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May 14-16, 2018

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Try to imagine your life without readily available, safe, water. I was watching a show on Netflix about an evil warlord poisoning the water, causing death to all people and land. You are probably thinking: Doesn’t that woman have anything better to do than watch that kind of television? However, just think of the devastation that would cause. How fortunate we are to have professionals who work towards keeping our water and land safe for future generations. Granted, I might not have felt that way at the beginning of the year when I was filing all the annual reports, but once you get through all of that and reflect on what just occurred, it’s quite impressive.

The responsibilities of leading this group are really hitting home with the preparation of the Annual Meeting. At the last Executive Committee meeting, Dave Arnott, the incoming president, asked me what he needed to know to help him during his presidency. At the time I really did not say anything, but now that I have had some time to think about it, here it is. It would be very helpful to review Robert’s Rules of Order. Seriously, I still get confused as to when the discussion is supposed to occur. Know your Executive Committee and how many people you need for a quorum, and who the guests are (guests are to be excused when discussing contracts and voting). In addition, you are the president and have the final say. Having an organized local arrangement chair and recruiting volunteers is essential to get the conference scheduled.

On that note, the CSWEA 91st Annual Meeting will be held on May 14-16 in Oakbrook Terrace, IL at the Drury Lane. By shortening the conference by one day, this means that from morning to night, the conference will be a flurry of opportunity and activity.

We have an excellent line-up of vendors and speakers. We will also be recognizing several members at the association luncheon and banquet. And who knows, I might even sing again.

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Collaboration

By Eric Lynne and Mark Eddington

This report highlights the collaboration service area. WEF would not exist without the collaboration of its members. The numerous opportunities for conferences, seminars, committees, knowledge sharing, and engaging students is extremely valuable to our members. The following segments highlight ways in which the delegates are extracting value from WEF for you.

**WEF/WE&RF LIFT AFFILIATE**
CSWEA is officially a LIFT Affiliate member. The newly formed Innovation and Technology Committee chaired by Jeremy Cramer is already under way. Look for future announcements for webinars and technology scan updates.

**WEF REPRESENTATIVE AT THE ANNUAL CONFERENCE**
WEF Trustee Peter Vanrolleghem, will be our special guest. Peter would be a great speaker at the conference if space allows. Peter leads a research team for water quality modeling in Quebec City, Canada. Members that are familiar with Peter are encouraged to contact the technical program committee to suggest topics that would align with CSWEA initiatives.

**WEF HOUSE OF DELEGATES (HOD) UPDATE**
There are four standing committees, because of their criticality to the sustainability of the HOD, as follows: Nominating, Steering, Budget, Outreach, and WEFMAX. Eric Lynne is now serving as the Chair of the Outreach Committee in its efforts to keep all the delegates informed with the activities of WEF, the other HOD committees, and workgroups.

“**The numerous opportunities for conferences, seminars, committees, knowledge sharing, and engaging students is extremely valuable to our members.**”

Each year there are a handful of workgroups that are focus groups with specific tasks to improve the organization. The workgroups were identified as follows:

**Member Relations:** This is a rebranding of a previous workgroup, with a primary goal of implementing the new dues strategy. Look for a workgroup update on this mid-2018.

**Operator Initiatives:** This workgroup is developing materials and techniques to enhance WEF’s operator taskforce and operator advisory panel in their mission to help attract, prepare, and retain the next generation of operators. The workgroup will deliver operator content at each WEFMAX. Look for an update on this mid-2018.

**Student Chapter Communications:**
This workgroup started off with ambitious goals, but quickly realized there are many challenges limiting student chapter communications. The committee took a step back to refine a database of all student chapters. Based on the feedback provided thus far, this workgroup will continue to be a high priority for most associations.

Each committee and workgroup has monthly meetings, so ask your delegates for feedback at any time.

**WEFMAX 2018**
WEFMAX offers an opportunity for MA leaders at all levels to join together, share success stories and ideas on how MA members can be better served. These fast-paced, interactive meetings are open to all members and provide for both enlightenment and networking with other leaders of the water profession from throughout North America and beyond.

Registration has begun for WEFMAX meetings and, as in past years, several members of the CSWEA Executive Committee will be attending these meetings. The meeting locations (schedules) are as follows:

- **April 11-13, 2018:** Little Rock, AR
- **March 14-16, 2018:** Indianapolis, IN
  - Note: Indiana WEA is hosting a pre-conference Young Professionals Summit – Wed, March 14 8:00 a.m.-4:00 p.m. Theme: Learn how soft skills impact the water industry. Attendees do not need to participate in WEFMAX to attend. Contact Eric Lynne for details.
  - **May 9-11, 2018:** Girdwood, AK
  - **May 23-25, 2018:** Wrightsville Beach, NC

Note: Indiana WEA is hosting a pre-conference Young Professionals Summit – Wed, March 14 8:00 a.m.-4:00 p.m. Theme: Learn how soft skills impact the water industry. Attendees do not need to participate in WEFMAX to attend. Contact Eric Lynne for details.

- **May 9-11, 2018:** Girdwood, AK
- **May 23-25, 2018:** Wrightsville Beach, NC
“Registration has begun for WEFMAX meetings and, as in past years, several members of the CSWEA Executive Committee will be attending these meetings.”

By popular demand a new topic at the Indianapolis and Wrightsville Beach WEFMAX will be led by WEF staff Steve Dye on Advocacy/Fly-In efforts. Steve will examine how a grassroots program works, why it’s important, the ways to make it successful, and tools associations can use to get their members to become water advocates.

Mohammed, Mark, and Eric plan to attend, respectively, the Indiana and North Carolina WEFMAX events. We look forward to networking with other MAAs and interacting with other leaders to enhance our organization. Anyone interested in attending a WEFMAX is strongly encouraged to contact Mohammed Haque.

DELEGATE TRANSITIONAL NOTE
Mark Eddington is currently serving as our Second Delegate through 2020. At the May 2018 Annual Conference Mark will be stepping down to serve as the IL Section Trustee, thereby trading places with Derek Wold who will continue the Delegate term through 2020. Eric Lynne will remain a Delegate during this transition and will engage Mark and Derek respectively for HOD activities.

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Innovation and Technology Committee

CSWEA has started an exciting new committee, the Innovation and Technology Committee. This committee will help promote the advancement of innovation and new technology in the water industry to CSWEA members. One of the main goals of the Innovation and Technology Committee will be to provide a forum for communication and technology transfer regarding new water technologies and innovative interests between Central States members.

The committee will consist of a chair, past chair, vice chair, and three members from each state section as well as the CSWEA executive director. The members of the committee will each serve a three-year term. This committee will include a diverse mix of members from each State Section involved in either academia, operations, consulting engineering, or utility management. The Innovation and Technology Committee is currently comprised of the following CSWEA members:

- Derek Wold – IL
- Rick Manner – IL
- Nick Menninga – IL
- Tracy Hodel – MN
- Samidha Junghare – MN
- Jackie Strait – MN
- Chris Lefebvre – WI
- Autumn Fisher – WI
- Leon Downing – WI
- Jeremy Cramer – Chair
- Mohammed Haque – CSWEA Executive Director

The committee will regularly solicit articles for publication in the Central States Water magazine regarding new water technologies and innovation. The committee may also plan an annual specialty conference or seminar focusing on new technology in the water sector and will work with other committees to make sure that new and innovative technology is promoted at other CSWEA specialty conferences or seminars.

The committee will also help facilitate engagement between CSWEA members and the WEF/WE&RF LIFT program. CSWEA has recently become a LIFT Affiliate and our members will be able to access many of the LIFT resources. CSWEA members will be able to access the LIFT program at a very economical cost, roughly $100 per person or login annually. Access for a municipality to the LIFT program typically costs well over $4,000 annually.

The ultimate goal of this new committee is to help foster and grow a culture of innovation in the CSWEA membership by helping advance new water technologies and helping members put innovation into practice.

If you would like to learn more about the CSWEA Innovation and Technology Committee, please contact Jeremy Cramer, CSWEA Innovation and Technology Chair, via e-mail jcramer@donohue-associates.com.

CSWEA is a New LIFT Affiliate

Given the many challenges that the water industry faces in the next twenty years and limited resources to address them, innovation will be key to cost-effectively solving our water challenges. CSWEA is pleased and proud to join as a new LIFT Affiliate and become part of a growing national and international program to accelerate water innovation.

Five years ago the Water Environment Federation (WEF) and The Water Research Foundation (WRF) undertook an initiative – Leaders Innovation Forum for Technology (LIFT) – to expeditiously bring innovative water technologies to the field that help utilities improve their performance and reduce costs.

LIFT provides a network of people and resources to help utilities identify new technologies, communicate with peer utilities, and collaborate on implementation. To date LIFT has engaged over 600 volunteers, reviewed and accepted over 150 technologies in its LIFT technology scans process, raised $5.5 million to fund innovation and pilots, and much more.

The program is expanding to incorporate local and global organizational partners to lead the innovation movement in their regions. LIFT has created a LIFT Affiliate opportunity to connect organizations (WEF Member Associations, water hubs and clusters, state sections, associations, NGOs) with LIFT and help expedite new technology adoption locally. LIFT Affiliates are well positioned to understand local needs, serving as main points of contact to connect innovation.

One of the main goals of the Innovation and Technology Committee will be to provide a forum for communication and technology transfer regarding new water technologies and innovative interests between Central States members.
interests, activities, and resources with the broader water ecosystem.

CSWEA has become one of the newest LIFT Affiliates. Since 2016, nine national and international organizations have come on board as LIFT Affiliates including Georgia Association of Water Professionals, Illinois WEA, Pennsylvania WEA, Rocky Mountain WEA, Current (Chicago), Mid-Atlantic Research and Innovation Forum, Nanjing International Water Hub, and the Korean Water Partnership.

LIFT Affiliates can benefit from the following resources included in the LIFT Affiliate Toolbox:

- **LIFT Link** – Online innovation platform that allows users to discover new water technologies; connect with others with similar needs and desired expertise; and collaborate on projects, demos, and implementation.

- **Technology Scans** – Identify and evaluate innovative technologies to inform utility end users, funders, and advisors and to expedite early adoption of technologies. Innovative technologies developed in the CSWEA region or that CSWEA members are interested in or are working with are encouraged to apply.

- **FAST Water National Test Bed Network** – Connects researchers, new technology providers, and other innovators with test facilities appropriate for their needs. Test facilities in the CSWEA region are encouraged to add their facility to the test bed directory.

- **University-Utility Partnerships** – Develops guidance and fosters partnerships to better connect universities and utilities for research, development, and demonstration of new technology.

- **Technology Visualization Tool** – Allows users to identify trends around the deployment of innovative technologies at utilities. WRF utility subscribers can access facility-specific information for peer-to-peer networking.

- **LIFT SEE IT** – Provides travel scholarships to help utilities get a first-hand look at new technologies by visiting peer facilities and sharing their experience with others for quicker adoption. Calls for application are typically in the fall of each year. CSWEA utility personnel are encouraged to apply.

As a LIFT Affiliate, CSWEA members may participate in the LIFT Technology Scan Presentation Series at no charge. This year, over 30 innovative technologies will be featured. Visit the LIFT Events page to see the full schedule and register.

CSWEA, together with the LIFT program, is working to provide tools and resources to its members to support innovation and new technology in the Central States region, and to champion a culture of innovation in our industry.

If you would like to learn more about LIFT, please contact Fidan Karimova, Water Technology Collaboration Manager at WRF, via e-mail fkarimova@werf.org.

To learn more about CSWEA’s LIFT program, visit www.cswea.org

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MARK EDDINGTON
2nd Vice-President
Mark Eddington has been an active member of CSWEA since 2003. He currently serves on the Executive Committee as the 2nd Vice President. He serves on several other section committees and was the Illinois Section Chair in 2013. He is also active in several other professional associations and served as the president of the Illinois Association of Wastewater Agencies in 2016.

Mark is a licensed engineer in the states of Illinois and Wisconsin and received a bachelor’s degree in civil engineering for Marquette University. He worked as a consultant for 14 years and has served as the Kishwaukee Water Reclamation District Manager for the last eight years.

BETH VOGT
Treasurer
Beth Vogt has been an active member of CSWEA since 1996, when she served as Secretary-Treasurer of the Illinois Section and on the Annual Meeting Local Arrangements Committee. She has also served as Illinois Section Chair, Illinois Section Trustee, Local Arrangements Chair, Annual Meeting Technical Program Committee Chair, Education Seminar Chair, and finally served as 2nd Vice-President, 1st Vice-President, President, and Past President of CSWEA.

Beth is a licensed professional engineer in the state of Illinois. She received a bachelor’s degree in Civil/Environmental Engineering from the University of Wisconsin-Madison and a master’s degree in Civil/Environmental Engineering from Purdue University. She worked as a consulting engineer serving municipal clients for over 18 years before accepting the position of Technical Services Director for the Fox River Water Reclamation District in Elgin, IL.

DEREK WOLD
WEF Delegate ’20
Derek Wold has been an active member of CSWEA since 2004. He currently serves on the Executive Committee as Illinois Section Trustee. He served on the Annual Meeting Technical Program Committee for six years, was IL Collection System Committee chair, and was IL Section chair in 2014.

Derek is an Executive Vice President with Baxter and Woodman, a Chicago-area-based consulting company. Derek is the manager of the firm’s water/wastewater group. He graduated from University of Illinois in 1996 with a BS in civil engineering and from Illinois Institute of Technology in 2002 with a MS in environmental engineering. Derek is a board-certified environmental engineer and licensed professional engineer.

JILLIAN KISS
YP Representative Nominee
Jillian Kiss has been nominated for the position of YP Representative. She has been an active member of CSWEA since 2012, serving as Vice-Chair of the Illinois Section Young Professionals committee in 2013 and the Chair since 2014. Jillian served on the Local Arrangements Committee in 2015 as Co-Chair and currently serves as Chair for the 2018 Annual Conference, to be held in Oak Brook, Illinois.

Jillian received a Bachelor of Science degree in Civil Engineering and a Master of Science degree in Environmental Engineering from the University of Illinois Urbana-Champaign. She is a project engineer for Trotter and Associates, Inc. in St. Charles, Illinois, serving water and wastewater clients in the area. Jillian is a licensed engineer in the State of Illinois.

Jillian is looking forward to serving as YP Representative to the Executive Committee and engaging our current students and YPs by providing leadership to the YP Section Chairs and general members of the YP network. She hopes to continue Anna Munson’s efforts by facilitating interpersonal connections and professional development through events with a focus on social and educational aspects.
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Supporting the Section

By Timothy Wedin

In the early 1990s, I worked at a Boy Scout camp in the mountains of New Mexico. It was a life-changing job, where I was able to spend three summers working with youth from around the country. Not only was I able to teach them camping and backpacking skills, but I was also able to pass on some life lessons. Part of my work involved teaching them about environmental stewardship as well as how to be leaders. Over those three summers, I ended up with a book of quotations that I liked to use to help convey ideas to the campers. My favorite of these is from Theodore Roosevelt:

“It is not the critic who counts; not (someone) who points out how the strong (person) stumbles, or where the doer of deeds could have done them better. The credit belongs to the (person) who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends (themself) in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he (or she) fails, at least fails while daring greatly, so that (their) place shall never be with those cold and timid souls who neither know victory nor defeat.”

Over the past year, I have watched as MN Section members have stepped forward to help with the Section’s work. They may have spent the day at a seminar registration desk, helped find a speaker for a seminar, reviewed awards nominations, or stepped forward to cover some perceived small task. There are too many volunteers to name here, but thank you to you all. Without your enthusiasm, devotion, and your willingness to spend your time in this worthy cause, we would not have had the triumphs that we did this year.

As we reach the end of this year, we start to focus on upcoming events and the direction that our Section will take. On April 17, we will hold our next MN Section Exchange in St. Cloud. We’ll take this opportunity to review the past year, and identify how our Section will move forward over the next year. We hope that you can join us.

At the Annual Meeting in Drury Lane, we will begin our next year of work. Incoming chair Pete Daniels and vice-chair Patrick Haney are excited to lead the Section into our 92nd year. The energy and dedication that they bring to the MN Section will ensure that we have another great year. I hope that you will join me in supporting them, whether by volunteering on a committee or helping with some perceived small task.

Again, thank you for your energetic support over the past year. I am proud to be a part of such a dynamic organization.

“On April 17, we will hold our next MN Section Exchange in St. Cloud. We’ll take this opportunity to review the past year, and identify how our Section will move forward over the next year. We hope that you can join us.”

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The Minnesota Section held its 35th Annual Innovative Approaches to Wastewater Operational Problems Seminar on February 6, in St Cloud, MN. With tightening budgets affecting all of our treatment facilities, owners and operators are tasked with providing the same high-quality treatment while reducing operating costs. For 35 years, this conference has provided cost-effective ideas for improving performance and reducing operating costs.

Our Operations, Laboratory and Safety Committee, led by Chair Carol Mordorski, plans for and hosts the Innovative Seminar every February. This year, 140 attendees from across Minnesota met at the Holiday Inn in St. Cloud to learn about innovative solutions and changes that are affecting the wastewater industry in Minnesota. Attendees learned about products to reduce struvite formation in pipes, changes in regulations governing wastewater treatment, and innovative products that can be used to rehabilitate manholes and lift stations.

The Seminar kicked off with an introduction by the Resource Recovery and Energy Committee. For the Minnesota Section, this is a relatively new committee, and many of our attendees were unfamiliar with the purpose of the committee. Samuel Lobby, Environmental Compliance Specialist with the City of St. Cloud, highlighted the tools and resources that the committee can provide operators with to enhance their nutrient recovery and energy related opportunities. Sam highlighted the relationship between providing sustainable designs for our systems and implementing resiliency in our facilities. By combining these two key tools, we can ensure that our facilities cannot only minimize their economic, ecological, and community impacts, but also bounce back when disturbances...

This year, 140 attendees from across Minnesota met at the Holiday Inn in St. Cloud to learn about innovative solutions and changes that are affecting the wastewater industry in Minnesota.”
affect them. Sam also highlighted technology and funding information that the committee can provide to POTW owners to enhance their performance, and pay for needed improvements.

Our keynote speaker was Dr. Matthew Julius, with the Department of Biological Sciences at St. Cloud State University. Dr. Julius presented a talk titled, “Unwrapping Nature’s Smallest Gifts, New Products and Opportunities from Microbial Species.” Dr. Julius leads the anaerobic digestion and biomass production team at St. Cloud State. His presentation highlighted the changes that have occurred in Biology, especially since 2008. Advancements in genomic testing have reduced the costs related to determining the species of microbes that we encounter. This has resulted in an increase in the number of microbes, especially bacteria, that we can identify. These advancements will also allow us to better understand the species of microbes that thrive in our treatment facilities, what factors cause them to decline, and how to encourage them to thrive.

The Innovative Seminar also provides an opportunity for operators from across the state to tell their peers about tools and tricks to improve their ability to do their work. Referred to as, “quickies,” operators speak for approximately five minutes about simple, inexpensive changes that they have made to their systems. This year’s quick topics included a Total Water Re-Use project, a discussion of the Colilert 18 Enzyme Substrate Test, and the use of ATP to improve the performance of filters in the lab. In many cases, these quickies can be the first time that operators present to their peers.

The Environment Technologies Program at St. Cloud Technical and Community College also attend our Seminar. Every year, the students take some time to talk to our attendees about the programs that they are a part of, and the work that they have done. This is a great opportunity for these future operators to meet others in the field and form professional networks.

Finally, we took this opportunity to recognize our award winners for this year. Congratulations to Scot Spranger, Superintendent for the Lake Area Sanitary District, and winner of the Minnesota Section’s Operator of the Year Award. Congratulations, also to Julie Macor, Senior Chemist for WLSSD, who is the winner of the Minnesota Section’s Lab Analyst of the Year.

The Innovative Seminar is a wonderful opportunity for operators, engineers, and owners to meet and discuss changes in the wastewater industry. We hope that you can attend our 36th seminar to be held in February 2019!
Appreciate the Value of CSWEA

By Jay Kemp

I don’t know about you, but one of the most head-scratching things about our current times is the notion of science becoming political. The various positions on issues like climate change, energy development, game management – even disposable wipes – indicate a trend to ignore good science in favor of expedience or placating a particular group. Maybe it’s always been so.

As water professionals, we understand the water environment and our role in protecting, maintaining and improving water quality. In general, we are the ones to implement policy, not make policy, but we can work to change policies for the better. That’s where the benefits of professional organizations like Central States are highlighted. Our organization can be a voice and offer an opportunity for individuals to contribute to the continued success of our industry and be an advocate for good science and sound policies. To advocate for policies that support and fund our industry, CSWEA will again be represented at the National Water Policy Fly-In. We are joined by NACWA and WateReuse in this important event in Washington, D.C.

In previous articles I wrote about exciting developments in resource recovery, the challenges represented by changes at the USEPA and new threats to the Great Lakes. In my final article as chair I am tying those things together with this idea: Our industry can continue to make strides using our own resources and ingenuity. Good things can be accomplished at the state and local level without regulatory mandates or support. And of course, CSWEA provides a foundation for these initiatives with shared knowledge and experience, networking, inspiration and numerous examples and case studies. The support of our peers and colleagues can be invaluable in uncertain or difficult times.

Resource recovery may be the best example of taking initiative. Consider that renewable energy development, nutrient recovery and water reuse can all be cost effective on their own merits. Wetland and riparian restoration and green infrastructure raise the awareness of the importance of water resources and yes, sustainable development. Projects like these become sources of pride and recognition for a community or district. This year’s Education Seminar provides the information and resources you need to understand the value inherent in biosolids and accessing that value through beneficial use and nutrient recovery.

Great Lakes restoration means bigger fish to fry, and frankly requires national and international funding, but an example of a local initiative is the School of Freshwater Sciences at the University of Wisconsin-Milwaukee being actively engaged in monitoring and data gathering to better understand the health of the Lakes and provide the tools needed for policy decisions. And the demands on the water from Lake Michigan continue with a requested diversion to serve the proposed Foxconn factory in Mount Pleasant, WI, a straddling community partially outside of the Great Lakes watershed. The access to Lake Michigan water was undoubtedly a contributing factor in the site selection, which demonstrates the value of our water-rich region.

Entering the last quarter of my term as chair, I would like thank all the committees and their members for continuing their fine work and providing educational and networking opportunities throughout the year through our many seminars and events. Our YPs continue to be amazing. As I write this, Allen Williams is preparing to represent the Wisconsin Section at the YP Summit in San Antonio. Good luck to Allen; I’ll be expecting a full report. Thanks to Mark Van Weelden for heading up the effort to select our attendee.

I want to recognize our Industrial Waste Committee for all of their work putting on our Pre-treatment Seminar, and especially Nora Erlandson for her years of service to the committee and wish her the best as she retires this spring. I could not have gotten this far without the help of past chairs Dan Zitomer and Alan Grooms; they are great sources of information and provide a sounding board when needed.

Our secretary Veronica Loete was invaluable in keeping the business of the Section on track along with treasurer Jon Butt. Veronica is leaving the Section leadership in May, but promises to stay active in CSWEA. Thanks to vice-chair Troy Larson for his good ideas. He’ll provide great leadership going forward.

You belong to a great organization. Appreciate it, support it, get involved, learn stuff, have fun.

“Our organization can be a voice and offer an opportunity for individuals to contribute to the continued success of our industry and be an advocate for good science and sound policies.”
The Shapes We’re In

For most, spring is a time of new beginnings, but for us section chairs, it is a time of finality, closure, and wrapping up our multiple years of service to the Executive Committee of our state section. I cannot believe my year as chair is nearly complete. It has been an exciting year for our section, and we are geared up for another exciting year in 2018-2019.

As our new year began, I spent some time working with our Section Treasurer, Mike Holland of Kishwaukee WRD, to set our 2018 budget. One of the most exciting aspects is seeing how much we give back as a section. Here is a summary of our budgeted expenses for 2018, with details to follow:

• $2,000 Sponsorship to an AWWA/WEF Young Professionals Summit Attendee
• $1,000 Sponsorship to a National Water Policy Fly-In “Water Week” Attendee
• $2,200 in Student Chapter Sponsorships
• $2,500 in Operations Challenge Members Sponsorships
• $1,000 Donation to Global Water Stewardship

I am excited to share that Joe Kostecki of the Kishwaukee WRD and Anne Crotteau of Baxter & Woodman represented our section at the YP Summit in San Antonio, as they were both selected for the sponsorship. The Water Week Fly-In will occur on April 17-18 in Washington, D.C., and as of this writing, the sponsorship has not been awarded. Our Student Chapter at University of Illinois Urbana-Champaign is strong and we look forward to supporting them in 2018. In 2017, we had a remarkable six CSWEA-IL members represented on the two four-person teams at WEFTEC in Chicago! Finally, if you have not learned about GWS yet, check it out at www.globalwaterstewardship.org.

While this is certainly exciting, it is also a bit daunting! This $8,700 represents a level of “profit” the section needs to make from our local workshops, meetings, events, and sponsorships in order to continue the level of giving back we have become accustomed to as a section. At the same time, we work hard to provide our workshops, trainings, and events at as low a cost as possible to provide great value and encourage sponsorship and attendance. So, what am I saying? Well, I guess I am telling you to sign up that extra coworker, go forward with that sponsorship, and share event details with your industry peers! You can be sure your registration fee will be well spent!

We are looking forward to a number of great events in 2018, starting with our Government Affairs Workshop, which was conducted in cooperation with the Illinois Association of Wastewater Agencies on February 27-28 in Springfield. In June, we are switching things up a bit with our Illinois Collection Systems Workshop. This year, we are moving to Northern Illinois University – Naperville for the event on June 13 and teaming with the US EPA for a parallel workshop – Effective Utility Management, alongside our typical Collections Workshop. Also, look for our annual Industrial Pretreatment/Laboratory Workshop, a summer Operators Workshop, and a fall Biosolids and Energy/Resource Recovery Workshop. Finally, this fall, we will be returning downstate for another downstate workshop spearheaded by our Collections Committee.

This is a busy schedule for a state chockablock with events from multiple organizations within our industry, but I have confidence our team of volunteers will pull it off! I look forward to seeing you at an upcoming event!

In closing, I would like to thank all the committee chairs, volunteers, attendees of our events, and especially my successor, Mr. Chris Marschinke of Trotter and Associates. Chris has been an extremely active member of the section, not only as vice-chair, but also on the Student Chapters and Operations Committees. I look forward to seeing where Chris takes our section over the coming year.

And, since I started my first chair message with Dr. Seuss, it’s appropriate to end this last with him, from The Shape of Me and Other Stuff: “Of all the shapes we MIGHT have been… I say, ‘HOORAY for the shapes we’re in!’”
We are back at the Drury Lane, Oakbrook Terrace, IL venue. This year more room at Drury will be available to us, so several events will be held there, excluding the section breakfasts which will be held at the Hilton on Wednesday morning.

We have decided to forego a keynote speaker and president’s welcome and dive right into the specialty tracks on Monday morning. Monday’s schedule also includes the Executive Committee meeting, golf outing, plant tour and stormwater tour. The evening activity will be at Pinstripes. Tuesday morning join us for the 5K Run/Walk and sunrise yoga followed by sessions, Association Luncheon, Business Meeting, and Exhibitor Reception. The Awards Banquet will be held on Tuesday evening at Drury Lane. Wednesday offers a full day of tracks with the exhibitor’s lunch. The exhibit hall will be open on Tuesday, May 15 (8:00 a.m. – 6:00 p.m.) and Wednesday, May 16 (8:00 a.m. – 3:00 p.m.). That gives everyone ample time to stop by and check out the booths.

Thank you to everyone who has made this conference happen, and thanks to those who are here to Educate, Advocate and Learn.
CSWEA 91st Annual Conference Schedule Changes

The 2018 91st Annual Conference will take place May 14-16, 2018 at the Hilton Oak Brook/Chicago Suites and Drury Lane Theatre and Conference Center. This year the Annual Conference will roll out changes to the general conference schedule. The scheduling change is part of the association’s efforts to showcase Day 1 specialty workshops and tours as well as condense conference activities into a more manageable and convenient schedule for attendees.

Under the new schedule, morning and afternoon conference workshops (Leadership Track and Watershed Management Group Panel), specialty tours, golf outing, association group meetings (7S, Golden Manhole, Young Professionals and Global Water Stewardship), and a combined Monday Night Social and Meet and Greet will take place on Day 1 – Monday, May 14.

The technical program will kick off on Day 2 – Tuesday, May 15 with morning and afternoon concurrent sessions. Both the Association Luncheon and Annual Awards Event will take place on Day 2 this year. This will remain a ticketed event. Also new this year is an Exhibits Only Hour on Day 2 (11:00-12:00) and Day 3 (10:00-11:00).

Day 3 will showcase the returning Operators Track and the Exhibitor Lunch along with concurrent morning and afternoon technical sessions. The conference will close at 4:00 p.m. this year, allowing generous time for attendees traveling back home.

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Conference Highlights

Monday, May 14, 2018

EXECUTIVE COMMITTEE MEETING
Hilton Suites Water Tower Room
8:00 to 11:00 a.m.

WORKSHOPS
Hilton Suites
10:00 a.m. to 12:00 p.m. and 1:00 to 4:00 p.m.
There will be two workshops focused on leadership topics and watershed management. Sessions will be held at the Hilton Suites.

GOLF OUTING
Maple Meadows Golf Club
(272 South Addison Road, Wood Dale, IL 60191)
12:00 to 4:30 p.m.
Maple Meadows Championship “West 18” features a modern combination of links and prairie design. The 18-hole course is a par-71 with immaculate bent grass fairways and greens. The 2018 golf event fee includes greens fee, cart, and lunch along with a sleeve of balls and a chance at the many skill prizes. Registration is from 11:00 to 12:00 with a shotgun start at 12:00. Rest assured, it will all end in plenty of time to get to the Monday Night Social event at Pinstripes Oak Brook. For corporate sponsorship opportunities or for outing details, contact Tim Tack, Golf Outing Coordinator, by phone at 847-921-0993 or by e-mail at ttack@lai-ltd.com.

COMMUNITY SERVICE PROJECT
Skinner North Elementary School
(640 W Scott St, Chicago, IL)
10:00 a.m. to 4:00 p.m.
Volunteer to work with other CSWEA volunteers and create a water legacy, right in the backyard of our annual conference. Skinner North Classic Elementary School fifth graders have designed a raingarden that would convert the puddles in their playground into plants and shrubs, while alleviating stress on the City of Chicago’s stormwater collection system. Please join Skinner North students to dig, plant, and leave a lasting water legacy. Support the service project by volunteering or donating. For more information about this year’s project, contact Natalie Cook at ncook@donohue-associates.com.

CITY OF JOLIET STORMWATER TOUR
CSO Wet Weather Tunnel and Treatment Facilities
12:30 to 4:00 p.m.
Please join us as the Illinois Section Stormwater Committee will be hosting a tour of the City of Joliet’s Des Plaines River tunnel and wet weather treatment facility projects. These projects arePhases II and III of the city’s approved Long Term Control Plan to reduce the occurrence of Combined Sewer Overflows. The scope of Phase II, which was completed in 2016, consisted of constructing two 24-inch dry weather siphons and a 60-inch wet weather pipe in a 9.25-ft diameter, 835-ft long tunnel that was installed utilizing a tunnel-boring machine 20 feet below the Des Plaines River. Phase III is construction of a 90 MGD wet weather treatment facility consisting of a screening facility, pumping station, 4,000,000 gallon first flush tank, two 180-foot diameter clarifiers, and a chlorine contact tank that will treat excess flow during wet weather events. This facility and infrastructure will help manage the city’s combined sewer system and reduce the frequencies of combined sewer overflows to no more than an average of four overflows per year. Attendees will visit a brewpub for a beverage and light snacks before returning to the Hilton Suites. Transportation will be provided. Please contact Tim Juskiewicz by phone at 815-744-5867 x3131 or by email at Timothy.Juskiewicz@strand.com with questions or for more tour details.

PLANT TOUR – Yorkville-Bristol Sanitary District
1:00 to 4:00 p.m.
YBSD is a 3.62 MGD facility and treatment consisting of both coarse and fine screens, single-stage nitrification with fine bubble panel diffusers, final clarifiers, UV disinfection, a gravity belt thickener, Autothermal Thermophilic Aerobic Digestion (ATAD), and dewatering centrifuges. The single-stage nitrification process is comprised of two liquid trains, Tanks 1-5 and Tanks 6-10, that were operated in series prior to the 2017 installation of the Membrane Aerated Biofilm Reactor (MABR) system. The facility is a 45-minute drive from the Hilton Suites and Drury Lane Conference Center. The tour is open to all conference attendees and will consist of a plant walk through and discussion of the facility’s unique MABR system. Tour participants are asked to bring photo identification. Please see Technical Program for associated technical presentation.
MONDAY NIGHT SOCIAL
Pinstripes (7 Oakbrook Center Mall, Oak Brook)
6:30 to 10:30 p.m.

The Local Arrangement Committee organizers invite attendees to attend the Monday Night Social and Meet and Greet at Pinstripes. Stop by and enjoy delicious appetizers and cocktails on the patio while you socialize with friends and colleagues (weather permitting). To add to the fun, the LAC has organized a Trivia Night. Grab a team, put on your thinking caps and join us for a night of fun and friendly competition. Top team wins prizes! Complimentary bocce and bowling will also be available... novices and pros are both welcome.

Shuttles to and from the Hilton Suites will be available. Doors open at 6:30 PM and trivia starts at 7:30 p.m. Golf awards and winners will also be announced. All registered attendees of the conference are welcome to attend. For corporate sponsorship opportunities, contact Amy Haque, by phone at 855-692-7932 x1 or by e-mail at ahaque@cswea.org.

Tuesday, May 15, 2018

5K RUN/WALK
DuPage County Forest Preserve, Salt Creek Greenway Trail
6:30 to 8:00 a.m.
Participants are asked to meet at the starting line for a 6:30 a.m. start. Directions to the trail will be provided at registration.

SUNRISE YOGA
Hilton Suites
7:00 to 8:00 a.m.
Attendees are welcome to join a Sunrise yoga session. Whether you are an absolute beginner or an experienced yogi, you will benefit physically and mentally from an hour of yoga focused on preparing you for the day ahead.

TECHNICAL SESSIONS
Drury Lane Oak I, Oak II, Crystal I/II, Crystal III/IV and French Ballrooms
9:30 to 11:00 a.m. and 1:30 to 4:30 p.m.
There will be five concurrent half-hour sessions A, B, C, D and E from 9:30 am to 11:00 and F, G, H and I from 1:30 to 4:30 p.m. For more information, please see the Technical Program.

EXHIBITS
Drury Lane Brook, Terrace and Venetian Ballrooms
8:00 a.m. to 6:00 p.m.
Exhibits showcasing the latest technology in wastewater, collection systems, treatment and many related items will be on display. Be sure to visit our fine exhibitors and thank them for their support of our Association.

ANNUAL CSWEA ASSOCIATION MEETING
Drury Lane Main Dining Room
12:00 pm to 1:30 pm
Hear from our President and WEF Visitor as they present a summary of activities and initiatives of the organizations. We will recognize our Operations challenge Teams for their performance at WEFTEC 2017 and our newest inductees to the Golden Manhole Society and the 7S will be announced and honored.
This is a ticketed event and includes a meal. Please remember to purchase and bring your ticket with you.

POSTER SESSION I
Drury Lane Foyer
3:00 to 3:30 p.m.
Posters will be on display in the Foyer by registration and the Exhibit Hall. Presenters will be available at their posters at this time to discuss their posters and answer questions. Please stop and visit.

EXHIBITOR RECEPTION
Drury Lane Brook, Terrace and Venetian Ballrooms
4:30 to 6:00 p.m.
Light snacks and refreshments will be provided in the Exhibit Hall. Share some refreshments and visit with our exhibitors, and thank them for attending this year’s Annual Meeting.

CSWEA ANNUAL BUSINESS MEETING
Drury Lane Crystal Ballroom I/II
5:00 to 6:00 p.m.
The Association Business Meeting will include reports from the Association Committees and Sections and the annual election of officers. We encourage everyone to attend and learn about our association’s activities.

CSWEA ANNUAL AWARDS EVENT
Drury Lane Oak Ballroom
6:30 to 11:00 p.m.
6:30 to 7:00 p.m. Social Reception. Connect with friends and enjoy refreshments before the Awards Banquet.
7:00 to 8:30 p.m. Awards Presentations. Hear updates about CSWEA activities from the outgoing president, the vision for the year ahead from our incoming president and honor this year’s award winners for the many WEF and CSWEA Awards presented to the very best of our industry.
8:30 to 11:00 p.m. Post-Awards Social. Join award winners and socialize with drinks in the Critic’s Corner Bar located in the lobby of Drury Lane.

The Annual CSWEA Awards Event is a ticketed event and includes a meal. Please remember to purchase a ticket and bring the ticket to the event.

Click HERE to return to Table of Contents
Wednesday, May 16, 2018

**STATE SECTION BUSINESS MEETINGS**
Hilton Suites Drury A, Drury B and Lane Rooms
7:30 to 9:00 a.m.

Please attend your respective State Section’s business meeting to be updated on the activities of the Section and its committees. Don’t miss this opportunity to get involved and find out where you can help your Section.

This is a ticketed event and includes a meal. Please remember to purchase and bring your ticket with you.

**EXHIBITS/SPONSORS**
Drury Lane Brook, Terrace and Venetian Ballrooms
8:00 a.m. to 4:00 p.m.

Exhibits showcasing the latest technology in wastewater, collection systems, treatment and many related items will be on display. Be sure to visit our fine exhibitors and thank them for their support of our Association.

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**TECHNICAL SESSIONS**
Drury Lane Oak, English and Crystal Ballrooms
9:00 to 11:30 a.m. and 1:45 to 4:00 p.m.

There will be four concurrent sessions, K, L, M and N from 9:00 to 12:00 and O, P, Q and R from 1:30 to 4:00 p.m. There will also be an Operators Track providing a Wastewater Operation Certification Exam review. Ethics topics will also be provided (P.E. requirement in some states). For more information, please see the Technical Program.

**POSTER SESSION II**
Drury Lane Foyer
10:00 to 11:00 a.m.

Posters will be on display in the Foyer by registration and the Exhibit Hall. Presenters will be available at their posters at this time to discuss their posters and answer questions. Please stop and visit.

**SILENT AUCTION**
Exhibit Hall/Registration Area

Auction items donated by exhibitors to benefit the Global Water Stewardship will be displayed in the Exhibit Hall. Support this amazing social and humanitarian effort by donating or bidding on the items. Interested in donating an item? Contact Rich Hussey at 847-989-5422 or rhussey@lai-ltd.com for more information. Bids are due by 10:30 a.m. Wednesday. Winners will be posted in the Exhibit Hall at 12:00 p.m. Wednesday (for the Exhibitor Lunch).

**EXHIBITOR LUNCH**
Drury Lane Brook, Terrace and Venetian Ballrooms
12:00 to 1:00 p.m.

The Exhibitor Lunch offers exhibitors and conference attendees to meet in a relaxing and social environment. Please visit the exhibit hall where the Exhibitor Lunch will be held.

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**CSWEA**

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- Highly portable and easy to operate

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630-941-0100

A few blocks from Oakbrook Center and adjacent to the Drury Lane Theatre and Conference Center, Hilton Chicago/Oakbrook is the perfect location for those traveling in from out of town. The hotel is located 15 miles from O’Hare International Airport (ORD) and 21 miles from Chicago Midway International Airport (MDW). Parking is complimentary in the adjacent parking lot.

Hotel Bookings:
Hotel Block expires April 18, 2018.
Ask for CSWEA rate of $172 per night for nights between May 13-17, 2018.

Book your room at www.cswea.org or use block code CSWEA by calling 630-941-0100.

DRURY LANE THEATRE & CONFERENCE CENTER
100 Drury Lane, Oakbrook Terrace, IL 60181
630-530-8300 www.drurylane.com

Drury Lane Theatre and Conference Center is a beautiful, unique and versatile facility that combines ideal location, functionality, and elegance to make it one of Chicagoland’s finest facilities. Drury Lane is conveniently located next door to the host hotel, Hilton Chicago/Oak Brook Suites. Complimentary parking is available in the adjacent parking lot and parking garage.
UTILITY REGISTRATION PRICING

Based on the success in past years, CSWEA will continue to offer flat rate utility pricing for the Annual Meeting. The pricing allows utilities to pay a flat fee for registration with the cost determined by their treatment plant design size. For that price, a utility may send as many people as they want to the annual meeting. The utility would still have to purchase event and meal tickets separately for each individual. The only included meals would be the continental breakfasts, coffee/snacks, and box lunch.

Five tiers have been set up for the Utility registrations.

PRICING TIERS FOR ANNUAL MEETING

| MICRO UTILITY (<=1 MGD or Collection Only) @ $150       |
| SMALL UTILITY (1-5 MGD) @ $250                         |
| MEDIUM UTILITY (5-20 MGD) @ $500                       |
| LARGE UTILITY (20-50 MGD) @ $900                       |
| MEGA UTILITY (>50 MGD) @ $2,000                        |

COST COMPARISON (OLD vs. NEW) – using simple pricing

An Example of the cost savings is below.

OLD PRICING

Sample pricing for a 7 MGD Treatment Plant
Old Pricing with 6 attendees:

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<th>Reg Cost</th>
<th>Events</th>
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<td>$240</td>
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<td>Operator 1</td>
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<td></td>
<td></td>
<td>$200</td>
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<tr>
<td>Operator 2</td>
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<td></td>
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<td>$1,650</td>
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New Utility Pricing With 2 more Operators and 1 Trustee Attending

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<tr>
<td>Operator 1</td>
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Questions? Contact Amy Haque at ahaque@cswea.org
Let's work together to create the perfect solution for your project.
815-886-9200 or metropolitanind.com
WEF Visitor
Peter Vanrolleghem, Ph.D. – Trustee

Peter Vanrolleghem is a member of the 2017-2018 Board of Trustees for the Water Environment Federation (WEF), an international organization of water quality professionals headquartered in Alexandria, Va.

Peter holds the Canada Research Chair on Water Quality Modelling and is the director of CentrEau, the interdisciplinary Water Research Center of Université Laval in Québec. He is a full professor in the University’s Civil and Water Engineering department.

Peter’s multicultural research team, modelEAU (“eau” is French for water), consists of three postdoctoral researchers, two research assistants, 12 doctoral students and five masters students. His teaching responsibilities include pollution dispersion, wastewater treatment, river basin management, and modeling and control of the urban wastewater system.

Peter’s research focuses on urban wastewater systems and tackles challenges such as nutrient removal and recovery, micropollutants and greenhouse gases by developing and using mathematical models, automated monitoring stations, process control and performing in-house pilot and full-scale experimental work. Peter has published more than 400 papers in peer-reviewed journals and has been instrumental in the development of the WEST modelling and simulation software for wastewater systems, next to robust measurement devices such as respirometers for use in water resource recovery facilities.

Throughout his career, Peter has been involved at the global level, and he has participated in large international research projects. His involvement in the International Water Association (IWA) included chairing a specialist group, initiating task groups, and serving on IWA’s Strategic Council and its Board of Directors from 2013 to 2016. He was a guest professor at École Polytechnique in Montréal (1998), Lund University in Sweden (2003), the Technical University of Denmark (2012) and most recently EAWAG, the Swiss Federal Institute of Aquatic Science and Technology.

Peter has participated actively in WEF since he became a member in 1996, but stepped up his involvement after his move to Canada from Belgium in 2006. Since then, he has served as chair of MEGA, the Modeling Expert Group of the Americas, Quebec delegate in the House of Delegates, and for many years has been a member of the Research and Innovation Symposium subcommittee. He organized a number of conferences in North America, including the highly innovative IWA/WEF Water Resource Recovery Modeling Seminar in Québec City.

Peter has undergraduate and graduate degrees in bioengineering – industrial microbiology from Ghent University in Belgium. He also has a Ph.D. in bioengineering – environmental technology from Ghent University. Peter is a registered professional engineer in Québec.
### Conference at a Glance

#### MONDAY, MAY 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-11:00</td>
<td>Executive Committee Meeting (Combined)</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Water Tower Room</td>
</tr>
<tr>
<td>10:00-12:00</td>
<td>Leadership Workshop</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury A, Drury B, and Lane Room</td>
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<tr>
<td>10:00-4:00</td>
<td>Service Project</td>
<td>Skinner North Classical Elementary School, Chicago, IL</td>
</tr>
<tr>
<td>12:00-4:30</td>
<td>Golf Outing</td>
<td>Maple Meadows Golf Club, Wood Dale, IL</td>
</tr>
<tr>
<td>12:00-1:00</td>
<td>Lunch Break (On Your Own)</td>
<td>Hilton Suites Chicago/Oakbrook Terrace</td>
</tr>
<tr>
<td>12:15-4:00</td>
<td>Stormwater Tour</td>
<td>City of Joliet, IL</td>
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<tr>
<td>1:00-4:00</td>
<td>Plant Tour</td>
<td>Yorkville-Bristol Sanitary District</td>
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<tr>
<td>1:00-4:00</td>
<td>Watershed Management Workshop</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury A Room</td>
</tr>
<tr>
<td>4:30-5:00</td>
<td>7S Meeting</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury A Room</td>
</tr>
<tr>
<td>4:30-5:00</td>
<td>YP Meeting</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury B Room</td>
</tr>
<tr>
<td>5:00-5:30</td>
<td>Golden Manhole Society</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Water Tower Room</td>
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<tr>
<td>5:15-6:00</td>
<td>Global Water Stewardship Annual Meeting</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury A Room</td>
</tr>
<tr>
<td>6:30-10:30</td>
<td>Monday Night Social</td>
<td>Pinstripes, Oakbrook, IL</td>
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#### TUESDAY, MAY 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30-8:00</td>
<td>5k Run/Walk</td>
<td>DuPage County Forest Preserve, Salt Creek Greenway Trail</td>
</tr>
<tr>
<td>7:00-8:00</td>
<td>Sunrise Yoga</td>
<td>Hilton Suites Chicago/Oakbrook Terrace</td>
</tr>
<tr>
<td>9:00-11:30</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>8:00-6:00</td>
<td>Exhibits Open</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>11:00-12:00</td>
<td>Exhibits Only Hour</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>12:00-1:30</td>
<td>WEF Update, Awards, and Lunch</td>
<td>Drury Lane Main Dining Room</td>
</tr>
<tr>
<td>1:30-3:00</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>3:00-3:30</td>
<td>Poster Session I, Afternoon Break</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>3:30-4:30</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>4:30-6:00</td>
<td>Exhibitor Reception</td>
<td>Drury Lane, Brook, Oak I, Oak II, and Crystal III/IV Rooms</td>
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<tr>
<td>5:00-6:00</td>
<td>Annual Business Meeting</td>
<td>Drury Lane, Crystal I/II Room</td>
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<tr>
<td>6:30-7:00</td>
<td>Awards Reception</td>
<td>Drury Lane, Oak Room</td>
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<tr>
<td>7:00-8:30</td>
<td>Annual CSWEA Awards Event</td>
<td>Drury Lane, Oak Room</td>
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<tr>
<td>8:30-11:00</td>
<td>Post-Awards Social</td>
<td>Drury Lane, Oak Room</td>
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#### WEDNESDAY, MAY 16

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30-9:00</td>
<td>State Section Business Meetings</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Drury A, Drury B, and Lane Room</td>
</tr>
<tr>
<td>8:00-4:00</td>
<td>Exhibits Open</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>9:00-12:00</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>10:00-11:00</td>
<td>Exhibit Hall Hour, Poster Session II</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
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<tr>
<td>10:30</td>
<td>Silent Auction Bids Due &amp; Posted</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>12:00-1:00</td>
<td>Exhibitor Lunch</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>1:30-2:30</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
</tr>
<tr>
<td>2:30-3:00</td>
<td>Afternoon Break</td>
<td>Drury Lane, Brook, Terrace, and Venetian Rooms</td>
</tr>
<tr>
<td>3:00-4:00</td>
<td>Technical Sessions</td>
<td>Drury Lane, Oak I, Oak II, Crystal I/II, and Crystal III/IV Rooms</td>
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</table>

#### REGISTRATION HOURS

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>10:00-4:00</td>
<td>Monday, May 14</td>
<td>Hilton Suites Chicago/Oakbrook Terrace, Lobby</td>
</tr>
<tr>
<td>8:00-5:00</td>
<td>Tuesday, May 15</td>
<td>Drury Lane Foyer</td>
</tr>
<tr>
<td>9:00-4:00</td>
<td>Wednesday, May 16</td>
<td>Drury Lane Foyer</td>
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#### EXHIBIT HALL HOURS

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>5:00-8:00</td>
<td>Monday, May 14 - Exhibitor Move In</td>
<td>Drury Lane Foyer</td>
</tr>
<tr>
<td>8:00-4:00</td>
<td>Tuesday, May 15</td>
<td>Drury Lane Foyer</td>
</tr>
<tr>
<td>8:00-3:00</td>
<td>Wednesday, May 16</td>
<td>Drury Lane Foyer</td>
</tr>
<tr>
<td>3:00-6:00</td>
<td>Wednesday, May 16</td>
<td>Drury Lane Foyer</td>
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</table>
### Technical Program

**Tuesday May 15, 2018**

<table>
<thead>
<tr>
<th>Session A: Resource Recovery/Phosphorus Removal</th>
<th>Session B: Oak I</th>
<th>Session C: Crystal I/II</th>
<th>Session D: Crystal III/IV</th>
<th>Session E: Potpourri</th>
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</thead>
<tbody>
<tr>
<td>YP Moderator:</td>
<td>Moderator:</td>
<td>Moderator:</td>
<td>Moderator:</td>
<td>Moderator:</td>
</tr>
<tr>
<td><strong>9:00-9:30 AM</strong></td>
<td><strong>Solids/BIogas/Energy</strong></td>
<td><strong>Innovation in Treatment</strong></td>
<td><strong>Industry Advancement</strong></td>
<td><strong>French</strong></td>
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<tr>
<td><strong>Maximizing Phosphorus Resource Recovery Potential</strong></td>
<td><strong>Dos and Don’ts of Biological Biogas Treatment</strong></td>
<td><strong>Biologically Enhanced Primary Treatment, Significant Construction and Operational Savings: A Summary of Experience from Pilot, Demonstration, and Full-Scale Systems</strong></td>
<td><strong>Industry/University Cooperative Research to Advance Water Reclamation</strong></td>
<td><strong>David Rosenburg</strong></td>
</tr>
<tr>
<td>Rick Johnson</td>
<td>Jeremy Cramer</td>
<td>Jared Alder</td>
<td>Daniel Zitomer</td>
<td>Michels Corporation</td>
</tr>
<tr>
<td>InNow LLC, Water and Environmental Services</td>
<td>Donahue &amp; Associates</td>
<td>Evauqua Water Technologies</td>
<td>Marquette University</td>
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<tr>
<td>City of Fond du Lac</td>
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<tr>
<td><strong>9:30-10:00 AM</strong></td>
<td><strong>Nutrient Harvesting or Sequestration: The Best Fit for the Fand du Lac WTRRF</strong></td>
<td><strong>Selective Pressures for Granulation in Full-scale, Flow through Activated Sludge System</strong></td>
<td><strong>Navigating environmental, economic, and hydrologic trade-offs in the design of green infrastructure for stormwater management in urban settings</strong></td>
<td><strong>Stephanie Houser</strong></td>
</tr>
<tr>
<td>Autumn Fisher</td>
<td>Joe Marino, Gately and Hansen</td>
<td>Eric Redmond CH2M</td>
<td>Stephanie Houser University of Illinois at Urbana-Champaign</td>
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<tr>
<td>City of Fond du Lac</td>
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<tr>
<td><strong>10:00-10:30 AM</strong></td>
<td><strong>Understanding your Utility Bill and why it Matters in Water Resource Recovery</strong></td>
<td><strong>Design and Startup of a Full-Scale Membrane Aeration Bioreactor and Water Quality Trading: Lessons Learned from Wisconsin</strong></td>
<td><strong>Water Quality Trading: Lessons Learned from Wisconsin</strong></td>
<td><strong>HR Green</strong></td>
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<td>City of St. Cloud, MN</td>
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<tr>
<td><strong>10:30-11:00 AM</strong></td>
<td><strong>Side-Stream Enhanced Biological Phosphorus Removal: An Emerging Technology for Stable Biological Phosphorus Removal</strong></td>
<td><strong>Effect of acid phase operation on digestate pH, VFA accumulation, and phosphorus solubilization</strong></td>
<td><strong>Developing Solutions to Meet Regulatory Constraints and Long-Term Goals</strong></td>
<td><strong>UV Disinfection</strong></td>
</tr>
<tr>
<td>Steve Arant</td>
<td>InNow LLC</td>
<td>Hiroko Yoshida Centraig-ChNP</td>
<td>Ted R. Bluer Grealey and Hansen</td>
<td>Improvements: Maximizing Resources from Design to Operation Brent Perz Baxter &amp; Woodman</td>
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<tr>
<td>Black &amp; Veatch</td>
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<tr>
<td><strong>11:00-12:00 AM</strong></td>
<td><strong>Optimizing Selector Zone of Aeration Basins to Maximize Mixed Liquor Energy and Maximize Phosphorus Removal</strong></td>
<td><strong>Ammonia-Based Aeration Control of an Oxidation Ditch to Improve Effluent Quality and Reduce Operating Cost</strong></td>
<td><strong>Steam delivery mechanism and impact on sludge Thermal Hydrolysis efficiency</strong></td>
<td><strong>Wesley Yellin Veolia</strong></td>
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<td>Milwaukee Metropolitan Sewerage District</td>
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<td>Marin Hildebrand Nexum</td>
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<tr>
<td><strong>12:00-1:00 PM</strong></td>
<td><strong>Sidestream and Recycle Stream Treatment Alternatives for Nutrient Removal and Recovery: Overview and Case Studies</strong></td>
<td><strong>Enhanced Solids Separation and Sludge Reduction Using Rare Earth Chloride Solution as a Coagulant</strong></td>
<td><strong>Ammonia Permits and Lagoons: Lake St. Martin, Manitoba’s WWTP and the Options Available for Beating Limits</strong></td>
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<tr>
<td>Sara Arabi, Ph.D., P.E., BCEE, BCEE</td>
<td>Debunking the myth of centrifuges: Centrifuges as an energy hog Nathaniel Nowicki CentriSys</td>
<td>Pam Cornish Neo Chemicals &amp; Oxides</td>
<td>Pam Cornish Neo Chemicals &amp; Oxides</td>
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<tr>
<td>Donahue and Associates</td>
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<tr>
<td><strong>1:00-2:00 PM</strong></td>
<td><strong>Navigating low effluent phosphorus limits: “Right sizing” phosphorus reduction strategies through Monte Carlo based evaluations</strong></td>
<td><strong>Cost Reduction by bioaugmentation in collection system: reduced influent loads but increased readily biodegrable COD</strong></td>
<td><strong>The Mid-Moraine Water Quality Collective: An Innovative Approach to TMDL Water Quality</strong></td>
<td><strong>Wesley Yellin Veolia</strong></td>
</tr>
<tr>
<td>Colin Fitzgerald, CH2M Hill</td>
<td>Offsetting energy costs: Organic waste diversion and bioenergy production in municipal wastewater resource recovery facilities Wesley Yellin Veolia</td>
<td>Xiaolong Wang In-Pipe Technology</td>
<td>The Mid-Moraine Water Quality Collective: An Innovative Approach to TMDL Water Quality</td>
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<tr>
<td><strong>3:00-3:30 PM</strong></td>
<td><strong>An Operational Perspective on Achieving Consistent Low-Level Phosphorus Removal</strong></td>
<td><strong>Energy Reduction and Biological Process Performance Improvements with Right-Sized Equipment, and Real-Time Process Optimization and Next-Generation Automation</strong></td>
<td><strong>Finding the Silver Lining of a Service Interruption Incident</strong></td>
<td><strong>Dan Bounds Arcadia</strong></td>
</tr>
<tr>
<td>Anthony Giovannone CDM Smith</td>
<td>Funding For Wastewater Treatment Facilities Through Energy Performance Contracting Jeff Montpas AECOM</td>
<td>Randy Chann, PE Environmental Dynamics Intl</td>
<td>Andrew Ohrt</td>
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<tr>
<td><strong>3:30-4:00 PM</strong></td>
<td><strong>The Mid-Moraine Water Quality Collective: An Innovative Approach to TMDL Water Quality</strong></td>
<td><strong>Energy Reduction and Biological Process Performance Improvements with Right-Sized Equipment, and Real-Time Process Optimization and Next-Generation Automation</strong></td>
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<td>The Mid-Moraine Water Quality Collective: An Innovative Approach to TMDL Water Quality</td>
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<tr>
<td><strong>4:00-4:30 PM</strong></td>
<td><strong>An Operational Perspective on Achieving Consistent Low-Level Phosphorus Removal</strong></td>
<td><strong>Energy Reduction and Biological Process Performance Improvements with Right-Sized Equipment, and Real-Time Process Optimization and Next-Generation Automation</strong></td>
<td><strong>Finding the Silver Lining of a Service Interruption Incident</strong></td>
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<tr>
<td>Time</td>
<td>Session</td>
<td>Title</td>
<td>Speakers</td>
<td>Authors</td>
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<td></td>
<td>M</td>
<td>Waukesha’s Challenge: Designing and Constructing a New Drinking Water Supply and Return Flow System</td>
<td>Catherine Richardson, Greetley and Hansen</td>
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<td>Wastewater Operator Certification</td>
<td>Paul Burris</td>
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<tr>
<td>9:30-10:00</td>
<td>N</td>
<td>The Effects of Side Streams on Phosphorus Removal</td>
<td>Elizabeth Bohne, E.I.T., Trotter And Associates, Inc.</td>
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<td></td>
<td>P</td>
<td>Secondary Clarifier Controls: Alternative Operating Modes</td>
<td>Andrea Bret, PE</td>
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<td></td>
<td>Q</td>
<td>Community Partnership for Biosolids</td>
<td>Amanda Eness</td>
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<td>Paul Burris</td>
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<td>10:00-10:30</td>
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<tr>
<td>10:30-11:00</td>
<td>O</td>
<td>Beat Ultra-Low Phosphorus Targets with Reactive Filtration: How Citronelle, Alabama consistently hits 0.02 mg/L</td>
<td>Nick Janous</td>
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<td></td>
<td>P</td>
<td>Back to the Future: SCADA Master Plan Your Utility Time Machine</td>
<td>Matt Larson, Carollo Engineers</td>
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<td>Q</td>
<td>Three in One: Pumping Improvements to Consolidate Frankfort’s Wastewater Treatment Plants</td>
<td>Derek Wold, Boater and Woodman</td>
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<td>Paul Burris</td>
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<tr>
<td>11:00-11:30</td>
<td>O</td>
<td>Using PACs to Achieve Low-Level Phosphorus Requirements</td>
<td>Joseph Carlson</td>
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<td></td>
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<td>City of South Beloit Wastewater Treatment Plant Improvements</td>
<td>Matthew A. Johnson, Fehr Graham</td>
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<td>R</td>
<td>Wastewater Operator Certification</td>
<td>Paul Burris</td>
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<tr>
<td>1:00-1:30</td>
<td>O</td>
<td>Enabling Fully Integrated Wastewater Resource Recovery for the Circular Economy</td>
<td>Kevin Sido, Hinshaw &amp; Culbertson LLP</td>
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<tr>
<td></td>
<td>P</td>
<td>No Strings Attached: Wireless Asset Management for Modern Utilities</td>
<td>Amit Sahdev, FE, Carollo Engineers</td>
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<tr>
<td></td>
<td>Q</td>
<td>Simplification of Treatment Processes and Equipment Replacement Results</td>
<td>Troy Larson, Strand and Associates</td>
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<td></td>
<td>R</td>
<td>Wastewater Operator Certification</td>
<td>Paul Burris</td>
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<tr>
<td>1:30-2:00</td>
<td>O</td>
<td>Use of the ISI Envision System and Stakeholder Engagement</td>
<td>Emily Wehmeyer</td>
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<tr>
<td></td>
<td>P</td>
<td>Stuck Between a Rock and a Hard Place - Meeting Environmental and Geotechnical Challenges on a Difficult Building Site... the Malone, Illinois Experience</td>
<td>Tina Sebold, Strand and Associates</td>
<td></td>
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<tr>
<td>2:00-3:00</td>
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<tr>
<td>3:00-3:30</td>
<td>O</td>
<td>Keeping process control system data in the DARC, how custom software helped our data see the light</td>
<td>Kevin Sido, Hinshaw &amp; Culbertson LLP</td>
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<td></td>
<td>P</td>
<td>2 for 1: Advanced Nutrient Removal and Plant Capacity Expansion Utilizing Ballasted Technologies</td>
<td>Laurie Dunn, Madison Metropolitan Sewerage District</td>
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<tr>
<td></td>
<td>Q</td>
<td>Wastewater Operator Certification</td>
<td>Paul Burris</td>
<td></td>
</tr>
<tr>
<td>3:30-4:00</td>
<td>O</td>
<td>Evaluating the potential of phosphorus recovery from side streams at corn-ethanol production plants using chemical precipitation to enhance the sustainability of corn load-energy-water system</td>
<td>Kevin Sido, Hinshaw &amp; Culbertson LLP</td>
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</tr>
<tr>
<td></td>
<td>P</td>
<td>Wastewater Operator Certification</td>
<td>Paul Burris</td>
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</table>
Leadership and Ethics Presenters

This year’s program again includes presentations geared towards leadership and ethics topics. The conference will kick off with the Leadership Track (Monday, May 14 from 10:00 a.m.-12:00 p.m.) and will feature Colton Janes, Director of Operations for Aqua Illinois, and Robert Jonas of Strategy International, strategy management consultants, who will share their insight and professional experiences. The popular Ethics Track will also return on Wednesday, May 16 from 1:45-4:00 p.m. Kevin Sido will provide engineering ethics training which will fulfill the mandatory professional conduct and ethics requirement for the State of Wisconsin Professional Engineers (2 PDHs).

Colton Janes is the Director of Operations for Aqua Illinois, a private water and wastewater utility overseeing 73,000 customers in 13 counties in the state. Aqua Illinois is a subsidiary of Aqua America, an organization providing water and wastewater services to approximately 3 million people in eight states that continues to grow its operations through acquisitions.

As a manager of 100 employees, Janes believes in a hands-on, team-oriented approach, working directly with operators to optimize existing systems to meet company goals. He enjoys exploring new and innovative management practices and is an avid reader. He also facilitates a leadership book club for the Illinois Section AWWA.

Janes received his Bachelor of Science degree in environmental engineering from the University of Wisconsin-Platteville and is a licensed professional engineer. He is also certified as a Class 1 Wastewater Operator and a Class A Water Operator in Illinois. Janes has worked on all sides of the water and wastewater industry – consultant, municipal engineer, contract operator and private utility. He lives in Manteno, Illinois, with his wife, Jecca, and young son, Rowan.

Robert Jonas is an experienced business owner, entrepreneur, corporate executive, management consultant and executive coach. Bob has founded and operated several manufacturing and business service companies during the past 30 years. He focuses on helping executives manage change with value growth planning to achieve the business owners’ goals and objectives. He provides time-proven methodologies that transition the management orientation to profits, causes management to focus on its customers and prospects, creates a sense of urgency, builds teams to handle complexity of growth and provides the communication tools to share the long view of the firm’s direction.

Bob is very experienced working with middle market and small firms. His MBA from Northern Illinois University in Financial Marketing gave him the basis for his business ownership and consulting. Bob’s management consulting involved buy-sell transitions including marketing, due diligence, start-up companies, corporate buy-side transactions, international strategic alliances and business transfers.

As an experienced strategist for over 30 years, Bob recognizes that knowledge is power and is the essential component in today’s increasingly global competition. He has helped clients develop and execute strategies that succeed in competitive markets.

Kevin Sido has been a trial lawyer and transactional counsel for design/construction professionals for over 40 years. Mr. Sido brings his trial experience to the counseling and transactional needs of his clients. He also has a significant background in alternative dispute resolution as both mediator and arbitrator.

Mr. Sido has authored amicus curiae briefs on behalf of many architect and engineer organizations in appeals concerning mechanics liens, the economic loss doctrine, QBS, construction and other matters. He holds affiliate memberships in SEAOI and ASCE. He has long counseled AIA Illinois and ISPE on legislative initiatives. He is editor of Architect and Engineer Liability: Claims Against Design Professionals (Aspen 2006) among many other publications.

In 2004 he received the president’s award of AIA Illinois. He has been profiled in Leading Lawyers Network Magazine. He is an Illinois “Super Lawyer” since 2005. Mr. Sido is a prolific writer and speaker and has presented on many dozens of occasions often addressing engineering ethics.
Community Service Project

**Skinner North Elementary School | 640 W Scott St., Chicago, IL**
**Monday, May 14, 2018 10:00 a.m.-4:00 p.m.**

Volunteer to work with other CSWEA volunteers and create a water legacy, right in the backyard of our annual conference. Skinner North Classic Elementary School fifth graders have designed a raingarden that would convert the puddles in their playground into plants and shrubs, while alleviating stress on the City of Chicago’s stormwater collection system. Please join Skinner North students to dig, plant, and leave a lasting water legacy. Support the service project by volunteering or donating. For more information about this year’s project, contact Natalie Cook at ncook@donohue-associates.com.

Golf Outing

**Maple Meadows Golf Club | 272 South Addison Road, Wood Dale, IL 60191**
**Monday, May 14, 2018 12:00-5:00 p.m.**

Maple Meadows Championship West 18 features a modern combination of links and prairie design. The 18-hole course is a par-71 with immaculate bent grass fairways and greens. The 2018 golf event fee includes greens fee, cart, and lunch along with a sleeve of balls and a chance at the many skill prizes. Registration and lunch is from 11:00 to 12:00 with a shotgun start at 12:00. Awards will be presented at the Monday Night Social and Meet and Greet at Pinstripes Oak Brook. For corporate sponsorship opportunities or for outing details, contact Tim Tack, Golf Outing Coordinator, by phone at 847-921-0993 or by e-mail at ttack@lai-ltd.com.
City of Joliet Stormwater Tour
CSO Wet Weather Tunnel and Treatment Facilities
Monday May 14, 2018 12:30-4:00 p.m.

Please join us as the Illinois Section Stormwater Committee will be hosting a tour of the City of Joliet’s Des Plaines River tunnel and wet weather treatment facility projects. These projects are Phases II and III of the city’s approved Long Term Control Plan to reduce the occurrence of Combined Sewer Overflows. The scope of Phase II, which was completed in 2016, consisted of constructing two 24-inch dry weather siphons and a 60-inch wet weather pipe in a 9.25-ft diameter, 835-ft long tunnel that was installed utilizing a tunnel-boring machine 20 feet below the Des Plaines River. Phase III is construction of a 90 MGD wet weather treatment facility consisting of a screening facility, pumping station, 4,000,000 gallon first flush tank, two 180-foot diameter clarifiers, and a chlorine contact tank that will treat excess flow during wet weather events. This facility and infrastructure will help manage the city’s combined sewer system and reduce the frequencies of combined sewer overflows to no more than an average of four overflows per year. Attendees will visit a brewpub for a beverage and light snacks before returning to the Hilton Suites. Transportation will be provided. Please contact Tim Juskiewicz by phone at 815-744-5867 x3131 or by email at timothy.juskiewicz@strand.com with questions or for more tour details.

Plant Tour
Yorkville-Bristol Sanitary District | 304 River Street, Yorkville, IL 60560
Monday, May 14, 2018 1:00-4:00 p.m.

Yorkville-Bristol Sanitary District (YBSD) is subject to complying with a Total Phosphorus (TP) effluent limit compliance schedule under their National Pollutant Discharge Elimination System (NPDES) permit. In addition, local industries were planning to send waste streams with a high organic loading relative to their hydraulic discharge. This impending higher organic load coupled with implementing Biological Phosphorus Removal (BPR) by converting aeration tanks to anaerobic tanks will significantly reduce the existing treatment capacity. The existing treatment plant site is built-out and any increase in conventional treatment will require a separate treatment plant on adjacent property, which will be a large capital expenditure. In conjunction with Biological Phosphorus Removal (BPR), YBSD elected to install a Membrane Aerated Biofilm Reactor (MABR) system to increase organic treatment capacity and meet the new TP limit without construction of a separate treatment plant.

YBSD is a 3.62 MGD facility and treatment consists of both coarse and fine screens, single-stage nitrification with fine bubble panel diffusers, final clarifiers, UV disinfection, a gravity belt thickener, Autothermal Thermophilic Aerobic Digestion (ATAD), and dewatering centrifuges. The single-stage nitrification process is comprised of two liquid trains, Tanks 1-5 and Tanks 6-10, that were operated in series prior to the 2017 installation of the MABR system.

The MABR mechanisms for nitrification and denitrification relieve a portion of ammonia loading from the aeration tanks, allowing those tanks to manage the higher BOD loading. YBSD selected the MABR system to increase the organic, or BOD capacity, of the existing plant and treat to the new TP limit.

The facility is a 45-minute drive from the Hilton Suites and Drury Lane Conference Center. The tour is open to all conference attendees and will consist of a plant walk through and discussion of the facility’s unique MABR system. Tour participants are asked to bring photo identification.
Operators Track
Wednesday, May 16 | 9:00 a.m.-4:00 p.m.

The CSWEA Annual Conference will again be offering an Operators Track developed for operators with an emphasis on the fundamental of key operation topics. Designed for operators, this session features practical information related to monitoring, process control, maintenance, and troubleshooting. Presenters are operators and wastewater professionals knowledgeable of daily wastewater operations. Scheduled for 9:00 a.m.-4:00 p.m. on Wednesday, May 16, this year’s Operators Track will offer a four-hour review of material for operators preparing to take a Wastewater Operator Certification Exam. The review session will be led by Paul Burris, Utility Operations Manager for the City of Elmhurst, Illinois. This session will be valuable for operators preparing to take the exam or for those wanting a general review of topics including collection systems, lagoons, fixed media treatment, and activated sludge plants.

The format of the Operators Track will promote interaction, networking and learning. Anyone interested in learning more about, or contributing to, the art and science of wastewater operations should consider attending.

SESSION PRESENTER:
Paul Burris is an Illinois Class 1 Wastewater Operator and a Class “A” Potable Water operator. Paul has over 30 years of operations experience in water and wastewater. He is currently the Utility Operations Manager for the City of Elmhurst, Illinois. Paul teaches both water and wastewater classes for Southern Illinois University at Edwardsville. He has also taught classes for Joliet Junior College and South Suburban Water Works Association.

9:00 a.m. Welcome and Session Overview
9:05 a.m. Basic Collection System Operations
10:00 a.m. Exhibit Hall Hour/Break
11:00 a.m. Lagoons and Basic Loadings
12:00 p.m. Lunch – Exhibitor Hall Lunch
1:30 p.m. Fixed Media Treatment Operations
2:30 p.m. Afternoon Break
3:00 p.m. Basic Activated Sludge
Over the course of centuries, the watersheds in northeastern Illinois have been significantly altered by changing land uses, development, flood control and pollution. A myriad of organizations and people have been working to restore and protect these unique, diverse and important watersheds. The Watershed Management Group Panel (Monday, May 14th from 1:00-4:00 p.m.) will showcase the varied and exciting work being accomplished regarding watershed management practices and policies from representatives of the organizations doing the work in the field every day for the benefit of northeastern Illinois residents, native species and natural environment.

Represented agencies include the DuPage River Salt Creek Workgroup, the Fox River Study Group, and the Conservation Foundation.

• The DuPage River Salt Creek Workgroup is a non-profit organization whose goal is to improve water quality in the East and West Branch DuPage River and Salt Creek watersheds. We conduct comprehensive biological and chemical assessments throughout DuPage and parts of Cook counties.

• The Fox River Study Group’s mission is to bring together a diverse coalition of stakeholders to work together to preserve and enhance water quality in the Fox River watershed.

• The Conservation Foundation has been actively working to protect rivers and streams since 1989 by creating community initiatives to help clean them up, raise awareness of how our everyday actions impact our water resources and collaborating with local stakeholders to plan for the future and implement change.

PANEL MEMBERS:

Nick Menninga is the General Manager of the Downers Grove Sanitary District. He is a registered Professional Engineer and Certified Class 1 wastewater operator in Illinois, and is a Diplomate with the American Academy of Environmental Engineers and Scientists. He has over 30 years of experience in the wastewater field, including regulatory agency, consulting engineering, and public utility management experience.

Bob Trueblood is Executive Director of the Fox River Water Reclamation District in Elgin, Illinois, with approximately 220,000 customers. Bob has been in the water/wastewater utility business for 40 years. He has a Business Degree from Indiana Institute of Technology. Bob has been vice-chair of the Fox River Study Group since May 2006.

Stephen McCracken is the Director of Watershed Protection for The Conservation Foundation. Stephen works primarily on the DuPage River and DuPage County watershed and water quality projects. This includes administering the DuPage River Coalition, the TMDL workgroup (a technical group assessing the health of the DuPage River and Salt Creek), dam modification efforts, thorium removal public education and the revision of the DuPage River Watershed Plan. Stephen also works with the Salt Creek Watershed Network and other watershed groups.

He has a master’s degree in Applied Environmental Economics, a second master’s degree in Natural Resource Management (specializing in water resources), and a bachelor’s degree in Geoscience. He has worked for a land trust in Massachusetts, a consulting firm doing environmental and sustainability work in West Africa and other countries, and on his family farm in Ireland.

Deanna Doohaluk is a Watershed Project Manager with The Conservation Foundation and fulltime staff to the DuPage River Salt Creek Workgroup. She has over 18 years’ experience in water resource management in both the public and private sector. Ms Doohaluk has a Masters of Public Health in Environmental Health Sciences from the University of South Carolina.
Monday Night Social and Meet & Greet
Pinstripes | 7 Oakbrook Center Mall, Oakbrook
Monday, May 14, 2018 6:30-10:30 p.m.

The Local Arrangement Committee organizers invite attendees to attend the Monday Night Social and Meet and Greet at Pinstripes. Stop by and enjoy delicious appetizers and cocktails on the patio while you socialize with friends and colleagues (weather permitting). To add to the fun, the LAC has organized a Trivia Night. Grab a team, put on your thinking caps and join us for a night of fun and friendly competition. Top team wins prizes! Complimentary bocce and bowling will also be available... novices and pros are both welcome.

Shuttles to and from the Hilton Suites will be available. Doors open at 6:30 p.m. and trivia starts at 7:30 p.m. Golf awards and winners will also be announced. All registered attendees of the conference are welcome to attend. For corporate sponsorship opportunities, contact Amy Haque, by phone at 855-692-7932 x1 or by e-mail at ahaque@cswea.org.

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$1,000 Scholarship

As the publisher of Central States Water magazine, we at Craig Kelman & Associates have a deep appreciation for our readers and members of CSWEA whose task it is to ensure that water taken from and put back into our precious Mother Earth is clean and safe for the people, animals and plants whose very existence depends upon it.

To demonstrate our admiration and respect for the association, its members and the water industry as a whole, we have established a yearly educational scholarship of $500 to be funded through a percentage of advertising sales generated in Central States Water.

On behalf of the publishing professionals who form part of our team, as well as our advertisers who use the pages of Central States Water to convey their important messages, we look forward to helping a worthy individual further their education in the water industry.
Auction items donated by exhibitors to benefit the Global Water Stewardship will be displayed in the Exhibit Hall. Support this amazing social and humanitarian effort by donating or bidding on the items. Interested in donating an item? Contact Rich Hussey at 847-989-5422 or rhussey@lai-ltd.com for more information. Bids are due by 10:30 a.m. Wednesday. Winners will be posted in the Exhibit Hall at 12:00 p.m. Wednesday (for the Exhibitor Lunch).

ABOUT GWS
Global Water Stewardship resolves sanitation issues in the developing world by educating people and engineering sustainable centralized solutions that keep waterways clean and communities healthy. Donate at: www.globalwaterstewardship.org.

Global Water Stewardship Annual Meeting
Monday, May 14, 2018 5:15-6:00 p.m.
Hilton Suites Chicago/Oakbrook Terrace, Drury A Room
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GWS Volunteer Spotlight: MANUEL DE LOS SANTOS

By Liz Bohne

Manuel De Los Santos, Aqua-Aerobics Systems, currently serves as the International Programs Chair for GWS. He has been involved in GWS since the beginning. We would not function without Manuel’s help. As a native Spanish speaker, he is our main liaison with all of the key players in Costa Rica. He travels at least once a year to give presentations to government officials, community members, and school children. His passion and dedication to this group is nearly unmatched. I spoke with him about why he does what he does and his experience with GWS. Read on for the full conversation!

LIZ: How did you get involved with GWS?
MDLS: I always wanted to volunteer in an organization. I came across a GWS mailer, and saw that the work was related to wastewater and sanitation. There are not a lot of volunteer organizations working on wastewater, so I found the perfect opportunity to use my knowledge of wastewater treatment, and my native language for a good cause.

LIZ: Why did you decide to stay involved?
MDLS: After working for several months with the organization, a trip was setup to Costa Rica; during the trip I got to experience first-hand the need for the work we do. It is very satisfying to know that our work is helping people in the world. In addition, I have the opportunity of networking with very passionate people with similar goals.

LIZ: What’s your position/role with the group? What are your main tasks?
MDLS: My current role in GWS is the International Programs Chair. My main task is to make sure that there is constant communication between the GWS team and the local contacts in the countries GWS serves. This communication can extend from localized communities to government officials.

LIZ: Why should more people volunteer with GWS?
MDLS: The more people we have, the more we can cover and the more people we can help. We’ve got more and more to do as we add new projects and get more recognition. We need our volunteer base to grow with us so we can keep reaching our goals.

LIZ: What have you gotten out of your involvement?
MDLS: The satisfaction of knowing that I’m utilizing my resources (and knowledge) to do some good in this world. I believe in #sanitationforall, meaning that everyone should have access to a clean environment and we are here to make sure this happens.

LIZ: How did you get involved with wastewater?
MDLS: It is not really a great story, but a good ending. I’m a civil engineer and was working in a company that worked on the construction field. They eventually partnered with a company that worked in...
wastewater and was given the opportunity to do a master’s on Sanitary and Environmental Engineering. I have been in the wastewater field since then and I’m very passionate about it.

**LIZ:** How has GWS helped you professionally?

**MDLS:** It gives me a better understanding that what we do really does good for the environment and for people. It sort of calibrates you on the fact that all the work we do in the office has a purpose.

**LIZ:** What’s your favorite GWS memory?

**MDLS:** Definitely the trips to Costa Rica. Every year there is something eye opening. I get the opportunity to bond with the locals and the other GWS members and see first-hand the impact we can have.

**LIZ:** What’s coming up next for GWS?

**MDLS:** As we get bigger, we can get more funding and cover more territory. We have some long term big goals (large communities) and short term small term projects (biogardens, community education, etc.). Once one of the long-term projects is completed, the floodgates will open with more opportunities to help.
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LIZ: Tell me how you first got involved in wastewater work?
DAVE: At school at UW-Madison, I was not sure of what type of engineering I wanted to try. I knew out of high school that I was interested in engineering. I took an orientation course that exposed me to the various types of engineering. That helped direct me to civil and environmental engineering. However, even within that area there is a lot of variation. As a civil engineer you can work on transportation, drinking water, wastewater, storm water, and dams and other hydrologic structures. I had an internship with a firm. That experience let me know that that area was not for me. I turned to wastewater after that internship, started at Ruekert & Mielke, Inc. in 1999, and never looked back.

LIZ: What do you find most challenging about wastewater treatment?
DAVE: I like the challenge of incorporating various disciplines. Wastewater involves mechanical, biological, chemical, concrete and site engineering components. It is fun and challenging to work on projects that include these multiple aspects.

I enjoy the variety of projects within wastewater. I have worked in the planning, design, construction and operation phases for collection systems, treatment, and wet weather facilities.

LIZ: What do you wish other people knew about R&M and wastewater?
DAVE: We are starting to see the areas of storm water and wastewater move together. With TMDLs becoming more prevalent in WI, there is a real opportunity for integration and collaboration in the two areas. For example, a municipality with an MS4 permit typically has certain percent reductions to achieve for total phosphorus and total suspended solids. Using approaches like Water Quality Trading or Adaptive Management the municipal WWTF and MS4 have an opportunity to work together. The City of Oconomowoc is using the Adaptive Management approach as the compliance mechanism for their storm water phosphorus reduction requirements. The Adaptive Management program is being led by the wastewater treatment facility.

LIZ: What do you like to do when you aren’t working?
DAVE: I like cycling (bicycle). Nothing beats winding down a hectic day at the office like a ride through the rural countryside in western Waukesha County where I live. I also completed my first half marathon last fall. I am trying to fight middle age! I never thought I would like running but it is starting to grow on me.

Also, I enjoy hiking the Southern District of the Kettle Moraine with my family. We have two teenagers who are too cool to spend time with their parents, so lately it is my wife Chrystal our dog doing the hiking. We love to hike in the winter too!

I am also a volunteer for the Boy Scouts of America for the troop my son is in. It is exciting to see boys learn new skills and grow into responsible young men.

LIZ: What was your first impression of GWS?
DAVE: My first impression was that it was a great opportunity and that it would move to encourage community involvement in wastewater.
be a lot of work. However, that work would be very worthwhile. Those points are proving true.

**LIZ:** Why are you supporting GWS as opposed to other groups working on sanitation?

**DAVE:** I have always regarded CSWEA as a top-notch organization. I am interested in growing the association through GWS. GWS is a great way to attract Young Professionals who will be the future of the association. YPs have a great amount of enthusiasm and energy for “giving back” and making a contribution that directly improves the lives of those less fortunate. My viewpoint, confirmed by talking with my peers, is that this type of work is reinvigorating to seasoned professionals too.

**LIZ:** What’s your personal philosophy on what should be done about availability to wastewater treatment in the developing world?

**DAVE:** I believe in developing countries such as Costa Rica, there is a great opportunity to improve public health through centralized treatment. Septic systems are the main treatment system in Costa Rica presently. Often, the drain fields are very small (8 ft. x 8 ft.). In addition, the systems are not ideal for the great amount of rainfall they receive. These small systems and the rainfall, create a public health hazard right at individual homes. Lastly, there are often cross connections from the septic tank to the storm sewer system. Centralized treatment with a collection, system can immediately improve public health at the homes. It will also provide a higher level of treatment that will benefit the environment.

Costa Rica has a very efficient storm sewer system. They are very good at getting storm water off pavement quickly. Through our projects, GWS is working on leveraging that infrastructure mentality to public sanitation.

**LIZ:** Tell me about someone who has influenced your decision to work with GWS?

**DAVE:** Mohammed Haque started the program. I like the way Mohammed dove in and challenged himself and others to make a difference. He did not have all the answers, but that did not stop him.
Sometimes as engineers we get locked into “paralysis by analysis”. Mohammed broke through that mentality and took a calculated risk to start this initiative with the help of couple contacts he had in Costa Rica and a gritty group of CSWEA volunteers. GWS has grown in stature so much that other Member Associations are asking how they can get involved.

**LIZ:** The interest in wastewater treatment seems to be growing. Why do you think that is?

**DAVE:** In the last ten years the buzzwords in wastewater have been energy efficiency and resource recovery. I believe those two factors are driving the interest in wastewater today. These are exciting times to be a wastewater engineer.

In addition, with the TMDLs we are seeing, there is a great opportunity to work on a wholistic level to improve our water environment. I believe the storm water and wastewater arenas will continue to move closer together.

**LIZ:** What can you tell me about R&M or your involvement with GWS?

**STAN:** Ruekert & Mielke, Inc. has been providing infrastructure and technology solutions to municipalities since 1946. The services we offer include traditional civil engineering (streets, utility planning and design, grading, site plans, surveying), GIS implementation, asset management, water supply and treatment, water resource engineering in addition to wastewater engineering.

**STAN:** R&M is also unique because we are 100% Employee owned. We focus a lot of our efforts on employee development because every employee at R&M is an owner. We also place a high value on helping the communities in which we work. We provide a quarterly Infrastructure Investment Award to one of our clients that is focused on improving the quality of life for their residents with significant public improvements. Each award provides a $1,000 contribution to the non-profit of the community’s choice. We also annually make contributions to the food pantries throughout our client communities.

**DAVE:** I have been involved with GWS since August of 2014 when I went on the first fall trip to Costa Rica. Since then, I have worked on the QA/QC committee where we interact with the student design teams and review and refine the student designs. We are on our fifth project right now. The interest from the students is amazing. I think they are excited to be working on a real, tangible problem in a developing country. They feel they can make a difference. We all feel we can make a difference to people that do not have the resources that we have. That is the key interest driver for GWS.

**STAN:** Dave’s presentation on his trip to Costa Rica and other staff mission trips was the impetus for R&M to begin our Employee Enrichment Program. Twice a year we evaluate requests from staff for funding assistance to attend and participate in efforts to improve their own communities and the world. The other great part of this program is that is our culture team reviews and makes the determination on who to select. It is exciting to see staff rewarded for their efforts to make the world a better place.

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U.S. States, EPA Coordinating on Best Approaches to Nutrients Permitting

ACWA, WEF join with U.S. EPA to host seven workshops

By Mark Patrick McGuire and Katie Foreman

In early December 2017, representatives from 24 state clean water programs involved in managing nutrient pollution as well as headquarters and regional staff from the U.S. Environmental Protection Agency (EPA) met for three days to learn, discuss, and confer on a broad range of nutrients permitting issues. Presentation topics included nutrient removal technologies, nutrients reduction strategies, variances, water quality trading, watershed-based and adaptive management approaches, integrated planning, and more. Participants also had the opportunity to work in small groups on three specific issues:

- Nutrient removal technology implementation at water resource recovery facilities (WRRFs).
- Overcoming impediments to permitting for nutrients.
- Integrating total maximum daily loads (TMDLs) with permits.

The workshop, held in Boise, Idaho, was the first in a series of seven meetings to be held between 2017 and 2021 by the Association of Clean Water Administrators (ACWA; Washington, D.C.), with support from the Water Environment Federation (WEF; Alexandria, Va.), as part of a cooperative agreement with EPA.

The workshops are intended to assist with achieving several objectives and environmental outcomes by bringing together state, tribal, territorial, federal, and other stakeholders. The goals are to identify challenges and barriers to nutrient permitting program implementation, highlight opportunities for program improvement and enhancement, showcase innovations and achievements, and identify and attempt to solve the most intractable issues.

States employ various approaches to nutrient permitting

A major takeaway from the Boise workshop was that states manage nutrient pollution through permitting in a myriad of ways. For example, Montana, Iowa, and North Carolina approach nutrients permitting via numeric nutrient criteria, performance-based actions, and water quality trading, respectively.

Montana. Montana adopted numeric nutrient criteria in 2014 to combat nutrient pollution. The development process for the criteria included three components:

- Identifying geographic zones for specific criteria.
- Understanding the cause-effect relationships between nutrients and beneficial uses.
- Characterizing water quality for reference sites.

Because nutrient concentrations vary naturally, Montana tested different geospatial frames and reference sites for nutrient concentration variation. To develop permit limits based on the criteria, Montana used EPA’s 1991 Technical Support Document for Water Quality-based Toxics Control. Ongoing work in Montana will lead to other large-river nutrient standards and additional site-specific wadable stream standards.

“These workshops provide states and EPA, as co-regulators, the opportunity to identify and seek solutions for the diverse problems associated with nutrient pollution. In 2018, workshops are planned for summer and autumn; visit www.acwa-us.org for more details on these events.”
Iowa. Iowa employs a nutrient reduction strategy to combat nutrient pollution. In Iowa, numeric nutrient criteria development presents significant challenges. Therefore, in lieu of adopting numeric nutrient criteria, Iowa hopes to achieve nutrient load reductions through performance-based actions. Working closely with the regulated community to adopt performance-based discharge limits, Iowa establishes limits based on the effect of the pollutant in the water and the feasibility and reasonableness of treating the pollutant. Iowa focuses on major and minor municipal WRRFs and industries that treat more than 3.8 million L/d (1 mgd). Under this approach, there has been considerable progress in nutrient pollution reductions at point sources throughout the state.

North Carolina. North Carolina uses water quality trading to combat nutrient pollution. North Carolina implements nutrient trading programs in specific watersheds where impairments have been identified. In these watersheds, point sources have a collective nutrient allocation (“bubble”) permit. Pursuant to this joint compliance approach, allocation is sold or leased among these facilities through an independently operated compliance association. So long as the collective cap is met, individual nutrient limits are not enforced.

In the final session on integrating nutrients TMDLs with permits, participant attendees acknowledged that communication gaps are a major barrier to adequate integration. They identified the existence of communication gaps between regulators and stakeholders and with permitting and TMDL staff. Many participants described better communication among the various interested parties as an important goal for resolving this challenge.

Future meetings
ACWA and WEF plan to tackle these three issues and more in greater detail at the next six nutrients permitting workshops. These workshops provide states and EPA, as co-regulators, the opportunity to identify and seek solutions for the diverse problems associated with nutrient pollution. In 2018, workshops are planned for summer and autumn; visit www.acwa-us.org for more details on these events.

Mark Patrick McGuire is an environmental program manager and Katie Foreman is an environmental program associate at the Association of Clean Water Administrators (Washington, D.C.).

States and EPA offer solutions to complex issues
At the Boise workshop, participants focused on the three issues mentioned above (technology implementation, permitting impediments, and TMDL integration).

Technology implementation. Participants named some of the significant barriers to technology integration as affordability, resource constraints, operator expertise, and political will. They also identified some solutions, including targeted technical training and greater public education on the need for such technologies at WRRFs.

Permitting impediments. Regarding impediments to permitting, participants identified affordability, lack of data, and resource constraints as challenges. One solution identified to mitigate these problems included changing the 5-year National Pollutant Discharge Elimination System (NPDES) permit cycle to 10 years. Other solutions included increasing flexibilities for states, implementing stronger regulations for nonpoint sources, integrated planning to identify issues and priorities for regulators and the regulated community, increased support and technical training, and public education.
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As Flushable Manufacturer Sues, We Push Back

WEF and NACWA File Amicus Brief in Support of District of Columbia’s Wipes Law

By Brianne Nakamura and Steve Spicer


This law, the Nonwoven Disposable Products Act of 2016, aims to protect the sewer systems from backups by defining the term flushable for any disposable wipes sold within Washington, D.C., and requires manufacturers of non-compliant products to “clearly and conspicuously label” them as products that “should not be flushed.”

The law provides that a “nonwoven disposable product” that is offered “for sale in the District” can be labeled as “flushable” only if it: (A) Disperses in a short period of time after flushing in the low-force conditions of a sewer system; (B) Is not buoyant; and (C) Does not contain plastic or any other material that does not readily degrade in a range of natural environments.

The D.C. Council passed the law unanimously in December 2016. As introduced, the bill prohibited the advertisement, packaging, or labeling of any nonwoven disposable product as flushable, sewer safe, or septic safe unless the claim is substantiated by competent and reliable scientific evidence. The bill authorizes the District Department of Energy and Environment to impose civil fines and penalties to sanction non-compliance with its provisions. The law requires the labeling rule to take effect Jan. 1, 2018, a deadline that the district is unlikely to meet.

The call to action

Since Washington, D.C. is a federal city, Congress has granted the city home rule authority to make and implement its own laws. But, the U.S. Congress also has retained jurisdiction over policies and budget matters; on occasion Congress has revoked district laws. In July 2017, some members of Congress suggested that they would take full advantage of this policy, by introducing a rider to the DC Appropriations Bill that would prevent the district from moving forward with the wipes legislation.

In response, WEF sent a letter of support to D.C.’s non-voting member of Congress Rep. Eleanor Holmes Norton and members of both the House and Senate Appropriations Committees to protect the district’s new law. Additionally, WEF issued a “Call to Action” to the WEF membership urging them to contact their senators and representatives to oppose the rider. The WEF Water Advocates program had a resounding response with 232 letters sent in just one week.

The lawsuit

The Kimberly-Clark Corp. has sued the district to stop enforcement of the law. The plaintiff’s case states that requiring manufacturers to adhere to the definition set forth in the new law “restrains commercial speech and compels speech by private actors,” which would violate the First Amendment. The manufacturer’s claim further says that the law violates the Commerce Clause because it invalidly seeks to regulate the conduct of manufacturers in other states by imposing civil sanctions on conduct that is entirely lawful in other states.
The Amicus Brief

In the brief supporting the district’s right to enforce the law, WEF and NACWA state that they “have a strong interest in the Court rejecting the current challenges to the authority of state and local governments to decide which products may safely enter their own sewer and wastewater systems and to create mechanisms to enforce those standards.”

The 32-page brief describes the burden that wipes place on sewer systems in Washington, D.C., and nationwide. “The increased popularity of wipes marketed as ‘flushable’ has been accompanied by a rise in costly burdens associated with handling flushed wipes – burdens borne directly by municipalities, utilities, and ratepayers,” the amicus brief states.

The brief explains the effects of wipes that do not readily degrade. They can combine with fats, oils, greases, and other debris to cause major clogs in sewer and wastewater systems. They can accumulate in pump impellers; this leads to reduced efficiency, increased electrical power used by pumps, and, potentially, complete malfunction. To restore service, workers must perform the costly, time consuming, and hazardous task of physically unclogging the pumps.


“We encourage our members to continue to share the messages “Only Flush the 3Ps” and “Toilets are not Trashcans.””

WEF continues to support the District of Columbia law, as well as convey the burden that flushable wipes and other products can cause our infrastructure. We encourage our members to continue to share their stories and hardships with their communities and representatives, along with the messages to “Only Flush the 3Ps” and “Toilets are not Trashcans.”
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- Improving Outcomes – Practices & Measures
- Implementing EUM at Your Utility
- Feedback Session

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The Collaborating Organizations have worked with utilities, water associations, research organizations, and technical assistance providers to create materials that help utilities address challenges and capture improvement opportunities. These materials include Effective Utility Management Primer. You can find these resources at www.WaterEUM.org.

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The Vaughan Conditioning Pump is a Vaughan Submersible Chopper Pump mounted on a portable stand and fitted with a high-velocity mixing nozzle. The Conditioning Pump recirculates wet wells, chopping and mixing to produce a homogeneous slurry that is more easily pumped out. Floating mats are removed and solids that have accumulated on the floor are re-suspended. Being portable, it can be used in multiple applications at a single job-site, facility or municipality. In one recent project, the Vaughan Chopper Pump paid for itself in 2.5 months. Contact us to see what we can do for you.

APPLICATIONS
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Ph: 708-891-4400 | Fax: 708-891-5786 | E-mail: info@gasvoda.com

ChopperPumps.com
St. Cloud, Minnesota is a leader in innovative, cost-effective, and sustainable practices. Donohue collaborated with its Resource Recovery Facility to produce a Resource Recovery and Energy Efficiency Master Plan that is guiding the Utility along its path to energy neutrality and greater resource recovery. This path includes the design of recently constructed Energy Efficiency and Biofuel Recovery improvements and Nutrient Recovery and Reuse facilities currently under construction.

April 11, 2017 was “Energy Independence Day,” the first day the wastewater treatment facility produced 100% of its required energy and achieved Net Zero Energy status. Annually, the facility produces more than 85% of its required electricity, exceeding purchased energy reduction goals 17 years ahead of schedule. Donohue congratulates the Facility on its well-earned accolades and for making the City GREATER.