

# CENTRAL STATES WATER

The Official Magazine of the Central States Water Environment Association, Inc.

## 93RD ANNUAL MEETING

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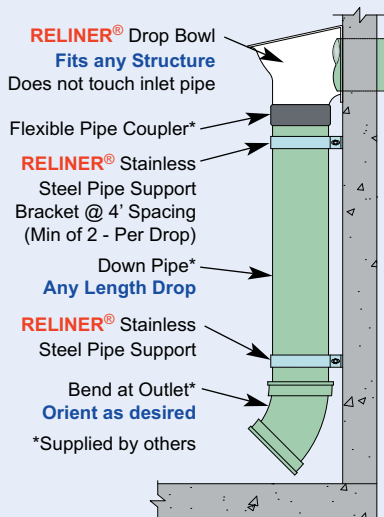
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# Passing the Gavel

By Doug Henrichsen



Time has flown by this year, and it is already time to pass the gavel. As I reflect on my last message, I want you to know what an honor it has been for me to serve you this year as President. CSWEA is a very strong Membership Association (MA) within WEF, and we do our job well. I want to congratulate you for all your hard work and volunteer time, as it is reflected in all the good things that are happening within our organization.

**Mark Eddington**, Kishwaukee WRD, will be replacing me at the Annual Meeting, now in August, as your next President for CSWEA. Mark has a long and successful history volunteering his time to CSWEA and has held many positions within our organization. He will do an excellent job as your incoming President. Mark has my full support.

I also wanted to take this time to thank all of the people who worked tirelessly to bring you **CSWEA's 93rd Annual Meeting**. The 2020 Local Arrangements Committee (LAC) lead by

**Tim Wedin**, MCES, did an outstanding job this year. Thanks to:

- Tim Wedin (Chair)
- Patti Craddock (Social and Catering)
- Kyle Fritz (Exhibitors)
- Lana Tullis (Printing, Signage, Silent Auction)
- Ashley Hammerbeck (A/V)
- Dan Popehn (Financial, Golf)
- Evelun Sluiter (Golf)
- Fasil Yitbarek (Poster Session)
- Patrick Haney (Golf)
- Christopher Harrington (Ethics Presentations)
- Tim Korby (Ethics Presentations)
- Mark Doneux (Stormwater Tour)
- Scott Mulinix (5k Run/Walk)
- Anna Munson (Conference Advisor)
- Peter Daniels (Conference Advisor)
- Rachel Lee (Conference Advisor)
- Chuck Lewis (Conference Advisor)
- Tracy Hodel (Conference Advisor)

The Technical Program Committee, lead by **Emma Larson**, City of St. Cloud, also did a fantastic job organizing this year's technical program.

Approximately 160 abstracts were submitted, which allowed us to hold five concurrent presentation sessions. This is outstanding, and I want to thank all of you who submitted abstracts, as well as presented. Members of the Technical Program Committee who reviewed all of the abstracts and developed the final technical program include:

- Emma Larson (Chair)
- Mandy Sheposh
- Matt Seib
- Collin Fitzgerald
- Ryan Giefer
- Mark Eddington

Since my last message, there have been several other big events that have occurred in our area, including the Illinois Section Operator Training Courses, Illinois Section S&YP Holiday Party, Illinois Section Meeting, Illinois Section B.E.E.R. Seminar, Wisconsin Government Affairs Seminar, Wisconsin Section Board Meeting, Minnesota Section 37th Innovative Approaches to Wastewater Operational Problems, Minnesota Section



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Winter Collections Workshop with MWOA, and the Minnesota Section Lift Pilot Open House for OREG SLG Process at the Rochester WRP. I will briefly cover each of these events below.

Two **Illinois Section Operator Training Courses** were held this past winter. On December 10, the first Operator Training Course was held at the Greater Peoria Sanitary District in Peoria, IL, and covered the **Fundamentals of Secondary Treatment**. The second training was held on February 6 at the Lake

County Public Works in Libertyville, IL and covered the **Fundamentals of Maintenance Practices I**. Both of these Illinois Section operator training courses were well attended, and the hope is that someday, these training sessions can be expanded to both Minnesota and Wisconsin. Congratulations again to **Mike Holland** for organizing these operator training events. The Illinois Section also held their **Section Meeting** at the Fox River WRD, and the **S&YP Holiday Party** on December 18 in Elgin, IL. The Illinois Section, in association with the Illinois

Association of Wastewater Agencies, also held a **Biosolids, Energy, and Environment Recover (B.E.E.R.) Seminar** on November 19 in Glen Ellyn, IL.

The **Wisconsin Section** conducted their Board Meeting on December 19 in Fond Du Lac, WI. They also conducted the **Wisconsin Government Affairs Seminar** the following day, which was held on February 20, 2020 in Fond Du Lac. These events were well attended.

The **Minnesota Section** held the **37th Annual Innovative Approaches to Wastewater Operational Problems Conference**, in collaboration with the Minnesota Wastewater Operators Association (MWOA), on February 4 in St. Cloud, MN. The MN Section also conducted their **Winter Collections Workshop** with MWOA on January 22, which was held at the MCES Regional Maintenance Facility in Eagan, MN. The event was well attended. The MN Section also held their **Lift Pilot Open House for OREG SLG Process** at the Rochester Water Reclamation Plant (WRP) on December 17.

While it is now Spring, there are several activities/functions that are planned for the coming months. Please keep an eye on these great educational and social events already in the works:

- **CSWEA Midwest Student Design Competition**, Monona Terrace, Madison, WI, April 6.
- **25th Annual CSWEA Education Seminar**, Monona Terrace, Madison, WI, April 7.
- **Wisconsin Section 2020 Classic Collection System Seminar**, Watertown, WI, June 4.
- **2020 Illinois Stormwater/Collections Systems Conference**, Naperville, IL, June 24.
- **Wisconsin Section 2020 Northwoods Collection System Seminar**, Marshfield, WI, July 23.
- **Minnesota Section 2020 Fall Collections Workshop w/ MWOA**, Duluth, MN, September 30.

Information for these upcoming events can be found on our website, [www.cswea.org](http://www.cswea.org). These events are valued by CSWEA members, as well as by many distinguished professionals, wastewater pioneers, operators, manufacturers, professors, and students throughout the region.

Again, thank you for the opportunity to serve you. I have greatly enjoyed this past year. [CS](#)



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# 'Til We Are Allowed to Meet Again...

By Mohammed Haque



**T**his issue of *Central States Water* was put together before the COVID-19 pandemic hit and so it may seem ambivalent about the latest happenings.

Print can be a little laggy like that. This article is the last one to be put in. As we waited to figure out when to release this issue (as a result of the Annual Meeting date change), we had to navigate three weeks of shelter-at-home in Illinois. WOW is all I can say. What a different world we live in right now. I am hopeful that this is temporary and pray that our scientists figure out a vaccine soon.

This time has really made us all rise to the occasion and I am so impressed with the professionals we have in our industry. In the weeks since the pandemic has started, I have seen amazing coordination by our long line of professionals. Their flexibility, commitment to maintaining our essential services and providing support in all ways, has been amazing. We are

going through unprecedented times. In these times, our work of making sure that people can flush their toilets and that their waters are clean, highlights the importance of what we do. **Don't hesitate to let people know about the amazing work you do every day.**

I have to highlight one superstar, **Stephanie Cioni**, with the Wheaton Sanitary District. Stephanie has put together the **Water's Worth It Essay Contest** in Illinois and also is running the **Don't Flush That Video Contest** (\$500 prize!) on Facebook. Public Education is such an important part of our message, especially during a pandemic! Stephanie received over **412 middle schoolers' essays** from **80 different schools** and **110 teachers**. WOWSERS! Well done, Stephanie. For the video contest, I encourage you to take a look on Facebook and if you live in Illinois, please enter!

CSWEA has also worked in tandem with IAWA and MEG Wastewater to

put together a CSWEA region funding needs for Clean Water projects. Tracy Ekola, Rachel Lee, and a host of other volunteers helped gather Project Priority Lists from IEPA, WDNR, and MPCA to get a grasp on the total funding needs in Illinois, Wisconsin, Minnesota. We were then able to ask our member utilities for other ready to go projects that they have which may not be part of the Clean Water SRF. It was amazing to know that as of the writing of this, there is a total need of \$5.4 billion in Clean Water projects in our region (\$2.0b in IL, \$1.7b in MN, \$1.7b in WI). The real need is even likely more, but the sheer volume of projects we have ready for Infrastructure Stimulus is astonishing. Hopefully, our Congressmen and Congresswomen can pass a COVID stimulus bill that allows us to enhance clean water infrastructure AND boost our economy as we endure this pandemic and it's economic toll.

Till we are allowed to meet again, I wish you all good health. [CS](#)



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# WEF Workforces

By Derek Wold and Tracy Ekola



**T**he House of Delegates (HOD) is gearing up for WEFMAX events, which will showcase the initiatives being pushed forward by the Delegates and WEF staff. These initiatives help support of WEF's mission to 1) connect water professionals, 2) enrich the expertise of water professionals, 3) increase the awareness of the impact and value of water, and 4) provide a platform for water sector innovation.

## WEFMAX 2020

All association leaders are encouraged to attend a WEFMAX to network, learn, and share experiences with other MAs. The locations for 2020 WEFMAX events are: Jersey City, NJ (March 25-27), Honolulu, HI (April 15-17), Charleston, SC (May 13-15), and Fargo, ND (May 27-29).

CSWEA WEF delegates will attend and present at the North Dakota and Hawaii meetings.

33 MAs took a survey to provide feedback on what they would like to learn at WEFMAX and if they were interested in presenting. The topics listed below are in order of highest ranking of what they wanted to learn:

1. Engagement
2. MA Resource Sharing
3. Diversity and Inclusion
4. Communication

These four topics will have their own 1.5-hour session.

The survey also ranked 'WEF Resources' as a topic to be included on the program which will provide an hour session to share resources WEF offers for MAs, where to find the resources, and much more.

## WEFMAX MEMBERSHIP CHATS

A casual meet is planned at all four WEFMAX events on Wednesday from 2:30 to 4:00 pm to discuss membership topics. Anything from membership recruitment and growth sustainability strategies to how to do a membership drive with a combined membership (ie WEF/AWWA).

## WEF HOD UPDATES

In addition to the standing WEF committees, the following work groups have developed charters as listed below for 2019/2020.

## 2019-2020 HOUSE OF DELEGATES WORK GROUP CHARTERS

### Stormwater/NGICP Workgroup

This workgroup will assist the National Green Infrastructure Certification Program (NGICP) with marketing the program. This program has earned the 2019 Power of A Summit Award which is the industry's highest honor and recognizes organizations that distinguish themselves with innovative, effective and broad-reaching programs and activities that positively impact America and the world. Delegates will focus on the need for skilled individuals and assist with compiling a list of prospects to receive information about the certification. Delegates will also work to compile State Agencies that WEF could be coordinating with as the program continues to expand.

### Public Education Workgroup

This workgroup will have responsibility for screenings of the documentary film "Brave Blue World." Delegates will be ambassadors for the documentary within their Member Associations (MAs).

Specifically, the responsibility is to work with other MA leaders and volunteers to hold film screenings that are as meaningful as possible. To support delegates, WEF is developing a toolbox to include social media content, graphics, blogs, clips from the film, and more. Delegates serving on this workgroup will be asked to report on the screenings held within their MAs. The objective is to have this movie viewed by as many people as possible and to spur conversations about water in communities.

*Brave Blue World* is a new documentary film that looks at how innovation and technology can create a sustainable water future. The film debuted on December 16, 2019 in Los Angeles. WEF will host a screening at all 4 WEFMAX's in 2020 and the grand debut will be at the 2020 WEFTEC Conference in New Orleans, Louisiana.

The film is narrated by Liam Neeson and includes interviews with a variety of water experts, as well as high-profile advocates Matt Damon and Jaden Smith. It features compelling stories, beautiful scenery, and examples from across five continents to show novel ways of tackling water problems. The film explores developments in areas such as water reuse, nutrient recovery, energy generation, decentralized treatment, and the digitization of water.

## Water Utility Workforce of the Future Workgroup

This workgroup will seek to assist and work with the WEF Operator Advisory Panel and the WEF Plant Operations and Maintenance Committee to enhance programs and practices that promote the

**“The Water Utility Workforce of the Future Workgroup will seek to assist and work with the WEF Operator Advisory Panel and the WEF Plant Operations and Maintenance Committee to enhance programs and practices that promote the water utility workforce of the future.”**

water utility workforce of the future. The focus will be on front-line water utility personnel like facility and collection system operators, mechanics, and laboratory technicians. The workgroup will develop materials and collaborate with the Member Associations regarding local water utility workforce development and recruitment and assist the MAs in delivering materials that promote the water utility profession.

### HOD COMMITTEE ACTIVITIES

All committees have been meeting regularly and completing their roles with specifics below:

**Steering Committee** has been coordinating activities with liaisons assigned to all committees and workgroups to provide and receive input as well as to track progress throughout the year.

**Nominating Committee** is working on updating last year's handout identifying positions and descriptions that need to be filled. This has previously been used at WEFMAX meetings to communicate and drum up interest in the available positions.

**Outreach Committee**, which includes Derek Wold, has been working on communication between HOD, MAs, and WEF and continual upgrades. They are assisting the Steering Committee with implementation of the dashboard for each

committee and workgroup to maintain minutes and communications. They are also evaluating video conferencing and document storage platforms to implement as WEF standards for communication.

**Budget Committee** is responsible for scoring for the popular WEF Pilot MA Grant Program. WEF and the Board of Trustees are committed to supporting Member Associations (MAs) to ensure our mutual success. Accordingly, in years that WEF has an operating surplus and exceeds targeted reserves, the Board of Trustees may designate funds to provide grants to MAs. These grants are intended to assist MAs in providing member value locally and to support MA operations, sustainability and growth. WEF would like to congratulate the 2020 Round One Winners, including CSWEA!

- Alabama – “Student Membership Initiative
- Alaska – “Membership Website Upgrade”
- **Central States – “Host SDC in Costa Rica”**
- Michigan – “Develop 10 Training Courses
- New York – “Work in Water”

**WEFMAX Committee** has been extremely busy with planning for 2020 and hosting each of the events.

### WEF CONSTITUTION AND BYLAWS

The WEF Constitution and Bylaws Subcommittee recently completed an extensive review of WEF's Constitution

and Bylaws and is recommending the following changes:

- Revising the name of the C&Bs to Bylaws, as WEF's Articles of Incorporation serve as the constitution of WEF.
- Removal of redundant or cumbersome language, resulting in a more streamlined document.
- Prescriptive, non-governing sections are being moved to either WEF, House of Delegates, or Committee Leadership Council Policy and Procedure.
- Simplifications have been made to various sections based upon legal counsel recommendations.

A webinar was held with the House of Delegates, Committee Leadership Council and WEF Past Officers to review the proposed changes.

### MA WEBINAR TOPICS FOR 2020

Beginning February 2020, WEF began providing bi-monthly 30-minute webinars on non-profit topics. Topics suggested to date include the following:

- How to measure the success of your strategic plan (metrics and accountability)
- Accounting: How to work with Form 990 in QuickBooks
- HR topics: Laws/changes
- Lobbying: Regulations
- Engage with Walt: Executive Director to Executive Director
- Fundraising: Tips
- Onboarding: Training for new board members
- Member inurement issues

The first webinar, *Do you Need to be a Registered Lobbyist at the State Level?*, was held on February 12. This webinar focused on knowing when someone would be required to be a registered Lobbyist. Being a new year, there can be new rules to be made aware of. The webinars are recorded for future viewing. [CS](#)





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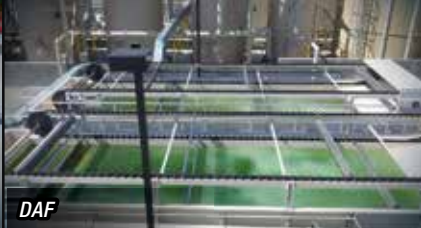


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# Working in Water is Work Worth Doing



By Rachel Lee

To coin a phrase from Madison Metropolitan Sewerage District, working in water is work worth doing. This sentiment was certainly evident in the room at the recent Government Affairs Seminar. Preston Cole, our newly confirmed DNR Secretary, gave an encouraging keynote address and reiterated the support WDNR offers to all of the members of the water and wastewater community. One of the statistics he mentioned really stood out to me. In 1990, WI NPDES dischargers were discharging four million pounds of phosphorus a year to our surface waters. This year, less than one million pounds of phosphorus will be discharged. That reduction would not be possible without a lot of people engaged in work worth doing. Everyone reading should give themselves a pat on the back for that one. It was refreshing and inspiring to hear so much encouragement and support from the leader of the WDNR.

Our workforce includes so many from diverse backgrounds: operators, engineers, managers, manufacturers, contractors, regulators, professors, and more. It takes so many skills to plan, design, construct, operate, and maintain our facilities. I am pleased to see more and more women coming into this field, but our work is not done yet. Our workforce is aging, and it is going to take significant efforts to bring more visibility to our industry and to attract more people to support ongoing success. In talking to others in our industry, it is evident that people love working in this industry. There is an inherent satisfaction and sense of pride that comes with protecting our water and environment. No one has to ask if their work makes a difference because we all know it does. The WDNR has started an apprenticeship program to help funnel operators into positions where they can learn the skills and get the certifications necessary to serve as the Operator in Charge, but the program



needs more participants. Perhaps this program could be a tool to elevate employees and assist in succession planning?

I recently experienced the gift of time through an unanticipated employment change. One of the things I was able to do during this time was to visit my sister in Germany with my family for a couple weeks. During our time in Germany, I noticed that restaurants or stores would often be staffed by people of similar ethnicities, regardless of the style of restaurant. Perhaps this is something we can utilize

in the wastewater industry. We can bring in some diversity to lead to more diversity. Whatever it may be – race, age, or gender. This may mean utilizing different means of communication or understanding different cultures or learning new apps, but after seeing what has been accomplished over the past decade, I know we are game for learning and adapting.

Bringing things back to what is happening in the section right now, you will all be happy to hear that the Energy and Resource Recovery Committee was voted into action by our section. Our section is sending representatives to the YP Summit and the DC Water Fly-In. We look forward to hearing from them when they get back. We are sponsoring a Water's Worth It essay contest inspired by WEF's Water's Worth It campaign and Lori Harrison's book *Why Water's Worth It*. We are also working with CSWEA and WEF to coordinate one or more screenings of the *Brave Blue World* documentary in our area. Please reach out if you would like to get involved in any of these efforts. Around twelve percent of our members are actively involved in a committee or section leadership role.

Thank you for the opportunity to serve as your Section Chair. I look forward to seeing many of you at one of our section events or at the annual meeting. [CS](#)

“In talking to others in our industry, it is evident that people love working in this industry. There is an inherent satisfaction and sense of pride that comes with protecting our water and environment. No one has to ask if their work makes a difference because we all know it does.”



## 2020 Government Affairs Seminar Summary

Prepared By: Bernie Robertson, Jennifer Jerich, and Lisa Creegan of Wisconsin DNR

The 2020 Government Affairs Seminar brought another day of networking, information, and education to approximately 215 professionals associated with the wastewater industry. The seminar provided an opportunity for attendees to obtain the most recent information regarding regulatory initiatives in Wisconsin and USEPA Region 5, and to learn how Wisconsin dischargers are managing their operations within this evolving regulatory environment. On February 20, 2020 the Government Affairs Seminar in Fond du Lac, WI welcomed attendees representing a wide spectrum of interests, including those involved with municipal government, state and federal regulation, education, advocacy, consulting, legal, and industry.

The day began with a lineup of DNR speakers covering topics related to phosphorus compliance, water quality trading, and operator certification. Keynote speaker and Wisconsin DNR Secretary Preston D. Cole provided an overview of upcoming initiatives and current challenges facing the DNR and emphasized the importance of wastewater professionals' involvement in developing solutions. Andrew Craig (WDNR Nonpoint Source Watershed Planning Coordinator) and Kevin Kirsch (WDNR Water Resource Engineer) discussed new water quality trading guidance and the prospect of a statewide water quality-trading clearinghouse. Finally, Amy Garbe (WDNR Wastewater Operations Engineer) provided updates regarding the Operator Certification program and discussed ways the Department is partnering with the Wisconsin Department of Workforce Development to provide additional recruiting and retention options for wastewater facilities such as apprenticeship programs.

Per and Polyfluoroalkyl Substances (PFAS) dominated the next session, with Adrian Stocks (WDNR Water Quality Bureau Director) providing a regulatory update. Dr. Scott Grieco of Jacobs then discussed PFAS in further detail based on his experiences and research in multiple states over the past decade. Topics covered included pretreatment alternatives, possible treatment technologies, costs, and implications for wastewater treatment facilities. Just before lunch, Vanessa Wishart, attorney for MEG Wastewater, provided a municipality's point of view regarding PFAS and the highlighted the challenges facing communities.

After lunch, Mary Frances Klimek, (Director, City of Racine Wastewater Utility) gave an inspirational talk titled, *This Is Us and I Mean All of Us* addressing transition, turnover, and employee engagement and retention. As a new generation of wastewater professionals decide whether to enter the wastewater industry in a competitive job market, this is becoming an increasingly important topic to wastewater managers. Ms. Klimek's presentation highlighted the importance of valuing and developing employees and providing an inclusive workplace to attract and retain a talented, dependable team of professionals.

Kathy Lake (Madison Metropolitan Sewerage District), Cathy Wunderlich (WDNR Public Water Engineering Section Chief),



**“Keynote speaker and Wisconsin DNR Secretary Preston D. Cole provided an overview of upcoming initiatives and current challenges facing the DNR and emphasized the importance of wastewater professionals' involvement in developing solutions.”**

Erin Abramson (City of Superior Environmental Services Division of Public Works), and Chris Murphy (Conservation Specialist, Rock County Land Conservation Department) led a session titled, *One Water* that focused on the interconnection of water and how communities will be challenged in the future to think holistically when tackling water management.

In the final session, Jerry Deschane (Executive Director, League of Wisconsin Municipalities) provided the latest in legislative and policy updates at the local and state level. Jason Knutson (WDNR Wastewater Section Chief), provided a final DNR update, including the latest information on water quality standard development, permitting reminders, the Clean Water Fund, and TMDLs. Mr. Knutson also announced the winners of the 2020 WDNR Wastewater Operator Awards. Warren Howard (City of Marinette POTW) and Jeff Bratz (Western Racine Sewerage District, Eagle Lake, Brighton, and MHC Rainbow Lake) received recognition as Outstanding Operator, and the Hartford Water Pollution Control Center and City of Superior were recognized for Outstanding Plant Performance. Congratulations to all that were nominated!

Planning efforts for the 2021 Government Affairs Seminar are already underway. The seminar will return to Fond du Lac in 2021 for its second year in a row at the new location. Mark your calendars for Thursday February 18, 2021 at the Radisson in Fond du Lac. [CS](#)



## 33rd Annual Collection System Seminar

Thursday, June 4, 2020

**T**he CSWEA Wisconsin Section Collection System Seminar Committee is excited to present our 33rd Annual Classic Collection System Seminar in beautiful Watertown, WI, on June 4, 2020. Our event will once again be held at the historic Turner Hall where the food is second to none, followed by an afternoon at the scenic Riverside Park. Six DNR credit hours will be available in the morning and afternoon sessions.

### MORNING SESSION:

#### Collection System Technical Presentations

Tentative technical topics include:

- Weather forecasts and predicted collection system effects.
- I&I micro-flow monitoring using level sensors.
- Trace wire systems for locating underground utilities.
- Safety: OSHA requires certifications for overhead hoists.
- Styrene emissions from steam cured CIPP.
- DNR – Update/safety.
- Collection systems and GIS.
- Microbial Induced Corrosion (MIC) – Cause and effect.

### AFTERNOON SESSION:


Vendor presentations and equipment displays, product demonstrations and door prizes.

### CO-SPONSORS:

Wisconsin Section – CSWEA and the Wisconsin Wastewater Operators Association

Online Registration when available will be on [www.cswea.org](http://www.cswea.org).

For more information, contact:

Mark Kolczaski, Baxter & Woodman, 262-763-7834 Ext. 3359 

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# Where Will We Find the Operators of Tomorrow?



By Patrick Haney

**A**s a profession, the water industry is passionate about problem solving. We continue to invent, innovate, and develop new solutions and technologies. We rise to the occasion to ensure our water resource recovery facilities continue to meet permit requirements, even when faced with operational or maintenance challenges. When regulators update our permits (often driven by federal standards, receiving water body water quality, and scientific advances), we work collaboratively to develop and apply the most cost effective solutions at our facilities and within our communities.

To continue our success, we need to replace ourselves with intelligent, educated, and well-trained engineers and operators. This isn't an asymmetric need, every industry fights for the most talented people to further their mission and successes. I am extremely happy to note that we have a bright future in terms of engineering talent.

The MN Section hosted an E-Week Pizza Lunch at the University of Minnesota. The students worked their way through over 25 pizzas and three large salad bowls. MN CSWEA was able to discuss careers in water and water resource recovery, connect students to our YP committee, and solicit attendance at the CSWEA Annual Meeting in St. Paul this May. During that time, I was able to meet with multiple professors and faculty. The professors shared a need to educate students about how Bachelor's, Master's, and PhD graduates fit within our industry. Knowing the diversity of our profession, we discussed a panel discussion and a water/wastewater specific career fair that would explore the roles and opportunities of utilities, consulting engineers, equipment manufacturers, and equipment representatives. The MN Section aims to strengthen our relationships with the Academic Institutions to ensure that the best and brightest students are attracted into our industry and know the fantastic and meaningful opportunities that exist.

Unfortunately, the availability of qualified wastewater treatment plant operators is a bit more limited. In Minnesota,



the grey tsunami has hit. We have more plant operators retiring than we can replace. At the Innovative Approaches to Wastewater Operational Problems workshop, I discussed the struggle to find qualified operators for rural facilities. This problem isn't unique to utilities, but also professional wastewater operations companies. Neither can find enough qualified and licensed talent.

In Minnesota, degrees in Water Environment Technologies and Water Quality Science can be earned at institutions such as the St. Cloud Technical & Community College and Vermilion Community College. Both programs produce well-qualified graduates ready to engage in the water industry. However, we still need more operators. **As an industry, our call to action is to educate high school students about water career opportunities, and make sure that education is available.**

As an industry, we can always cast the net a bit wider to capture more talented individuals. There is plenty of untapped potential within our states. Directing talented students to existing water operator programs is extremely achievable. I would encourage our industry professionals to reach out to high schools near World Water Week (August 23rd through the 28th). Central States and our partnering organizations can educate students on the value of water, how we all benefit from clean drinking water and waterways, and the opportunities in the water profession.

While a much larger effort, I would also encourage our industry to help establish additional operator schools within our respective regions. Now is the time to educate our community college and technical school leadership about the demand for new professional water operators. Establishing new water programs will not be an easy or expediate effort, but it is necessary to meet our industry's needs, continue to produce high quality water effluent, and protect our environment. For the past several months, I've had discussions with many people about the need for water programs in the Twin Cities Area as

*“Establishing new water programs will not be an easy or expediate effort, but it is necessary to meet our industry's needs, continue to produce high quality water effluent, and protect our environment.”*

well as other parts of the state. There are smart students living in the more urbanized sections of our cities that may not have financial access to four-year degrees. As an industry, we can work with the urban community colleges to provide a water-based education and subsequent career opportunities to the best and brightest; while meeting our operations staffing and resourcing needs.

Ending on a much lighter note, the MN Section has had a busy spring. As mentioned, we hosted the Innovative Approaches Wastewater Operational Problems workshop in St. Cloud. Not only did we have a great turnout for the event, but we also had a fantastic keynote speaker. Chad Pregracke spoke about the Living Lands and Water Effort to clean up America's Waterways. They operate mainly along the Mississippi River and have pulled out over 12 million pounds of trash and debris out of the river. Chad's story starts as a Mississippi River mussel diver. As a young man living on the river, he got tired of all the tires, styrofoam, plastic, bottles, and garbage. He started the effort to clean up the river on his own but has since grown his effort to multiple crews and barges. His story is truly inspirational, and I would encourage our members to leverage him as a guest speaker at future events.

Finally, the MN Section will be hosting a screening of the *Brave Blue World* movie at the University of Minnesota in March.



Chad Pregracke of Living Land and Water has removed over 12 million pounds of trash from the Mississippi River and its tributaries. At the Innovative Approaches to Wastewater Operational Problems workshop, he thanked WWTP operators for helping keep our rivers clean.

As noted on the WEF website, [www.wef.org/resources/for-the-public/brave-blue-world](http://www.wef.org/resources/for-the-public/brave-blue-world), *Brave Blue World* is a feature-length documentary that examines how new technologies and innovations can create a sustainable water future. WEF is a production partner of the movie, allowing WEF and WEA members to use the film to raise public awareness about the solutions to water challenges. I'd like to thank John Berrigan, a member of the WEF Public Communication and Outreach Committee, in advance for helping coordinate the event. [CS](#)

A large advertisement for JDV Equipment Corporation. The background is a photograph of a cable-stayed bridge with many white cables fanning out from a central pylon against a blue sky. The text "Experience You Can Trust" is written in a large, white, serif font on the left side. The text "Support You Can Rely On" is written in a similar font on the right side. In the bottom right corner, there is a logo for JDV Equipment Corporation, which includes a stylized blue and white circular emblem and the text "JDV Equipment Corporation" in red and black. At the bottom center, the website address "www.jdvequipment.com" is displayed in white text on a dark blue horizontal band.

# You Can't Move Forward Without Looking Back



By James Kerrigan

This is the last Chair's Message from me, and it really is bittersweet. We've done a lot and I personally have gained a greater appreciation for how much work goes on behind the scenes at CSWEA. I am in awe at the huge volunteer effort that has been put into CSWEA since its founding in order to make it a successful organization. I'm honored to be part of something that we can all be proud of. Look back through the award winners and you'll see the names of just some of the people who help make the industry great. But that is only a small sample. There are many other folks who don't get the acclaim that have worked tirelessly within CSWEA. A big thank you to everyone who has helped me this year and I hope that going forward I can return the favor.



Jake Callahan (Bloomington Normal WRD) and Mike Holland (Kishwaukee WRD). It's encouraging to see the interest and engagement from our operators. If anyone is interested in hosting an event or would like further information on the operator training program, please feel free to contact Mike Holland or Jason Neighbors. The next scheduled sessions are being held on April 30 in Plainfield, May 27 at FRWRD, June 24 at NIU, and July 14 at the Kishwaukee WRD [unless otherwise announced]. Hope to see you there.

Another highlight is the new venture that came from Stephanie Cioni and the public education committee – the Waters Worth It Essay Contest. This is a very exciting initiative and one that has gained some national attention at the WEF level. The essay contest evolves around the IL Section providing funding for grants to teacher and students for the best essays about our industry. The entries have been coming in fast and furious. Go to [www.cswea.org](http://www.cswea.org), and visit the news section for more information. It's a great chance to get involved and help out. There are lots of essays to be scored and the extra help is always appreciated. Below is snapshot of the various schools that the committee has received submittals from so far. A question for you: is your local school on the map? Why not? This is an example that shows what a committee can do to fulfill its role and one that 'does exactly as it says on the tin'. Way to go Stephanie!

## THE GOOD

Ah, the good, what we always strive for, and I think we've had plenty. First, the operator training is rolling along well. This program is being administered by Mike Holland and led out of the IL Section Operations Committee by Jason Neighbors. In conjunction with the new (to Illinois) wastewater operator CEU requirements, the IL Section introduced the CSWEA Operator Training program in 2019. In this inaugural year of the program, eight operator training events were held, which were attended by 95 different operators from upstate and downstate Illinois. 2020 has eight more events already on the schedule and interest in these is continually growing. One of the highlights of this program is that the courses are being taught by certified operators, such as Jason Neighbors (Glenbard Wastewater), Luke Markko (Northern Moraine WRD), Shirley Burger (Village of Bloomingdale – Retired),

## THE NOT SO GOOD

There is always an opposite side to the good, or so the story goes. Not everything works as planned and one of the issues we always run into is timing. Scheduling continues to be a struggle. No matter how good a topic is, if people don't attend success will be hard to come by. Timing really is everything. With all the various other seminars and conferences, the goal of finding the right combination of topics and timing is getting tougher to nail down. There are so many opportunities these days to go to a seminar or sit in on an online webinar that it can be a bit overwhelming to pick which to attend. With all these options all fighting for attendees, we have to do a better job of not just

*"There are many other folks who don't get the acclaim that have worked tirelessly within CSWEA. A big thank you to everyone who has helped me this year and I hope that going forward I can return the favor."*

getting the word out, but demonstrating the advantages of attending our seminars. CSWEA is a great hub of information and a perfect starting point to find what's available, and while it may be rough going at first, with persistence a good idea will grow to be a great one. So don't lose hope, give it a chance to get going. Rome wasn't built in a day, although I've read that it may have burned in one.

### THE REALLY NOT SO GOOD

I've said this before, but by our very nature we're not what people immediately think about when it comes to infrastructure. The potholes people drive over every day are much more visible than the effluent we discharge from our facilities. Fighting for funding is something we've got to keep doing. We have to keep ourselves visible to get funding so that we can sustain and advance our facilities as they are really fundamental for communities to grow and thrive.

Alright, enough looking back, let's look forward. As we continue our momentum as a section one of the main areas of success will continue to be the strength of our committees. We've seen some good growth in the Operations, B.E.E.R, and Public Education Committees, and we're re-invigorating some of the others establishing a good path going forward. Committees are the backbone of CSWEA. Everything we do is through some sort of committee, so get involved in one that perks your interest. It's easy to start and fun to be involved with. If you are not communicating about CSWEA to someone more than once a month, then you are not just missing out on good learning opportunity, but are missing a chance to be a part of something truly special. With your help we can keep the momentum going. Here is a quote from a famous Irish poet that I hope will help motivate you to get involved and get the most out of your section.

**"Do not wait to strike till the iron is hot;  
but make it hot by striking."**

– William Butler Yeats

So as fun as this year has been this for me, it's time to turn over the reins to someone that needs no introduction at CSWEA – Amanda Streicher. We all know Amanda will do a fantastic job based on her tireless work with CSWEA and GWS, and especially with Bob Swirsky backing her up, I know there are very exciting times ahead for the section. Please give Amanda and Bob as much help as you've given me. Of course, I'll still be around if you need anything.

As always stay tuned to CSWEA's website for the next upcoming events, including the next section meeting.  
[www.cswea.org/illinois/events/upcoming-events](http://www.cswea.org/illinois/events/upcoming-events).

Go raibh maith agaibh as eisteacht liom, slan abhaile a chairde, tabhair aire.

James CS



Essay Contest Submissions by Locations  
(From the IL Section Public Education Committee)

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# 2020 OFFICER NOMINATIONS

## Alan Grooms

### Treasurer 2020-2023

Alan Grooms has been a member of CSWEA and WEF since 2009. He has presented at the CSWEA Annual Conference, WEFTEC, the WEF Biosolids and Residuals Conference, and the WEF Nutrient Conference. Alan has served on several committees and organizing bodies, including service as the 2013 CSWEA Annual Conference Local Arrangements Chair, Wisconsin Section CSWEA Chair, as well as working on local arrangements committees and the Wisconsin Section Operations committee. Alan is a licensed professional engineer in the state of Wisconsin and a certified operator in Wisconsin. Alan graduated from Iowa State University with BS and MS degrees in Civil and Environmental Engineering, and currently works as the Operations Manager at Madison Metropolitan Sewerage District, where he has been employed for over 10 years. Prior to coming to the District Alan worked as a consulting engineer serving municipal clients.



## Tracy Hodel

### 2nd Vice President

Tracy Hodel has been a member of CSWEA since 2003. She has been an active member of CSWEA, serving on several committees and has served as Minnesota Section Chair and Trustee. Tracy has worked for the City of St. Cloud for 19 years, and is currently the Public Services Director; overseeing the Public Utilities, Public Works, Engineering and Airport Departments. Tracy earned a Bachelor of Science Degree in Aquatic Biology from St. Cloud State University. She holds a Minnesota Class A Wastewater Operator license, a Minnesota Class A Water Operator license, a Type IV Biosolids Operator License and is certified as an Envision Sustainability Professional with the Institute of Sustainable Infrastructure.



## Samantha Austin

### Young Professionals Representative '22

Samantha Austin has been an active member of CSWEA since 2014 and has held many roles including the WI Section Student and YP Representative and the WI Section Secretary. She was also a member of the Local Arrangements Committee. Samantha was the recipient of the WI Section Young Professional of the Year Award in 2017 and graduated from the University of Wisconsin-Madison with a bachelor's degree in Biology and a master's degree in Civil & Environmental Engineering. She is a licensed professional engineer in the state of Wisconsin and has been working as a consulting engineer for Strand Associates since 2013. [CS](#)



## David Arnott

### WEF Delegate '23

Dave Arnott has been a part of CSWEA since 2002. Dave was first involved with the Operations Committee for Wisconsin Section. Later, Dave served as Wisconsin Trustee/Secretary for six years. Dave then served in the leadership rotation of Wisconsin Section and then the leadership rotation of the Association.

Presently, Dave is Past Chair on the Executive Committee. Dave has also been a part of Global Water Stewardship.

Dave works out of the Waukesha office of Ruekert & Mielke, Inc (R/M). He has been with the firm since 1999. At R/M, Dave is the Team Leader for the Water and Wastewater group, which also includes SCADA and Electrical. As well, Dave earned a Bachelor of Science Degree in Civil and Environmental Engineering from the University of Wisconsin-Madison in 1995 and a Masters of Science degree in Engineering Mechanics from the University of Wisconsin-Milwaukee in 2000. He is a licensed Professional Engineer in Wisconsin, Illinois, and Oklahoma, and feels strongly that we all have a unique role in the protection of our clean water resources. [CS](#)



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# CSWEA'S 93RD ANNUAL MEETING

## Welcome to the 93rd Annual Meeting



Doug Henrichsen,  
CSWEA President 2019-2020

The Local Arrangements Committee (LAC) is excited to bring you the 93rd Annual Meeting that will be held at the Saint Paul RiverCentre in downtown St. Paul, Minnesota! Our conference theme this year will be the *Future of Water*. We have been hard at work to provide a great venue that builds technical knowledge, provides great networking opportunities, conducts Section and Association Business, and provides time for our members to reconnect with business associates and friends. The meeting is scheduled to begin on Tuesday, August 18, and will continue through Thursday, August 20. The conference hotel will be the historic Saint Paul Hotel, which is in close proximity to the RiverCentre. Our Social/Meet & Greet event will be held at the historic Landmark Center, which is also within walking distance of the RiverCentre and hotel.

We have a great series of conference technical sessions, as well as a keynote address, that are all geared towards the main conference theme. Plus, many exhibitors and sponsors will be presenting at the meeting this year. Please spend some time making the rounds, as they have worked very hard preparing for this event.

A brief overview of the annual meeting schedule is below:

On Monday, the golf outing, YP service project, stormwater tour, plant tour, GWS annual meeting, and the Social/Meet & Greet are all scheduled to occur. The golfing event will be a new venue this year with the use of Top Golf, an indoor golfing event that will be geared more to an accelerated/improved experience. The YP group is planning a service project for St. Paul's Crosby Farm Regional Park.

A stormwater tour is being planned at Allianz Field, as well as the Capitol Watershed District's new office building to see state of the art facilities. MCES Metropolitan Wastewater Treatment Plant, the largest facility of its type in Minnesota, will provide a wide-ranging tour of their plant. The Social/Meet & Greet event will be at the Landmark Center, which will provide opportunities to network and just have fun.

On Wednesday, the Jim Shaw Memorial 5k Walk/Run is scheduled to start the day, followed by exhibits, opening session/keynote address, technical sessions, poster session, exhibitor reception, 7S meeting, Golden MH Society meeting, YP meeting, diversity and inclusion pop-up event, Annual Business Meeting, and the Annual Awards Reception. Five technical sessions throughout both Wednesday and Thursday are being planned. Technical sessions will focus on numerous Future of Water topics that include biosolids and resource recovery, energy reduction and production, operations and facility management, nutrients, stormwater, PFAS, data and asset management, collections systems, research and innovation, ethics, and other important topics.

The keynote address will be delivered jointly by Ms. Jeannine Clancy, Assistant General Manager at MCES, and Ms. Katrina Kesler Assistant Commissioner of the MPCA. Their keynote is focused on how *Sewer Separation, I&I Reduction Efforts are paying off in the City of Minneapolis*. Our honored WEF visitor will be Ms. Lynn Broaddus, President-Elect for WEF. We are excited to have Lynn, who is a member of both WEF and CSWEA, since her company is also located in the Minneapolis area.

On Thursday, the state section business meetings, more technical sessions, exhibits, poster sessions, silent auction, annual association meeting, and other activities are scheduled to occur. The conference is planned to conclude around 4:00 pm.

An overview of the RiverCentre layout showing the location of the meeting place is included in this brochure, as well as the overall conference schedule. A big thank you goes out to all who have worked tirelessly for this Annual Meeting. We look forward to seeing everyone in August!

## Conference at a Glance

TUESDAY, AUGUST 18		LOCATION	ROOM
1:00 - 3:30	Golf Outing	Top Golf	---
12:30 - 5:30	Stormwater Tour	Allianz Field, Capitol Region Watershed	---
1:00 - 4:00	Plant Tour	Metro WWTP	---
1:00 - 4:00	YP Community Service Project	Crosby Farm Regional Park	---
4:00 - 5:30	Tours Meet-up at Brewery	Surly Brewing Co.	---
6:00 - 6:30	Global Water Stewardship Annual Meeting	Landmark Center	Main First Floor
6:30 - 10:00	Social / Meet & Greet	Landmark Center	Main First Floor

WEDNESDAY, AUGUST 19		LOCATION	ROOM
6:15 - 7:45	5k Run/Walk		---
8:00 - 6:00	Exhibits	Saint Paul RiverCentre	Ballroom A-D/Concourse
8:00 - 9:00	Opening Session and Keynote	Saint Paul RiverCentre	Ballroom E & F
9:00 - 9:15	Morning Break	Saint Paul RiverCentre	Ballroom A-D
9:15 - 10:15	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
10:15 - 11:00	Exhibits Only/Career Networking Event	Saint Paul RiverCentre	Ballroom A-D/Concourse
11:00 - 12:00	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
12:00 - 1:00	Exhibitor Lunch	Saint Paul RiverCentre	Ballroom A-D
1:00 - 2:30	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
2:30 - 3:00	Poster Session I, Afternoon Break	Saint Paul RiverCentre	Ballroom A-D/Concourse
3:00 - 4:00	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
4:00 - 6:00	Exhibitor Reception	Saint Paul RiverCentre	Ballroom A-D/Concourse
4:00 - 6:00	Diversity & Inclusion Pop-Up	Saint Paul RiverCentre	Ballroom A-D
4:00 - 4:15	7S Meeting	Saint Paul RiverCentre	Meeting Room 2
4:15 - 4:30	Golden Manhole Society	Saint Paul RiverCentre	Meeting Room 4
4:30 - 5:00	YP Gathering	Saint Paul RiverCentre	Ballroom A-D (side tables)
5:00 - 6:00	Annual Business Meeting	Saint Paul RiverCentre	Meeting Room 2
6:30 - 7:00	Awards Reception	Saint Paul RiverCentre	Ballroom E & F
7:00 - 9:00	Annual CSWEA Awards Event	Saint Paul RiverCentre	Ballroom E & F

THURSDAY, AUGUST 20		LOCATION	ROOM
7:00 - 8:30	State Section Business Meetings	Saint Paul RiverCentre	Meeting Rooms 12-14
8:30 - 9:30	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
8:00 - 12:00	Exhibits	Saint Paul RiverCentre	Ballroom A-D/Concourse
9:30 - 10:30	Poster Session II, Morning Break	Saint Paul RiverCentre	Ballroom A-D/Concourse
10:30 - 12:00	Technical Sessions	Saint Paul RiverCentre	Meeting Rooms 2-9
12:10	Silent Auction Bids Due	Saint Paul RiverCentre	Ballroom A-D/Concourse
12:00 - 1:30	Annual CSWEA Association Meeting	Saint Paul RiverCentre	Ballroom E & F
1:30 - 3:30	Technical Sessions/Ethics/Ops Training	Saint Paul RiverCentre	Meeting Rooms 2-9

REGISTRATION HOURS		
11:00 - 5:00	Tuesday, August 18	The Saint Paul Hotel
6:30 - 9:00	Tuesday, August 18	Landmark Center – Meet & Greet
8:00 - 5:00	Wednesday, August 19	Saint Paul RiverCentre
8:00 - 4:00	Thursday, August 20	Saint Paul RiverCentre

EXHIBIT HALL HOURS		
8:00 - 6:00	Wednesday, August 19	Exhibit Hall Open
8:00 - 12:00	Thursday, August 20	Exhibit Hall Open

# CSWEA'S 93RD ANNUAL MEETING

## Local Arrangements Committee

Name	Organization	LAC Role	Email
Tim Wedin (Chair)	Metropolitan Council Environmental Services	2020 LAC Chair	<a href="mailto:timothy.wedin@metc.state.mn.us">timothy.wedin@metc.state.mn.us</a>
Emma Larson	City of St. Cloud	Technical Committee Chair	<a href="mailto:emma.larson@ci.stcloud.mn.us">emma.larson@ci.stcloud.mn.us</a>
Kyle Fritze	Great Northern Environmental	Exhibits Chair, Silent Auction	<a href="mailto:kfritze@gnenv.com">kfritze@gnenv.com</a>
Lana Tullis	Burns & McDonnell	Printing and Signage Chair, Silent Auction	<a href="mailto:ltullis@burnsmcd.com">ltullis@burnsmcd.com</a>
Ashley Hammerbeck	WSB	A/V Chair	<a href="mailto:ahammerbeck@wsbeng.com">ahammerbeck@wsbeng.com</a>
Chuck Lewis	Brown and Caldwell	Conference Advisor	<a href="mailto:clewis@brwnncald.com">clewis@brwnncald.com</a>
Dan Popehn	Victaulic	Treasurer, Golf Outing	<a href="mailto:dan.popehn@victaulic.com">dan.popehn@victaulic.com</a>
Evelyn Sluiter	AE2S	Golf Outing	<a href="mailto:evelyn.sluiter@AE2S.com">evelyn.sluiter@AE2S.com</a>
Fasil Yitbarek	SEH	Poster Sessions	<a href="mailto:fyitbarek@sehinc.com">fyitbarek@sehinc.com</a>
Patrick Haney	Stantec	Golf Outing	<a href="mailto:patrick.haney@stantec.com">patrick.haney@stantec.com</a>
Christopher Harrington	HR Green	Ethics/Operator Training Sessions	<a href="mailto:charrington@hrgreen.com">charrington@hrgreen.com</a>
Tim Korby	HR Green	Ethics Session/Catering	<a href="mailto:tkorby@hrgreen.com">tkorby@hrgreen.com</a>
Mark Doneux	Capitol Regions Watershed District	Stormwater Tour	<a href="mailto:mdoneux@capitolregionwd.org">mdoneux@capitolregionwd.org</a>
Anna Munson	Wenck	Conference Advisor	<a href="mailto:amunson@wenck.com">amunson@wenck.com</a>
Patti Craddock	SEH	Social and Catering Chair	<a href="mailto:pcraddock@sehinc.com">pcraddock@sehinc.com</a>
Peter Daniels	Wenck	Conference Advisor	<a href="mailto:pdaniels@wenck.com">pdaniels@wenck.com</a>
Rachel Lee	LAI, Ltd.	Conference Advisor	<a href="mailto:rlee@lai-ltd.com">rlee@lai-ltd.com</a>
Scott Mulinix	Boerger	5k Run/Walk Chair	<a href="mailto:smu@boerger.com">smu@boerger.com</a>
Tracy Hodel	City of St. Cloud	Conference Advisor	<a href="mailto:tracy.hodel@ci.stcloud.mn.us">tracy.hodel@ci.stcloud.mn.us</a>
Doug Henrichsen	Brown and Caldwell	2019-2020 CSWEA President	<a href="mailto:dhenrichsen@brwnncald.com">dhenrichsen@brwnncald.com</a>

## Technical Program Committee

Emma Larson (Chair)	City of St. Cloud	<a href="mailto:emma.larson@ci.stcloud.mn.us">emma.larson@ci.stcloud.mn.us</a>	MN
Colin Fitzgerald	Jacobs	<a href="mailto:colin.fitzgerald@jacobs.com">colin.fitzgerald@jacobs.com</a>	MN
Mark Eddington	Kishwaukee WRD	<a href="mailto:meddington@kishwrd.com">meddington@kishwrd.com</a>	IL
Mandy Sheposh	Johnson Controls	<a href="mailto:alpoole2@gmail.com">alpoole2@gmail.com</a>	IL
Matt Seib	Madison MSD	<a href="mailto:matts@madsewer.org">matts@madsewer.org</a>	WI
Ryan Giefer	Wisconsin Rapids WTF	<a href="mailto:rgiefer@wirapids.org">rgiefer@wirapids.org</a>	WI

## Executive Committee

- President, Doug Henrichsen
- 1st Vice President, Mark Eddington
- 2nd Vice President, Jane Carlson
- Treasurer, Beth Vogt
- Immediate Past President, David Arnott
- WEF Delegate '21, Tracy Ekola
- WEF Delegate '20, Derek Wold
- PWO Representative '21, Kathy Crowson
- YP Representative '20, Jillian Kiss
- Minnesota Section Trustee '20, Alison Sumption
- Illinois Section Trustee '21, Mike Holland
- Wisconsin Section Trustee '21, Jay Kemp
- Executive Management, Amy Haque and Mohammed Haque

## Conference Highlights

**Tuesday, August 18**

### TOP GOLF EVENT

*Top Golf*

6420 N Camden Avenue | 1:00-3:30 pm



Top Golf is a golfing game and venue that anyone can play (and win), regardless of their golfing experience. The range is set up to allow for interactive play, with both technology and a physical set up that will allow for more engaged interaction



with your friends, colleagues, and fellow golfers. Each player scores points by hitting micro-chipped golf balls at giant dartboard-like targets on an outfield. The closer you get your ball to the center or 'bullseye' and the further the distance, the more points earned. The 2020 golf event includes: an appetizer buffet, free top golf play, coaching from Top Golf Professionals, and a hosted "Tournament", and a chance at many skill prizes.

For corporate sponsorship opportunities, including a 'Hole in One' game, contact the Golf Outing Coordinators Patrick Haney ([patrick.haney@stantec.com](mailto:patrick.haney@stantec.com)) or Daniel Popehn ([dan.popehn@victaulic.com](mailto:dan.popehn@victaulic.com)). [www.topgolf.com/us/minneapolis](http://www.topgolf.com/us/minneapolis)

### REUSE, BREWS AND LID TOO!

Saint Paul and Minneapolis Stormwater Tour  
12:30-5:30 pm



Please join us on a tour of innovative stormwater management in Saint Paul and Minneapolis, hosted by Minnesota Section Stormwater Committee. The tour will begin at Allianz Field, the new home of the Minnesota United FC Major League Soccer team. See all of the latest innovative stormwater management at and around Allianz Field, where the City of Saint Paul and the United FC have developed landmark clean water infrastructure, which will recycle more than two million gallons of rainwater every year. This unique system, the largest and smartest of its kind, will be used to irrigate trees and grass across the site, and to serve future developments around the stadium.

From Allianz Field, we travel to Capitol Region Watershed District's (CRWD) new office building and see its state of the art rainwater harvest and reuse systems along with LID practices, landscaping and pocket park, all developed in a brownfield.

Following the CRWD site visit we will travel to the Towerside Innovation District in Minneapolis. This system collects stormwater from four new multi-family housing developments and centrally treats the stormwater runoff in rain gardens that also serve as park-like, publicly accessible spaces. At the conclusion of the tour we will stop at Surly Brewing's Destination Brewery (a brownfield redevelopment with low impact stormwater systems as well) and enjoy one of their brews and light snacks before heading back to the Saint Paul Hotel.

### PLANT TOUR

Metro WWTP | 1:00-4:00 pm



MCES's Metropolitan Wastewater Treatment Plant is the largest plant in Minnesota, treating an average flow of 192 mgd in 2019. The plant includes enhanced biological phosphorus removal in its liquid treatment train and state of the art incineration, air pollution control, and energy recovery in its solids management process. In addition, the plant includes MCES's centralized maintenance facilities, the analytical laboratory serving all MCES plants, and extensive odor control measures to ensure it is a good neighbor to the surrounding community. The tour will provide a wide-ranging overview of this impressive facility, it will include specific stops at highlights and unique features of the plant, and it will provide an opportunity to discuss relevant topics with staff involved in its operation, optimization, and capital planning.



After the tour, attendees will gather with friends from the stormwater tour at Surly Brewing Company. Carpooling is encouraged.

### COMMUNITY SERVICE PROJECT

Crosby Farm Regional Park | 1:00-4:00 pm  
(Location Subject to Weather Conditions)

Volunteer to work with other CSWEA volunteers at the City of St. Paul's Crosby Farm Regional Park! Located along the scenic Mississippi River, this park was once the largest and longest running farms in the West End and Highland Park area. Volunteers will help with invasive weed removal and cut brush piling. For more information about this year's project, contact Amy Patterson by email at [amy.patterson@tkda.com](mailto:amy.patterson@tkda.com) or Trevor Prater by email at [trevor.prater@metc.state.mn.us](mailto:trevor.prater@metc.state.mn.us).



# CSWEA'S 93RD ANNUAL MEETING

**Tuesday, August 18**

## MEET & GREET

Landmark Center | 6:30-10:00 pm

Kickoff the Annual Meeting with a step back in time to network with your fellow water quality professionals at the historic **Landmark Center**. Enter off 5th Street through the main doors facing Rice Park. Registration will be setup at the entrance – remember to get your drink tickets and come hungry! Plenty of food options await. We look forward to seeing you, whenever you can make it.



**Wednesday, August 19**

## JIM SHAW MEMORIAL 5K RUN/WALK

St Paul Hotel Lobby | 6:15-7:30 am

Meet in the lobby of the St Paul Hotel for the 5k run/walk along the Mississippi River. Course details will be provided at registration.

This year the 5k event will be run in honor of Jim Shaw, who passed away in November 2019. Jim was an active CSWEA member and avid runner. While Jim enjoyed the running, he certainly relished the camaraderie that running provided. He encouraged many of his friends and colleagues to participate with him in whatever running event he could find, whether it was the Central States 5k or a self-organized WEFTEC run with the promise of breakfast after. Jim's love of water and running were evident to all that met him, and it is fitting that we honor him with this race.

## OPENING SESSION AND KEYNOTE ADDRESS

Ballroom E & F | 8:00-9:00 am

Join us as we start the day with a Keynote address, presented by Jeannine Clancy (MCES) and Katrina Kessler (MPCA) at the 93rd CSWEA Annual Meeting on the topic of sewer separation, and how I&I reduction efforts are paying off in Minneapolis and Saint Paul. Jeannine was appointed Assistant General Manager with MCES in July 2017. Katrina was appointed Assistant Commissioner for Water Policy and Agriculture with the MPCA in April 2019. Both will bring a unique working atmosphere to the keynote address.

## TECHNICAL SESSIONS

Meeting Rooms 2-9

9:15-10:15 am, 11:00-12:00 pm, 1:00-2:30 pm, 3:00-4:00 pm

For more information, please see the Technical Program.

## EXHIBITS

Ballroom A-D/Concourse | 8:00-6:00 pm

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.

## EXHIBITOR LUNCH

Ballroom A-D | 12:00-1:00 pm

The Exhibitor Lunch offers exhibitors and conference attendees to meet in a relaxing and social environment. Please visit Ballroom A-D, where the Exhibitor Lunch will be held.

## POSTER SESSION I

Ballroom A-D/Concourse | 2:30-3:30 pm

Posters will be on display in the Ballroom A-D/Concourse. Presenters will be available at their posters at this time to discuss their posters and answer questions. Please stop and visit.

## EXHIBITOR RECEPTION

Ballroom A-D/Concourse | 4:00-6:00 pm

Light snacks and refreshments (remember to bring your drink tickets!) 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.

## DIVERSITY & INCLUSION POP-UP

Ballroom ABCD | 4:00-6:00 pm

Engage, Share, and Celebrate! Stop by the Diversity & Inclusion Pop-Up space located in the Exhibit Hall to share your thoughts and ideas about diversity and inclusion in our industry. Be part of establishing our organization's initiatives to create a vibrant and inclusive community of engineers, operators, students, and professionals. We want to hear from you! Everyone welcome!

## CSWEA ANNUAL BUSINESS MEETING

Meeting Room 2 | 5:00-6:00 pm

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.

## Wednesday, August 19

### CSWEA ANNUAL AWARDS EVENT

Ballroom E & F | 7:00-9:00 pm

**6:30 to 7:00 pm** – Social Reception. Connect with friends and enjoy refreshments before the Awards Banquet.

**7:00 to 9:00 pm** – 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.

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.



## Thursday, August 20

### STATE SECTION BUSINESS MEETINGS

Meeting Rooms 12-14 | 7:00-8:30 am

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

Ballroom A-D/Concourse | 8:00-12:00 pm

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.

### TECHNICAL SESSIONS

Meeting Rooms 2-9

8:30-9:30 am, 10:30-12:00 pm, 1:30-3:30 pm

For more information, please see the Technical Program.

### POSTER SESSION II

Ballroom A-D/Concourse | 9:30-10:30 am

Posters will be on display in Ballroom A-D/Concourse. Presenters will be available at their posters at this time to discuss their posters and answer questions. Please stop and visit.

### SILENT AUCTION

Ballroom A-D/Concourse

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 Kyle Fritze at [kfritze@gnenv.com](mailto:kfritze@gnenv.com) for more information. Bids will be posted at 12:10 am in Ballroom A-D/Concourse.



### ANNUAL CSWEA ASSOCIATION MEETING

Ballroom E & F | 12:00 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 2019 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.

# CSWEA'S 93RD ANNUAL MEETING

## Technical Program

WEDNESDAY, AUGUST 19					
	Session A	Session B	Session C	Session D	Session E
	Biosolids and Resource Recovery	Energy Reduction and Production	Operations and Facility Management	Nutrients & CEC	Stormwater
Moderator	Mark Eddington	Ryan Giefer	Matt Seib	Shanna Czeck	Mandy Sheposh
Room	2 & 3	4	5	7 & 8	9
9:15-9:45	Sidestream Phosphorus Management – Assessing Uncertainty for Technology Identification <b>Eric Redmond</b> , Black & Veatch	From Evaluating and Financing to Commissioning of Your Biogas to RNG Project: What Every WRRF Needs to Know <b>Becky Luna</b> , Carollo Engineers, Inc.	Let the Water Flow: Starting Up a New 720 MGD Project at MWRDGC's Stickney Water Reclamation Plant <b>Ryan Christopher</b> , Greeley and Hansen	In Pursuit of the Chloride Reduction "Easy Button": An Overview of the Many Tools and Strategies Used for Chloride Source Reduction by a Wastewater Treatment Plant in Southern Wisconsin <b>Catherine Harris</b> , Madison Metropolitan Sewerage District	A Regional Approach to Reducing Pollutant Loads to the City of St. Cloud's Sole Drinking Water Source <b>Noah Czech</b> , City of St. Cloud
9:45-10:15	PFAS in Biosolids: State of Knowledge and Treatment Opportunities <b>Mohammad Abu-Orf, PhD</b> , Hazen and Sawyer	Energy Reduction During the Electrochemical Treatment of Water for the Removal of Estrogenic Compounds <b>Emily Maher, PhD</b> , Donohue and Associates	Cedar Rapids Nutrient Test – Aerobic Granular Sludge <b>Eric Evans</b> , HDR	Pilot Plant Demonstration of Stable and Efficient High Rate Biological Nutrient Removal with Low Dissolved Oxygen Conditions <b>Natalie Beach</b> , Carollo Engineers	Use of the Optimizer™ Software to Develop a Program of Flood Mitigation Projects <b>Lisa Goddard</b> , City of Minneapolis
10:15-11:00	Break				
11:00-11:30	The Future of Managing PFAS in Wastewater and Biosolids <b>Todd Williams</b> , Jacobs Engineering	Membrane Aerated Biofilm Reactor Technology; Many Birds in One Stone – Nutrient Removal with Process Intensification, Resiliency, and Energy Efficiency <b>Amit Kaldate</b> , Suez Water Technologies & Solutions	Operations Workshops Provide Benefit in the Commissioning of Biological Phosphorus Removal (BPR) for the Village of Cary, IL <b>Troy Larson</b> , Strand Associates	Testing Advancements in Filtration Technology to Meet Ultra Low Total Phosphorus Requirements <b>Mark P. Hughes, P.E.</b> , Aqua-Aerobic Systems, Inc.	Landmark Clean Water Infrastructure at Allianz Field <b>Anna Eleria</b> , Capital Region Watershed
11:30-12:00	Durational Biosolids Odor Control Using Peroxide Regenerated Iron Technology (PRI-Tech®) at Metropolitan St. Louis Sewer District's Lower Meramec Treatment Plant <b>Michael Nelson</b> , USP Technologies	RINs – Biogas Upgrading to RNG for Pipeline Injection and Vehicle Fuel <b>Kim Murdock-Timmerman</b> , Unison Solutions, Inc.	Keeping Your Critters Happy: Achieving Cold Weather Nitrification via Post Lagoon MBBR <b>Larry Li</b> , Veolia Water Technologies	eXeno™: New Operational Strategy of MBBR for Removal of Pharmaceuticals and Other Micropollutants from Municipal Wastewater Effluent – Results From Pilot Operation <b>Elena Torresi</b> , Veolia Water Technologies-AnoxKaldnes	Stormwater BMP Pretreatment – Lessons Learned From Minnesota <b>Dan Murphy</b> , Advanced Drainage Systems
12:00-13:00	Exhibitor Lunch				
	Session F	Session G	Session H	Session I	Session J
	Biosolids and Resource Recovery	PFAS in Wastewater	Operations and Facility Management	Data & Asset Management	Stormwater
Moderator	Mandy Sheposh	Matt Seib	Ryan Giefer	Mark Eddington	Mark Doneux
Room	2 & 3	4	5	7 & 8	9
13:00-13:30	Comparison of Struvite and Brushite Recovery: Model Based Technical and Economic Evaluation <b>Sara Arabi</b> , HDR	PFAS: Concerns and Treatment <b>Alan Labisch</b> , Ruekert & Mielke, Inc.	Optimized Substrate Removal and Energy Consumption in Membrane Aerated Biofilm Reactor with Intelligent Biofilm Thickness Measurement and Control <b>John Koch</b> , DuPont	A Smarter Way to Treat <b>Ken Neu</b> , Environmental/Health Products & Service LLC	The Challenge of Maintaining Stormwater Control Measures: A Synthesis of Recent Research and Practitioner Experience <b>Vinicius Taguchi</b> , University of Minnesota
13:30-14:00	New Concept for Integrated Nutrient Removal and Anaerobic Digestion <b>James Postiglione</b> , HR Green	Emergency Response PFAS Water Treatment System Design and Implementation <b>Katie Wolohan</b> , Barr Engineering Co.	Applying CFD Modelling to Establish Existing Secondary Clarifier Capacity to Handle Wet Weather Flows Without New Facilities <b>Lloyd Winchell</b> , Brown and Caldwell	So Much Data, So Little Information: Advances in Data Analytics and Visualization for Wastewater Design and Energy Management <b>Justin Irving</b> , Hazen and Sawyer	Lakeview Beach Beneficial Use Impairment Assessment. City of Lorain, Ohio <b>Rica Enriquez</b> , Geosyntec Consultants, Inc.
14:00-14:30	The Impacts of Influent Metal Loads on Nutrient Recovery and EBPR: A NEW Water Case Study <b>Steven Graziano</b> , Jacobs	Point and Non-Point Sources of PFAS to Wastewater Treatment Plants <b>Sara Arabi</b> , HDR	5 Things a Young Professional Can Tell You About New Technologies for H&H Modeling <b>Luisa Torres</b> , Stantec	Milwaukee Metropolitan Sewerage District's Asset Management Journey <b>Greg Hottinger</b> , MMSD	Bringing a Lost Urban Stream Back to Life: Trout Brook Nature Sanctuary <b>Alice Messer</b> , City of Saint Paul Department of Parks and Recreation
14:30-15:00	Break				
	Biosolids and Resource Recovery	Instrumentation	Operations and Facility Management	Pretreatment	Stormwater
15:00-15:30	State-of-the-Industry Review of Source Separated Food-Waste Co-digestion <b>Tanja Rauch-Williams</b> , Carollo Engineers	Virtual Reality and Design Visualization – Enabling Owners and Operators to Take Charge of their Designs <b>Amanda Streicher</b> , Baxter & Woodman, Inc.	Improved BNR Performance Through Selective Sludge Wasting <b>Daniel Dair</b> , World Water Works	Electroless Nickel Plating Wastewater is a Major Source of Soluble Non-Reactive Phosphorus to the St. Paul, MN, Metropolitan WWTP <b>Walter Atkins</b> , Metropolitan Council Environmental Services	Coping with Future Rain Events – City of Madison, WI Multi-Faceted Approach <b>Jim Bachhuber</b> , Brown and Caldwell
15:30-16:00	Experimentation, Design Consideration and Challenges for Real World Treatment of PFAS Laden Sludge <b>Sudhakar Viswanathan</b> , Veolia Water Technologies	Are Your Instruments Accurate? A Cross Functional Approach to Detecting Instrument Errors in the Metropolitan Wastewater Treatment Plant Secondary System <b>Laura Fletcher</b> , Metropolitan Council Environmental Services	Utilities Use Peak Wet Weather Flow Management with Pile Cloth Media Filtration to Meet Permits <b>John Dyson</b> , Aqua-Aerobic Systems, Inc.	Piloting a Home Softener Improvement Incentive Program to Reduce Chloride to the Sewer <b>Emily Jones</b> , Madison Metropolitan Sewerage District	Study of Polycyclic Aromatic Hydrocarbons in the Pike River Sediment <b>Ellie Haviland</b> , Carthage College

THURSDAY, AUGUST 20					
	Session K	Session L	Session M	Session N	Session O
	Biosolids and Resource Recovery	Bits & Bobs	Operations and Facility Management	Energy Reduction and Production	Research and Innovation
Moderator	Mandy Sheposh	Matt Seib	Mark Eddington	Ryan Giefer	Shanna Czeck
Room	2 & 3	4	5	7 & 8	9
8:30-9:00	Water Research Foundation CalPrex Phosphate Recovery Validation Study at The Madison Metropolitan Sewerage District <b>Menachem Tabanpour</b> , CNP	Utilizing Real-time Automated Controls to Minimize Cost and Maximize Performance of a Flood Control BMP <b>Mark Doneux</b> , Capitol Region Watershed District	Making Granules Out of Flocs: Selective Pressure for Aerobic Granulation in Continuous Flow Activated Sludge Processes <b>Leon Downing</b> , Black & Veatch	Next Generation Resource Recovery Update: Startup and Construction of the Co-Digestion to Renewable Natural Gas (RNG) Pipeline Injection Project at the Des Moines WRF <b>Dustin Craig</b> , PE, CDM Smith	Algae-based Secondary Treatment with Nutrient Removal: Evaluating a Revolving Algal Biofilm Treatment system at Full-Scale in Slater, IA <b>Martin Gross</b> , Gross-Wen Technologies
9:00-9:30	Dividends of Gravity Thickener Control <b>Lee Pinkerton</b> , Metropolitan Council Environmental Service	Storm Water Reuse Utility: Its Financial Operation and Capital Cost Correlation to a Potable Water Utility <b>Craig Eldred</b> , City of Waconia	Improving EBPR Stability, Saving Energy and Optimizing Alum Polishing at the Seneca WWTP <b>Christine Voigt</b> , Metropolitan Council Environmental Service	Power Purchase Agreement Changes Result in New Approach to Digester Gas Use at Janesville <b>Jay Kemp</b> , Black & Veatch	Peracetic Acid (PAA) Wastewater Disinfection Trends and Application <b>Scott Schaefer</b> , AE2S
9:30-10:30	Break				
	Biosolids and Resource Recovery	Energy Reduction and Production	Operations and Facility Management	Nutrients	Research and Innovation
10:30-11:00	Land Application Education: What Engineers and Operators Can Learn from Farmers About Biosolids Management <b>Matt Seib</b> , Madison Metropolitan Sewerage District	Comparing Energy Savings and Process Performance of Conventional Versus Advanced Aeration Control Systems <b>Tanja Rauch-Williams</b> , Carollo Engineers	Sustainable Nutrient Recovery While Meeting Water Quality Based Effluent Limits <b>Ed Coggin</b> , Weston Solutions	Water Quality Trading: Requirements, Case Studies, and Lessons Learned <b>Jane Carlson</b> , Strand Associates, Inc./UW-Mad	Opportunities and Challenges Associated with PAA Disinfection <b>William Martin</b> , Hazen and Sawyer
11:00-11:30	Post Aerobic Digestion – A Simple but Comprehensive Solution for Biosolids Management <b>Bryen Woo</b> , Ovivo USA LLC	The Path to Achieve One of Minnesota's Most Stringent Total Phosphorus Limits <b>Susan Danzl</b> , Short Elliott Hendrickson, Inc.	Balancing Anaerobic Mass Fractions and Fermentation During Start-Up of the Geneva BNR Process <b>Michael Cho</b> , CDM Smith	To the MDV and Beyond: Fond du Lac's Phosphorus Compliance Continuing Story <b>Samantha Austin</b> , Strand Associates	Do Graphene Oxide Nanostructured Coatings Mitigate Bacterial Adhesion? <b>Karl Wuolo-Journey</b> , Geosyntec
11:30-12:00	Optimizing Aerobic Digestion Process and Energy Use by De-Coupling Aeration from Mixing <b>Tyler Kunz</b> , EnviroMix, Inc.	Nutrient and Energy Reduction with Low Dissolved Oxygen Operations <b>Don Esping</b> , Brown and Caldwell	A Quiet Place – WW Operations <b>Colton Jones</b> , AE2S	Identification of Operational Control Strategies for Stable and Efficient Biological Nutrient Removal Under Low Dissolved Oxygen Conditions at Cold Temperatures <b>Rania Bashar</b> , University of Wisconsin-Madison	Ultra Low Effluent Total Phosphorus: A Tale of Three Cities <b>Avinash Bhat</b> , Evoqua Water Technologies LLC
12:00-13:30	Lunch				
	Session P	Session Q	Session R	Session S	Session T
	Ethics	Collection System	Operations and Facility Management	Nutrients	Operator Training
Moderator		Shanna Czeck	Mandy Sheposh	Ryan Giefer	
Room	2 & 3	4	5	7 & 8	9
13:30-14:00	Professional Ethics in Engineering <b>Pat Berzonik</b> and <b>Joe Labuz</b> , University of Minnesota	Large Pipe Inspection Technologies: Laser, LiDAR, and Manned Entry <b>Sean O'Rourke</b> , Hazen and Sawyer	Reducing the Cost and Footprint of Ballasted Activated Sludge Treatment <b>John Fraser</b> , Carollo Engineers	Zeolite Incorporated Materials for Enhancing Nitrogen Removal in Mainstream Wastewater Treatment <b>Anndee Huff</b> , University of Minnesota	1:30-2:25 Purpose & Fundamentals of Wastewater Treatment
14:00-14:30		Assessing the Interrelated Risks of Hydraulic Transients and Corrosion in Three Critical Ductile Iron Force Mains <b>Dianne Mathews</b> , Western Lake Superior Sanitary District	Optimizing Two-Stage Anaerobic Digestion via Recycle from an Aerobic Digester <b>Justin Wippo</b> , Thermal Process Systems	Complying with the Lowest Phosphorus Stream Discharge Limit in the State of Wisconsin <b>Jim Fisher</b> , Jacobs	2:25-2:30 Break 2:30-3:00 Fundamentals of Maintenance Practices
14:30-15:00		Implementing a Cost-Effective Infiltration and Inflow Reduction Program Through Prioritized Sewer Inspection and Rehabilitation <b>Doug Youngblood</b> , CDM Smith	Integrating Improved Operator Training for Successful Capital Projects <b>Angie Craft</b> , Metropolitan Council Environmental Services	Novel Demand-Based Intermittent Aeration Control for Simultaneous Biological Nutrient Removal Under Low Dissolved Oxygen Conditions <b>Rachel Stewart</b> , University of Wisconsin-Madison	3:00-3:30 Hands On Combination Air/Vacuum Valve Function & Maintenance
15:00-15:30		Application of Real-Time Weather Forecast in Collection System Operation <b>Hazem Gheith</b> , ARCADIS	The Talk: Encouraging Emerging Leaders to Look Beyond the Fence Line <b>Keith Haas</b> , Racine Wastewater Utility	Evaluating Different Treatment Pathways to Address Current and Future Nutrient Reduction and Operation Goals <b>Don Esping</b> , Brown and Caldwell	<b>Chris Harrington</b> , HR Green, <b>Mike Holland</b> , Kishwaukee WRD, and <b>Robert Walton</b> , Western Lake Superior SD.

## Presenters

### KEYNOTE PRESENTERS



Jeannine Clancy



Katrina Kessler

#### Sewer Separation, I&I Reduction Efforts are Paying Off

The Metropolitan Council Environmental Services (MCES) and the City of Minneapolis have reached a milestone in joint efforts to protect public health and our water quality, while avoiding future high costs. The Minnesota Pollution Control Agency recently terminated a longstanding joint combined sewer overflow permit. While once commonplace, a combined sewer overflow into the Mississippi River hasn't occurred since 2010, demonstrating that local and regional investments to separate the systems – and to reduce inflow and infiltration (I&I) of groundwater and stormwater into the wastewater system – are reaping financial and environmental benefits. Minneapolis and Saint Paul may be the only major metropolitan cities in the country to successfully separate their combined systems.

When the wastewater system was originally constructed, stormwater and wastewater flowed into the same pipes, the combined flow exceeded capacity after major rainfall or during snowmelt would overflow into the river. Concerted collaborative investments over multiple decades to separate the systems reduced (and ultimately eliminated) the occurrence of overflows.

To achieve this, Minneapolis and Saint Paul invested over \$330 million in new, separated infrastructure and MCES invested about \$1 billion to renew regional infrastructure in the last decade.

In partnership with local communities, MCES created a critical regional program to reduce I&I and requires local comprehensive plan updates to address I&I from private property sources, as up to 80% of clear water entering the wastewater system comes from private infrastructure. Despite regional population growth and average annual precipitation increasing, in the last decade the annual wastewater flow to regional treatment plants has declined. While water conservation plays a role, I&I reduction and sewer separation efforts have been essential.

These smart investments and collaborative efforts are a major factor in the average household in the Twin Cities region continuing to pay about 40% less for wastewater service than households in regions with similarly-sized wastewater systems.

#### Presenters:

**Jeannine Clancy** was appointed Assistant General Manager of MCES in July 2017, where she and her staff are responsible for wastewater system planning and the design, construction and commissioning of the MCES capital program, which invests about \$150M annually into MCES' wastewater treatment plants and conveyance system. Jeannine is honored to be part of an organization that protects public health and the environment,

and fosters the economic growth of the Twin Cities metropolitan area. Before working for MCES, Jeannine was the Director of Public Works for the cities of New Hope and Golden Valley, MN and gained project delivery experience with the City of Scottsdale, AZ. An active member of the American Public Works Association (APWA), Jeannine earned a Master of Arts degree from Minnesota State University and a Bachelor of Science degree from Morningside College.

**Katrina Kessler** was appointed Assistant Commissioner for Water Policy and Agriculture in April 2019. Prior to Katrina's return to the agency, she was the Director of the Surface Water and Sewers Division at the City of Minneapolis, where she provided strategic direction for the management of the City's 150-year-old sewer infrastructure and worked to meet climate and water quality goals. Previously, Katrina worked at the MPCA for 13 years as a permit engineer in the Municipal and Industrial Divisions, and was the Effluent Limits Supervisor and Manager of the Water Assessment Section in the Environmental Analysis and Outcomes Division. Katrina has a Bachelor of Arts in Environmental Science from American University and a Master of Science in Environmental Engineering from the University of Minnesota. She enjoys swimming, biking, and running outside (when it isn't snowing) and downhill and cross-country skiing (when it is), as well as traveling with her husband, Jason, and their two sons, Quinn and Damian. Katrina is excited to bring her passion for public service as well as her collaborative and pragmatic problem-solving approach to the MPCA.

### ETHICS PRESENTERS



Pat Brezonik



Joe Labuz

#### Professional Ethics in Engineering

For this two-hour combination of presentations, two distinguished professors from the University of Minnesota Department of Civil, Environmental and Geo-Engineering will be our guides. **Pat Brezonik** (Professor Emeritus) and **Joe Labuz** (Professor and Department Head) will be leading us through the basics of ethics in the engineering profession, as well as covering case studies highlighting ethical dilemmas, and discussing how to resolve them appropriately. For many years, Professor Brezonik led the training efforts for research and professional ethics for graduate students within the Department of Civil, Environmental and Geo-Engineering. He has also organized and conducted previous ethics training sessions for CSWEA. Joe Labuz is a Professional Engineer and Fellow of the American Society of Civil Engineers. He has been involved with ethics training for undergraduate students in capstone design classes. Both of our speakers look forward to sharing their experience with the water professionals of CSWEA.

## Operators Track



Moderator  
Chris Harrington,  
HR Green, Inc.



Presenter Mike Holland,  
Kishwaukee Water  
Reclamation District



Presenter Robert Walton,  
Western Lake Superior  
Sanitary District

Though this track is designed for operators, all with an interest in wastewater operations are welcome to attend. This track is focused on two main themes: the purpose and fundamentals of wastewater treatment plant operations as well as appropriate maintenance practices for wastewater facilities. The content on wastewater treatment fundamentals comes from training that CSWEA has developed and used to train operators in Illinois. Half of the content on maintenance will be a hands-on demonstration of assembly and disassembly of two brands of combination air and vacuum valves. This presentation will include a description of the role each of the physical components play in the function of the valve, as well as how to properly maintain those components.

### Operators Track Schedule - August 20, 2020

1:30-2:25	Purpose & Fundamentals of Wastewater Treatment
2:25-2:30	Break
2:30-3:00	Fundamentals of Maintenance Practices
3:00-3:30	Hands On Combination Air / Vacuum Valve Function & Maintenance

**Robert Walton** is the Lead Collection System Operator for WLSSD in Duluth, MN. In his role at WLSSD he is responsible for keeping 75 miles of interceptor sewer and 19 pumping stations in good working order.

**Mike Holland** is District Engineer and Assistant District Manager for the Kishwaukee Water Reclamation District in DeKalb, IL. Mike has been involved in operator training for CSWEA in Illinois.

**Chris Harrington** is an Associate and Group Manager at HR Green, Inc. He has 16 years of experience in civil engineering, 10 years with HR Green, Inc. Chris has designed treatment, pumping, and piping systems for wastewater, stormwater, and potable water. During his career Chris has made a priority of leading and developing tracks for operators with the goals of learning how to design operator friendly systems and to share what he has learned along the way.

## Special Guest

**Lynn Broaddus, Ph.D, M.B.A.**  
WEF President-Elect



Lynn Broaddus, Ph.D, MBA is the 2019-20 president-elect of the Water Environment Federation (WEF), an international organization of water quality professionals headquartered in Alexandria, VA.

Lynn formed Broadview Collaborative Inc. in 2014 as a platform for advancing sustainable, resilient practices in the water sector. She serves as a strategic adviser

and facilitator for private sector, non-profit and philanthropic clients throughout North America, and is known for bringing new ways of thinking to the crucial environmental challenges of our day.

Prior work includes leading The Johnson Foundation's environment program from 2008-2014, convening hundreds of leaders to address national water sustainability and resiliency under the umbrella of "Charting New Waters." Earlier she held leadership roles with Milwaukee Riverkeeper®, The Nature Conservancy and NatureServe, and also has experience in energy conservation and teaching. She earned her doctorate from Duke University, her MBA from the

University of Wisconsin-Milwaukee, and her bachelor's degree in environmental sciences from the University of Virginia.

Lynn also serves as past chair of River Network's board, and member emerita (Past Chair) of the University of Wisconsin-Madison's Nelson Institute Board of Visitors. She recently completed three years as a non-resident senior fellow with the Brookings Institution. Lynn is based in Minneapolis.

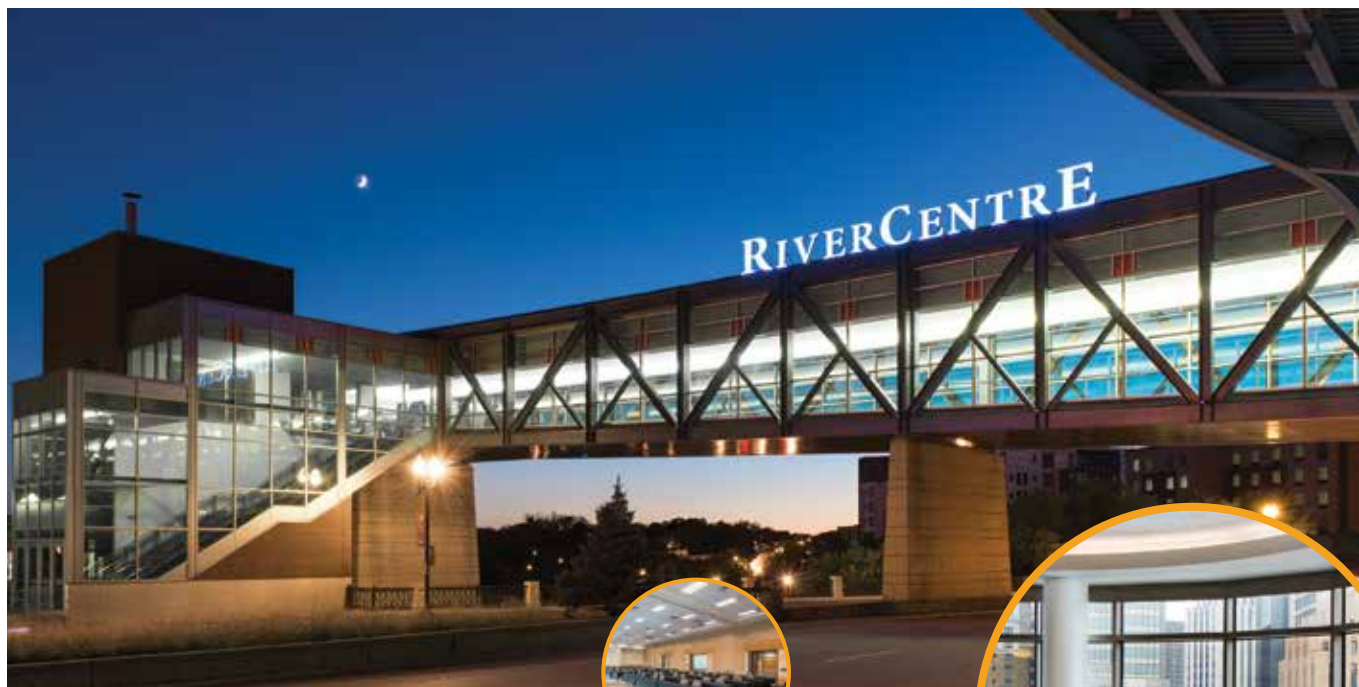


### About WEF

The Water Environment Federation is a not-for-profit technical and educational organization of 35,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. Since 1928, WEF and its members have protected public health and the environment. As a global water sector leader, our mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation. To learn more, visit [www.wef.org](http://www.wef.org).

# CSWEA'S 93RD ANNUAL MEETING

## Venue



### SAINT PAUL RIVERCENTRE

175 West Kellogg Boulevard | Saint Paul, MN 55102

The conference will be held at Saint Paul RiverCentre in Saint Paul, MN. Renowned for its leadership in sustainability, the venue was designed by Hammel Green and Abrahamson, Inc. and is a renowned location for events of all types. It was the first building to achieve sustainability certifications from LEED, Green Globes and APEX / ASTM, and part of a campus that was one of the first venues to offer front of house organics composting to its guests. For more information, go to [www.rivercentre.org](http://www.rivercentre.org).

## Accommodations



### THE SAINT PAUL HOTEL

350 Market Street, Saint Paul, MN 55102

The Saint Paul Hotel is the official Conference Hotel. Rooms are available for reservation at the The Saint Paul Hotel, 350 Market Street, Saint Paul, MN 55102 ([www.saintpaulhotel.com](http://www.saintpaulhotel.com)).

**Book a standard room for the CSWEA rate of \$179.**

Visit [www.reservations.saintpaulhotel.com/sph](http://www.reservations.saintpaulhotel.com/sph) and under the 'SPECIAL CODES' drop-down, select 'GROUP/BLOCK' and enter the code: 200819CSWEA. Or call 800-292-9292 and ask for the CSWEA 2020 Annual Conference Block.

We expect that there will be great demand for these rooms, so please book early.



## Featured Events

### REUSE, BREWS AND LID TOO!

Saint Paul and Minneapolis Stormwater Tour  
Tuesday, August 18, 12:30-5:30 pm



Please join us on a tour of innovative stormwater management in Saint Paul and Minneapolis, hosted by the Minnesota Section Stormwater Committee. The tour will begin at Allianz Field, the new home of the Minnesota United FC Major League Soccer team. See all of the latest innovative stormwater management at and around Allianz Field, where the City of Saint Paul and the United FC have developed landmark clean water infrastructure, which will recycle more than two million gallons of rainwater every year. This unique system, the largest and smartest of its kind, will be used to irrigate trees and grass across the site, and to serve future developments around the stadium.

From Allianz Field, we travel to Capitol Region Watershed District's (CRWD) new office building and see its state of the art rainwater harvest and reuse systems along with LID practices, landscaping and pocket park, all developed in a brownfield.

Following the CRWD site visit we will travel to the Towerside Innovation District in Minneapolis. This system collects stormwater from four new multi-family housing developments and centrally treats the stormwater runoff in rain gardens that also serve as park-like, publicly accessible spaces. At the conclusion of the tour we will stop at Surly Brewing's

Destination Brewery (a brownfield redevelopment with low impact stormwater systems as well) and enjoy one their brews and light snacks before heading back to the Saint Paul Hotel.

#### ITINERARY

- 12:45 Gather in Lobby of Saint Paul Hotel.
- 1:00 Leave for Allianz Field.
- 1:15 Arrive at Allianz Field (The tour will split into two groups, one group will see the reuse system while the other learns about the District-wide approach, then the groups will switch).
- 2:10 Depart Allianz Field for CRWD's office.
- 2:15 Arrive at CRWD's office.
- 3:10 Depart CRWD for Towerside Stormwater Innovation District.
- 4:00 Depart for Surly Brewing: Relax and enjoy one of Surly Brewing's finest beverages. Light snacks served.
- 5:15 Board shuttle to return to Saint Paul Hotel.
- 5:30 Arrive Saint Paul Hotel.

### PLANT TOUR

Metro WWTP | Tuesday, August 18, 1:00-4:00 pm

MCES's Metropolitan Wastewater Treatment Plant is the largest plant in Minnesota, treating an average flow of 192 mgd in 2019. The plant includes enhanced biological phosphorus removal in its liquid treatment train and state of the art incineration, air pollution control, and energy recovery in its solids management process. In addition, the plant includes MCES's centralized maintenance facilities, the analytical laboratory serving all MCES plants, and extensive odor control measures to ensure it is good neighbor to the surrounding committee. The tour will provide a wide-ranging overview of this impressive facility, it will include specific stops at highlights and unique features of the plant, and it will provide an opportunity to discuss relevant topics with staff involved in its operation, optimization, and capital planning.

After the tour, attendees will gather at Surley Brewing Company. Carpooling is encouraged.



# CSWEA'S 93RD ANNUAL MEETING

## COMMUNITY SERVICE PROJECT

Crosby Farm Regional Park | Tuesday, August 18, 1:00-4:00 pm  
(Location Subject to Weather Conditions)

Volunteer to work with other CSWEA volunteers at the City of St. Paul's Crosby Farm Regional Park! Located along the scenic Mississippi River, this park was once the largest and longest running farms in the West End and Highland Park area. Volunteers will help with invasive weed removal and cut brush piling. For more information about this year's project, contact Amy Patterson by email at [amy.patterson@tkda.com](mailto:amy.patterson@tkda.com) or Trevor Prater by email at [trevor.prater@metc.state.mn.us](mailto:trevor.prater@metc.state.mn.us).



## MEET & GREET

Landmark Center | Tuesday, August 18, 6:30-10:00 pm

Kickoff the Annual Meeting with a step back in time to network with your fellow water quality professionals at the historic **Landmark Center**. The building opened in 1902 as a Federal Court House and Post Office. During its time as the Court House, the building was the site of many famous 1930s 'Gangster Trials', showcased with exhibits you can peruse through the evening. The building was placed on the National Register of Historic Places, renovated and opened to the public in 1978 as an arts and cultural center, renamed the Landmark Center.

**Guitarist Andy Austin** will help us span time and the generations of our organization's membership by playing your favorite music. Andy will perform throughout the evening and as the music moves us, to sing along or dance. Or you can be entertained while conversing with members – in a quieter area of this historic building atrium.

Enter off 5th Street through the main doors facing Rice Park. Registration will be setup at the entrance – remember to get your drink tickets and come hungry! Plenty of food options await. We look forward to seeing you, whenever you can make it.



## CAREER NETWORKING

Ballroom A-D/Concourse | Wednesday, August 19

**Please help keep our water sector strong.** We will have opportunities for job seekers and employers to connect throughout the conference. Building a strong water workforce is something important today and in the future. All who are interested in meeting new candidates, looking for career growth, or learning about opportunities should participate.

Exhibitors will be participating by encouraging attendees with career growth questions to seek input from them at their exhibit booth. These booths will be marked with a balloon.

A table in the exhibit hall will be reserved for students and other job seekers to meet those of you wishing to share about your profession. Sit down and share your story! Specific times for this exchange include:  
10:15-11:00 am Break  
12:00-1:00 pm Exhibitor Lunch

Students will have name tag ribbons identifying them – please welcome them, learn what drives them, and expand their knowledge about our amazing water quality profession.

*Participate in this opportunity to inspire, engage, and recruit the next generation of water professionals.*

## SILENT AUCTION

Ballroom A-D/Concourse  
Thursday, August 20

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 Tom Mulcahy at [tmulcahy@mulcahyshaw.com](mailto:tmulcahy@mulcahyshaw.com) for more information. Bids will be posted at 12:10 am in Ballroom A-D/Concourse.



**GLOBAL WATER**  
STEWARDSHIP



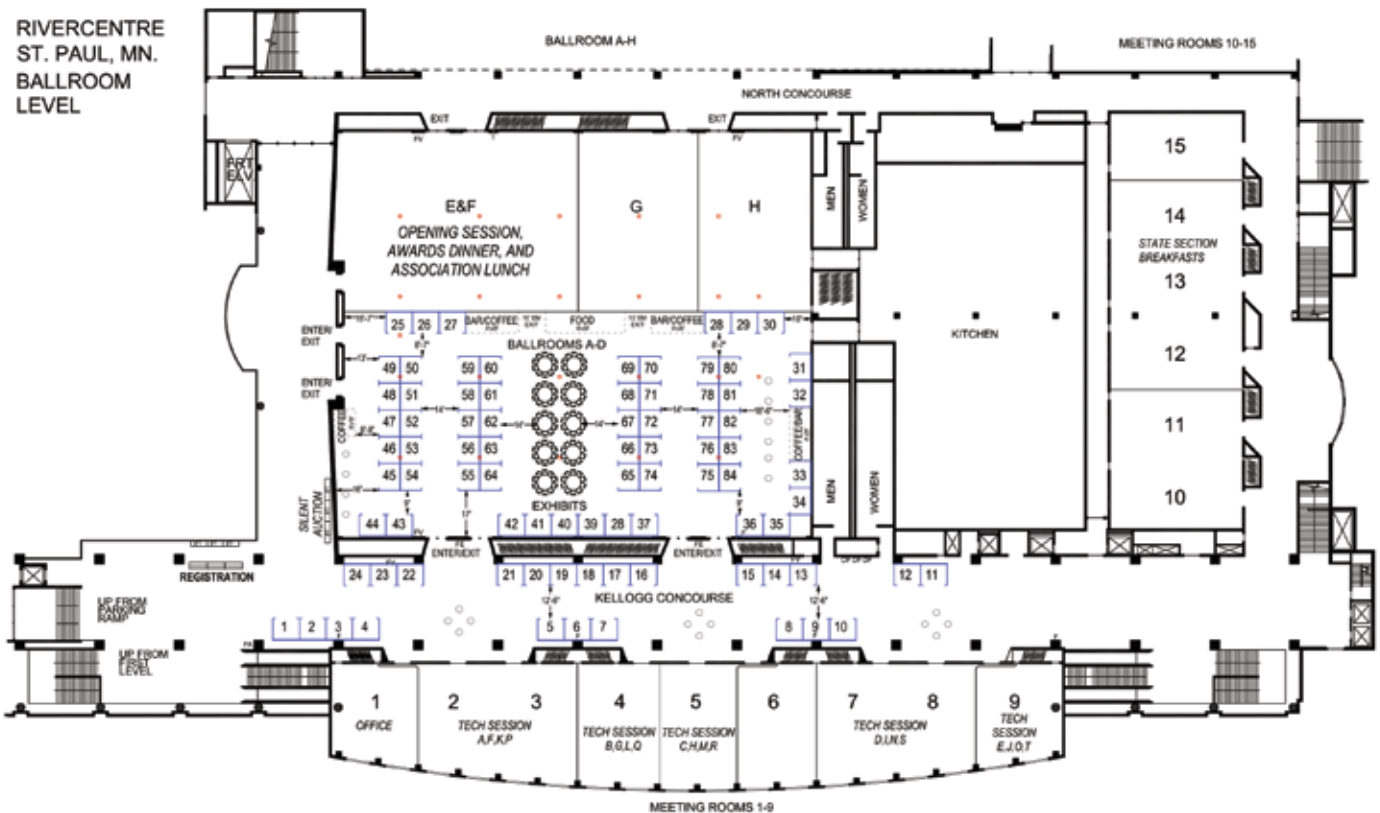
## Floor Plan and Exhibitors

The Exhibit Hall will be open two days: Wednesday and Thursday, August 19 and 20. Dedicated exhibit times on Wednesday include 10:15 to 11:00 am, at lunch from 12:00 to 1:00 pm and at the reception from 4:00 to 6:00 pm; as well as poster session periods both days. As well, the conference provides longer breaks during the technical sessions with refreshments in the exhibit hall.

### Exhibit Hours

**8:00 am-6:00 pm**  
Wednesday

**8:00 am-12:00 pm**  
Thursday



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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 \$1,000 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.



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## Utility & Regulator Pricing



### SEND MORE PEOPLE AND STILL SAVE MONEY!

#### UTILITY & REGULATOR 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. This pricing structure is also being offered this year to regulatory agencies. There are five registration tiers.

#### 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 or REGULATORY AGENCY	(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:

Attendee	Reg Type	Reg Cost	Events	Meals	Subtotal
District Manager	Full	\$350	\$110	\$120	\$580
Asst Manager	Full	\$350	\$85	\$105	\$540
Chief Operator	Full	\$350		\$40	\$390
Maint Manager	Thurs Only	\$200		\$40	\$240
Operator 1	Thurs Only	\$200			\$200
Operator 2	Thurs Only	\$200			\$200
TOTAL		\$1,650	\$195	\$305	\$2,150

## New Utility Pricing Example With 2 more Operators and 1 Trustee Attending

Attendee	Registration Type	Registration Cost	Event	Meals	Subtotal
Utility Regn	5-20 MGD	\$500			\$500
District Manager	Full		\$110	\$50	\$160
Asst Manager	Full		\$85	\$50	\$135
Chief Operator	Full			\$50	\$50
Maint Manager	Thurs Only			\$50	\$50
Operator 1	Thurs Only				
Operator 2	Wed Only				
Operator 3	Thurs Only				
Operator 4	Wed Only				
Trustee	Thurs Only			\$50	\$50
TOTAL		\$500	\$195	\$250	\$945

With utility pricing – a \$1,200 savings.

**Questions? Contact Amy Haque at [ahaque@cswea.org](mailto:ahaque@cswea.org)**

# CSWEA'S 93RD ANNUAL MEETING

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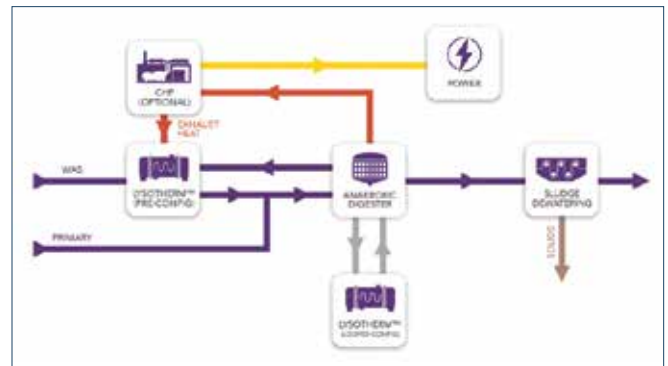
## LIFT Spotlight: LysoTherm



Thermal Hydrolysis is becoming a more common process in the wastewater industry as a sludge pretreatment technology to help improve anaerobic digestion performance, reduce digestion time, increase gas production, and increase the percent solids of the sludge while maintaining a lower viscosity. One thermal hydrolysis process that is emerging on the market is called LysoTherm.

LysoTherm is a patented system for thermal disintegration of organic sludge. It is unique in that it doesn't require steam. The LysoTherm technology is based on a tube-in-tube heat exchanger design that has two heating circuits. One heating circuit uses thermal oil that produces the process heat for the hydrolysis reaction at 160-175°C. The oil is heated up from CHP exhaust systems or boilers. The second heating circuit uses water that recovers heat from the hydrolyzed sludge cooling system and makes it available for preheating.

LysoTherm can be applied in the pre-configuration location for the WAS stream prior to anaerobic digestion. If a CHP system is in place, the heat recovered from the engine can be

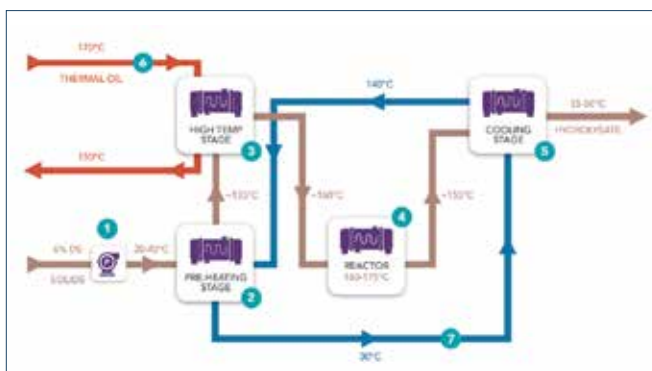


used to heat the LysoTherm process. Another option is the looped configuration where it is looped directly to the anaerobic digesters conditioning the sludge to improve the digester performance.

The LysoTherm process should be considered for Water Resource Recovery Facilities to help:

- Reduce total solids and improve volatile solids reduction.
- Increase existing digester capacity.
- Increase biogas production.
- Reduce chance for foaming issues.
- Improve the dewaterability of the sludge and reduce polymer usage.
- Improve the rheology of the sludge for easier mixing and pumping.

Some unique features specific to the LysoTherm process is that it doesn't require steam, it has an automated cleaning system, and it has a small footprint with its modular configuration design. Additionally, it has minimal instrumentation and the continuous flow process makes it very easy to operate. For more information visit [www.ovivo.com](http://www.ovivo.com). CS



# MIDYEAR SPRINGBOARD 2020

FEBRUARY 2 TO 8, 2020

RECAP



## JOE'S PERSPECTIVE

In early November of 2019, I received an email from WEF Students and Young Professionals Manager, Megan Livak, that included a link to the 2020 Springboard Program application. On November 29, 2019 I was notified that I was selected to attend the Water Environment Federation (WEF) 2020 Midyear Meeting as part of

**"Every single person that I met, whether they were a CEO of a consulting firm or an important WEF staff member, were all cordial and genuinely enthusiastic that the Springboard participants were interested in developing their career in water."**

the Springboard Program. I was elated for various reasons to find out that I was selected, but above all, I was happy to continue my growth in the water industry.

If you ask any of my colleagues, they will tell you that I am a very extroverted individual that has little to no problem talking to new people. However, at the Midyear Meeting I was pushed to my social limit (in a great way). I had the honor of meeting a lot of important individuals who make WEF the great organization that it is. Every single person that I met, whether they were a CEO of a consulting firm or an important WEF staff member, were all cordial and genuinely enthusiastic that the Springboard participants were interested in developing their career in water.

It would be very remiss of me not to mention the truly wonderful Springboard participants that I can now call lifelong

friends. I now have several connections all over the United States, I mean how cool is that? I would like to thank WEF for allowing me to participate in such a great opportunity. Specifically, I would like to thank the Students and Young Professional Committee leadership team for making the experience an unforgettable one. Finally, I would also like to thank both my employer (Northern Moraine WRD) and my Central States WEA for their constant support on my career growth. I genuinely appreciate all that has been done for me and I will be forever grateful.

**"The goal of the program is to get YPs involved in technical committees, and show them "behind the curtain" of WEF and WEFTEC, with the idea that they will be future industry and organization leaders."**

#### LIZ'S PERSPECTIVE

At WEFTEC 2019 I was sitting on the bus next to another YP from New York and we got to talking about how we got involved with WEF. She had just graduated from school in 2018 and was already co-chairing WEF SYPC subcommittees and seemed to know all about how WEF worked. I was impressed and curious at how she got so involved so fast. She explained to me that she actually competed in the Student Design Competition in 2018, and maintained her involvement after graduation. She had participated in the WEF Midyear Springboard program earlier that year, and told me about how awesome the experience was. She was able to sit in on technical committee meetings and listen to the programming committee deliberate about which abstracts would proceed. I hadn't even heard of the springboard program, but I was very interested in learning more.

After this, I knew I wanted to get more involved in WEF, so I applied for the Springboard program, which is a WEF program where 15-20 YPs are selected to attend the WEF Midyear Meeting. The goal of the program is to get YPs involved in technical committees, and show them "behind the curtain" of WEF and WEFTEC, with the idea that they will be future industry and organization leaders. Even though I had NO idea what to expect, I was so excited to be selected to attend. I remembered Scott Trotter talking to me at WEFTEC about how he had been working with some of the people there for over 20 years. It was crazy to think that I would be saying the same thing about a lot of the people on the Springboard program 20 years from now! I was even more excited when I learned that my CSWEA/GWS friend and colleague Joe Lapastora was also selected.

#### PROGRAM OVERVIEW

When Joe and Liz arrived they met with the other Springboard participants. The 20 participants went through introductions and some team building exercises. It was interesting to think that the people in this room were the future of the water industry. After team building, WEF President Jackie Jarrell paid a visit to welcome the participants to the program and explain what they could expect for the next two days.

The next morning the Springboard group met again. After a quick briefing, they were off to technical committee meetings. Liz's first stop was the Disinfection and Public Health Committee. Liz had joined the WaSH sub-committee. She chose this committee because it lined up well with her interests and involvement in Global Water Stewardship. At this meeting, she heard an update from each sub-committee. One of the most interesting parts to her was the update from the WIDOC task force about the Coronavirus. Until then, coronavirus was something she had only heard about on the news. She said it was interesting to have the opportunity to be in a meeting with the people who were working on identifying the impact it will have on the water industry.

After lunch, Liz attended the Municipal Resource Recovery Design Committee meeting. She said that she was excited to learn that they had

recently created a phosphorus removal sub-committee. She said that she has spent most of her career thus far working on phosphorus removal projects, so she felt like she found a place where she could both learn and contribute.

*"They also have a process modeling subgroup that I was excited to get involved with," Liz said, "so I could bond with other process modeling nerds and continue to deepen my understanding of process and design."*

Joe chose to attend both the Plant Operations and Maintenance Committee and the Collection Systems Committee meetings since they aligned with his employment at NMWRD. He attended the PO&M Committee meeting during the morning sessions and followed up with the Collection System committee after lunch.

He learned that each of these committees aim to help District Managers, Superintendents, Engineers and Operators who work at treatment facilities. Perhaps the most interesting concept that he learned about was that both committees had goals to 'modernize' how information is provided to public utilities. Joe stated that he left the meeting with a good understanding of the future goals for each committee and he looks forward to volunteering within the committees in the near future.

That evening there was a networking event. As always, everyone was very friendly and welcoming. Liz and Joe spent



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time with the Springboard participants as well as WEF board and committee chairs and leaders.

The final day was the WEFTEC Symposium. The pair had been warned about the chaos that was about to happen, but nothing could truly prepare you for what is truly behind the WEFTEC curtain. At first glance, it looked like a bunch of crazy people running around with no rhyme or reason covered in colorful post-its.

Upon further investigation, you realize that everyone is moving deliberately and there is (as they say) "a method to the madness." The program committee comes in prepared and in less than one day, the WEFTEC program is selected. Liz got to help put together some of the fundamentals sessions, as well as sign up to be an assistant moderator for a few of the sessions she found interesting. Joe had a similar experience and signed-up to lead a mobile session at WEFTEC.

The visit finished with a group trip down the riverwalk to take a riverboat tour. Overall, it was an amazing experience. Both Liz and Joe echoed the following message: *Events like this are always a reminder about why people got into the water industry. It's great to be surrounded by so many hardworking people that are so passionate about what they're doing. Liz and Joe can't wait for WEFTEC 2020.* [CS](#)

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At the 50th Anniversary Celebration in 2018, graduates spoke highly of the positive, rewarding impact the program provided them professionally and personally.

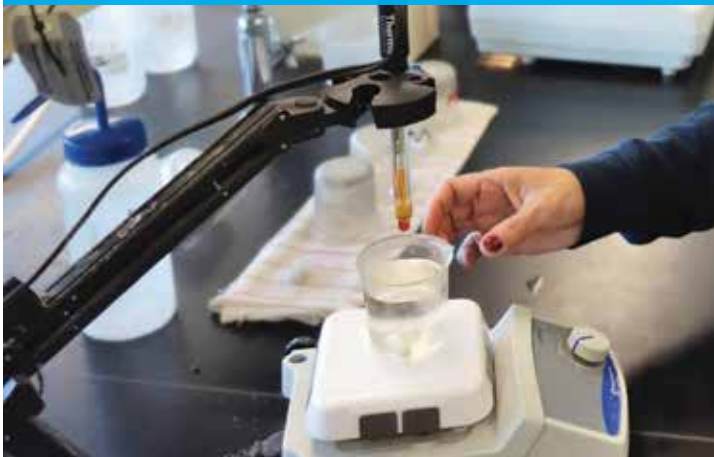
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For any questions you may have, please contact Kathy Bates, program coordinator, at [batesks@matc.edu](mailto:batesks@matc.edu) or 262-238-2264. Visit [matc.edu](http://matc.edu) and search "Water Quality"

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## October

Persephone Ma, University of Minnesota  
Carly Gloudemans, MSA Professional Services, Inc.  
Danielle Waldschmidt, Hydrosil International, Ltd.  
Walfried Lassar, Unity Scientific  
Shanna L Czeck, City of St. Cloud  
Wastewater Treatment Plant  
Natalie Lenz, Jacobs

## November

Kari Steele, Metropolitan Water  
Reclamation District of Greater Chicago  
Robert Loken, Envirogen Technologies  
Dr Jason Burney, Nalco Champion  
Dave Marsh, WEP Water Research Center  
Joseph Deyoung, MSA Professional Services, Inc.  
Avinash Bhat, Evoqua Water Technologies LLC  
John Dustman, Summit Envirosolutions  
Zach Billings, Wheaton Sanitary District  
Kimberly Blomker  
Randy Conner, City of Chicago  
Kayla Heriaud, Water Quality Research Foundation  
Gerardo Villalobos, City of Naperville  
Joe Kottwitz, Cesa10  
Cory Winland,  
Derek Tess, Sustana Fiber  
Rodney Gross, Veolia NA  
Michael Nguyen, Metropolitan Council  
Environmental Services  
Cam Davis, Metropolitan Water Reclamation  
District of Greater Chicago  
Justin Hart, Metropolitan Water Reclamation  
District of Greater Chicago  
Josina Morita, Metropolitan Water Reclamation  
District of Greater Chicago  
Marcelino Garcia, Metropolitan Water  
Reclamation District of Greater Chicago  
Chris Foley, P4 Infrastructure, Inc.  
Brian Tierney, Evoqua Water Technologies  
Rocio A Durkot, City of St. Cloud  
Wastewater Treatment Plant  
Steven Muir, HDR  
Billie Komorowski,  
University of Wisconsin-Green Bay  
Matt Schroeder, Fehr Graham  
Rachel Feil, Madison Metropolitan  
Sewerage District  
Josh Haggard, Yorkville – Bristol Sanitary District  
Diana M Soltess, Wheaton Sanitary District

## December

HCA Asset Management LLC  
Eric Hjellen, Madison Metropolitan  
Sewerage District  
Lavender Ntaoti  
Cole Huggins, MPCA  
Derek Budsberg, City of Wisconsin Rapids  
Aaron Kilpo, Minnesota Pollution Control Agency

## January

Leslee Storlie, MN Metropolitan Council  
Tim Gratke, City of Hutchinson WWTF  
Tyler Gates, Baxter & Woodman, Inc.  
Nicolas Sparacio, Central Brown  
County Water Authority  
Marianne Bohren, Western Lake Superior  
Sanitary District  
Dylan Hansen, Rochester Water Reclamation Plant  
Tim Finegan, Aquatic Informatics Inc.

## February

Sherry Bock, Minnesota Department of Health  
Terrance Brueck, EMA Inc  
Allison Bell, HDR  
John Peichel, SUEZ Water Technologies & Solutions  
Bartlett Durand, Sand County Foundation  
Darren Olson, Christopher B. Burke  
Engineering, Ltd.  
Mr Wesley Leo Leksell, MPCA  
Wayde Schroeder, Metropolitan Council  
Theo Jass  
Steven Jossart, Sheboygan Regional WWTP  
Ian Demarre  
Wesley Zloza, Evoqua Water Technologies  
Miguel A Mercado, Northern Moraine Wastewater  
District/Island Lake S  
Nader Rezaei, Madison Metropolitan  
Sewerage District  
Kate Marnul  
Eric Wenzel, Water Quality Investigations  
Paul Much, Midwest Contract Operations, Inc.  
Susma Bhattachari  
Linnea Henkels, University of Minnesota

## March

Paul Draskowski, Winona Wastewater  
David A Humbert, Lake County  
Public Works Department  
Bradley Miles Bennett,  
Urbana & Champaign Sanitary District  
Malek Hattar, Envea  
John Larkin, AE2S  
Kelly E Macintyre, City of Minneapolis  
Eden Willcox, Winona  
Wastewater Treatment Plant  
Mike Zickus  
Emily T Van Deraa, Milwaukee  
Metropolitan Sewerage District  
Emily J Karry, Lake County  
Public Works Department

## April

Dan Tighe, Tighe-Zeman Equipment  
Curtis Czarnecki, The City of Kenosha  
Brittany A Sloan, Lake County  
Public Works Department  
Ying L Miao, Lake County  
Public Works Department  
Thomas F Miles, Lake County  
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Jason Neville, Bolton and Menk, Inc.

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## JULY

**WI Section 2020 Northwoods  
Collection System Seminar**  
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## SEPTEMBER



**Collections Workshop  
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## GLOBAL WATER STEWARDSHIP

# GWS

# Update

By Liz Heise

**H**appy New Year CSWEA! In light of the New Year, I figured it would be a great time to provide a quick recap about what Global Water Stewardship is, who we are, and what we do.

Global Water Stewardship (GWS) is an organization that resolves sanitation issues in developing countries. Our focus is on educating the public and engineering sustainable centralized solutions to keep waterways clean and communities healthy.

Established in 2013 by CSWEA, the organization steadily grew utilizing the tremendous talent of CSWEA and WEF water professionals, passionate students, and working professionals from various backgrounds, who are dedicated to make a positive impact.

### PROVIDING SANITATION SOLUTIONS

Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day, and leads to impoverishment and diminished opportunities for thousands more. Many countries lack the technical knowledge to develop and implement centralized sanitation solutions.

We use university student design competitions for concept designs to give university students an opportunity to solve a real life problem. We then partner with the local water authority (ASADA) and empower them to solve their sanitation issues. We educate professionals and mitigate the risk associated with design, implementation, operations, and maintenance of centralized wastewater collection and treatment systems.



### STUDENT DESIGN

GWS partners with rural Costa Rican communities that have a need for improved wastewater treatment. These communities typically depend on tourism for their income, and their growth is limited due to issues with water and wastewater infrastructure. GWS develops a problem statement, which university students use to develop a preliminary design for the community.

GWS judges student presentations and selects a winning design based on which best addresses the sanitation needs of a chosen Costa Rican community. The students work with GWS professionals to improve their design and associated operation and maintenance estimates. The team travels to Costa Rica to share their design directly with the community and get first-hand experiences of the people and places they are affecting.



To learn more,  
contact **Matt Holub**  
at **630.470.7579** or  
**mholub@esg.email**.

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“GWS’ goal is to increase local awareness to sanitation issues, thereby increasing public acceptability of wastewater treatment projects. The goal of this work is to provide the framework for Costa Rica to develop a strong wastewater industry and become a leader in Latin America.”

### PROFESSIONAL TRAINING AND PUBLIC EDUCATION (WASH)

GWS continues to work with the Ministry of Water (AyA), local water authority (ASADA) and local NGOs and municipal leaders to improve the knowledge base of water and wastewater professionals in Costa Rica. GWS conducts annual professional training seminars, as well as performs outreach to locals in communities and children in schools.

GWS wants to ensure that the people who will be affected by changes in their bills, new construction in their hometowns, and the challenging task of operating and maintaining new infrastructure are prepared for the challenges and responsibilities.

Our team cares deeply about letting locals know that we are not there to complete a quick project and head home. We are committed to a presence in their community through the years that it will take to construct, implement, and maintain improvements. We build relationships and develop long-term partnerships.

GWS continues to build relationships in Latin America, educating both adults and children on the importance of water, sanitation, and hygiene.

The education of young people has proven to be vital in the local understanding of proper water management and awareness. GWS’ goal is to increase local awareness to sanitation issues, thereby increasing public acceptability of wastewater treatment projects. The goal of this work is to provide the framework for Costa Rica to develop a strong wastewater industry and become a leader in Latin America.

We have five committees. Depending on the time of year, each individual committee will have calls as needed. They include:

### COMMUNITY DESIGN

This committee is in charge of developing the problem statement each year for a different community and leads the Student Design Competition.

### MARKETING AND FUNDRAISING

In charge of developing marketing materials and organizing fundraising campaigns.

### PROFESSIONAL DEVELOPMENT

In charge of organizing professional development events in Costa Rica including an annual day technical seminar that GWS puts on in August, TICOSAN (Costa Rica mini-WEFTEC), GWS delegation trip (Costa Ricans to the US for a week of WWTP tours and the Student Design Competition), and the Knowledge Exchange Program (Two week program where two Costa Rican engineers/WWTP operators/lab staff shadow in US).

### PROJECTS FOR CONSTRUCTION

In charge of follow up and management of past projects, as well as biogarden construction and design.

### PUBLIC OUTREACH AND EDUCATION

In charge of developing educational material for local and Costa Rican children and the general public to be used at school and community presentations (WaSH education).

We have had a TON of momentum over the past year and have a lot of new initiatives. A couple of highlights include:

### TICOSAN2020

The first annual wastewater seminar in Costa Rica. This event has been postponed. Stay tuned for new information. We will have exhibitors from the US that will have the opportunity to present their products and educate the local decision makers about their brand. Costa Rica has a huge untapped wastewater market and plans to spend over \$500 million in projects prior to 2045 in an effort to meet the millennium sustainable development goals and treat over 90% of the country's wastewater.



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They have included this budget within their 30-year capital improvements plan that was released in 2016. They also have a huge interest in sustainable energy sources. GWS is working to educate the decision makers while helping to develop a sustainable wastewater industry within the country in both urban and rural areas. This is where TicoSan came from. TicoSan is going to be the first wastewater conference in Costa Rica. The goal of the conference is:

1. Provide an opportunity to Costa Rican engineers/operators/wastewater leaders to learn about available equipment.
2. Provide an opportunity to local vendors/manufacturers to share and teach about their products, and develop a relationship with the decision-makers in Costa Rica.

#### **COSTA RICAN STUDENT DESIGN COMPETITION**

In November 2019 GWS held our first annual design competition at TEC University in Costa Rica. Costa Rican students completed designs based on the GWS problem statement. The winner of this competition will be competing alongside American university students at the Global Water Stewardship Design competition (partnered with the Midwest Student Design Competition) in April of this year. They will join AyA, Asada, and UN Development Program members for a one-week long-trip where they will also get the chance to tour local facilities and attend the CSWEA Education Seminar. Additionally, these students will start their own WEF Student Chapter that is currently hosted by CSWEA. They have been involved in helping organize TICOSAN. These students are SO excited about wastewater and are the future of the Costa Rican wastewater solution.

We have a lot of different initiatives going on right now and can definitely use all hands-on deck! We typically have a conference call the first Friday of every month at 12 CST to get updates from Committee Chairs and are always looking for more volunteers. As you can see, our 2020 calendar is jam-packed! If you're interested in getting involved, reach out to [chair@globalwaterstewardship.org](mailto:chair@globalwaterstewardship.org). **CS**



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# GWS Volunteer Spotlight:

## MATT STREICHER

Interview by Amanda Streicher (GWS Past Chair)

**M**att Streicher, GWS Treasurer, has been involved with GWS since the beginning. He has taken on one of the least fun but most important roles in the organization, and is a HUGE part of the group's success. He makes sure that we maintain our 501(c)3 status, deals with all the legal logistics, and manages countless expense reports and the GWS bank account. He does all of this with an amazing attitude. We can't say enough how much we appreciate his dedication. The Streicher wastewater power-duo both have been hugely involved in GWS, so it only made sense for Amanda Streicher (Baxter and Woodman Project Engineer, GWS Past Chair, and the other half of the Streicher Wastewater Power Duo) to interview him. Read more of their conversation below.

### HOW DID YOU GET INVOLVED WITH GWS AND WHEN?

While enjoying dinner and a night out prior to the CSWEA Ed Seminar in Madison with Mohammed and some other colleagues, Mohammed had mentioned an idea that was brought up at a recent CSX meeting, which was for CSWEA to start its own humanitarian group. I just happened to be out to dinner with the right people at the right time. This was before GWS was GWS, and we were just a couple of CSWEA members trying to start something up. I think it was probably around 2014.

### WHAT MOTIVATED YOU TO GET INVOLVED?

Besides Mohammed being a good recruiter, I found the opportunity to actually be involved intriguing, as I had really only donated to humanitarian groups in the past. Since I was already heavily involved with CSWEA, and I was young, single, and motivated, I thought this would be a good opportunity for me to volunteer. My thought was that I'd check it out on the first service trip to see what it was about, and decide if it was something I wanted to pursue further. After our first service trip to Costa Rica, I was amazed by the natural beauty of the country, and by the motivation of its residents to want to remedy their sanitation issues. There seemed to be so much potential for quick growth and success.

### WHY DO YOU STAY INVOLVED?

Since I'd been part of it from the beginning, I felt a personal connection to GWS, and I wanted to see it grow and succeed. It's amazing to have been there from the beginning and see how it's evolved. I'm also thoroughly impressed by the steady stream of young professionals that continue to want to become part of GWS and contribute, including students who I've seen present their student designs, and now have become emerging leaders in our industry. Mohammed does a great job at keeping things in the organization moving and evolving. He's the true lifeblood to this organization, so



to see his passion and dedication, makes me want to help make those goals come to fruition.

### WHAT IS YOUR FULL-TIME ROLE OUTSIDE OF GWS?

I'm the Executive Director at the Glenbard Wastewater Authority. Our plant is a high purity oxygen activated sludge process, so while it's not really an applicable technology to share within GWS, it's another example of the different ways water can be treated. I'm also proud that one of our operators, Jason Neighbors, has gained interest in GWS and participated in a service trip as well – in addition to him and his wife throwing their own GWS fundraiser this spring.

### HAS GWS BENEFITTED YOU PROFESSIONALLY? PERSONALLY? HOW SO?

It's benefited me professionally in many ways; from meeting others in our industry,



“GWS has benefited me professionally in many ways; from meeting others in our industry, seeing student design projects that are innovative and complex, to learning about different ways to treat wastewater with fewer resources.”

seeing student design projects that are innovative and complex, to learning about different ways to treat wastewater with fewer resources. Many connections made through GWS that have become part of a great professional network and developed into personal relationships. GWS has also benefited me tremendously in many personal ways as well; its given me the opportunity to see first-hand that what we take for granted here with wastewater treatment. Standards aren't the same in other countries. Although I definitely knew other parts of the world didn't have the same standards, I would have never thought a fairly developed country, like Costa Rica, would be so far behind, so it opened my eyes towards a more global situation. Obviously, my most personal benefit from being part of GWS is that it's where I met my beautiful wife, Amanda, as we were both involved from the start. Although I had briefly met her before our first service trip, we got to



know each other from both being involved in GWS, so GWS was a factor our relationship. We even had several GWS members as guests at our wedding, and our involvement with GWS was mentioned during the best man speech.

#### **WHAT MADE YOU DECIDE YOU WANTED TO BE TREASURER?**

I wanted to have a continuing role in the organization rather than just be on the board. When we formed our board though, I had also just recently accepted a new position in my professional career that would include more responsibilities, so I wanted to be cautious of how much time I could contribute. I had assumed the Treasurer role would be a good way to still contribute and be involved without a tremendous time commitment. At first it was as I had assumed, but with how much we've grown and how much activity goes on, the Treasurer became the bookkeeper, accountant, and chief financial officer... almost a part-time job! I do feel like I get to see almost everything going on while in this role.

#### **WHAT DO YOU FEEL HAS BEEN YOUR GREATEST IMPACT ON THE ORGANIZATION?**

Even more than my treasurer role, I felt the participation in the service trips were the greatest impacts, seeing things first hand and interacting with the people who are most effected by sanitation issues. So much happens while the service trips that I always came home with a great sense of accomplishment.

#### **WHAT IS YOUR FAVORITE PART OF BEING INVOLVED?**

Interacting with the GWS members. We have such a highly motivated, and bright, group of volunteers. I also enjoy hearing the excitement from Costa Ricans as they continue to learn and look forward to better sanitation. It's not just rewarding to see our volunteers be so passionate, it's even more rewarding to see how the Costa Rican's receive that passion and participate.

#### **WHERE DO YOU HOPE TO SEE THE ORGANIZATION IN FIVE YEARS' TIME?**

I hope to see it grow as much as it has in its first five years! It went from a handful of volunteers that were a spinoff of CSWEA, to being a large group of professionals with its own Board of Directors, to being incorporated as a 501(c)3 organization. We're getting to the size that the next big step will be to actually have full-time staff, which would help us move forward faster. [CS](#)



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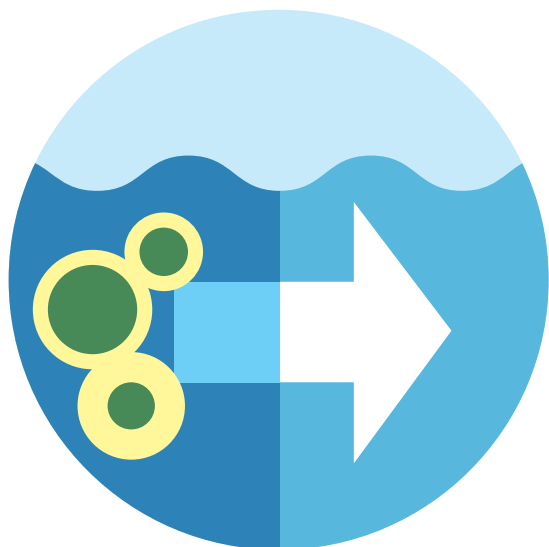
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# WEF/Central States WEA

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# WEF/Central States WEA

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- |  |  |  |
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from our ancestors,  
we borrow it from our children.*



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