Laboratory Committee on the Go at Annual Conference
By Becky Rose, Laboratory Committee Chair

IWPC Annual Conference 2017. What a whirlwind of a time. It was “go, go, go” for the Lab Committee. First, we held the BOD Lab workshop on Monday afternoon. This was an excellent opportunity for operators to get all their BOD questions answered. Even some of the more experienced operators left the workshop learning something new. Everyone walked away with a better understanding of BOD and a goody bag as a bonus, with donations from YSI, Hach and Environmental Express. They enjoyed it so much that a request has been put in to repeat it next year. Thanks to Hach, YSI and Thermo for providing the meters.
I am honored and humbled to serve as the new president of the IWEA for the 2017-2018 year. I would like to thank those who have served before me, especially Mark Termini, for their strong leadership of this wonderful organization.

As I prepared to take over the presidency, my thoughts turned to the executive board and each committee, and how passionately they work as a team, year in and year out, providing each of us with opportunities to share knowledge, networking and become involved at different levels. It takes many volunteers to put on the annual conference, specialty conferences, one-day seminars and other networking opportunities throughout each year.

I came to IWEA as a Young Professional (YP) many years ago and attended conferences every other year as my only involvement. I missed opportunities to grow because I did not volunteer or serve on a committee. Later, I was encouraged by my mentor, Tom Granato, to become involved and I began serving on the biosolids committee and later as the committee chair. Working with the other members of the committee allowed me to understand what it means to be a part of a professional team.

I was later nominated to become president and while honored, I felt intimidated by the work of my predecessors because of the tremendous respect I had for each of them. I realize however, that each one of us has something to contribute, and by working together we can accomplish great things. Peter A. Vanrolleghem, WEF Trustee and the keynote speaker at our annual conference, talked about members engaging IWEA. We can achieve this by stepping out of our comfort zone and volunteering to serve on a committee, stepping up and becoming a committee chair, inviting others to participate on committees or by simply joining the organization. IWEA is fiscally sound and strong in its membership. However, in an effort to continually improve, we need to grow as an organization. Young professionals, seasoned professionals, and operators are needed to see the organization achieve greater success.

The annual conference was held Apr. 24-26 as a joint effort with the Illinois Association of Water Pollution Control Operators (IAWPCO). This was the first collaboration between the two organizations that worked to provide educational, as well as networking opportunities to engineers, laboratory personnel, managers, operators, and other professionals in the wastewater industry. The event was truly a success. The positive feedback from the vendors and the energy throughout the Exhibition Hall was greater than in recent years. The scholarship raffle and other fundraising events were a great success as well. I would like to thank the conference planning committee, committee chairs and members, and all who dedicated time to make this conference successful. In addition, a special thanks goes out to our Executive Director, Laurie Frieders, who did a tremendous job organizing the event and working along with the Executive Team of IAWPCO.

I look forward to serving as IWEA President this year and, once again, encourage everyone to engage the organization through attendance at one of the many seminars/events, or inviting other professionals to become members. Participating in IWEA is beneficial, not only to the organization, but for us as professionals working to protect the water environment for future generations.
Monday night at the awards banquet, one of our own, Donna Coolidge received the Laboratory Analyst Award. Congratulations, Donna!!

The committee was back to work on Tuesday morning with the lab session. We had a great line-up of speakers and we would like to thank all of them: Scott Siders, Eric Kink, Cam Walker, Sue Glavin, Eva Kiss, Christina Smith and Kenny Smart.

The work didn’t stop there. The committee went on to judge the lab portion of the operators challenge. From the novice to the experienced, fun was had by all. This was a great opportunity for everyone to try their hand at lab skills.

The Laboratory Committee is a great, hardworking group of people. It has been an honor to work with everyone. I am going to be stepping down as the chairperson and Keith Richard from Decatur will be taking over as the new chair. I am sure he is going to do a great job.

Illinois Water Day Recap
By Tomek Rynkiewicz, submitted by Laurie Frieders, Executive Manager

This year’s Illinois Water Day (IWD) took place on April 7 and was hosted at the University of Illinois in Champaign. First organized in 2014, IWD represents the movement to acknowledge the significance of local water resources as well as the challenges which put these resources at risk. Thanks to our sponsors - ISEE, IWEA, NRES, the UIUC Hydrosystems Laboratory and the CEE department - IWD 2017 was an enormous success.

The event consisted of a poster session featuring research from graduate and undergraduate students as well as the screening of two films - Liquid Assets and DamNation - which address important and controversial issues in regards to water-related infrastructure. Following the films, open discussions were led by facilitators, including campus faculty. The discussions addressed diverse topics which link water and the built environment, such as the ethics or economics of water infrastructure.

Besides providing a thought-provoking conclusion to IWD, they also gave the attendees and the facilitators a new idea of the complexity of water management.
A group of 58 members attended the annual Industrial Pretreatment Dinner on Feb 15, 2017, at the Ditka’s Oakbrook in Oak Brook, IL.

Illinois Pollution Control Board Chairman Gerald Keenan was the speaker. He has many years of experience as a regulator, entrepreneur, consultant and financier in the electric, natural gas and telecommunications industries.

The title of his presentation was Can Economic Collaboration Help Meet the Goal of Improving Illinois Waterways? He discussed current water quality issues in Illinois from the watershed and wastewater treatment plant point of view (point source and non-point source). He also provided a regulatory update on the nutrient regulations in the state and gave an informative update on the water quality trading practices in watersheds to meet the new phosphorus discharge criteria and introduce a trading framework with a “market” mindset to reduce costs.
The IWEA Operators Challenge was held during the 2017 Illinois Wastewater Professionals Conference (IWPC) on Tuesday, April 24 in the exhibit hall. The fun started at 1 p.m. and finished up around 4:30 p.m. The challenge consisted of four events: Maintenance, Safety, Laboratory, and Operations, with a total of 32 participants. Each event was structured for learning and a bit of fun. Judges were assigned to each event, along with strict judging criteria. Necessary equipment was graciously supplied by participating vendors. Every participant received a certificate of participation and the winners of each event received an award plaque. Here are the results and recap of the challenge.

The Laboratory Event was a refined chlorine analysis featuring the latest gadgets from Hach. The challengers were graded on two different problems: calibrating pipet within a few percentage points of the calibrated value, and then a chlorine residual event. Competitors were judged on procedure and technique. The winners of this event were Christina Smith and Sue Glavan.

The Maintenance Event involved the identification of pump components and Supervisory Control and Data Acquisition (SCADA) use. Tools and parts were provided by Metropolitan Industries. The challengers were required to identify parts of a pump, which was quite entertaining since some of the participants had never seen the actual insides of a pump. The second part was to identify and record data from an exquisite SCADA program devised by the geniuses at Metropolitan Industries. The winners of this challenge were Edgar Mendoza and Joe Marino.

The Safety Event involved identifying the safety equipment necessary to complete the task for five different scenarios: entering a confined space, descending a fixed ladder into a dry pit, standing guard over a contained chemical spill, and safely performing electrical troubleshooting. The winners of this event were Joe Severson and Bill Hoyt.

The Operations Event was a plant operator’s worst nightmare. The short quiz was developed by the Environmental Resources Training Center (ERTC) experts and had a few devious twists woven into the questions. The winners were Shannon Pratt and Dan Small.

There were several intrepid individuals that successfully navigated all four of the challenges. Only one, Sue Glavan, earned the title of Overall Winner with a combined score of 308.

Thanks to all of the vendors who helped make this a successful event.

A special thanks to the Plant Operations Committee and members of the Operators Challenge sub-committee: Lee Melcher, Greg Garbs, Don Bixby, Craig Soling, Greg Pyles, Becky Rose, Mark Termini, Mary Johnson, Mike Carney, Rick Lallish, and Sara Arabi. We would also like to thank all the other volunteers who offered their time behind the scenes or during the event. Without everyone’s assistance, the Operators Challenge could not have been a success.

Photos by Ted Denning
From the Shed
2017 IWEA Watershed Management Track at the Illinois Wastewater Professionals Conference

By Dan Bounds and the Watershed Management Committee

The Watershed Management Committee planned and moderated a successful watershed management track at the recent IWPC Conference in Springfield. Scott Twait from the IWPC provided the Illinois Water Quality Standards Update. Abel Haile and Chris Davis from the IEPA provided the TMDL Program Status and Nonpoint Source Program Update. Gregg Good of IEPA’s Ambient Monitoring Unit provided an overview of the State’s ambient monitoring program, data, and priorities for 2017. We also learned:

- IEPA is planning on hiring additional staff in 2017 to support Bureau of Water programs.
- After 13 years of effort, numeric water quality standards for nutrients still elude Illinois.
- USEPA finalized its national criteria for ammonia in 2013. Mollusks are protected under these criteria, and nearly all Illinois streams are capable of supporting mussels. However, chronic Water Quality Standards would be cut in half from our current state water quality standard (WQS) if mussels are not present in a given water body. The WQS may revert to more-or-less what we have now. Illinois EPA is in a study phase to see how the new criteria would impact the state. Some major facilities or larger minor ones may have to upgrade treatment to comply. USEPA has expressed its insistence that any variance process be based on a Use Attainability Analysis (UAA). The agency is currently working on implementation procedures.
- IEPA is working on revising disinfection exemptions for wastewater facilities in Illinois. Recreational survey (UAA) must be conducted for each facility using a new protocol. IEPA staff may end up doing these (at a time when staffing is at an all-time low). It is not clear at this time how the UAA-based disinfection exemptions will be allowed under the bacteria standards. USEPA has informed IEPA it will not accept the proposed current draft UAA procedures.

Four panel discussions were held featuring a dozen experts in the field of water quality program management. Janet Buchanan from Heartlands Conservancy, Cindy Skrukrud from Sierra Club and Andrea Cline from Geosyntec led a panel discussion on watershed group formation. Teri Holland of the IEPA Surface Water Lakes Unit, Stephen McCracken of the Conservation Foundation and Lindsay Birt from Huff &Huff led a discussion on watershed monitoring program implementation. Scott Tomkins of the IEPA Watershed Management Section, Bob Caveny, the IDNR Conservation Stewardship Program Manager and Alley Ringhausen of the Great Rivers Land Trust led a discussion on watershed program funding. Cathy Demeroukas of the IEPA Permits Section, Dan Bounds from Baxter and Woodman and Matt Bardol of Geosyntec led a one-hour discussion on MS4 program development and implementation. Participants shared a great amount of information and resources to aid their watershed management efforts.

Continued On Page 7
USEPA Watershed Wiki

USEPA has created a Watershed Wiki, a watershed management resource that you can edit! There are more than 1,000 watershed articles and more than three million readers on the Wiki website. The website for the Wiki is: https://wiki.epa.gov/watershed2/index.php/Main_Page.

The Wiki is a place to:
• Share your best practices, case studies and lessons learned
• See what other watershed organizations are up to and learn from them
• Identify partners in your watershed area
• Evaluate and comment on watershed management tools or report on new tools
• View a map with water monitoring stations, high-resolution aerial photography, and more
• Provide a link to your watershed management plan for others to learn from and create a page about your organization

Students Win IWEA Scholarships

By Paul Hurley, Scholarship & Charitable Giving Committee

The winners of the 2017 IWEA Scholarship Contest were announced at our Annual IWEA Awards Banquet. The Clean Water Scholarship award winners were David Litwin from University of Illinois, Urbana-Champaign and Chelsea Peterson from Cornell University. Each will receive $1,000 to put towards their tuition. This year we introduced the Environmental Career Scholarship for high school seniors. Our first recipient, Serena Zhu from Aurora’s Waubonsie Valley High School, received $500 towards her college tuition.

Every year, our main scholarship fundraisers are the Basket Raffle and the Annual IWEA Golf Outing. This year’s Basket Raffle raised over $2,600 for IWEA and IAWPCO scholarships. Thank you to our committees, sponsors, and everyone who brought baskets to the fundraiser.

Photos by Ted Denning
2017 WEF and IWEA Award Winners Honored at Annual Banquet

By Nathan Davis, Collection Systems Committee

WEF AWARDS

Laurie Frieders received the Arthur Sidney Bedell Award, acknowledging her extraordinary personal service to the Member Association. Laurie has served as our Executive Manager or Secretary since 2008. She is also an active member of many IWEA committees.

Joel Ilseman received the William D. Hatfield Award, which is presented to operators of wastewater treatment plants for outstanding performance and professionalism. Joel has been in the water and wastewater field for 29 years and is an operations supervisor at Fox Metro Wastewater Reclamation District.

American Bottoms Regional Wastewater Treatment Facility received the George W. Burke Jr. Safety Award. The facility’s slogan is “safety flows” and they have gone over 2,686 days without a lost-time injury in their organization through management involvement and employee commitment to safety.

Donna Coolidge received the Laboratory Analyst Excellence Award, recognizing her for outstanding performance, professionalism and contribution to the water quality analysis profession. Donna works at MWRDGC and volunteers her time and expertise as an analyst to educate others.

Mary Johnson was recognized for her service as WEF Delegate 2013-2016 and for participating on the WEF Membership Workgroup. Mary is a past president of IWEA and is currently our Corporate Secretary and Website Chair. She has served on a variety of IWEA committees over the years.

Herb Anderson, Sam McNeilly, Charles Corley, Tim Kluge and Royce Hamende, Jr. were recognized as new WEF Life Members, commemorating their 35 years of consecutive active membership in WEF. They can now begin enjoying their free WEF membership. Congratulations, gentlemen!

IWEA AWARDS

Raj Bhattarai received the Best Technical Presentation Award, for his keynote presentation entitled Advances in Water Resource Recovery: An Overview. Raj manages Austin Water’s Environmental and Regulatory Services Division and was the 2007-08 president of the WEA of Texas.

Kelly Lockerbie received the Outstanding Young Professional Award, for her contribution as a young water environment professional. Kelly is currently the Young Professionals Committee Chair and is active on several other IWEA committees and a regular conference presenter.

Mark Halm received the Paul Clinebell Outstanding Service Award in recognition of his service to IWEA for more than 20 years. Mark has been a member since 1992 and is a past IWEA president, past chair of several committees and currently serves as our WEF Delegate 2017.

Continued On Page 9
Rick Lallish received the Kenneth C. Merideth Memorial Award for elevating the status of the plant operator and promoting operator professionalism within the State of Illinois. Rick teaches at Environmental Resources Training Center (ERTC) in Edwardsville and has 15 years of wastewater and collections operations experience.

President Mariyana T. Spyropoulos (MWRD) received the Public Official Award for her contributions to improve the water environment of Cook County, Illinois. Under her leadership, the district has reached several milestones and is continuing its environmental leadership focus.

Ms. Irein Thomas received the Clean Water Award Senior Prize and was the IWEA Stockholm Junior Water Prize Representative 2016. Her project was titled Effect of Water Contaminant Microplastics on the Vitality of Microorganisms. Irein attended Niles West High School.

Serena Zhu received the 2017 Environmental Career Scholarship. She is an avid member of Science Olympiad, a national merit finalist and in the top ten percent of her class at Waubonsie Valley High School in Aurora. She plans to major in environmental engineering next year.

John Greathouse received the Sylvanus Jackson Scholarship, which is an endowed scholarship available to students at the Environmental Resources Training Center (ERTC) at Southern Illinois University. John is looking forward to becoming a wastewater treatment operator.
Delegates’ Corner
Inaugural Illinois Water Professionals Conference
By Mark Halm, Delegate 2018

Having just returned from Springfield and reflecting on the program and events of the first IWPC conference, it is evident that IWEA is stronger than ever. We have passionate volunteers who worked tirelessly to ensure that every attendee could benefit from the educational and social events. Together, the Illinois Water Environment Association and the Illinois Association of Water Pollution Control Operators share the mission, the vision and the core values of the Water Environment Federation as stated below.

Mission
- Connect Water Professionals
- Enrich the Expertise of Water Professionals
- Increase the Awareness and Impact and Value of Water
- Provide a Platform for Water Sector Innovation

Vision
- A community of empowered professionals creating a healthy global water environment

Core Values
- Service
- Leadership
- Passion
- Scholarship
- Collaboration

The House of Delegates has been developing tools for member associations such as ours to develop a strategic plan. I am looking forward to the executive board long-term planning meeting this summer, led by our President Dan Collins. We will establish critical objectives and strategic goals as we plan for the future of the organization. I would like everyone to set a personal goal of inspiring one student or young professional to join our organization to help fulfill the IWEA mission of “Enhancing and Protecting the Illinois Water Environment through Education and Collaboration.”

Welcome New Members!
By Frederick Wu, Membership Committee Chair

JANUARY
Phillip Egebrecht
ChemStaff Inc.
Wayne Gibson
ChemStaff Inc.
Jay Patel
Illinois EPA
Barbara Scapardine
MWRDGC
Jay Shetty
MWRDGC
Guanglong Tian
MWRDGC

FEBRUARY
Peter Bugg

MARCH
Anthony Bukala
MWRDGC
Richard Campbell Jr.
MWRDGC

APRIL
Eric Carlson
Joseph Hanley
Rock River Water Reclamation District

MAY
John Murray
MWRDGC
Arturo Hernandez
Northwestern University
Mike McMahon
MWRDGC
Edgar Mendoza
Cindy Skrukrud
Sierra Club, IL Chapter
Matt Sokolowski
Elizabeth Tijerina

Pinakin Desai
Greg Firranteillo
Paul Ganvik
BLOCK USA, Inc.
Greg Halmagyi
Joe Marino
Greeley and Hansen
David Swarthout
Hanting Wang
Greeley and Hansen
Michael Zidonis Jr.
**Mark it down on your calendar…**

I am pleased to announce that the keynote speaker for the American Academy of Environmental Engineers and Scientists (AAEES)/ Water Environment Federation (WEF) Breakfast Lecture during WEFTEC 2017 will be our own past president, Dr. Krishna Pagilla.

After spending 20 years at the Illinois Institute of Technology, Dr. Pagilla took on a new challenge and became the Environmental Engineering Program Director at the University of Nevada, Reno. Dr. Pagilla is an expert and internationally-known leader in the fields of water quality, water resource recovery, water reuse, and environmental biotechnology. He has been recognized by WEF, International Water Association (IWA), AAEES and other organizations for his significant contributions to the water profession. He is a board-certified environmental engineer, and a fellow of both WEF and IWA. Dr. Pagilla is also the chair of the USA National Committee (USANC) of International Water Association.

For IWEA, he has served on the executive board and as president from 2012-13. His speech will be focused on recycled water use for potable and non-potable purposes in both water-rich and water-deficit regions. Dr. Pagilla will discuss the drivers for and limitations against water reuse in both water-rich and water-deficit regions. The focus will be on regulatory aspects, technical requirements, and triple bottom-line evaluations of water reuse for both potable and non-potable purposes.

The breakfast lecture will be held on Monday, Oct. 2, 2017. The event is a collaboration among WEF, AAEES, and the Inter-American Sanitary and Environmental Engineering Association (AIDIS). For more information, go to [http://weftec.org/attend/meetings--events/featured-events/aaeesaidiswef-breakfast/](http://weftec.org/attend/meetings--events/featured-events/aaeesaidiswef-breakfast/)

We hope to see you there.

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**Third Quarter Financial Report**

*By Debra Ness, Treasurer*

This will be my last report as the treasurer of the IWEA because Lou Storino will take over the treasurer responsibilities at the executive board and committee chair meeting in June. Thanks, Lou!

The third quarter is always a busy one for IWEA since we hold most of our educational programs during that period. In January we hosted the Government Affairs Seminar, the Industrial Pretreatment Committee Dinner in February and the Annual Meeting in April. Hopefully you had a chance to attend one or more of these events.

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**FINANCIAL STATEMENT**

*(As of 5/2/2017)*

**Bank Accounts**
- Community Bank .................. $ 88,128.20
- Scholarship Fund.................. $ 17,494.58

**Asset Accounts**
- 12 Month Reserve CD ............. $ 12,541.67
- 24 Month Reserve CD ............ $ 13,176.83
- 12 Month Reserve CD ............. $ 10,248.28
- 12 Month Reserve CD ............. $ 10,021.72
- 24 Month Reserve CD ............ $ 10,475.81
- 24 Month Reserve CD ............ $ 10,148.56
- 24 Month Reserve CD ............ $ 10,000.00

**Total .................................. $ 182,235.65**

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**TRIVIA ANSWER!**

**Answer:** 146 monitoring stations statewide, collecting data every six weeks. For more information, contact IEPA’s Ambient Monitoring Unit.
WEF’s 2017 Young Professionals Summit

By Kelly Lockerbie, Students and Young Professionals Committee Chair

What do you do when an aggregation of manatees gets caught in your dam? When your residential sewage pipe bursts? How about when your lift station decides to sink into the ground? These were just a few of the emergency situation experiences shared during the Water Environment Federation (WEF)/American Water Works Association (AWWA) Young Professionals (YP) Summit this year.

In February, WEF and AWWA hosted the YP Summit in Tampa, Florida. At this event, 164 young professionals from around the U.S. and Canada joined together for discussions on leadership skillbuilding and professional development. This year also included the first ever WEF Workshop for emerging YP leaders. As the IWEA Students & Young Professionals Committee Chair, I was fortunate to be able to attend both events as an IWEA representative.

The WEF Workshop kicked off with an icebreaker and a welcome from WEF leaders. We then heard success stories from various WEF YP committee leaders.

The Kentucky-Tennessee WEA shared their experience in creating a student chapter handbook, a document tailored to help college students identify the steps to take in order to create or reactivate a WEF student chapter at their school.

Central States WEA spoke on tips and ideas to further engage YPs in their organization. Chesapeake WEA shared their unique idea: Interview “Speed Dating,” a well-organized event at which students and companies sign up in advance to have several 15-minute interviews over the duration of a few hours.

The workshop shifted over to a presentation on an always appreciated topic – work-life balance – and then concluded with a presentation on unconscious bias in the workplace. Later that evening, the WEF and AWWA attendees joined together for a reception at the Florida Aquarium.

The next day was the YP Summit, where industry experts shared stories about unexpected or emergency challenges (Hint: trapped manatees) and provided guidance on how to take on leadership roles during those situations. We had breakout sessions with our tables to work through a hypothetical emergency situation and determine which steps to take. We learned that high-quality customer service is critical to a utility’s success in handling these types of situations.

The afternoon switched gears into a presentation by Linda Kelly, the former WEF Senior Director of Association Engagement, on workplace interpersonal communication using emotional intelligence. During this presentation, we identified four major personality types and determined the category in which we best fit. We were encouraged to step out of our comfort zone and learn how to change our perspective on certain traits of different personality types in order to create friendly, engaging working environments.

The final presentation, by Bill Stowe of Des Moines Water Works, provided advice on the importance of effective communication and leadership during times of emergencies, natural disasters, and major environmental concerns. After a closing from the WEF and AWWA managers, the YPs attended a networking reception to continue the fun.

My experience at the WEF workshop and YP Summit was unlike any other. Not only did I learn a tremendous amount about the importance of leadership and communication when unexpected issues arise, I also was able to develop a network of fantastic individuals who are passionate about our industry and are involved within their member association organizations. Through the friendships made during this event, committee leaders have a pool of young professionals they can reach out to for ideas and advice on how to expand and improve their students and young professional committees. Because of the YP Summit, I feel more connected to WEF on the national level, and would encourage member associations to invest in sending young professionals to be a part of this enlightening and inspiring event.
ANITA™ Mox:
Nitrogen Removal Technology in Action
By Meagan Matias, LIFT Committee

The quest for efficient and economical ways to remove nutrients from wastewater is at the forefront of discussion and research in the industry. Last year, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) took a big first step towards enhanced nitrogen removal, installing the ANITA™ Mox sidestream deammonification process at John E. Egan Water Reclamation Plant (Egan) in Schaumburg.

The ANITA™ Mox process is a continuous flow-through, single-stage nitrogen removal process specifically designed for waste streams with high ammonia concentrations. It uses a moving bed biofilm reactor (MBBR) to provide a low carbon footprint and eliminate the need for backwashing or cleaning. At Egan, the process is used to treat the post-digestion centrate sidestream.

Because this ammonia load exceeds the nitrification capacity of Egan’s aeration basins if returned to the head of the plant, centrate was pumped into a combined gravity sewer that flows to the Terrence J. O’Brien Water Reclamation Plant (O’Brien) in Skokie for treatment. This operational strategy was inefficient, caused considerable odor issues and corrosion in the gravity sewer, and significantly increased the nitrogen load at O’Brien.

In 2012, the MWRD reviewed available treatment technologies for nitrogen removal and piloted the Demon® process for centrate sidestream treatment. Concurrently, the Metropolitan Water Reclamation District of Denver piloted the ANITA™ Mox process. While both technologies proved successful in removing large percentages of N, the MWRD chose to implement a full-scale ANITA™ Mox process at the Egan plant due to its robustness and ability to be retrofitted into an existing set of decommissioned dissolved air flotation (DAF) tanks.

The Egan WRP has a design average flow of 30 million gallons per day (MGD) with a design maximum flow of 50 MGD. The 2016 average flow was 24.2 MGD. The ANITA™ Mox system at Egan is designed to treat 0.23 MGD of centrate at 1,080 mg/L ammonia as N (NH3-N) and provide a guaranteed NH3-N removal efficiency of greater than 75 percent. It consists of four deammonification reactors, along with an equalization tank to store centrate and ensure a consistent and continuous supply to the reactors. The reactors contain millions of small plastic carrier elements commonly referred to as “media,” which have a density slightly less than water.

Egan anaerobically digests solids from its own treatment train as well as sludge pumped from the James C. Kirie Water Reclamation Plant (Kirie) in Des Plaines. The digested sludge is dewatered using solid-bowl centrifuges which produce a liquid centrate stream containing an average ammonia nitrogen (N) concentration of 956 milligrams per liter (mg/L), roughly 42 percent of the total N load at the plant.
biofilm, with the media providing a large and protected surface area for growth. The outer aerobic layer of the biomass in contact with the centrate is made up of ammonia oxidizing bacteria (AOB) which oxidizes approximately 55 percent of the ammonia to nitrite. The layer closer to the surface of the media is made up of anammox bacteria, which anaerobically convert the nitrite produced by AOBs and a portion of the remaining ammonia into nitrogen gas and release it from the liquid phase.

The project at the Egan WRP is in the start-up phase. Initial process data shows the system operating as designed and successfully removing ammonia.

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**Mark Your Calendar!**

The 14th Annual IWEA Golf Outing will be on Thursday June 8, 2017 at the Links at Carillon in Plainfield, Illinois. Golfing will be followed by drinks, appetizers and awards. This event is an excellent opportunity for members to get together and for businesses to sponsor a hole, interact with other professionals and meet potential clients. All proceeds benefit the IWEA Scholarship Fund.

Registration is now open for attendees and still open for sponsorship opportunity. Visit the IWEA website, iweasite.org, to register online.

If you have any questions on sponsorship opportunities, please contact John Lamb, IWEA Golf Committee Chair at jlamb3858@gmail.com

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Thanks to all of our Annual Golf Outing Sponsors!

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14th Annual IWEA Golf Outing & After Party
Links at Carillon Golf Course, Plainfield, Illinois
Thursday, June 8, 2017 10:00 AM
State News
General Permit for the Discharge from Public Water Supply Facilities
The Illinois Environmental Protection Agency (IEPA) recently posted a new general permit on their public notification website for review and public comments. This general permit will be applied to discharges which include any of the following: clarifier sludge blowdown, particulate filter backwash and/or lime softener wastewater, iron filter backwash wastewater, or Zeolite softener wastewater, as long as they are not tributary to a prohibited water body. This permit is intended to replace existing permits for these facilities as they come up for renewal. New discharges will also be allowed under this permit by filing for coverage.

Settlement of the Lawsuit Involving MWRDGC NPDES Permits
Earlier this year, the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) and environmental groups reached an agreement and settled a lawsuit pertaining to nutrient limits for the NPDES permits for the Stickney, Calumet, and O’Brien Water Reclamation Facilities. Per the terms of the settlement, the MWRDGC permits for these facilities will include a 0.5 mg/l annual geometric mean phosphorus technology-based effluent limit that must either be met by the year 2030, or the district must provide evidence on why it is not economically feasible. The district will also establish a Nutrient Oversight Committee to study nutrients within the tributary watershed, and to develop an implementation plan to meet water quality standards recommended by the Illinois Nutrient Advisory Committee, or develop their own standards and implementation plan in the event that the state committee fails to make a recommendation. MWRDGC will also be required to conduct a study on the feasibility of meeting phosphorus limits ranging from 0.5 down to 0.1 mg/L.

While IEPA is currently assessing what this settlement means for other dischargers in the U.S., they have recently released the NPDES permits for these three facilities for public review and comment. Copies of the permits, including the language developed as part of the settlement, can be obtained on the IEPA public notification website.

415 ILCS 5/38.5 Time-Limited Water Quality Standards
In February, the governor signed a bill that would allow the Pollution Control Board to consider and approve time-limited water quality standards in Illinois. The term “time-limited water quality standard” is defined as a water quality variance that meets the federal requirements found in 40 CFR 131.14.

Illinois had previous rules in place that allowed variances from existing water quality standards. However, these rules were no longer in compliance with newer USEPA requirements. This new bill will allow a mechanism for the Illinois Pollution Control Board to grant water quality variances specific to water bodies, water bodies segments, or dischargers within the USEPA framework. The state bill does not mention a specific term limit for which a variance can apply; however, USEPA requires variances to be reevaluated at least once every five years. New rules to allow the full implementation of this legislation are currently being drafted by the IEPA / IPCB, and more details will be released as progress is made. The full text of the legislation can be viewed at: http://www.ilga.gov/legislation/

Federal News
It’s hard to predict what the full impact of the November 2016 election will be on USEPA. However, USEPA is actively taking action to fulfill the requirements of an Executive Order mandating a review and elimination of unnecessary regulatory burdens. USEPA requested public comments on any regulations which may be considered an unnecessary burden, and will be conducting national listening sessions. Additional information and final submitted public comments can be found on reglations.gov under Docket # EPA-HQ-OA-2017-0190-0042.
Fun Times at the Annual Conference!
New Shoveler Members Announced
By Greg Garbs, Plant Operations Vice Chair

Illinois Select Society of Sanitary Sludge Shovelers
The Shoveler Award was designed to honor those hearty individuals who strive tirelessly for the betterment of our beloved Illinois Water Environmental Association. A top secret conclave of the Shovelers was convened Monday afternoon, April 24 during the Illinois Wastewater Professionals Conference in Springfield. Matters of high importance and top secret actions requiring signatures occurred.

There are those individuals who are recognized, not by the board members or executive committee, but by fellow members who work quietly and diligently on one or more committees and give freely of their time. These individuals do not seek fame or fortune or even lofty aspirations of chair or board member status. These individuals that we honor with this award expect no congratulations or acknowledgement, but revel in the feeling of a job well done.

Shovelers, it is of vital importance that we, as practiced members, recognize and seek out these shy, meek individuals. These hard working members deserve the honor of elevation to the lofty pinnacles of Mount Biosolids. We recognize these intrepid individuals and bestow upon them the honor, air, and distinction of Shoveler status.

At this time, I, your exalted pH neutral, announce the newest members of our elite society. The precious golden shovel award was presented to Lee Melcher and Bernie Held for their tireless, unending devotion to the IWEA. An honorary shovel was presented to the WEF keynote speaker Mr. Peter Vanrolleghem. Let us welcome these newest members in joining us high on Mount BioSolids.

Executive Manager Attends WEF Workshop
By Laurie Frieders, IWEA Executive Manager

The Water Environment Federation (WEF) held a WEF and Member Association (MA) Resources and Knowledge Sharing Workshop in Alexandria this past February. This is a program that had been held in the past but was discontinued for several years due to budget constraints. The program focused on topics that impact MA staff members involved in the day-to-day running of the association.

This was my first chance to attend, since these events ended shortly before I became the IWEA Executive Manager. It was fantastic! The agenda was tightly packed and extremely pertinent. Getting to meet key WEF staff members face to face and have them present on their areas of expertise and current initiatives was invaluable and energizing.

The majority of the MAs had staff there to represent them. While I have had a chance to meet some of them at WEFTEC throughout the years, being alongside them at a two-day workshop together allowed for a deeper exchange of thoughts and resources.

Did I mention that there were some wonderful social events as well? WEF did a great job all the way around—the venue, the content, the social activities. My only wish would be for longer networking breaks during the program. I came away with several talking points for the executive board and many ideas to share and implement.

Photo by Ted Denning

Photo by Bill Gefroe
Illinois Water Environment Association Executive Board

<table>
<thead>
<tr>
<th>Member/Position</th>
<th>Affiliation/Address</th>
<th>Telephone/Email</th>
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</thead>
<tbody>
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<tr>
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Keep your eyes open for these upcoming events!

IWEA Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting/Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>June 8, 2017</td>
<td>IWEA Golf Outing Fundraiser</td>
<td>The Links at Carillon - Plainfield, IL</td>
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<tr>
<td>June 16, 2017</td>
<td>IWEA Executive Board &amp; Chair Meeting</td>
<td>Starved Rock Lodge - Utica, IL</td>
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<tr>
<td>Sept. 7, 2017</td>
<td>IWEA Nutrient Removal &amp; Reuse Seminar</td>
<td>Medinah Shriners - Addison, IL</td>
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<tr>
<td>Sept. 22, 2017</td>
<td>IWEA Executive Board &amp; Chair Meeting</td>
<td>Starved Rock Lodge - Utica, IL</td>
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<tr>
<td>September 30 -</td>
<td>WEFTEC</td>
<td>McCormick Place - Chicago, IL</td>
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<tr>
<td>October 4, 2017</td>
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<tr>
<td>Nov. 9, 2017</td>
<td>IWEA Collections Seminar</td>
<td>Hyatt - Lisle, IL</td>
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<tr>
<td>Dec. 1, 2017</td>
<td>IWEA Executive Board &amp; Chair Meeting</td>
<td>Starved Rock Lodge - Utica, IL</td>
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Please see www.iweasite.org to register for events.
Illinois Water Environment Association is a Member Association of the Water Environment Federation dedicated to improving Illinois’ surface, sub-surface and atmospheric water. The ILLINOIS CLARIFIER is a quarterly publication of IWEA providing pertinent information by, for and about IWEA members. The opinions contained herein are those of the authors and not necessarily those of the IWEA or the ILLINOIS CLARIFIER committee. Copy deadlines are the 15th of January, April, July and October. Direct comments and inquiries to: Illinois Clarifier, Karen Dix Managing Editor; email: ILClarifier@juno.com; website: http://iweasite.org/ Printed on recycled paper. Share with a friend and prospective member, then recycle.

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