the deer and turkey, as well as other wildlife, living in the wooded areas of the Farm. Part of the area is dedicated as a wildlife refuge where, on any given day, a variety of plants and animals native to the area can easily be observed.

Membership in AWWA and the local section is also an important attribute of the Board. A utility member since 1972, the Board shares AWWA’s mission of providing high quality water in sufficient quantity to growing communities. The benefits of membership include free operator training provided online by the Section, leadership roles for its employees in the Section, service on AWWA national standards committees, and opportunities for its staff to network to solve treatment and other operational problems. Buddy Morgan, the Board’s General Manager believes membership in AWWA is important: “Membership for us means operators and staff who are engaged in the industry, not just here in our community, but throughout the state and beyond.”

The mission of the Board is to provide the highest quality water and sewer service in harmony with the environment. This mission is carried out by a capable staff of water works professionals led by Thomas R. (Buddy) Morgan, General Manager and former President of the American Metropolitan Sewerage Association (AMSA).
The AL/MS Section of the American Water Works Association is now accepting abstracts for presentations and posters for the 2014 Annual Conference technical program. Presentations will be limited to 20-30 minutes with the opportunity for questions to be submitted from the audience afterward. Abstracts should include the title, a detailed description of the topic, approximate length (time) of presentation, authors’ names, and short bio for the primary contact. Abstracts should be limited to 500 words or less. The Section plans to place a special emphasis on Operator training and Student involvement so presenters from each of those groups are encouraged to participate. General categories for the technical program include:

- Operations/Management
- Regulatory Compliance
- Finance and Administration
- Billing and Customer Service
- Water Resources
- Surface Water
- Groundwater
- Distribution System Management
- Water System Security and
- Disaster Recovery
- Research from Universities
- Emerging/New Technologies
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Selection Criteria
- Originality
- Content
- Relevance to industry
- Audience range
- Innovation
- Case Studies

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Please submit abstracts and questions to Matt McDougald [matthew.mcdougald@ch2m.com; (205) 209-3010] or Phillip Gibson [gibsonpw@gibsonengineeringms.com; (601) 594-1545]. Materials may also be mailed to CH2M Hill, The Plaza Building, 2112 11th Ave. South, Suite 320, Birmingham, Alabama 35205 ATTN: Matt McDougald.
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COMMUNICATIONS COMMITTEE NOTICE
Volunteers are needed to serve on the Communications Committee for the Alabama/Mississippi Section of AWWA. If you are interested in working on the Section Website or the Section’s Pipeline magazine, please contact the Communication’s Chair Harry Gong at Harry.Gong@msdh.state.ms.us or at (601) 576-7527.

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