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DINE AND DANCE
FRIDAY, FEBRUARY 24, 2017
RISTORANTE DA BENITO
IN UNION, NJ

AWWA NJ 82ND ANNUAL CONFERENCE
MARCH 21-24, 2017

GOLF CLASSIC
MONDAY, MAY 1, 2017
ROYCE BROOK GOLF CLUB IN HILLSBOROUGH, NJ

ACE17
JUNE 11 – 14, 2017

www.njawwa.org
A Final Message from the Chair

By Drip Martindale

I am writing to you all one last time as the Chair of this great organization the AWWA NJ!!!! The year as chair is not over (meaning I am not dead yet!!) and I plan on staying on the Board as the past chair, but I write to you all about the exciting accomplishments of the Section. I want to thank the entire Board of Trustees and Mona Cavalcoli for the endless amount of support I received in order to carry out the goals of the Section.

No matter how hard the challenges were, The AWWA NJ, its Committee chairs, Vice Chairs and hardworking members were always there for me. The Section kept me connected to the most important aspect of the organization the business and the people. The individuals in the organization, the ones who really get involved, make up the committees who make the Section strong. There is not one individual who makes us great; it is when each individual donates their valuable time to make up a committee or group of people that makes us strong and effective.

Here are a few examples of such great things the Section has done in 2016 and well into 2017:

1. Diligently working on a new Strategic Plan and implemented new Section policies, established a website Committee, a new Safety and Security Committee, a combined Public Information/Publications Committee.

2. Our Financial Advisory Committee has established new policies that make the Section financially sound, determining new ways to invest the Sections funds to increase revenues in order to carry out the Section’s mission.

3. Our Award and Recognition committee always striving to recognize the accomplishments of our members. The Section is looking into the possible new names of these awards in order to possibly honor former members.

4. Our Conference and Technical program Committee putting together one of the best annual conferences throughout the northeast. The Committee is looking into a Fall Conference in North Jersey in order to maximize the attendance. The Committee is also looking into the possibility of Tri-State Summit with the Pennsylvania and New York Sections in early 2018.

5. An Education and Professional Development Committee is working on new seminars for our Section. Please look on our website for details.

6. The Infrastructure Management Committee focusing on the most important issue of our time and in our business, water infrastructure improvement. This Committee worked diligently on presenting testimony to the NJ Joint Task Force on Water Infrastructure. This testimony has been posted on our website and has been issued as press release to the general public. The lawmakers are listening to the AWWA NJ. Keep providing your input on this critical issue.

7. A Membership Committee always finding creative ways to get industry professionals more involved. The Committee has started a new award for the best Utility Project of 2017.

8. The Research Committee has been revitalized by the efforts of Eileen Feldman and the hardworking committee members. They sponsored a great seminar for small water systems and are diligently working with State Universities to get students interested in Drinking Water Research.

9. A salute to our Retired Professionals who are so dedicated to this business. They do their best to give back to young people through their invaluable life experiences.

10. The Student Affairs Committee who are dedicated to reaching out to our youth through scholarships and mentoring programs that are a model for the other Sections and throughout the country. This committee, through their hard work, helped start a new Student Chapter at Rutgers University. Great work indeed!!!

11. A Water Utility Council who actively works with our regulators and legislators on the rules and regulations that guide our business. The Council is looking at ways to connect with our local and state legislators with the numerous amounts of proposed legislations. As a Section, I encourage all of you to pay attention to the legislation that is being proposed to our drinking water industry. Your involvement and your voice will make the difference to improving public health and the safety of our water supplies. The WUC has also formed a Lead and Copper Task force with the mission of generating a white paper in anticipation of the new Revised Lead and Copper Rule.

12. A Young Professionals who make up the future of our business, those who if they stay become Old/Seasoned Professionals. We need to find the next group of leaders in our industry.

13. Water for People, an impressive organization who raises money for those living without access to safe drinking water and sanitation. This Committee is coming up with new ways to raise money. The group is sponsoring an event at the AWWA Conference on June 12, 2017 in Philadelphia PA. This group is also looking at ways to expand the philanthropic efforts by teaming up with other organizations looking to volunteer time and donate money to some additional great causes.

14. The recently rebranded Website Committee has actively engaged members to provide key information to carry out our mission. The website now has posted testimony on Hexavalent Chromium, testimony on Water Infrastructure, testimony on lead in drinking water, emerging contaminants and the critical drought information. The Section will continue its efforts of utilizing the website to get critical information to our members.

(continued on page 4)
The AWWA NJ WFP Committee hosted the 11th Annual “Turning Wine Into Water” dinner and silent auction on Friday, September 23, 2016. Last year’s event was a special one for the Committee as for the first time in our history, the CEO of Water For People, Eleanor Allen, joined us and served as the Keynote Speaker. Eleanor spoke passionately about the “Everyone Forever” mission of Water For People and shared photos and stories from her travels around the globe.

Dinner guests and supporters of Water For People were given an inside look at where their donations are used and how they help create an environment where every family, school and clinic in a region where Water For People exists receives access to safe water and sanitation. The event was the most well attended event in the Committee’s sixteen-year history with 222 registered attendees and raised a grand total of $29,949, the most ever for this event!

Special thanks goes out to Pioneer Pipe Contractors of Washington Township, NJ who served as our Vineyard Sponsor for the 4th consecutive year. Thanks also goes out to our Event Chair Erika Vardaxis of Federici & Akin and the following companies that supported and attended the event:

**Wine Maker Sponsors:** Kmetz, Inc.; Montana Construction; J. Fletcher Creamer & Sons; McKernan Architects; & Federici & Akin

**Sommelier Sponsors:** T&M Associates; J.F.Kiely; CDM Smith; HDR; Scalfo Electric; Mott MacDonald; New Jersey American Water; Northeast Remsco

**Connoisseur Sponsors:** Hazen & Sawyer

**Aficionado Sponsors:** CH2M; AECOM; D. Desmond; Buck Seifert & Jost; C&H Agency; Sutherland Associates

**Whiskey & Beer:** U.S. Pipe

**Wine Bottles:** J.D. Covely

In addition, Montana Construction donated a Louis Vuitton purse and Kmetz, Inc. an Enzo custom tailored suit that were raffled off to two lucky winners. Proceeds from those two raffles alone exceeded $2,500.

To close out our 2016 calendar of events, the Committee held the “8th Annual Sporting Clays Social Event” and the first “Water For People Paint Night” in November. Both events were a huge success thanks to the efforts of Carmen Tierno and Ruth Gavel of New Jersey American Water.

Early in 2016, the Committee set an ambitious goal of raising $250,000 over a two-year period. We are well on our way to achieving that goal and will announce the final 2016 fundraising total at the Opening Session of the AWWA NJ Annual Conference on Tuesday, March 21st. Join us!

Finally, with the National AWWA Annual Conference & Exposition (ACE17) coming to Philadelphia in 2017, the NJ & PA Water For People Committees will partner to host a special one-time event – the “Water For People BASH” – that will be held in the evening on Monday, June 12, 2017 at the Hard Rock Café in Center City Philadelphia and feature AWWA NJ Section Band – WATER HAMMER! Tickets for the event are on sale now – visit [http://www.njawwa.org](http://www.njawwa.org) for more information.

Nicholas DeVecchis is Manager, Business Development at New Jersey American Water and Chair of the Water For People Committee

The Water For People Committee is always looking for new members to assist with planning events. If you are interested in volunteering or finding out more about these events, please contact Nicholas DeVecchis at Nicholas.DeVecchis@amwater.com or visit the AWWA NJ Section website at [www.njawwa.org/WFPOverview](http://www.njawwa.org/WFPOverview).
15th Nondenominational Prayer Breakfast at the Upcoming Section Meeting  By Chris Andreasen

The NJ Section will be holding its 15th annual Prayer Breakfast Thursday, March 23 at 7:30 a.m. during the annual conference at the Borgata. This is an informal get together for those (regardless of religious affiliations) interested in fellowship and listening to / sharing experiences and thoughts on faith and its effect on our lives in our common journey of life. A small group of volunteers (this year John Civardi, Justin Mahon, David Applegate, Michael Barnes and myself) are putting the brief program together with the Conference Committee.

What is the format? It’s informal, and includes an opening and closing prayer, a keynote talk by a member who has agreed to provide some reflection to the group, and then a time for open and voluntary sharing and discussion. Attendees may choose to speak, or just listen, whatever is comfortable for them. There’s also a continental breakfast with plenty of coffee.

So what are you doing at 7:30 that Thursday morning of the conference? There can be plenty of excuses of why not go to an early morning breakfast meeting. I know, I used them for many years. But I offer that when I did go to my first prayer breakfast, I was surprised, pleasantly, at who, many of my colleagues and friends, were in attendance, and have been very glad to be able to participate in this event each year.

Hopefully this prompts you to consider joining us Thursday morning to see what it’s all about. If you aren’t sure, or are on the fence, please give one of us a shout, and we’ll be glad to try and answer any questions.

Chris Andreasen, P.E. is Director of Engineering at Middlesex Water Company and Chair of the Infrastructure Management Committee and a Past Chair of the NJ Section

A Final Message from the Chair (continued from page 2)

15. And lastly to the Licensed Operator Committee, recently “rebranded” leading the way on addressing a crucial need to revise and update operator regulations while providing critical education to the industry. I am a licensed T4/W3 NJDEP operator and have a special and unique passion for this group. This Committee has accomplished so much during my tenure as Chair.

These are a few examples:

a) They are actively administering the new $5,000 Licensed Operator Scholarship/Mentorship award designed to assist with individuals interested in becoming licensed operators, a key part of our business,. They are also looking into sponsoring a second scholarship that will help others interested people into the business.

b) Following the discovery of high lead levels in the Newark School Public School system, many of the members of the committee sprang into action and volunteered to provide training to the entire staff of the school system. Others on the committee continued their efforts training about 1000 school officials throughout the State of NJ working closely with the NJDEP and the NJDOE.

c) Continuing the effort to work with NJDEP on key regulatory changes to the licensing operator rules in order to make the industry stronger and more effective while attracting fresh new young talented individuals.

d) Worked with WFP sponsoring a Sporting Clays event that raised almost $15,000 for Water For People.

e) The LOC have nominated and are working diligently to get key members on the NJDEP Licensing Board of Examiners and the Advisory Board of Training.

I am proud to be a part of this group of comrades, amigos on the front line every day, 365/24/7!!!!

I want everyone to recognize and thank the entire AWWA NJ Board of Trustees and the paid staff for their dedication to the Section. We are looking to expand the amount of paid staff in order to better carry out our overall mission. Good luck to Nicole Wiley, our next chair and Brian Carr our next Vice Chair. Let’s honor them for standing up and taking on the challenge.

I also want to recognize one the greatest “water” bands of our time, worthy of being in the Water Industry Rock and Roll Hall of Fame. Congratulations to Water Hammer on their 2017 “Get the Lead Out Tour”!!!! Come see them play in 2017, buy a tour T-Shirt and for years to come!!!

This Section is not about ME but it is about YOU, every member who joins and works together at making our world (and the world we live in) a better place than we left it. We must put aside our differences and work to our common goal of providing a safe and plentiful drinking water supply to all we serve. The AWWA NJ is the leading authorities in the drinking water industry. Let’s all continue working together to make this happen!!!!

Thank you all for your support and I am looking forward to a great future!!!!

Michael Furrey is Owner of Agra Environmental and Laboratory Services and the outgoing chair of the NJ Section of AWWA.
Water For People

ACE 2017 BASH

Hosted by the AWWA New Jersey & Pennsylvania Water For People Committees

Monday, June 12  |   8P – 11P  |   Hard Rock Café
1113-31 Market Street, Philadelphia, PA 19107
Directly connected to the Philadelphia Convention Center

To Register, visit www.njawwa.org/event/wpace17

Advance Purchase by Friday, June 9, 2017: $40
After June 9, 2017 & at the door: $50

See next page for sponsorship details

Please join us as we kick off ACE ’17 with a fun night of music, food and drinks in honor of a great organization! Water For People envisions a world where every person has access to reliable and safe drinking water and sanitation.

100% of this event’s net proceeds will benefit Water For People’s programming across 9 countries in Latin America, Africa and Asia.
Water For People

ACE 2017 BASH
Hosted by the AWWA New Jersey & Pennsylvania Water For People Committees

Sponsorship Opportunities

“Declaration of Independence – Title Sponsor” - $20,000 (Limit 1)
Includes twenty (20) tickets to event and the opportunity to address the crowd and/or introduce the band, “Water Hammer.” The Title Sponsor will be prominently recognized on the following:
- Official Event Flyer (company color logo)
- Water For People ACE2017 website (company color logo)
- Pre-ACE17 email blast to Water For People’s 23,000+ person mailing list
- All other mass-email and social media advertising blasts (local & national)
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People post-ACE17 BASH email blast to attendees
- 4 tickets to Water For People’s Kenneth J. Miller Founders’ Award Luncheon (held earlier the same day)
- Logo inclusion on rotating presentation during Water For People’s Kenneth J. Miller Founders’ Award Luncheon (held earlier the same day)
- Logo inclusion on rotating presentation at Water For People’s ACE17 conference booth
*Deadline to receive full suite of benefits is March 31, 2017

“Ben Franklin Sponsor” - $15,000 (Limit 2)
Includes fifteen (15) tickets to event and the following recognition:
- Official Event Flyer (company color logo) – sub-tier to “Declaration of Independence – Title Sponsor”
- Water For People ACE17 website (company color logo)
- Pre-ACE17 email blast to Water For People’s 23,000+ person mailing list
- All other mass-email and social media advertising blasts (local and national)
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People post-ACE2017 BASH email blast to attendees
- 2 tickets to Water For People’s Kenneth J. Miller Founders’ Awards Luncheon (held earlier the same day)
- Logo inclusion on rotating presentation during Water For People’s Kenneth J. Miller Founders’ Award Luncheon (held earlier the same day)
- Logo inclusion on rotating presentation at Water For People’s ACE17 conference booth
*Deadline to receive full suite of benefits is March 31, 2017

“Brotherly Love Sponsor” - $5,000
Includes 10 tickets to event and the following recognition:
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People ACE17 website (company name)
- Pre-ACE17 email blast to Water For People’s 23,000+ person mailing list
- Water For People post-ACE17 BASH email blast to attendees
- Logo inclusion on rotating presentation during Water For People’s Kenneth J. Miller Founders’ Luncheon (to be held earlier the same day)
- Logo inclusion on rotating presentation at Water For People’s ACE17 conference booth
*Deadline to receive full suite of benefits is March 31, 2017

“Liberty Bell Sponsor” - $2,500
Includes eight (8) tickets to event and the following recognition:
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People post-ACE17 BASH email blast to attendees

“Boat House Row Sponsor” - $1,000
Includes four (4) tickets to event and the following recognition:
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People post-ACE17 BASH email blast to attendees

“Rocky Sponsor” - $500
Includes two (2) tickets to event and the following recognition:
- Event day signage and on rotating presentation on screens in event space (company color logo)
- Water For People post-ACE17 BASH email blast to attendees

For more information on sponsorship opportunities, please contact:
Nickole Uva at NMUva@StoneHillContracting.com
or Carmen Tierno at Carmen.Tierno@amwater.com

www.njawwa.org
Introducing the Infrastructure Management Committee

By David Chanda

My name is David Chanda, and I have recently joined the Section’s Infrastructure Management Committee (IMC), led by Committee Chair Chris Andreasen. The IMC has recently been meeting regularly to support more active approaches in Asset Management in the operation and maintenance of our water and wastewater system infrastructure.

Asset management planning for water utilities is a best practice to ensure that a safe, adequate, and reliable water supply is available to the customers they serve at reasonable costs. Asset Management Plans are part of almost every discussion involving utility management, and being included in many regulatory requirements. Developing such a plan, and its execution, involves several factors including the 5 step process described in most standards and guidelines. The committee is discussing and working on several topics including methods to conducting an inventory of system assets, providing outreach and training for asset management programs, and developing strategies for securing adequate funding for capital improvements and replacements.

The committee consists of members of utilities, consultants and regulatory agencies and is focused on the development of approaches to work in New Jersey for utilities.

The committee is working in conjunction with other Section Committees to provide training and education opportunities to its members, as well as external groups, on the need and use of asset management programs for the preservation of the state’s water infrastructure. Just this past January 19, 2017, we hosted an Asset Management Workshop/Seminar led by a Dawn Noll of the Environmental Finance Center Network and included NJ perspectives from the committee and NJDEP representatives. This full day workshop included a presentation and learning objectives pertaining to the development of an inventory of utility components, setting goals for level of customer service, identifying critical assets, and effectively addressing O&M and asset replacement schedules. Approximately 40 attendees participated in the Workshop.

The committee is planning on many more exciting events that have, and will be, rolled out over the next calendar year. Additionally, a survey questionnaire seeking input as to what types of asset management training and activities are desired was made available at the January 19th workshop, and will be circulated to all members at the annual conference in March 2017. This will help us understand how we can best continue this IMC to deliver measurable action items that have palpable resonance within the water/wastewater industry.

We are excited to be working on this important topic and encourage anyone interested in learning more to contact a member of the committee or send an email to imc@njawwa.org. Thank you, and I hope to see and hear from everyone soon.

David Chanda is a Senior Designer at Suburban Consulting Engineers, Inc. and a member of the Infrastructure Management Committee.
Young Professionals Conduct Tour of New Jersey American Water Facility  

By Brian Van Nortwick

On Friday, November 18, 2016, the young professionals committees of the Pennsylvania AWWA and New Jersey AWWA Sections jointly hosted a facility tour of New Jersey American Water’s Delran Regional Water Treatment Plant in Delran, New Jersey. Over 20 young professionals attended and were provided a detailed overview of the treatment process.

The Delran Regional WTP, which was originally put into service in April of 1996, treats a combination of groundwater and surface water withdrawn from the Delaware River. The plant delivers over 40 million gallons of treated water per day to customers within 24 public water systems in Burlington, Camden, Gloucester, and Salem Counties at transmission distances of over 60 miles from the plant.

The tour guided attendees through the plant’s treatment process, starting in the control room, where the plant and distribution system are managed and monitored 24 hours a day, 365 days a year by plant operational staff members. From there, attendees were given a glimpse of the laboratory areas, where sampling and compliance monitoring activities occur as well as some of American Water’s most cutting edge water treatment research.

The tour continued through the treatment process which includes pre-oxidation through the use of ozone, clarification via superpulsator clarifiers, and filtration through multi-media granular activated carbon filters. The plant also houses on-site emergency standby generators capable of providing power for the entire plant during a service outage.

After leaving the plant, tour-goers convened at a local restaurant for a happy hour networking event hosted by the YP committees.

If you are interested in attending a future YP Committee event, have an idea for a future event or would like to assist in planning a future event please contact the following committee chairs.

Brian Van Nortwick, E.I.T. is an Engineer at H2M architects + engineers and is Chair of the Student Affairs Committee.
Each year the Retired Professionals Committee creates a Living History Project Video which is presented at the Annual meeting. The Living History Project is a documentary series where retired industry professionals talk about their water industry experiences. They share with us the stories and their viewpoints on the Section and how changes in State and Federal Regulations changed the landscape of our profession.

The main goal is to record and document the history of our Section and the water history of New Jersey. However, we hope that we will realize two additional benefits. The first is to encourage high school seniors, college students and others to choose a career in the exciting and rewarding water industry. The second is to give the young professionals in the industry a global perspective of the how, when, where, who and why we are where we are today.

The 10th edition (2017) interviewees were Richard Russo and William Hutchison. Richard Russo is a former Vice President of Mott MacDonald, former Vice President of Middlesex Water Company, and former General Superintendent and Chief Engineer of the City of Trenton Water Works. William Hutchison is the former Executive Director/Chief Engineer of the Southeast Morris County Municipal Utilities Authority. Both are Fuller Awardees, licensed Professional Engineers and hold both W4 and T4 water licenses. At the end of this year’s video Rich and Bill grilled each other. It made for a lively exchange.

Toms River East High School taped the sessions and will be editing the presentation. The Video will be on display at the Annual Conference in March. It will also be available through a YouTube link on the Section’s web site after the conference.

Neil Goldfine is the President of Mavin Consultants L.L.C and Chair of the Retired Professionals Committee
AWWA NJ Delivers State-wide Educational Seminars for Reducing Lead in School Drinking Water  By Frank Marascia and Robert Fullagar

During July 2016, and in preparation for the start of the school year, members of American Water Works Association New Jersey Section (AWWA NJ), conducted an educational seminar regarding lead in drinking water in schools for the City of Newark Public Schools. The training was held at the Harold Wilson School in Newark, NJ and was attended by thirty-one school officials responsible for the maintenance and/or safety of the school facilities including the drinking water. Topics included the source of Newark's water supply and several elements of the EPA's 3Ts (Training, Testing and Telling) for reducing lead in drinking water in schools, including how to perform a plumbing survey, sampling, and corrective actions per EPA recommendations.

In addition to classroom instruction several hands-on training sessions were provided, including sample collection, sample handling and preservation and identifying plumbing material. The program was extremely well received and garnered positive feedback from those in attendance. Valerie Wilson, School Business Administrator for the Newark Public Schools, reaffirmed her staff’s appreciation for the training and indicated a desire to work with the AWWA NJ on these issues in the future stating, “We believe we will be setting the standard for water testing and lead remediation in New Jersey schools.”

Recently, the New Jersey Department of Education has enacted regulations that require every school district to sample for lead in all of their schools. The New Jersey Department of Environmental Protection has been charged with providing guidance and training of this effort and has requested assistance from the AWWA NJ in implementing several upcoming regional training sessions that will be held in the near future.

Building on the success of the seminar conducted in July for the City of Newark Public Schools, members of AWWA NJ expanded their outreach and conducted additional educational seminars at several regional venues in conjunction with the New Jersey Department of Environmental Protection and the New Jersey Department of Education for school districts State-wide. The sessions were held during the last half of September 2016 at the Trenton Board of Education Administration Building, the Middlesex County Vocational-Technical School in East Brunswick, the Hammonton High School and the Mount Olive High School. A total of 917 school officials responsible for the drinking water and compliance with the program requirements attended the seminars.

Water professionals from the AWWA NJ who provided this training included: Frank Marascia (NJ American), Charles Ansulot (Agra Environmental Services), Robert Fullagar (Middlesex Water Company), John Perry (Montville Township), Keith Smith (Butler Water Department), and Michael Furrey (Agra Environmental Services and AWWA NJ Section Chair).

For more information on the EPA Guidance manual for elevated levels in drinking water in schools visit: https://www.epa.gov/sites/production/files/201509/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

Frank Marascia is a Production Manager and NJDEP Licensed Operator of Record with the New Jersey American Water Company and is the Chair of the Licensed Operator Committee.

Robert Fullagar, PE, is the Director of Distribution at Middlesex Water Company and is a Vice-Chair of the Licensed Operator Committee.
What’s Left When the Snow Melts: Chloride Trends in the Metedeconk River Watershed  

By William Ruocco

Every winter, road salt is applied to road surfaces, walkways, and parking lots throughout New Jersey to keep them free of ice and snow. Once the snow melts, the deicing chemicals make their way into nearby streams and soils. In recent years, an increase in chloride levels in both surface and groundwater caused by road salt application has presented unique operational challenges to the Brick Township Municipal Utilities Authority (Brick Utilities).

Brick Utilities, located in coastal Brick Township, New Jersey, operates a 16 MGD conventional water treatment plant supplying drinking water to over 100,000 customers in 5 municipalities. Most of Brick Utilities’ influent water comes from the Metedeconk River, a floodplain river that is fed by the underlying Kirkwood-Cohansey aquifer. Because of the intrinsic link between

(continued on next page)
What’s Left When the Snow Melts: Chloride Trends in the Metedeconk River Watershed (continued from previous page)

groundwater recharge and surface water in the coastal plain, land use and its impacts on groundwater are of critical concern.

Baseline chloride concentrations have increased steadily over the past 10 years at the Brick Utilities intake; from an average of 28.14 mg/L in 2006 to an average of 57.78 mg/L in 2016. A similar trend has been observed in groundwater and at sample sites throughout the Metedeconk River watershed. Groundwater samples collected from the Kirkwood-Cohansey aquifer show chloride levels increasing from an average of 49.10 mg/L in 2006 to an average of 82.53 mg/L in 2016. The specific conductance of the surface water has increased drastically in every HUC14 sub-watershed that makes up the Metedeconk River watershed.

The increase in chloride concentrations within the watershed is strongly correlated with impervious surface cover. Sections of the Metedeconk River watershed with more impervious cover have seen greater increases in conductance measurements. Development within the watershed is expected to continue and the amount of deicing chemicals used to coat the new pavement will increase with time. The Metedeconk River watershed has seen tremendous growth in recent years and is home to some of the fastest growing municipalities in New Jersey.

The increase in chloride levels within the Metedeconk River is worrying from both an ecological and a drinking water quality perspective. Over the past three years, there have been several days during snow melts where Brick Utilities conductivity sampling has indicated that dissolved chloride levels in the Metedeconk River may be greater than the EPA ambient aquatic life water quality criteria. While the average chloride levels in the Metedeconk River are well below drinking water standards (250 mg/L), the drastic change in the ionic content of our source water has caused Brick Utilities to see impacts on its finished water quality resulting in an LCR noncompliance event in 2014 that was caused primarily by raw water chloride. This event required an alteration to corrosion control processes to account for a shift in finished water ionic activity and address corrosivity.

Compounding the problem is the fact that we don’t know what peak chloride levels will ultimately be. Research has shown that less than half of applied deicing chemicals flush out of a watershed in a year. There is an immense amount of variability in application methods which all have differing environmental impacts. It is difficult to obtain reliable data on exactly how much road salt is being applied. The roads and other impervious sur-

Figure 2. Chloride Trends at Brick Utilities surface water intake, 2006-2016
What’s Left When the Snow Melts: Chloride Trends in the Metedeconk River Watershed  
(continued from previous page)

Land cover change within the Metedeconk River watershed 1986

Land cover change within the Metedeconk River watershed 2012

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What’s Left When the Snow Melts: Chloride Trends in the Metedeconk River Watershed

(continued from previous page)

faces located in the Metedeconk River watershed are maintained and deiced by five municipal public works departments (DPWs), two county DPWs, two state agencies, and countless landowners and commercial property managers. NJDOT alone applied 188,716 tons of road salt, 376,013 gallons of liquid calcium chloride, and 1,254,983 gallons of brine to the roads of New Jersey during the winter of 2015/2016. Perhaps the biggest obstacle in effectively managing the chloride problem is the fact that road salt is a societal necessity. Road conditions are an acute public safety issue, while water quality is a chronic environmental health issue. Finding a balance between the former and the latter is a challenging task.

The response by Brick Utilities has been to identify both the cause and the effect of the increased chloride concentrations. Brick Utilities has enlisted the help of industry experts including Dr. Marc Edwards of Virginia Tech in order to develop a comprehensive long-term water treatment response to the corrosivity issues resulting from the chloride increases. Brick Utilities has implemented a source water chloride monitoring program to better assess the impacts of the increased chloride load on water quality. Concerns about deicing chemical application have been brought to upstream municipalities. Brick Utilities is in the early stages of developing deicing chemical usage BMPs to advise local applicators on safe and sustainable use.

William Ruocco is Watershed Foreman at Brick Township Municipal Utilities Authority and a member of the Research & Technology Transfer committee.
2017 Membership Application

Student Member

Contact Information

Full Name  □ Mr.  □ Ms.  □ Mrs.  □ Dr.
Title
Company
Address
City
State/Province  ZIP/Postal Code  Country
Phone
Email

Gender  □ Male  □ Female  (Optional)
Birth Year  (Optional)

Is your company a member of AWWA?  □ Yes  □ No
Company Member Number (if known)

Were you referred by an AWWA member?  □ Yes  □ No
Referring Member Name  Email

Annual Dues (A1)

Student $20
A student enrolled in a minimum of nine credit hours (or the equivalent thereof) at an accredited institution. (14)

Payment
Total $ ____________________

Payment Method
□ Check enclosed
(make payable to AWWA, US currency only, US bank only)

□ American Express  □ MasterCard  □ Discover  □ Visa

Card Holder Name
Card Number
Expiration Date

Your membership will be activated when payment is received.

By joining AWWA, you grant the association, through implied consent, authorization to send you commercial electronic messages. Your communication preferences can be updated at any time at www.awwa.org under “My Account.”

Signature  Date

3 Ways to Join

➤ 1. Apply online at www.awwa.org/join

➤ 2. Fax completed application to 303.347.0804

➤ 3. Mail completed application to AWWA Customer Service 6666 West Quincy Avenue Denver, CO 80235-3098

* AWWA has 43 Sections in North America. You are automatically enrolled in a Section based on your address. In addition to your primary Section, you may join other AWWA Sections. There is a $33 multi-section fee, plus the dues for the other Sections as appropriate. Please call 1.800.926.7337 for more information.
Tell Us About Yourself  All applicants must complete this section.

What one business activity best describes your company? (Please check only one)

- A Public Water Supply Utility—Municipally Owned
- B Public Water Supply Utility—Investor Owned
- C Government—Federal, State, Local
- D Consulting Firm
- E Contractor
- F Private Industrial System or Water Wholesaler
- G Manufacturer of Equipment & Supplies (including representatives)
- H Distributor of Equipment & Supplies (including representatives)
- I Educational Institutions (faculty & students), Libraries and other related organizations
- J Fully Retired
- K Research Lab
- L Other allied to the field (please specify)

What one category best describes your company’s field served/principal activity? (Please check only one)

- 9 Both Water Supply & Wastewater
- 5 Water Supply Only
- 7 Wastewater Only
- 3 Other

What one category best describes your job title? (Please check only one)

- A Executive (General Manager, Commissioner, Board Member, City Manager, Municipal Supt., Mayor, President, Vice President, Owner, Partner, Director, etc.)
- B Management/Non-Engineering (Division Head, Section Head, Manager, Dept. Head, Comptroller, etc.)
- C Design and Engineering/Both Managerial and Non-Managerial (Chief Engineer, Civil Engineer, Mechanical Engineer, Elect. Engineer, Environmental Engineer, Planning Manager, Field Engineer, System Designer, etc.)
- D Scientific/Non-Managerial (Chemist, Biologist, Biophysicist, Researcher, Analyst, etc.)
- E Purchasing (Purchasing Agent, Procurement Specialist, Buyer, etc.)
- F Operations (Foreman, Operator, Maintenance Crewman, Service Representative, etc.)
- G Marketing & Sales/Non-Managerial (Market Analyst, Marketing Representative, Salesperson, Sales Representative, etc.)
- I Professorial (Educator, Teacher, etc.)
- Z Other (please specify)

What areas of the water and wastewater industry are of current interest to you? (Please check all that apply)

- Asset Management
- Backflow/Cross Connection
- Climate Change
- Conservation/Efficiency
- Customer Service
- Desalination
- Design/Construction
- Distribution/Plant Ops.
- Drought
- Emergency Preparedness/Security
- Groundwater
- Laboratory
- Membrane Treatment
- Public Health
- Public Info./Communications
- Regulatory Issues
- Reuse
- Small Systems
- Stormwater
- Training/Career Development
- Utility Management
- Wastewater
- Water Loss
- Water Quality/Treatment
- Water Research
- Water Resources/Planning
- Workforce Strategies
- Young Professionals

Dues rates valid through December 31, 2017. Dues are not deductible as charitable contributions for income tax purposes. The following is for USPS periodical mailing requirements only. In some AWWA Sections, a portion of the Section allotment equal to 90% or more of the domestic subscription rate charged for the Section periodical will be allocated toward a subscription to that periodical. Allocation for each publication recipient authorized—Journal - American Water Works Association—$50; Opflow—$16. Members with APO/FPO addresses will receive e-periodicals only. Print periodicals may be purchased for an additional fee. NOTE: Members’ phone numbers and email addresses are protected under AWWA’s Privacy Policy.
Application Form

2017 Water Utility Project of the Year Award

Award Description and Criteria
The NJ Section of the American Water Works Association hereby solicits applications for the inaugural Water Utility Project of the Year Award. The Award is intended to honor contributors to the New Jersey Water Community, whose efforts have served to improve the safety and reliability of drinking water throughout the state. The award winner will be announced at the 2017 AWWANJ Annual Conference in Atlantic City.

Deadline for Submittal
All applications for Water Utility Project of the Year Award shall be submitted via e-mail only. Completed applications, endorsed by the owner utility agency, shall be submitted no later than 5:00 PM on Tue, February 28, 2017. Submissions shall be directed to Patrick K. Cole, Chair, Membership Services Committee, at pcole@h2m.com.

Eligibility
In order to be eligible for the 2017 Water Utility Project of the Year Award, a nominee must meet the following minimum requirements:

- Owner Utility shall be a member in good standing of the AWWA New Jersey Section. The nominator must be an employee of the Owner Utility.

- The primary intent (minimum of 2/3 of constructed value) of the project shall be improvement of a Public Water System.

- The project shall have achieved substantial completion in the calendar year 2016.

- The project may consist of any drinking water infrastructure improvement, new work or rehabilitation, such as – but not limited to – sources of supply, pumping, treatment, transmission, distribution, storage, or SCADA. A nominator may submit projects consisting of combinations of these components, so long as they are regulated under the same PWSID, and were delivered under a single contract or program.

Nominator Information
Name of Owner Utility: __________________________________________________________
PWSID #: ____________________________________________________________________
Mailing Address: ______________________________________________________________
Name and Position of Nominating Employee: ________________________________
Nominating Employee Phone and E-mail: ________________________________
Nominating Employee Signature: _________________________________________
Plenty of Opportunities to Get Involved at ACE17  By Nicole A. Wiley

As most of you already know, AWWA’s 2017 Annual Conference and Exposition (ACE17) will be held in Philadelphia, PA this year. This offers the NJ Section a unique and rare opportunity to partner with the host Section and participate more than usual. I’d encourage everyone to take the time review all of the events that are available at the conference including seminars, exhibit hall participants, contests, and networking events. Visit www.AWWA.org for more information.

I’m hoping that many of our members are allowed to get involved with ACE17 through support from their employers but I realize that not all will be able to do so. To that end, I wanted to highlight some opportunities that may allow for more of our members to participate:

• **Volunteer!** NJ Section, along with the Chesapeake Section, is assisting the PA Section with the coordination and hosting duties. Several of our own Section members are heading up key committees: Mark Tompeck is one of the Vice Chairs for the conference, representing the NJ Section, while Mona Cavalcoli and Andy Clauhs are chairing the Room Monitor and Contest Committees, respectively. Hundreds of volunteers are needed to help ACE17 run smoothly. Volunteering is a great way to get involved and meet members. If you did not sign up yet but are interested in volunteering, contact the Section office at 866-436-1120.

• **Free Exhibit Hall pass for utilities!** If you work for utility, you can register for a pass to visit the exhibit hall for free. Even if you don’t work for a utility, the exhibit hall passes are less expensive than other registration options. If you’ve never been to ACE and haven’t seen the exhibit hall there, think of AWWA NJ’s exhibit hall on steroids. It’s a huge open space where just about every vendor associated with the water business has a booth. Many of the manufacturers bring full size models of their equipment for you to examine and observe in operation. This is a great learning opportunity for people new to the water business who can get hands on experience with the equipment and those who have been around a long time who can get up to date on the latest technologies. The pass will also allow you to watch the competitions that take place throughout the conference on the exhibit hall floor such as Pipe Tapping and Meter Madness which are pretty amazing to see.

• **Sunday Workshops!** There are several workshops that will be held Sunday, June 11 that offer a variety of interesting topics. There is even a great new hands-on workshop that our own Lindsey Olson helped develop. The fees for these workshops are separate from the overall conference fees. And since these workshops are on a Sunday, they will not interfere with your work schedule. My recommendation is that if you are interested in attending one of these, you register soon because they fill up fast!

• **Networking events!** Not all of the action for ACE17 will take place inside the convention center during normal business hours. Many of the service providers and manufacturers in the water business host networking events in the evening. This is a great time for you to meet colleagues from all across the country (and beyond!). The relationships formed at these events can have long-lasting impacts on your career that you may not even realize at the time. And these events would be on your own time at no cost to your employer.

• **Water For People and Water Hammer!** Yes, that’s right. Our very own Section band will be playing at the Hard Rock Cafe on Monday night as part of a fundraiser for Water For People. This event is being organized as a joint effort between NJ and PA Sections Water For People Committee. It sounds like it is going to be a great time and I hope to see my fellow NJ Section members out there dancing!

Nicole A. Wiley is a Senior Planning Engineer at New Jersey American Water, and is currently the Vice Chair of the Section, and our incoming Chair

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**Upcoming Events: Save the Dates**

**Dine & Dance**
- Friday, February 24
- Ristorante da Benito in Union, NJ
- Contact Mike Bange at Michael.Bange@amwater.com to register

**AWWA NJ 82nd Annual Conference**
- March 21-24, 2017

**Drop-in-the-Bucket Auction**
- March 21-23
- AWWA NJ Annual Conference
- For information, contact Samantha Liccketto of Municipal Maintenance at sliccketto@mmc-nj.com

**Golf Classic**
- Monday, May 1
- Royce Brook Golf Club in Hillsborough, NJ

**ACE17 WFP Bash**
- Monday, June 12
- 8:00 p.m. – 11:00 p.m.
- Hard Rock Café in Center City Philadelphia
- Featuring AWWA NJ Section Band Water Hammer
- Contact Carmen Tierno at carmen.tierno@amwater.com for details

**ACE17**
- June 11 – 14
Learn about water and show your professionalism.

Keep current on water issues.
- Get information from AWWA Standards, Manuals, books, award winning DVDs, and respected periodicals.

Earn continuing education credits.
- Attend in-person or online. AWWA and local Sections host dozens of educational opportunities every year covering all aspects of water and wastewater.

Support smart water policy.
- From regulations to innovative financing options, AWWA works on issues that benefit the water community.

Save time and resources.
- Current technical resources provide what you need, when you need it; all at member discounted pricing.

Join or renew today.
www.awwa.org/membership
Retired and Young Professionals to Co-Present at Annual Conference  By Stacy Fysz Cacallori

The Retired Professionals and Young Professionals are together again hard at work producing two interesting and educational technical presentations for the Knowledge Sharing Track of the 2017 Annual Conference. For all involved this is an exciting program that allows senior professionals in our industry to share their knowledge and experience with the next generation of industry professionals.

One of the presentations, “Asset Management and the Modern Water Utility- Don’t Wait Until It’s Too Late,” will be presented by Gary Fournier, CH2M-Hill, and Jordan Spitzer-London, New Jersey American Water Company. Gary and Jordan will provide a general overview of the importance of asset management. They will discuss how the effects of an aging water and wastewater systems could be better managed with a robust asset management system.

Karen Fell, Retired, NJDEP; Conor Bourque H2M architects + engineers; and Brian Van Nortwick, American Water, will present the other topic in the Knowledge Sharing Session. Their presentation, entitled “The Forgotten Unregulated Contaminants – What You Need to Know Now and For the Future,” will focus on unregulated contaminants that are not necessarily at the forefront of current discussion within the industry but are expected to gain attention soon.

We look forward to seeing you at the Knowledge Sharing Session on Thursday afternoon, March 23!

Stacy Fysz Cacallori is an independent utility consultant and is a member of the Conference Committee and Retired Professional’s Committee.

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You know AWWA provides the best technical resources and networking opportunities in the water sector. Refer a colleague and get rewarded for each person who joins. More members mean more connections and resources for you! Learn more at www.awwa.org/getrewarded

American Water Works Association
Dedicated to the World’s Most Important Resource®
Hydrant Flushing and Public Education

By Sean H. Fitzgerald

As any water professional can tell you, two of the biggest challenges we face are water quality and public perception. Here at the Merchantville – Pennsauken Water Commission, we found that trying to solve one of these problems tended to exacerbate the other. By following a bi-annual hydrant flushing program we helped to decrease, in the long term, our overall water quality complaints. This did, however, come at a short term cost to public perception. Customers questioned how we could “waste” water at such high volumes, especially when they are being told to hold back on water consumption during drought conditions. It would also cause pressure issues and discolored water leading to consumer fear and concern over the quality and safety of their drinking water.

At first, the idea of spending the entire year educating the public about the causes of water quality issues and how to react was met with silence. If no problems are occurring at the moment, consumers tend to ignore the information and forget it completely once a problem occurs. Throw the echo chamber of social media community groups into the mix and the problem compounds a hundredfold. Now your community wide flushing program is being perceived as a community wide water quality disaster.

The ultimate answer for the MPWC was to wed the solutions together. The need for yearlong consumer education remained, but the need to laser focus our public education and information messages around flushing crystallized.

First and foremost the need to reinforce our tried and true methods of reaching the MPWC’s customers were utilized in the broadest way possible. By using local newspapers and our website the MPWC was able to notify the public of the dates and times that flushing would take place. From there, the message became more detailed and nuanced.

Social media, primarily Facebook, was used a week prior to the start of the MPWC’s two week hydrant flushing cycle to remind the public of the dates and times, educate them on the reasons why flushing was needed, and potential side effects and how they could mitigate those effects. All of these posts were shared widely on local neighborhood Facebook pages. This allowed for greater exposure and the ability to answers questions that the public had prior to them suffering flushing’s ill effects. It’s much easier to answer a calm customer during the day rather than an angry mother whose child is in a tub of discolored water at night.

Once the hydrant flushing began the MPWC would transfer our Excel spreadsheet nightly schedule, used by each of our flushing teams, to our Facebook page 7 hours in advance of the beginning of each night’s flushing. This allowed ample time to answer any questions by those in the area being flushed, as well enabled us to make changes to the weekly schedule if a team fell behind without posting a massive listing of dates and areas.

This proactive approach, combined with employee education program, and an updated hydrant flushing program gave the MPWC dramatic results. Over the course of 3 years we saw our water quality complaints plummet from double digits down to only 4 action required complaints for the entire year of 2016. Along with this sharp decrease we’ve seen countless thanks and signs of gratitude from the public at large for keeping them up to date on what’s going on with their water quality and system.

At the end of the time positive communication with the public, decrease in time and resources spent on customer complaints, and the increase in overall public knowledge has paid huge dividends when you consider that all it cost was a few minutes of public education.

Sean H. Fitzgerald is Treatment Technician at Merchantville – Pennsauken Water Commission and a member of the Public Information Committee.
Water Crossword  By Marisah L. Potkalesky

Across
1. a “tube” used to pump groundwater
2. Drinking enough water every day keeps us healthy and ______.
6. vapor in the atmosphere forms ______
8. What is the main ingredient in common products like canned foods and soft drinks?
9. not dirty
11. water holding formation
13. to contaminate
14. to add water to an aquifer

Down
1. marshy area
3. water beneath the earth’s surface
4. large body of salt water
5. Tap water in the United States is suitable for drinking and is sometimes called ______ water.
7. evaporation, transpiration, precipitation and infiltration make up the water ______
10. like a stream
12. to consume or “eat” water

Answers on last page

Marisah L. Potkalesky is Senior Technician, Management Information Systems at the Passaic Valley Water Commission and a member of the Public Information Committee
Confined Space Workshop  

By Joseph Aldighieri

On October 21st 2016 the Safety and Security Committee conducted a Confined Space Workshop at the Middlesex Fire Academy in Sayreville, NJ. It was a four (4) hour comprehensive program on confined space entry for Lead Employees, Supervisors and Managers. This workshop was created specifically for the water/wastewater industry by George Lewis and Joseph Aldighieri of the Passaic Valley Water Commission, with guidance from PEOSH and help from Brian Maitland of J.A. Montgomery and Anthony Morrelle of Tri-State Safety Solutions.

The workshop explored the difference between Permit Required and Non-Permit Required Confined Spaces, reviewed hazards associated with permitted spaces and focused on the decision logic used for permitted entries. We essentially covered the spectrum of potential hazards confined spaces pose to our workforce, including: recognition and evaluation of hazards, proper implementation of the Alternate Entry Procedure under (OSHA 29:1910.146), the control of hazardous energy (LOTO), air monitoring, ventilation and rescue plans.

Throughout the workshop we conducted demonstrations of equipment such as gas meters, ventilators, and mechanical retrieval devices. Trainees were provided with hands-on and group activities. During group activities the attendees were asked to evaluate different scenarios previously found in confined space operations in the water/wastewater industry. Afterwards we went over the decisions made by the group and pointed out where successes and deficiencies were.

Some of the feedback received from the workshop included:

“Good real life scenarios for the water industry. I enjoyed the classification of spaces and rescue requirements.”

“Good course, I learned a lot of new information”

“A very informative seminar”

This workshop provided 4-TCH’s for Water or Wastewater Licenses, 4-PE-CPC’s and 4-NY PE-PDH’s. Due to the amount of positive feedback, the Safety and Security Committee is considering conducting this Confined Space Workshop again in 2017, so please keep an eye on the AWWANJ calendar if this is something that interests you. Stay safe.

Joseph Aldighieri is a Carpenter/LFWTP Safety Coordinator at the Passaic Valley Water Commission and Chair of the Safety and Security Committee

Student Affairs Committee Updates  

By Brian Van Nortwick

The Student Affairs Committee has been busy during the Fall of 2016, mainly focusing on recruitment of new student members. In October, committee members visited Rowan University to speak about AWWA to Rowan’s very active ASCE chapter. After the presentation, we had 13 Rowan students take advantage of our free first-year student membership offer! Many students also expressed interest in the filter competition and other ways of getting involved. In November, AWWA NJ’s newest student chapter was officially formed at Rutgers University, with a total of 25 new members – special thanks to Dave Tanzi and Amit Kulkarni for their efforts in making this happen! After an active recruitment period during Fall 2016, the Student Affairs Committee has a very busy first half of 2017 planned.

Student Filter Competition

On Saturday, February 25, 2017, the Student Affairs Committee will host its 3rd Annual Student Filter Building Competition at Middlesex Water Company’s C.J.O. Water Treatment Plant in Edison, NJ. The competition will feature teams comprised of high school and college students putting their homemade water filters to the test. The filters were judged on several criteria including effluent flow rate, weight, effluent turbidity, cost, and sustainability. The winners of the competition will receive cash prizes, and an all-expenses paid trip to the NJ Section Annual Conference in Atlantic City for a chance to compete in the Student Research Poster competition.

Annual Conference

Students’ Day at the 82nd Annual NJ Section Conference will kick off bright and early on Wednesday, March 22nd. We have a jam-packed day full of activities to keep student conference attendees engaged, including:

• Student Educational Track – featuring seminars on working in the water industry and diversity.
• Student Research Poster Competition
• NEW “Meet the Boss” Lunch – Students will also have opportunity to meet and network with industry professionals – both young and seasoned – during lunch on Wednesday.
• Student/YP/Operator Trivia Bowl – Teamed with representatives from the Licensed Operator Committee, several students will participate in the Trivia Bowl to showcase their knowledge in all things drinking water.

Drinking Water Week

The Student Affairs Committee will be holding its annual Elementary Student Poster Contest during Drinking Water Week, which is May 7-13 for 2017. Also, to help combat the increasing cost of college tuition, the Student Affairs Committee will once again be awarding three (3) scholarships to qualified students during Drinking Water Week. Each scholarship is worth $5,000, distributed over the course of two years in separate $2,500 installments. The scholarships are as follows:

• The Drinking Water Careers Scholarship – awarded to an undergraduate student entering their sophomore, junior or senior year of college who is interested in a career in drinking water.
• The Drinking Water Continuing Education Scholarship – awarded to a high school senior who is planning to continue their education at a college, trade or vocational/technical school.
• The Family Drinking Water Careers Scholarship – awarded to children of Section members who are pursuing their education at an undergraduate, graduate or other vocational/technical school.

Brian Van Nortwick, EIT is an Engineer at H2M architects + engineers and is Chair of the Student Affairs Committee
AWWA Press Release
AWWA Board of Directors Selects David Rager of Cincinnati as Next President-Elect

January 14, 2017 (SCOTTSDALE, ARIZ.) – The American Water Works Association Board of Directors today selected David Rager of Cincinnati as the association’s next president-elect during its annual winter meeting. Four vice presidents, one director-at-large and one service provider director-at-large were also elected.

An AWWA member for nearly 15 years, Rager is the principal of Rager Management Consulting, LLC. He was CEO for SD1 in Kentucky for four years and for the Greater Cincinnati Water Works for 17 years. For AWWA, he has served as Association treasurer, chair of the Water Utility Council and a member of the International Council. A former chair of the Board of Trustees for the Water Research Foundation, Rager is a member of the Ohio Section and the Kentucky/Tennessee Section.

Rager begins his role as president-elect in June at the conclusion of AWWA’s Annual Conference and Exposition in Philadelphia. He will serve his one-year presidential term beginning in June 2018.

The four vice presidents elected by the board are:

- Raymond Baral Jr. has been an active member of the Connecticut Section for 22 years. He is the assistant manager of water treatment at the Metropolitan District Commission in Hartford, Conn.
- Stephen Blankenship, a member of the New Jersey Section for 16 years, represents the Section at many AWWA workshops, events and conferences. He is the executive director/chief engineer at Hamilton Township MUA in Mays Landing, NJ.
- Mark Coleman has been an AWWA member for 35 years and is a George Warren Fuller Award winner. He is currently the Michigan Section director and is a senior vice-president at Wade Trim in Detroit.
- Alan Forrest has been an active member of the Arizona Section for 22 years, where he currently is the director. He is a senior manager in the water business group at CH2M.

Also elected was Marshall Thompson as a director-at-large. Thompson is the director of operations at SUEZ Water Idaho in Boise. An AWWA member for 10 years, he serves as chair of the Water Information Technology Committee for the Pacific Northwest Section. He is a veteran of the U.S. Coast Guard Reserve.

Also elected was Randy Moore as a service provider director-at-large. Moore has been an active member of AWWA for 34 years at the Missouri Section and is a regular contributor to Opflow, The AWWA’s magazine for operators. He is vice president of market development at Pure Technologies, Ltd. in Columbia, Md.

Download the AWWA NJ 82th Annual Conference App!

The AWWA NJ 81th Annual Conference has gone mobile using Guidebook!

We strongly encourage you to download the mobile guide to enhance your experience at the AWWA NJ 82th Annual Conference. You’ll be able to plan your day with a personalized schedule, browse exhibitors and sponsors, access interactive maps to help you find a session or exhibitor booth and receive reminders for events. You will also be able to provide feedback on presentations with our new feedback forms and download presentation information.

The app is compatible with iPhones, iPads, iPod Touches and Android devices. Windows Phone 7 and Blackberry users can access the same information via the mobile site at http://guidebook.com/browse/.

To get the guide, choose one of the methods below:

**FIRST STEP**

- Download ‘Guidebook’ from the Apple App Store or the Android Marketplace
- Visit http://guidebook.com/getit from your phone’s browser
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(QR-Code reader required, e.g. ‘Red Laser,’ ‘Barcode Scanner’)

**SECOND STEP**

The guide will be listed under the “Download Guides” section of the application. Search “AWWA NJ.”

See you at the event!

The AWWA NJ Conference Committee
Research Corner:  
Water Research at NJIT By Wen Zhang

Water research at NJIT involves a broad spectrum of work including water and wastewater treatment, remediation, and water resources. For example, The Water-Energy Nexus activity at NJIT is focused on the nexus that exists between the need for clean water, the need to reduce conventional energy expenditures in the processes, and the need to generate green energy during such activities. Current water treatment technologies involving clarification/pretreatment, purification, disinfection, and distribution consume huge volumes of energy in different public sectors including municipal water treatment, oil and gas production, power generation, mining, industrial activities, and the agricultural and animal husbandry sector.

As we move toward more stringent water quality requirements, it has become paramount that we produce higher volumes of clean water requiring the least amount of energy and capital expenditures. Semi-permanent drought-like conditions in parts of the country present on-going challenges. This overarching goal will require development of technologies for water treatment. Furthermore, we need to explore and utilize the potential for green energy extraction/generation during such water treatment. These endeavors are supported by academics and researchers from the Department of Civil and Environmental Engineering. Project collaborations extend across the Department, the University, specific industries and state agencies (e.g., NJDOT and NJDEP). We have forged strong relationships across all levels of government and industry. We are frequently called upon to provide advice, specific research and data when important decisions are being made. Some of the applications developed in these collaborations are listed below.

1. Selected current research and projects related to water and wastewater treatment

A. Low cost clay water filter development for family and point of use (Research Team: Jay Meegoda, Ph.D., P.E. and Wen Zhang, Ph.D., P.E.). Access to clean and safe drinking water remains the global challenge especially in developing countries and remote suburban areas. To address water quality and contamination issues such as pathogens, pesticides and heavy metals clay pot filters were developed. Clay pot filters have the capability of removing most of the pathogenic microorganisms, pesticides and heavy metals, such as Pb, cadmium and arsenic, turbidity and odor. The longevity, performance of multiple contaminant removal, and cost are challenging issues this project is particularly evaluating. Meanwhile, Dr. Zhang is currently developing functional adsorbents and filter columns for point-of-use (POU) water treatment devices using a variety of naturally and commercially available materials including food waste (crab and clam shells) and plant seeds. These alternatives may provide affordable and sustainable water treatment for rural areas.

B. Development of multifunctional reactive electrochemical membranes for water purification and biomass harvesting (Research lead: Wen Zhang Ph.D., P.E.). This project investigates the use of titanium dioxide-based reactive electrochemical membranes (REMs) to treat and remove algae and associated algal medium and algogenic organic matters from water. This membrane features a cross-flow filtration method, as shown in the graph. The research goals are to achieve an efficient biomass concentration water reuse, and nutrient recovery, using this antifouling REM filtration system.

C. Characterization and environmental applications of Nano bubbles as clean water treatment technology (Research team: Taha Marhaba, Ph.D., P.E. and Wen Zhang, Ph.D., P.E.). There is a growing interest in Nano bubble technology due to its wide range of potential applications (e.g., detergent-free cleaning, water aeration, ultra-sound imaging and intracellular drug delivery, and mineral processing). In the processes of surface fouling and defouling, the surface and colloidal properties such as surface charge, surface tension, hydrophobicity, coalesces, and bubble size distribution, will fundamentally influence the stability and performance of applications. This project evaluates these fundamental properties and measures the effects of environmental conditions such as pH, ionic strength, the presence of natural organic matters (NOM) and the origin of Nano bubbles (air, pure oxygen or nitrogen). The ultimate goal is to lay the groundwork for other engineering applications of Nano bubbles such as environmental remediation, pollution control and filtration as a green sustainable technology.

D. Visible light Fenton reaction and integration into an all-in-one, on-demand Fenton-active and photocatalytic filtration device (Research lead: Wen Zhang Ph.D., P.E.). In this study, we aim to design and produce an all-in-one Fenton-reaction-active filtration system. The Fenton reaction, discovered over 100 years ago is an oxidation system is based on the formation (continued on page 22)
Does Your Utility Have the Best Tasting Water?  
...care to put it to the test?  By Summer Defeo

It’s Back at this year’s Annual Conference!
Utilities are invited to participate in a water taste test contest on Wednesday, March 22nd from 11:00 am to 2:00 pm.

Due to last year’s feedback regarding the paper cup aftertaste samples will now be served in special AWWA shot glasses that participants get to keep.

The winning utility will be awarded a trip* for one representative from the utility to participate in AWWA’s Best of the Best at the AWWA National Conference and Exposition (ACE) in June. This year’s conference will be held very close to home in Philadelphia, PA June 11-14, 2017.

Participating utilities must abide by the following rules:

Five samples should be sent, each in a 1 L container. Utilities can use the container of their choosing. Each sample should be clearly identified with the name of the water system.

Samples must be dropped off by 9am on the morning of the water taste test (Wednesday, March 22.) Please drop the samples off at the registration desk in the conference hall.

Water Research at NJIT  (continued from page 21)

of reactive oxidizing species able to efficiently degrade the pollutants of the wastewater stream. This system we would design, could be applicable for advanced oxidation water treatment applications, integrating nanostructured materials and iron-catalyzed free radical reactions within pore-functionalized synthetic membrane platforms. The system would provide the flexible, on-demand initiation of the Fenton reaction. Hydrogen peroxide would be flushed through the functional membrane layer with immobilized ferrous/ferric ions or iron oxide nanoparticles. This would then kick off the Fenton reaction for the oxidation of recalcitrant and emerging pollutants (e.g., PFOA, BPA and dyes) in the raw water within the confined membrane pore space. The design of this active filtration system represents a great stride in on-demand, initiated chemical reactions and in moving the chemical reaction within confined spaces to break the conventional reaction efficiency limit.

E. Asset management (Research lead: Fadi Karaa, Ph.D.). The project involves the use of NSF-sponsored expert system for water distribution system maintenance, rehabilitation and reconstruction decisions. Integrated inventory, condition assessment and maintenance management systems for water and wastewater systems were designed and developed. Under US Army Corps of Engineers Construction Engineering Research Laboratory (CERL) contract, Fadi developed decision support/expert system architecture for the automation of the analytical and data collection processes. This system eliminates or reduces infiltration and inflow sources in wastewater systems.

2. Relevant coursework offered to senior undergraduate and graduate students

The following courses offered by faculty in the Department of Civil and Environmental Engineering are related to water and wastewater treatment. Graduate courses are given in the evening while most undergraduate courses are run in the day time. Courses can be taken by external people as non-matriculated students.

ENE 262: Introduction to Environmental Engineering
ENE 360: Fundamentals of Water and Wastewater Treatment
ENE 630: Physical Processes in Environmental Systems
ENE 661: Environmental Microbiology
ENE 663: Water Chemistry
ENE 662: Environmental Chemodynamics
ENE 664: Physical and Chemical Treatment
ENE 665: Biological Treatment
ENE 672: Stormwater Management

Wen Zhang, Ph.D., P.E. is an Assistant Professor at NJIT
Women’s History Month

Spouse. Colleague. Leader. AWWA and our members celebrate Women’s History Month. Women’s History Month recognizes the contributions of women who have broken the precast mold of history within our industry and paved the way for women to occupy every possible space within the world of water.

Join us in paying tribute to the many contributions that women have made to our industry, country, and world.
The Technical Program Committee has assembled a strong agenda for the 2017 Annual Conference focusing on providing interesting, worthwhile content to our Section members. Some highlights of our program include:

**Lead with Lead** – Our Opening Technical Session on Tuesday will focus on Lead issues. The session will include a discussion from the USEPA and NJDEP on regulatory requirements, a discussion on the Flint, Michigan situation, a discussion on lead service line replacement as well as a discussion on water quality and treatment.

**Regulatory Update** – During the Regulatory session on Wednesday morning, experts from the NJDEP will be presenting on important and “in the news” topics including updates to the SRF Program and the DEP Self-Assessment tool.

**Operator Track with Hands-on Training** – We have planned a full day of operator training for Wednesday. The morning session will provide a refresher on asset management, emerging contaminants, lead in schools and drought indicators. The afternoon session will be small breakout groups for hands-on training related to fall protection, SCADA, flow meters and turbidimeters.

**Infrastructure and Condition Assessment** – On Thursday, we have a complete session dedicated to aging infrastructure with a focus on distribution systems with talks ranging from condition assessments to distribution system hydraulics.

**Treatment and Water Supply** – On both Wednesday and Thursday, there are multiple sessions dedicated to treatment and water supply issues touching on issues related to both groundwater and surface water supplies.

**Research** – The Section’s Research and Technology Transfer Committee has assembled a group of talks to focus on some fascinating research going on within the New Jersey water systems.

**Ethics** – Be sure to stick around on Thursday afternoon for one hour of ethics training required for New Jersey professional engineers.

**Students and Young Professionals** – The Student Affairs Committee and Young Professionals Committee have prepared a dedicated track on Wednesday to provide discussions on diversity in the water business, how to get a job in the water industry and a day in the life of a water industry member. On Thursday morning, our retired professionals have teamed up with young professionals to exchange ideas on asset management and unregulated contaminants.

Throughout the conference program, we have aimed to offer at least one technical session at each time slot that qualifies for New Jersey Professional Engineer (CPC) and New Jersey Operator (TCH) continuing education credits. Our continuing education credits are still pending, and we strive to maximize the opportunities for our members to receive these important credit opportunities at a great value.

*Joseph Frissora, P.E., is a Vice President at HDR and Chair of the Technical Program Committee*

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**A Magical Attendee Appreciation & Awards Dinner!**

We invite all Conference attendees to join us for the Annual Attendee Appreciation & Awards Dinner, to help us close out what will surely be another successful conference. And this year, we are adding an element of MAGIC to the event, as we welcome well-known NJ magician and mentalist Stephen Christopher, to provide entertainment for the evening.

AWWA President Jeanne Bennett-Bailey will be with us that evening to help us celebrate the presentation of outgoing Committee Chair Awards, the presentation of the prestigious George Warren Fuller Award, the Dedication Award, and more. Dinner attendees will have a chance to win cool door prizes, and then Stephen Christopher has promised to delight our audience with fun feats of magic and mental powers! We hope to see you all on March 23 in the Signature Room at The Borgata for this great final Conference event.
AWWA NJ 2017 Annual Conference
Program Overview

**Tuesday, March 21, 2017**
- 9:55 AM – 4:15 PM Opening Technical Session
- 4:45 PM – 5:45 PM Keynote Speaker
- 5:45 PM – 7:45 PM Meet & Greet (Cocktail Reception) In the Exhibit Area

**Wednesday, March 22, 2017**
- 7:30 AM – 8:15 AM Students AM Meetup Breakfast: followed by Students Day Track
- 7:30 AM – 4:00 PM Exhibits Open
- 8:15 AM – 11:45 AM Three Concurrent Technical Sessions
- 8:45 AM – 12:45 AM Student Poster Session
- NOON Lunch in the Exhibit Area
- 1:00 PM – 3:30 PM Three Concurrent Technical Sessions
- 3:30 PM – 3:45 PM Break
- 3:45 PM – 5:45 PM Annual Business Meeting, Operators’ Bowl & Student Bowl Competition
- 9:00 PM Special Networking Event! Water Hammer Plays at the Premier Club

**Thursday, March 23, 2017**
- 7:30 AM – 8:30 AM Interfaith Breakfast
- 8:00 AM – 1:30 PM Exhibits Open
- 8:45 AM – 9:45 AM Three Concurrent Technical Sessions
- 9:45 AM – 10:30 AM Vendor Appreciation Coffee in the Exhibit Area
- 8:45 AM – 12:00 NOON Three Concurrent Technical Sessions
- 12:00 NOON – 1:30 PM Past Officers’ Luncheon (invitation only)
- 1:30 PM – 3:00 PM Three Concurrent Technical Sessions
- 3:00 PM – 3:15 PM Break
- 3:15 AM – 4:15 PM Three Concurrent Technical Sessions
- 6:00 PM – 9:30 PM Attendee Appreciation & Awards Dinner

**Friday, March 24, 2017**
- 8:00 AM – 9:30 AM Section Farewell Breakfast

Credits are pending final approval and will be posted to our website when they are available.
Visit [www.nj.awwa.org/AnnualConferenceHome](http://www.nj.awwa.org/AnnualConferenceHome).

**REGISTRATION DECK HOURS**
- Tuesday: 9:00 AM – 5:00 PM
- Wednesday: 7:30 AM – 4:30 PM
- Thursday: 8:00 AM – 2:00 PM

**VENDOR EXHIBIT AREA HOURS**
- Wednesday: 7:30 AM – 4:00 PM
- Thursday: 8:00 AM – 1:30 PM

**Note:** This program is preliminary and is subject to change. Check your registration mailing and the AWWA NJ website at [www.nj.awwa.org](http://www.nj.awwa.org) for the latest information.
AWWA NJ 2017 Annual Conference (continued)

Opening Technical Session – Lead Issues

<table>
<thead>
<tr>
<th>Time</th>
<th>Session A1: Session Master: Mark Tompeck</th>
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</thead>
<tbody>
<tr>
<td>9:00 AM – 9:55 AM</td>
<td>Check-In</td>
</tr>
<tr>
<td>9:55 AM – 10:00 AM</td>
<td>Introduction and Welcome: Mark Tompeck</td>
</tr>
<tr>
<td>10:00 AM – 4:15 PM</td>
<td>OPENING TECHNICAL SESSION</td>
</tr>
<tr>
<td>10:00 AM – 11:00 AM</td>
<td>Lead Health Effects and Regulatory Requirements: Where are we and where are we going?: Douglas Pabst, USEPA and Kathleen Burkhard, NJDEP</td>
</tr>
<tr>
<td>11:00 AM – Noon</td>
<td>Restoring Faith in Flint: John Young</td>
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<tr>
<td>Noon – 1:00 PM</td>
<td>Lunch – On Your Own</td>
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<tr>
<td>1:00 PM – 2:00 PM</td>
<td>OPENING TECHNICAL SESSION II</td>
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<tr>
<td>1:00 PM – 2:00 PM</td>
<td>Lead Service Line Replacement – A Utility Perspective: Gert van der Walt, DC Water</td>
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<tr>
<td>2:00 PM – 3:00 PM</td>
<td>Water Quality and Treatment : David Cornwell, EE&amp;T</td>
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<tr>
<td>3:00 PM – 3:15 PM</td>
<td>Break</td>
</tr>
<tr>
<td>3:15 PM – 4:15 PM</td>
<td>Getting the Lead Out: Risk Management and Communications: Melanie Goetz, Hughes and Stuart Communications</td>
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<tr>
<td>4:15 PM – 4:45 PM</td>
<td>Break</td>
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<tr>
<td>4:45 PM – 5:45 PM</td>
<td>OPENING SESSION</td>
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<tr>
<td>5:45 PM – 7:45 PM</td>
<td>Meet &amp; Greet (Cocktail Reception)</td>
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</table>

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Visit [www.njawwa.org/AnnualConferenceHome](http://www.njawwa.org/AnnualConferenceHome)
### AWWA NJ 2017 Annual Conference (continued)

#### Wednesday, March 22, 2017

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>7:30 AM – 4:00 PM</td>
<td>Exhibits Open</td>
</tr>
<tr>
<td>8:15 AM – 3:45 PM</td>
<td>Technical Sessions</td>
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<tr>
<td>8:15 AM – 12:45 AM</td>
<td>Student Poster Session</td>
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<td>8:15 AM – 11:45 AM</td>
<td>Students Day Educational Track</td>
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#### STUDENT DAY

<table>
<thead>
<tr>
<th>Session H: Session Master –</th>
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<tbody>
<tr>
<td>8:15 AM – 9:00 AM</td>
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<tr>
<td>9:00 AM – 9:45 AM</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Session B: Session Master – Gene DeStefano</th>
<th>Session C: Session Master – Mark Tompeck</th>
<th>Session D: Session Master – Joe Stanley</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGULATORY</td>
<td>SURFACE WATER TREATMENT</td>
<td>OPERATIONS</td>
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<td>• 1.5 Credits</td>
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<td>• APO:</td>
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</tr>
<tr>
<td>8:15 AM – 8:45 AM</td>
<td>Regulatory Update</td>
<td>Rapid Delivery of Supplementary Summer Treatment Capacity Utilizing Microfiltration Membranes: Brian Van Nortwick, EIT, H2M (FI), Jordan Spitzer-London, NJ American (FI)</td>
</tr>
<tr>
<td>9:15 AM – 9:45 AM</td>
<td>DEP Self-Assessment</td>
<td>Improve Performance of Aging Media Filters without the Cost and Disruptions of a Complete Filter Overhaul: Sandra Kutzing, CDM Smith &amp; Nancy Fox, Suez</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:45 AM – 10:15 AM</td>
<td>Break (Coffee &amp; Soda)</td>
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</table>

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### AWWA NJ 2017 Annual Conference (continued)

#### Session B: Session Master – Gene DeStefano

**TREATMENT**
- 1.5 Credits
- PO: 
- APO: 

10:15 AM – 10:45 AM
Converting Filters to Biologically Active Filters to Remove PPCPs/EDCs: **Bob Raczko, Suez North America**

#### Session C: Session Master – Mark Tompeck

**ADVANCE OXIDATION**
- 1.5 Credits
- PO: 
- APO: 

10:45 AM – 11:15 AM
UV Technologies: Balancing between Advances in Science and Regulatory Requirements, and Preparing for the New Challenges: **Chengyue Shen, HDR, Inc. & James Jensen, HDR, Inc.**

#### Session D: Session Master – Joe Stanley

**OPERATIONS**
- 1.5 Credits
- PO: 
- APO: 

10:45 AM – 11:15 AM
EPA 3Ts and Lead in Schools: **F. Marascia, New Jersey American Water and Bob Fullager, Middlesex Water Company**

### Lunch in the Exhibit Hall | Location: Exhibit Area

**WATER SUPPLY**
- 1 Credit
- PO: 
- APO: 

11:45 AM – 1:00 PM
Exploring Water Supply Options in the Coastal Plain of Maryland: **Ben Wright, Hazen and Sawyer & Jason Groth, Charles County Maryland**

**GROUNDWATER TREATMENT**
- 1 Credit
- PO: 
- APO: 

11:15 AM – 12:00 PM
Eliminating Nitrification in Drinking Water Distribution Systems Using Active Chloramine Control: Dr. Peter S. Fiske, PAX Water Technologies, Inc.

**OPERATIONS – HANDS-ON**
- 1 Credit
- PO: 
- APO: 

11:15 AM – 12:00 PM
Ozone Based Advanced Oxidation Processes for the Treatment of Emerging Contaminants: **Mark Theiler, Middlesex Water Company (FI)**

**Drought Indicators:**
- **Steve Doughty, NJDEP**

### Break (Coffee & Soda) | Location: Exhibit Area

2:00 PM – 2:30 PM
Break

**GROUND WATER**
- 1.0 Credit
- PO: 
- APO: 

2:30 PM – 3:00 PM
A Cost Effective Approach For Managing Salt Water Intrusion: **Pat Jurcek, Layne Christensen**

**STORAGE**
- 1.0 Credit
- PO: 
- APO: 

2:30 PM – 3:00 PM
Send Lawyers, Guns, and Money... Tips for a Successful Tank Painting Project: **Andrew Mumford, Mumford Bjorkman Associates & William Mitchell, Trenton Water Works**

**OPERATIONS – HANDS-ON**
- 1.0 Credit
- PO: 
- APO: 

3:00 PM – 3:30 PM
Success Comes in Small Packages: **David Chanda, Suburban Consulting Engineers, Inc. (FI)**

**Fullerton Finished Water Reservoirs - The Design of 63 MG of Storage for the Baltimore Water System: Nick Lewis, Gannett Fleming (FI), & Dennis Funk, Gannett Fleming**

**HACH Instrumentation – Hands-On:**
- **Cleaning & Calibration of Process Turbidimeters: Shane Reed, HACH**

### Break | Location: Exhibit Area

3:30 PM – 3:45 PM
Break

### Annual Business Meeting, followed by OPERATORS’ BOWL & STUDENT COMPETITION Organized by Licensed Operators & Student Affairs Committee

9:00 PM
Special Event! Section Band “Water Hammer”

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AWWA NJ 2017 Annual Conference (continued)

**Thursday, March 23, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session E: Session Master – Laura Norkute</th>
<th>Session F: Session Master – Bryan Slota</th>
<th>Session G: Session Master – Chris Olson</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM – 8:45 AM</td>
<td>Continental Breakfast in the Exhibit Area</td>
<td>Continental Breakfast in the Exhibit Area</td>
<td>Continental Breakfast in the Exhibit Area</td>
</tr>
</tbody>
</table>

**Session E:**
- PIPELINE CONDITION ASSESSMENT
- • 1.0 Credit
- • PO:
- • APO:

**Session F:**
- OPERATION EFFICIENCY
- • 1.0 Credit
- • PO:
- • APO:

**Session G:**
- PFCS
- • 1.5/1.0/1.0 Credits
- • PO:
- • APO:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45 AM – 9:15 AM</td>
<td>Using Condition Assessment to More Efficiently Manage Your Pipelines: David Smith, Pure Technologies U.S. Inc.</td>
<td>Exhibit Area</td>
</tr>
</tbody>
</table>

**9:45 AM – 10:30 AM**
- Vendor Appreciation Coffee Break
- Location: Exhibit Area

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 AM – 11:00 AM</td>
<td>Large Water Valve Inspection and Rehabilitation in the WSSC: David Lewis, Business Development Manager, Wachs Water Services</td>
<td>Exhibit Area</td>
</tr>
<tr>
<td>11:00 AM – 11:30 AM</td>
<td>Determining the Best Approaches and Field Tools for Pressure Pipe Condition Assessment: Celine Hyer, Arcadis</td>
<td>Exhibit Area</td>
</tr>
<tr>
<td>11:30 AM – 12:00 NOON</td>
<td>One Utility's Journey to Develop a Consistent Evaluation Process to Assess Likelihood of Failure, Consequence of Failure, and Risk: Kevin Slaven, ARCADIS</td>
<td>Exhibit Area</td>
</tr>
<tr>
<td>12:00 NOON – 1:30 PM</td>
<td>Lunch in the Exhibit Area</td>
<td>Exhibit Area</td>
</tr>
<tr>
<td>12:00 NOON – 1:30 PM</td>
<td>Past Officer's Luncheon (Invitation Only)</td>
<td>28 West Restaurant</td>
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</tbody>
</table>

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MORE
AWWA NJ 2017 Annual Conference (continued)

Thursday, March 23, 2017 (continued)

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<th>Session F: Session Master – Bryan Slota</th>
<th>Session G: Session Master – Chris Olson</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGING INFRASTRUCTURE</td>
<td>SOURCE WATER QUALITY</td>
<td>LEAD</td>
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<tr>
<td>• 1.5 Credits</td>
<td>• 1.5 Credits</td>
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<tr>
<td>• PO: Josh Hutson</td>
<td>• PO: Sandy Kutzing</td>
<td>• PO: Bryan Slota</td>
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<tr>
<td>• APO: Ron von Autenried</td>
<td>• APO: Chris Olson</td>
<td>• APO: Gene DeStefano</td>
</tr>
<tr>
<td>1:30 PM – 2:00 PM Managing Aging Infrastructure – Pipe Criticality Assessment: Sasa Tomic, HDR</td>
<td>I Didn't See That Coming: Updating ERPs for HABs and SWP: Carol Walczyk, Mott MacDonald</td>
<td>Lead and Copper Chemistry: Carol Rego, CDM Smith</td>
</tr>
<tr>
<td>3:00 PM – 3:15 PM Break</td>
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</tr>
<tr>
<td>6:00 PM – 9:00 PM ATTENDEE APPRECIATION &amp; AWARDS DINNER</td>
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</table>

Presentation of the George Warren Fuller Award, Dedication Award, Door Prizes, and more!

Credits are pending final approval and will be posted to our website when they are available.

Visit www.njawwa.org/AnnualConferenceHome

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Welcome to the New Pipeline Editor

I would like to welcome Michael Hanna as the new Pipeline editor for the next two years (or more). It has been an excellent experience for me editing and collecting everyone’s articles, but I am planning to transition to the Conference Committee this year, while continuing to support the new Public Information and Student Affairs Committees. I would like to ask the Section to give Mike the same support and dedication you have shown me.

With the recent merger of the Publications and Public Information Committees, new roles and responsibilities have been decided on. The committee has agreed that the Pipeline editor will serve, at a minimum, as the Committee Vice Chair.

Michael Hanna is a Project Engineer at Middlesex Water Company, specializing in geographic information systems database including system design, data editing, management, and web services development and maintenance.

By Brian Applegate

Brian Applegate, E.I.T. is an Engineer at Mott MacDonald, and the outgoing Co-Chair of the Public Information Committee
Exhibits Looking to Sell Out Again

AWWA NJ is looking forward to hosting another packed Exhibit Hall at the upcoming 82nd Annual Conference in Atlantic City, March 21-24, 2017.

At the time of this article (February 13th) the Exhibit Hall is more than 95% full with registrations still coming in. Each year, our Exhibit Hall is filled with water industry vendors showing off the latest in products and services, and providing expertise on technologies and applications to benefit your day-to-day work.

We encourage all Conference attendees to take advantage of the knowledge that is gathered in the Exhibit Hall by visiting and talking with our vendors, without whom the Conference would not be such a success!

**EXHIBIT HALL HOURS**

**Tuesday:** Opening Night Meet & Greet from 5:45 p.m. – 7:45 p.m.

**Wednesday:** 7:30 a.m. – 4:00 p.m.

**Thursday:** 8:00 a.m. – 1:30 p.m.

All food & beverage functions take place in the Exhibit Hall; plus, don’t miss out on the Water For People Drop in the Bucket Auction (drawing on Thursday at 1:15 p.m.)

**Exhibitors Registered to Date (Jan 29)**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Sponsorship Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Certified Testing, LLC</td>
<td>(conference sponsor)</td>
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<tr>
<td>Aqua America</td>
<td>(conference sponsor)</td>
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<td>Aqua Smart Inc.</td>
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<td>Arkema</td>
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<td>Automatech</td>
<td>(conference sponsor)</td>
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<td>BCM Engineers</td>
<td>(conference sponsor)</td>
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<td>BECK, Harold &amp; Sons, Inc</td>
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<td>Blue Earth Labs, LLC</td>
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<td>Calgon Carbon Corp</td>
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<td>Complete Control Services, Inc.</td>
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<td>Coppola Services Inc.</td>
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<td>Fisher Tank Company</td>
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<td>G.P. Jager Inc.</td>
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<td>Garden State Laboratories Inc.</td>
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<td>Garrison Enterprise, Inc.</td>
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<td>H2M (gold sponsor)</td>
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<td>P3 Generator Services</td>
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<td>PCS Pump &amp; Process</td>
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<td>Pioneer Pipe Contractors</td>
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<td>Preload, LLC</td>
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<td>Quality Controls Inc.</td>
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<td>Riordan Materials Corporation</td>
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<td>Russell Corrosion Consultants</td>
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<td>Sanexen Water Inc.</td>
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<td>Shannon Chemical Corp.</td>
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<td>Subsurface Technologies</td>
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<td>Van Note-Harvey Associates, PC</td>
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<td>Volliers</td>
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<td>Water Remediation Technology LLC (WRT)</td>
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<td>Water Resource Management, Inc.</td>
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<td>WaterSuite</td>
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</table>

AWWA NJ appreciates the support of all of our sponsors throughout the year. For more information on the AWWA NJ Sponsorship Program, visit our website at: [www.njawa.org](http://www.njawa.org).
Discover new ways to get your Section involved with Community Engineering Corps

**Engage Volunteers**
- **Communicate**: Start talking about the CECorps program.
- **Cooperate**: Form a committee of interested volunteers.
- **Brainstorm**: Identify your next steps.

**Build Relationships**
- **Connect**: Work with local organizations or your state primacy agency to reach out to communities in need.
- **Support**: Work with the community to complete a community project application.

**Responds to Needs**
- **Research**: Find Open Projects listed on the CECorps website.
- **Recruit**: Build an all-star project team of Section members with the appropriate experience.
- **Collaborate**: Complete a project team application and get to work with a community!

**Make an Impact!**

www.communityengineeringcorps.org
Contact: Lindsey Geiger (lgeiger@awwa.org)
Contact Information

Name
Title
Company
Address
City
State/Province
ZIP/Postal Code
Country
Phone
Email

Were you referred by an AWWA member

Referring Member Name
Gender
Birth Year

Annual Dues (A1)

- Individual Active $215
  An individual, such as a water utility employee, municipal official, public health professional, engineer, scientist, educator, consultant, or other person interested in or serving in the field of water supply. (02)

- Young Professional $127
  A special discount on first-year dues for individuals interested in or serving in the field of water supply, who are age 35 or younger. (YP2017)

- Operations/Administrative $86
  Any operations and administrative staff below the supervisory level at a utility with more than 1,000 service connections. Any staff member at a utility with fewer than 1,000 service connections. (06)

- Student $20
  A student enrolled in a minimum of nine credit hours (or the equivalent thereof) at an accredited institution. (14)

Additional Sections (A2)

In addition to your primary Section, you may join other AWWA Sections. There is a $33 multi-section fee, plus the dues for the other Sections as appropriate. Please call 1.800.926.7337 for more information.

Payment

Annual Dues (A1) $ ______________________________
Additional Sections* (A2) $ ______________________________
*If applicable

Total $ ______________________________

Payment Method

- Check enclosed
  (make payable to AWWA, US currency only, US bank only)

- American Express  MasterCard  Discover  Visa

Card Holder Name

Card Number

Expiration Date

Your membership will be activated when payment is received.

By joining AWWA, you grant the association, through implied consent, authorization to send you commercial electronic messages. Your communication preferences can be updated at any time at www.awwa.org under "My Account."

Signature
Date

(continued on next page)
Tell Us About Yourself  All applicants must complete this section.

What one business activity best describes your company?  (Please check only one)

- A Public Water Supply Utility—Municipally Owned
- B Public Water Supply Utility—Investor Owned
- C Government—Federal, State, Local
- D Consulting Firm
- E Contractor
- F Private Industrial System or Water Wholesaler
- G Manufacturer of Equipment & Supplies (including representatives)
- H Distributor of Equipment & Supplies (including representatives)
- I Educational Institutions (faculty & students), Libraries and other related organizations
- J Fully Retired
- K Research Lab
- L Other allied to the field (please specify) _______________________________

What one category best describes your company’s field served/principal activity?  (Please check only one)

- 9 Both Water Supply & Wastewater
- 5 Water Supply Only
- 7 Wastewater Only
- 3 Other

What one category best describes your job title?  (Please check only one)

- A Executive (General Manager, Commissioner, Board Member, City Manager, Municipal Supt., Mayor, President, Vice President, Owner, Partner, Director, etc.)
- B Management/Non-Engineering (Division Head, Section Head, Manager, Dept. Head, Comptroller, etc.)
- C Design and Engineering/Both Managerial and Non-Managerial (Chief Engineer, Civil Engineer, Mechanical Engineer, Elect. Engineer, Environmental Engineer, Planning Manager, Field Engineer, System Designer, etc.)
- D Scientific/Non-Managerial (Chemist, Biologist, Biophysicist, Researcher, Analyst, etc.)
- E Purchasing (Purchasing Agent, Procurement Specialist, Buyer, etc.)
- F Operations (Foreman, Operator, Maintenance Crewman, Service Representative, etc.)
- G Marketing & Sales/Non-Managerial (Market Analyst, Marketing Representative, Salesperson, Sales Representative, etc.)
- I Professorial (Educator, Teacher, etc.)
- Z Other (please specify) ___________________________________________

What areas of the water and wastewater industry are of current interest to you?  (Please check all that apply)

- Asset Management
- Backflow/Cross Connection
- Climate Change
- Conservation/Efficiency
- Customer Service
- Desalination
- Design/Construction
- Asset Management
- Drought
- Emergency Preparedness/Security
- Groundwater
- Laboratory
- Membrane Treatment
- Public Health
- Public Info./Communications
- Reuse
- Small Systems
- Stormwater
- Training/Career Development
- Utility Management
- Wastewater
- Water
- Water Loss
- Water Research
- Water Resources/Planning
- Workforce Strategies
- Young Professionals

Dues rates valid through December 31, 2017. Dues are not deductible as charitable contributions for income tax purposes. The following is for USPS periodical mailing requirements only. In some AWWA Sections, a portion of the Section allotment equal to 50% or more of the domestic subscription rate charged for the Section periodical will be allocated toward a subscription to that periodical. Allocation for each publication recipient authorized—Journal - American Water Works Association—$50; Opflow—$16. Members with APO/FPO addresses will receive e-periodicals only. Print periodicals may be purchased for an additional fee. NOTE: Members’ phone numbers and email addresses are protected under AWWA’s Privacy Policy.
PIPEDLINE is the official publication of the New Jersey Section of the American Water Works Association. It is published three times a year.

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We encourage and support varied and differing viewpoints that stimulate thought and discussion. Opinions expressed are exclusively those of the author(s) and do not suggest or indicate Section policies or procedures. Pipeline editors reserve the right not to publish any article or notice deemed inappropriate or contrary to the purpose and mission of the newsletter. Editors reserve the right to edit written material for style and readability while maintaining the intent and stated purpose of the material.

**Word Crossword Answers**
(from page 18):

Across:
1. well
2. hydrated
6. clouds
7. cycle
8. water
9. clean
10. river
11. aquifer
13. pollute
14. recharge

Down:
1. wetlands
2. groundwater
3. ocean
4. potable
5. cycle
6. ocean
7. water
8. drink
9. clean
11. aquifer
13. pollute
14. recharge

May someone from the Research and Technical Transfer Committee contact you? □ Yes □ No

**Have an Idea for Research?**

Let us know and we will help get it to the Water Research Foundation. Just fill out this short form and e-mail it to the Section manager, mona@AWWANJ.org. A member of the Research and Technical Transfer Committee will contact you for more details.

Name ____________________________ Name ____________________________
Phone Number ____________________________ Phone Number ____________________________
E-mail Address ____________________________ E-mail Address ____________________________

Issue/Research Idea
________________________________________________________________________
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May someone from the Research and Technical Transfer Committee contact you? □ Yes □ No

May someone from the Research and Technical Transfer Committee contact you? □ Yes □ No