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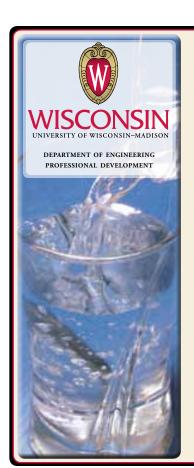






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FEATURES

| 85th Annual Meeting Review | 16 |
|------------------------------|----|
| Stockholm Junior Water Prize | 26 |
| Plant Profile: Janesville | 28 |
| Radebaugh Paper | 38 |
| Tablet Computers and WWTPs | 47 |
| Liquid Assets MN | 50 |
| Water's Worth It | 52 |



DEPARTMENTS

Messages

| President's Message | 7 |
|------------------------------|----|
| WEF Delegates' Message | 10 |
| Executive Director's Message | 12 |

CSWEA News

| Education Seminar | 33 |
|--------------------|----|
| Leadership Academy | 35 |
| Calendar of Events | 61 |

Section News

| Wisconsin Chair Message | 54 |
|-------------------------|----|
| Illinois Chair Message | 56 |
| Minnesota Chair Message | 58 |

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What is Water Worth to You?

By Randy Wirtz



he past year has been a time of change at WEF and at CSWEA. WEF's new Executive Director, Jeff Egger, recently rolled out WEF's new WATER'S WORTH ITTM campaign to raise awareness about the value and importance of water, waterrelated issues, and our water profession. At our recent CSWEA annual conference (May 14-17) in St. Charles, Jeff's keynote address focused on this new and exciting campaign. In my opinion, this exciting and focused program will take big steps towards familiarizing the public and elected officials on topics that affect everyone's quality of life.

Water – nothing is more important and vital to our quality of life yet taken more for granted. We have all been on the receiving end of comments from people complaining about their water or wastewater bill, yet many of these same people think nothing of a monthly cell phone or cable bill that is more than two or three times higher. While most of us in the water profession understand the inherently misguided and/or short-sighted priorities of the general public, the blame for these sentiments falls squarely on all of us and our industry. We don't talk about our achievements, the importance of our services, or the value thereof. We have not adequately educated the public and elected officials with respect to the value or water nor the cost of ensuring safe water and efficient wastewater treatment facilities. In short, we have undervalued our contribution to the quality of life we all enjoy, and in the process, have helped

to create many of the financial struggles that water utilities and municipalities now face. The WATER'S WORTH IT!™ campaign is needed, focused, and driven. WEF is carrying this torch so that in future years, we are wisely investing in our infrastructure rather than fighting the critical improvements needed to continue our quality of life. Please join in the campaign - start by going to www.WatersWorthlt.org to get the background and details.

I mentioned the recent annual conference that was hosted at the Pheasant Run Resort in St. Charles, Illinois in May. Dean Wiebenga was the Local Arrangements Chair for the conference, and he did a great job of putting all the pieces together for an exceptionally well-run annual conference. We had great attendance throughout the conference, and the technical program continues to be exceptional. I've attended several other member association conferences in other states, and our technical program is among the best. Few other MAs go through a peer



review process as extensive as we do, and the quality of the presentations at our conference is proof that our efforts are rewarded. Rick Manner chaired the technical program committee this year and I would personally like to thank Rick and his team (Derek Wold, Trevlor Ghylin, Jeremy Cramer, Jason Benson, and Tracy Hodel) for putting together a wonderful technical program. Our exhibition hall had 75 exhibitors, which was also one of our highest totals ever – many thanks to Rich Hussey for his work on the exhibits. The weather was as perfect for golf as anyone could hope for, and the conference went off without a hitch! It was a great week in St. Charles, and I'm already looking forward to next year's conference at the Monona Terrace in Madison. Please contact me (randy.wirtz@strand. com) or the 2013 Conference Chair, Alan Grooms (alang@madsewer.org) if you'd like to be a part of the local arrangements committee for the 2013 conference.

CSWEA is going through significant transition as I type this. Our energetic and very capable long-term Executive Director, Eric Lecuyer, has decided to hang it up after nine years at the helm. His wife, Anne, and their daughters Alaine and Emily supported Eric in his role. As most of you know, the entire Lecuyer family literally became a part of the CSWEA family throughout this time. They were all integral to the function of CSWEA and the success of our conferences and seminars. Eric's positive influence on the CSWEA operations, function, and governance

Continued on page 8

Continued from page 7

"The WATER'S WORTH IT! TM campaign is needed, focused, and driven. WEF is carrying this torch so that in future years, we are wisely investing in our infrastructure rather than fighting the critical improvements needed to continue our quality of life."

cannot be overstated. During his tenure as executive director, the association and state sections' reliance on the executive director's position increased ever year, and Eric handled it with efficiency and professionalism. We sincerely hope that Eric and his family will all stay involved in CSWEA for many years to come. Dan Lynch is our new executive director. Dan has been involved in CSWEA and has held nearly every office and position imaginable. His experience with CSWEA and the state sections and his commitment to our organization were the cornerstones of his selection for executive director, and I am confident that we will not miss a beat with the transition from Eric to Dan.

For my year as the CSWEA president, I will be focusing on two key issues – strategic planning and membership. Our strategic plan was developed nearly a decade ago and has generally not been kept up to date or reviewed regularly. I

don't intend to reinvent the organization or to make significant changes. My goal is to make sure that our strategic plan still defines our objectives clearly and measurably. At this summer's Central States Exchange (CSX), we will conduct a SWOT (strengths, weaknesses, opportunities, threats) analysis on our organization and then use that effort to refine our strategic plan. I encourage as many section committee chairs and members to attend the CSX (July 12 and 13 at the Kalahari in Wisconsin Dells) and provide input. Beyond that, CSX provides a fun opportunity to meet your counterparts in the other state sections. Please visit cswea. org for details.

Membership initiatives will mainly be focused on growing membership at all levels. Our membership has remained relatively consistent over the last several years, and I think we need to take some steps to recruit new members. This includes municipal wastewater profes-

sionals from communities throughout the three states, as well as wastewater consultants, equipment manufacturers, and consultants. My goal will be to engage our Membership Committee to develop a growth plan for CSWEA that can be implemented easily and followed consistently in the future.

It is my pleasure to serve each of you over the next year as CSWEA president and beyond. I've been an active CSWEA member since the mid 1990s, first at the Wisconsin state section level and more recently at the association level. I continue to be impressed with the energy and fellowship I experience at all of our events. I have many friends and acquaintances gained through CSWEA over the years, and I have no doubt that my involvement with CSWEA has enhanced my career and satisfaction in my employment. I hope to see many of you in the Dells this summer for CSX '12, and many more in New Orleans in late September for WEFTEC. CS





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WEF News You Can Use

By Dave Raby and Rusty Schroedel





he primary recent activity of your CSWEA Directors (Delegates) was attendance at WEFMAX meetings. House of Delegates (HOD) meetings were held in conjunction with the WEFMAX meetings. The four WEFMAX meetings held this year included:

- Sedona, AZ March 8, Attended by Dave Raby
- Fayetteville, AR April 12
- Baltimore, MD April 19, Attended by Rusty Schroedel, Dan Lynch and Randy Wirtz
- Indianapolis, IN May 17 Reports on the Standing Committees of Budget, Nominating, Steering, and WEFMAX were provided at those meetings.

Also, reports on the activities of the HOD Workgroups were provided. The workgroups are:

- BMP for Partnering Dave Raby is participating in this group
- HOD Strategic Planning Rusty Schroedel is participating in this group
- MA to MA Relationships
- Operator Outreach
- Delegates at Large
- Removal of Non-Dispersible Materials (Rags) from Wastewater

This year, each WEFMAX was asked to focus on one of four areas for improve-

ment identified by the HOD Strategic Planning workgroup to obtain attendee input. The locations and focus areas were:

- Sedona Mentoring, Training, and Development of Delegates
- Fayetteville Improving the Process of Soliciting Input from MAs
- Baltimore Improving HOD Meetings at WEFTEC
- Indianapolis Improving Workgroup Structure, Assignments, and Selection of Chairs

Generally, it appears that a focused effort through the HOD to better define their roles, responsibilities, and communications is under way with support from all of the workgroups.

In Sedona, discussions included training of volunteers and succession planning. The North Carolina WEA gave a presentation on developing a strategic model. They used Seven Measures of Success by Jim Collins. It was noted they have 56 committees distributed among five councils. Councils are comprised of a chair, a MA board liaison and the chairs of each committee within the council. Due to the number of committees, they have needed to combine some of them in order to attract enough volunteers to participate.

The Water Environment Associa-

tion of Ontario gave a presentation on succession planning. They have developed a mentoring program designed to enable mentors (typically members with more than 25 years of service to the MA) and mentees (new members who have an interest in serving the MA and being mentored) to develop a lasting professional relationship. They also have been successful in establishing a number of student chapters by doing such things as matching a board member or seasoned professional who attended a specific university with a new professional who also attended that same university to lead the charge in establishing a student chapter. Those folks work closely with a faculty member who is a strong proponent of the student chapter.

In Baltimore, several presentations were given. Regarding succession planning and volunteer training, the New Jersey WEA, New York WEA, and Virginia WEA all made presentations. Some items noted in those presentations include:

- Using Constant Contact for a monthly newsletter with links to event registration has worked well.
- Several WEAs are using RegOnline for event registration.
- To engage more utility staff, one offered free exhibit passes during typical exhibit downtimes.

"Thanks to numerous sponsors, WEF announced a new webcast program that offers free training through webcasts to WEF members and the entire water profession."

- Use of the League of Municipalities list for contacts and potential members was cited.
- A membership management system through Vieth Consulting was valu-

Influencing Public Policy was presented by the New England WEA. Development of a Stormwater Committee was presented by the Chesapeake WEA. They noted a highly successful specialty conference but also noted this may be driven by issues in the Chesapeake Bay watershed. Seth Brown from WEF discussed the WEF Stormwater Committee. Lastly, the Ohio WEA and Florida WEA gave presentations on Becoming Financially Stable. Some key points noted were:

- Be sure budgets and expenditures are consistent with and support the strategic plan.
- Annual sponsorships with a menu of choices based on points purchased were successful.

WEF staff is now in the process of developing an overview of all topics discussed at this year's WEFMAX meetings. Once that is completed, they will provide the overview to all MAs for their information and use at the MA level.

Other major actions that have occurred at the WEF level include:

- Approval of changes to the constitutions and bylaws which included reducing the size of the board of directors.
- Roll-out of the new strategic direction. A video was provided at the HOD meeting.
- Launch of the new Water Leadership Institute Website.
- Adoption of position statements on biosolids recycling and resource recovery.
- Roll-out of the Water's Worth It branding campaign and the opportunity to take the pledge. A link to the pledge is on the home page of the WEF website. The Water's Worth It pledge states:

"Providing clean and safe water to everyone is important to me. I believe that to accomplish that goal will require bold leadership, innovative approaches, the collaboration of many, and the passion to make it happen.

By uniting my voice and effort with others, I feel that the water sector can expand our mission beyond protecting public health and wellness. Working together, we can support clean and safe water worldwide."

The Water's Worth It campaign also made a public debut at the Indianapolis 500 race over the Memorial Day weekend. Hundreds of thousands of race fans had the opportunity to view a 30-second public service announcement (PSA) about the campaign on a large screen at the Indianapolis Motor Speedway. That PSA was shown four times each hour for 12 hours each day of the three-day event.

- Eileen O'Neill was named WEF Deputy Executive Director.
 - Launch of the Knowledge Center and availability of past webinars online for free. Thanks to numerous sponsors, WEF announced a new webcast program that offers free training through webcasts to WEF members and the entire water profession. With the support of the sponsor partners, the webcast program is offered so that water professionals may gain access to a wealth of water knowledge without additional financial burden. A listing of these free webinars, including dozens of past recorded webinars on a wide range of topics, is available.

Launch of the Water Advocate Program. An overview of that program includes:

"Aging infrastructure, strict regulatory requirements, and continued economic pressures have put unprecedented stress on local governments and agencies that provide essential water services, but you can help.

The new Water Advocates Program will create a network of water professionals in every state, community, and congressional district, to get the word out about the value of water and steps needed to protect it. As part of the network, you'll receive the training and information needed to become an effective water advocate for clean and safe water. It's a great opportunity to help in specific ways, including writing letters to elected officials and newspaper editors, making presentations to business and community organizations, and making visits to legislative offices.

Water needs YOUR voice. A link to sign up is on the Government Affairs Section of the WEF website."

There has been substantial recent activity in the House of Delegates and within WEF. There are more opportunities than ever to get involved. Please do so and gain the maximum benefits of your membership. CS



Change





o this is my first Executive Director's Message in my first edition of Central States Water. There are several things about this position that are somewhat amazing to me. First is the amount of work involved. I am at home a lot, but I am not feeling as retired as I used to feel before the annual meeting. CS Water doesn't come together by itself. There are quite a few contributors, and my job is to pull them all together in time and fill in some of the gaps. Most of those authors have been very responsive, so thank you to everyone who had a hand in helping me put this together. "In time" seems to be a more or less relative thing, but since I took over this position, I have said to a number of people on a number of occasions about a number of subjects, "I hope to get better each time I do this." It is too soon to say it's getting easier or that I have it figured out, but I am starting to get a handle on some of it. I think Eric and Anne did a very good job making this position look easier than it is. I am not saying this to get some future leeway (although I may need some later). I am saying this to remind people of the exceptional job done by my predecessors. So one last time, to Eric and Anne, and Alaine and Emily, thank you all so very much for all the hard work you put into this association. Your effort has left a lasting mark.

As for my immediate intentions regarding CSWEA, well, I do have some ideas about things we can do, but did I mention

that for now I am on a pretty steep learning curve? I believe that over the years Central States has evolved into a very solid organization. When WEF dignitaries say we are an exceptional member association, they are being honest, believe them. Our association and section events are competitive with anyone else. We have great seminars and great members who continually produce amazing results. The level of effort they put forth on a very wide range of projects helps keep us strong. Central States is doing many very good things that help make our members better, help the entire water profession, and help educate the general public about water issues. We are at present a strong organization and I really can't think of a single area where we are going in the wrong direction. That is not to say that we can't do more or that we can't do some things better. We can, but we aren't in a desperate condition. We have the time, the people, and the resources to plan our future. I am a big believer and advocate of change, but I think change is best when it is properly prepared for and generally accepted. I believe in the expression that, "change is good and good change is even better." Change is in the future, that is inevitable, but it should be gradual, well managed, and should make us an even better organization. Let me know what you think. Let me know what changes you think we should be thinking about. This kind of leads nicely into my next topic...

And now, on to the future! The next important event is just around the corner, the Central States Exchange and the Young Professional's Exchange. It is held annually at the Kalahari Resort in Wisconsin Dells. This year it will begin at 12:30 on July 12 and end at noon the next day. This event was modeled after the federation's WEFMAX (Water Environment Federation Member Association Exchange) and allows the leaders of our association to gather and discuss the issues we face. Everything from long-term planning to new ideas to better serve our members are open for discussion. Topics at this year's CSX will include such things as the strategic plan, sustaining and growing our membership numbers, ideas to better reach our students and young professionals, and anything else suggested. We strongly encourage all association officers, section officers and committee chairs to attend, but everyone is welcome. Bring your family (they can relax at the water park) and join your friends to help build a better Central States. I want to see you at the Kalahari.

I am excited to have this opportunity to serve Central States and I want to thank everyone who has congratulated me on my "promotion." I look forward to the future and to working with each and every one of you. Central States is a great organization, but together we can make Central States an even better organization.

Let's go have some fun. Dan



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All Central States leaders, which includes all CSWEA officers, all CSWEA committee chairs, all Section officers and all Section committee chairs, as well as any other interested or involved CSWEA members, should plan to attend our seventh annual Committee and Section Exchange and Young Professional Exchange, CSWEA CSX&YPX'12. The dates are July 12-13, 2012 and will once again be held at the Kalahari Resort in the Wisconsin Dells. The event is designed to provide for the informal exchange of ideas between Sections and committees over two half-days, beginning at noon on Thursday and ending at noon on Friday.

The focus of this year's event will be

on updating the CSWEA strategic plan and growing our membership. Our strategic plan helps us plan for the future and better serve our membership. Having a solid plan will help us maintain our core values and to stay focused on providing value for our members. With respect to growing our membership, all professional associations have been struggling with membership over the past decade. While CSWEA is and has been stable, new members are a critical to our continued success and viability.

In addition to the working sessions, ample time is set aside for discussion of other topics, networking and social activities. The meeting is arranged so that family members can take advantage of the water

park while mom or dad attends to CSWEA business. Central States provides a pizza party for everyone on Thursday evening. Make your plans to attend now, and feel free to contact President Randy Wirtz or Executive Director Dan Lynch for additional information.

Room rates are again \$199 per night; phone 877-253-5466 to make reservations.

Again this year, CSWEA YPX'12, (Young Professionals Exchange) will be incorporated as part of CSX on Friday, July 13, but all are invited to participate in both days of the event. Contact Eric Lynne for additional information or to suggest topics to be covered at YPX'12. CS





85th ANNUAL MEETING Review



ANOTHER SUCCESSFUL MEETING

By Beth Vogt, Immediate Past President

Another busy and educational annual meeting has come to a close. It was great to get back together with colleagues and meet new ones. Our week was kicked off with beautiful weather that made the golf outing even more enjoyable (although it didn't help some of us with our performance). The meet and greet allowed us to relax together as we prepared for full days of exhibits and technical sessions. Hopefully with Jeff Eger's help we can better understand Water's Worth It to carry that message forward to our communities as he suggested – one mind at a time.

Providing exceptional opportunities to learn from one another and talk with exhibitors about the latest technologies required significant effort by the Local Arrangements (Dean Wiebenga, Amanda Poole, Rich Hussey, Tim Tack, Jim Huchel, Mike Holland, and Anne Lecuyer) and Technical Program (Rick Manner, Jason Benson, Derek Wold, Tracy Hodel, Trevor Ghylin, and Jeremy Cramer) committees and we thank them for their diligence, attention to all the details, and excellent ideas. The beanbag toss certainly engaged our members, although I am pretty sure the winners should not be allowed to compete as amateurs! The annual banquet gave us an opportunity to recognize the great work and dedication of our members. The dancing at the end of the night was certainly – entertaining. Dean may have had the moves, but none of us should consider quitting our day jobs! Our closing speaker, Cindy Skrukrud demonstrated the wealth of scientific information gathered by working in partnership with other stakeholders. This data will be used in modeling the complex Fox River system from the Stratton Dam to the Illinois River to develop water quality improvement strategies.

As has become a tradition, our members remembered how difficult life is in areas where water isn't available or safe. Thanks to our generous Water For People donators and bidders, our silent auction raised about \$650! Additionally, we

thank Scott Trotter for bringing Water For Wine to our group with over \$800 raised for this great cause!

Many individuals and organizations in Central States are doing award-worthy work and we acknowledged some of these efforts with WEF and CSWEA awards. The 85th Annual Meeting winners are pictured on several pages in this magazine, so please look them over and congratulate the winners when you see

Finally, THANKS to our sponsors and exhibitors! These organizations share their experience, services, and technology with us to improve the water environment. Their support is what allows us to make the annual conference a successful education experience. Please review the lists below and remember that these organizations support the advancement of our industry every day.

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"Nigeria Water Project-Engineers Without Borders"



Special Recognition
Executive Director CSWEA '03-12
Eric Lecuyer



Academic Excellence Award
Taylor Swanson
Southern Illinois University, Carbondale

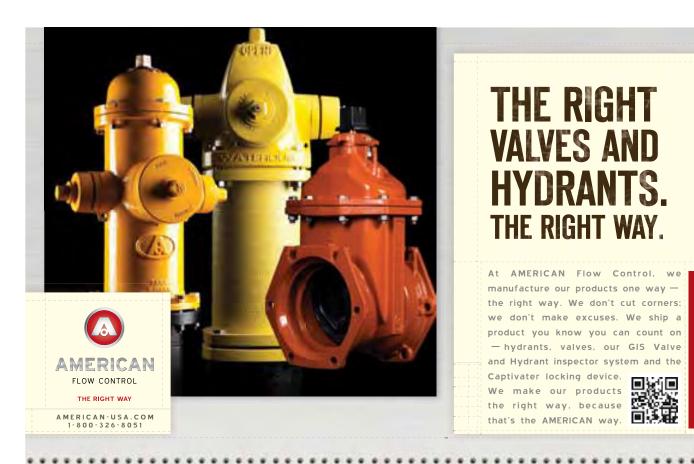


Kelman Scholarship Award Mark Ludwigson "Sustainability Comparison Framework and Application to Two Odor Control Systems"



Student Paper Competition-Graduate
Mengye Chen
University of Illinois, Champaign-Urbana
"Advanced Oxidation Process Treatment of
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85th ANNUAL MEETING Review



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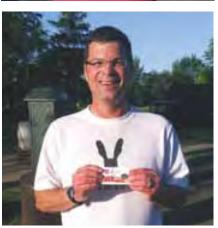
Seth Peterson from Bolton Menk, Inc. (1st place, 20:10) and Dennis Haile from DeKalb Sanitary District (2nd place, 20:55).

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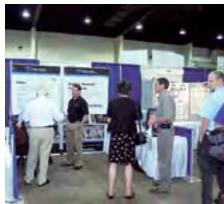
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85th ANNUAL MEETING Review



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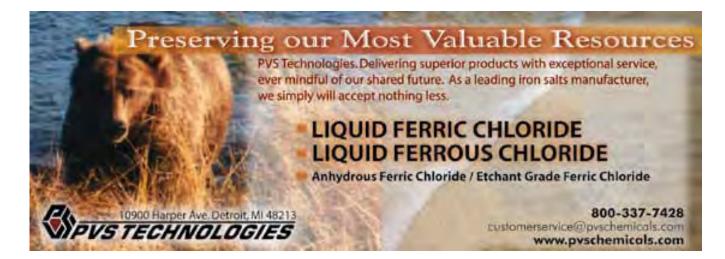














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2012

Stockholm Junior Water Prize State Finalists Announced

Congratulations to all students that entered the U.S. Stockholm Junior Water Prize state competitions! There were a record number of entries this year and so many excellent papers that choosing state winners proved to be a very difficult decision to make.

The purpose of the SJWP program is to increase students' interest in water-related issues and research, and to raise awareness about global water challenges. The competition is open to projects aimed at enhancing the quality of life through improvement of water quality, water resources management, water protection, and water and wastewater treatment.

The New England Water Environment Association will host the 2012 U.S. Stockholm Junior Water Prize National Competition to be held in Boston, Massachusetts. Students from around the United States will gather for three days of camaraderie, competition, and celebration at the Hilton Logan Airport Hotel, Boston, MA, where they will have the opportunity to meet with likeminded students to discuss their research projects and exchange ideas, as well as see the sites of the city at this fun and educational event from June 14-16, 2012.



As in past years, Central States Water Environment Association is sponsoring the state winners from Minnesota and Wisconsin. The Illinois Water Environment Association sponsors the state winner from Illinois. The winners from the three states are listed below.

Illinois

Rachel Traisman: "The Effect of Remediation of Oil by Bacteria, Dispersant, or Both, On the Hatch Rate of Brine Shrimp Eggs." Niles West High School; science teacher – Ruth Gleiche.

Minnesota

Rahul Mukherjee: "Restoration of The Great Lakes: A Genetic Study on Zebra And Quagga Mussels To Unfold The Mystery of Calcium (Ca2+) Based Invasion And Its Survival." John Marshall High School; science teacher – Eric Stanslaski.

Wisconsin

Filip Josifovski and Thomas Schneider: "Nanoparticles in Potable and Aquatic Freshwater: Novel Study by Transmission Electron Microscopy and X-Ray Spectroscopy." Nicolet High School; science teacher – Gary Stresma.

The U.S. winner will receive \$3,000 (USD) and an all-expense-paid trip to

Stockholm, Sweden for the international competition as well as the opportunity to present their research to water quality experts at WEFTER 2012, WEF's 85th annual technical exhibition and conference, this October in New Orleans, LA. In addition, the U.S. winner's school will receive \$1,000 toward enhancing science education and up to three finalists will receive \$1,000 each.

"The purpose of the SJWP program is to increase students' interest in water-related issues and research, and to raise awareness about global water challenges."

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Janesville Explores The Limits Of Technology

Wisconsin's new phosphorus rules require planning

By Jay Kemp





Wisconsin recently promulgated new rules for phosphorus (P) discharges from permitted facilities which will require communities to begin planning for compliance. The state has provided some flexibility for combining point and non-point control to produce overall water quality improvement, but it is likely that many facilities will need to modify or add onto existing treatment processes to meet the new limits. Janesville is also subject to the effluent limit derived from the Rock River TMDL.

The Central States Wisconsin Section Government Affairs Committee has been tracking the implementation of the new rules and TMDL implementation and has been seeking a role in a technical advisory role, especially as it concerns proposed water quality trading frameworks and anti-degradation rules. The work of the committee will be aid to communities as part of the planning process.

Biological processes costeffectively remove P to low levels

The City of Janesville wastewater treatment plant has been operating biological phosphorus removal (bio-P), with chemical (ferric chloride) backup since 2001. The nutrient removal system was modified in 2003 and further expanded and upgraded in a recently completed major project.

Bio-P processes incorporate un-aerated zones into the activated sludge process to develop anaerobic conditions which select for phosphorus-accumulating bacteria. These organisms actually release phosphorus and take up volatile fatty acids (VFAs) under anaerobic conditions. When exposed to an aerobic environment the bacteria then absorb an excess amount of phosphorus.

Before the recent upgrade, the bio-P process performed well but was subject to periods where the bio-P was not effective, due primarily to insufficient VFAs to feed the bacteria that accumulate excess phosphorus. Primary sludge fermenters were added in the recent project to increase the production of VFAs and provide a more consistent food source for the bio-P organisms. The fermenters have been in service almost one year and have provided much more consistent performance from the bio-P process. However, the effluent total phosphorus remains variable at times.

In nitrifying systems, like Janesville, ammonia is oxidized to nitrate. The presence of nitrate inhibits the development of anaerobic conditions, because nitrate is an oxygen source. Nitrate is removed by conversion to nitrogen gas by bacteria that use the same food as the bio-P organisms, so there is a need to manage the carbon resources and nitrate contained in the wastewater. Most of the nitrate entering the anaerobic zones comes from the return activated sludge (RAS) and can be

effectively controlled with a small anoxic zone. Further reduction in nitrate can occur through recycling mixed liquor to a second anoxic zone, following the anaerobic zone. The Janesville process was upgraded to include this additional nitrate removal step which provides energy recovery through the nitrate oxygen credit and reduces the total amount of nitrogen in the plant effluent.

The Janesville system has demonstrated the capability to produce very low effluent phosphorus values. In the fall of 2011 the plant received regular loads of high strength wastewater from an ethanol plant that was undergoing process modifications. The ethanol waste is an ideal food for the bio-P organisms and as shown in Figure 1, during this time the plant produced effluent total P values under 0.1 mg/L., without the use of ferric chloride. Using ferric chloride (FeCl₃) to reduce P to low levels requires an excess of the chemical compared to ratios in which P and Fe react, because the concentration of P is very low. Chemical addition is costly compared to biological P removal.

So how low can you go?

This summer Janesville is embarking on a study to improve the performance of the biological system through optimization of the fermenters, determination of the best mean cell retention time (MCRT), varying the number anaerobic zones, control of the mixed liquor recycle rates and continued refinement of dissolved oxygen control. In addition, a pilot cloth filter will be operated to determine the reduction in effluent P through filtration. The filtration study will include ferric chloride addition at various points in main plant flow and additional chemical polishing ahead of the filters.

Effluent polishing is accomplished by chemical addition directly ahead of the cloth filter which will be pilot tested. Chemicals such as iron and aluminum salts may be tested in combination with polymers to determine the best removal of P from the plant effluent. Pilot testing is a key piece of any technology evaluation as illustrated in Figure 2.

Demonstrating consistent effluent total phosphorus (TP) levels below 0.20 mg/L would be an expected result. A demonstration of producing

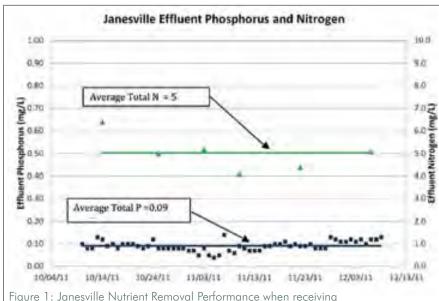


Figure 1: Janesville Nutrient Removal Performance when receiving ethanol plant wastewater

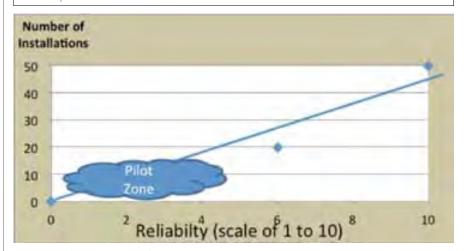


Figure 2: Pilot Testing Needs



lower effluent TP values would be a very important result for Janesville, since permit limits could go as low as 0.10mg/L.

The optimization study will begin with a focus on the fermenters. Operating the fermenter to produce an optimal level of VFAs to feed the bio-P process, will save on additional chemical costs. Primary sludge fermenters should be operated with a dilute sludge feed and overflow

rates in the range of 200 to 400 gpd/ft². Important process control parameters include: sludge blanket depth, torque on the sludge collector, underflow solids concentration and sludge withdrawal rate.

In bio-P systems phosphorus is removed only in the waste activated sludge (WAS). Therefore, in general, a shorter MCRT which results in a higher wasting rate is desirable for P removal.

However, the activated sludge process must also produce a sludge that settles well and in Janesville's case also oxidizes ammonia. So the appropriate sludge age will be site specific and may require seasonal adjustments. In addition, good dissolved oxygen control is essential. If DO is too high in the aeration tanks there may be excess oxygen in the RAS returning to the anaerobic zone (or pre-anoxic zone), if DO is too low denitrification and phosphorus release could occur in the final clarifier.

Janesville can add ferric chloride at multiple points in the solids and liquid processes:

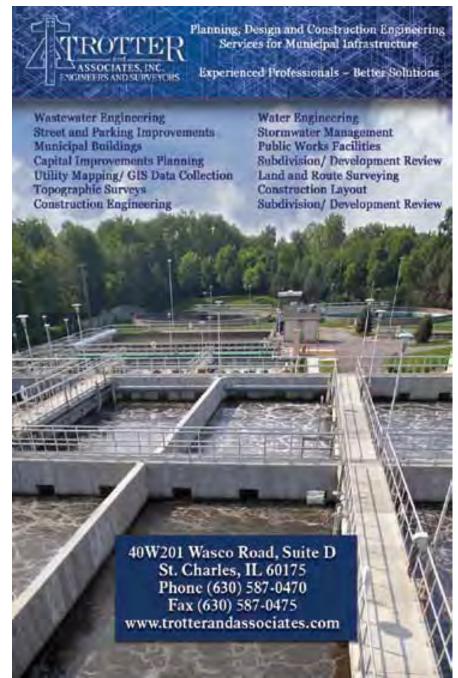
- Primary influent
- Mixed liquor (secondary clarifier feed)
- Anaerobic digesters
- Centrifuge feed

The above points can be used to enhance and supplement the biological process and control sidestream impacts. These chemical addition points in conjunction with the filters and chemical polishing will complete the picture for achieving low level phosphorus removal at Janesville. \$\mathbb{G}\$









CSWEA/IWEA TO HOST

17th Annual WEFTEC Welcome Reception at WEFTEC'12

CSWEA and IWEA members are invited to join us again for this year's WEFTEC'12 CSWEA/
IWEA Reception, Sunday, September 30, 2012.
The reception will be held from 6:00 to 8:00 p.m. at the Hilton New Orleans Riverside. Our joint WEFTEC welcome reception has become a not-to-miss event for members and friends attending WEFTEC and offers an outstanding kick-off each year. The reception will be held in the Versailles Ballroom of the WEFTEC'12 headquarters hotel in New Orleans. All members and supporters of CSWEA and IWEA are invited to attend.





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CSWEA'S 17TH ANNUAL EDUCATION SEMINAR NUTRIENTS IN LIMBO:



HOW LOW WILL YOU HAVE TO GO?

The 2012 Education Seminar featured a program focused on nutrients. The seminar focused on regulations, case studies, and the latest technologies regarding nutrient removal. The keynote address focused on cities of the future, and how nutrient reuse will be a key component for wastewater planning as we move forward with more stringent limits. A panel of regulatory speakers

from MN, WI, IL, and US EPA also provided insightful comments on nutrients, and how different geographic regions within the CSWEA area are proposing to reduce nutrient loads to waterways. Several speakers representing wastewater utilities also provided practical case-studies for facilities that are removing phosphorus and nitrogen to low levels, as well as the emerging

topic of beneficially reusing phosphorus as a resource. The proceedings for the 17th Annual Education Seminar can be found at www.cswea.org/papers.

If you missed the 17th Education Seminar, you will not want to miss the next one on April 2, 2013, again at the Monona Terrace Convention Center in Madison, WI to hear experts who will explore current issues related to biosolids.

















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CSWEA ANNUAL

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Central States WEA held its Second Annual Leadership Academy on April 2 at the Monona Terrace in Madison, Wisconsin. The seminar had 25 attendees from various backgrounds who sat in a variety of seminars to help aid them through their career. Topics included:

- Taking your Network to the Next Level
- Panel discussion, Various Stages of Leadership Throughout One's Career
- Start Building Your Network Today
- Emotional Intelligence
- Knowing Your Role

- State of Water: Why it is a Great Time to be in the Business
- Closing the Water Cycle
 The presenters had a variety of
 backgrounds with both technical and
 business perspectives present throughout
 the seminar. Central States offers this
 seminar to all members and although
 most of the attendees are earlier in their
 careers, we believe it is a nice seminar to
 be enjoyed by all members. The seminar
 is held in conjunction with the Annual
 Education Seminar and the registration
 fee does not cover the full cost of the
 seminar, but CSWEA believes it is

important that we offer opportunities to our younger members to attend CSWEA events and potentially allow them to attend the technical Education Seminar the following day at a nominal cost.

The seminar also allowed an opportunity for our members from various parts to meet up and share their experiences. At CSWEA events there are plenty of networking opportunities and by allowing members to attend this seminar it allows additional opportunities. After the seminar, the welcome reception for the Education Seminar is held where many of the following-day attendees

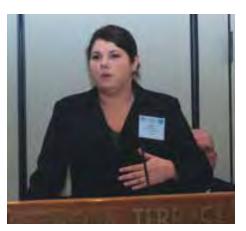










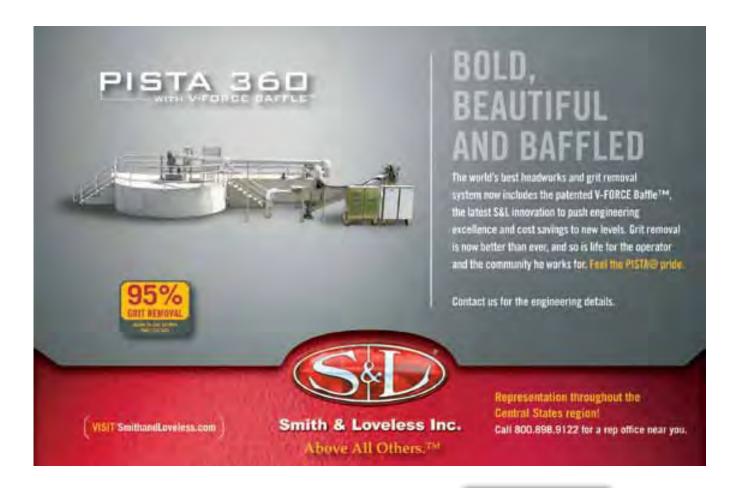


gather. After the reception is over, numerous members make their way over to the various local establishments where we watch the NCAA basketball championship and solve all of the water and wastewater problems of the world.

We would welcome any feedback or suggestions on improvement for the seminar. With this being a new seminar, the more members willing to participate, the better the seminar will become. We would like to see this seminar have the same recognition as the Education Seminar and hopefully one day other WEF MAs throughout the country follow with a similar set-up for their members.

I would to personally thank the presenters again for their time and effort. The organization recognizes it and greatly appreciates it. Each of the state section YP chairs should also be recognized as they were all able to secure a speaker/

presentation for the seminar, as well as Mike Holland. Moving ahead to next year, the seminar will be organized by the incoming YP Chair Eric Lynne and we as members should look forward to his tenure, as he will be a very active and valuable member in representing YP involvement throughout CSWEA. He already has ideas on improving the seminar and will hopefully be able to improve attendance to 40-60 people.



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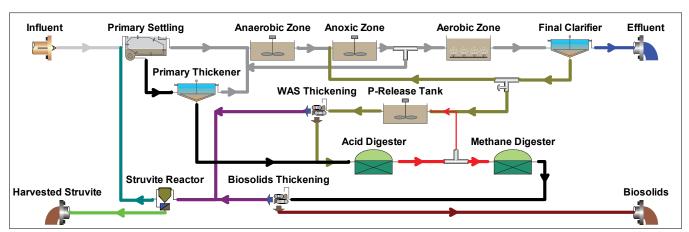
Promoting Phosphorus Release from Waste Activated Sludge (WAS)

Alan L. Grooms, P.E., Madison Metropolitan Sewerage District, 1610 Moorland Road, Madison, WI 53713

nhanced biological phosphorus removal (EBPR) has become a commonly used process tool in wastewater treatment. As engineers and operators, we guite comfortably design and operate a variety of EBPR process configurations to remove phosphorus from wastewater, and in most areas within the United States EBPR alone is still quite capable of meeting the regulatory effluent phosphorus limits. The nature of the EPBR process results in excess ortho-phosphorus taken up into the cells to be wasted as excess sludge – this is the removal method from the liquid stream. Because of

this, the EPBR process often presents related challenges such as high strength return streams, struvite formation, and increased phosphorus content in the biosolids. In reality, EBPR simply shifts the balance of phosphorus discharged from the facility from the liquid effluent to the biosolids. Many facilities in the Midwest of the United States apply their stabilized biosolids to land, so there is growing concern that this may be complicating an already complex non-point source problem. Separation of the phosphorus from both the liquid and solid discharges presents the means to truly control and direct the phosphorus discharge.

Madison Metropolitan Sewerage District (MMSD) is upgrading its solids handling processes, adding acid-phase digestion and phosphorus (struvite) harvesting. Research conducted by MMSD and the University of Wisconsin-Madison since 2000 has studied methods to trigger controlled phosphorus release from waste activated sludge (WAS) to permit reduction and recovery of phosphorus prior to anaerobic digestion. Recovery of phosphorus by harvesting serves to a) permit re-use of a valuable mineral resource; b) reduce the phosphorus content of biosolids applied to land. Releasing phosphorus from



Schematic of the current general process configuration for the Nine Springs WWTF, prior to commencement of the Eleventh Addition project now under way.

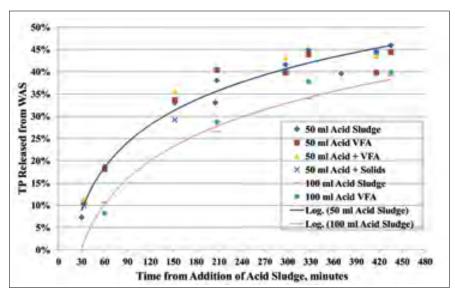
WAS and harvesting prior to anaerobic digestion adds another advantage to this list; c) reduction of struvite formation potential in and following anaerobic digestion.

Fitting closely with this issue is another that is gaining additional attention in recent years, the increasing concern of declining commercially viable reserves of phosphate rock. The layperson hearing snippets about nutrient blooms, dead zones, and runoff concerns might not be blamed in thinking that phosphorus is something the world would be better off without; far from the case, phosphorus is in fact a nutrient crucial to all known life on Earth. What better way to achieve sustainability with respect to phosphorus than to recover it from wastewater? In this way a valuable mineral resource is retained for re-use, versus being allowed to escape in a diluted form which is not commercially viable to recover and detrimental to the environment?

The wastewater marketplace has a small but growing number of phosphorus harvesting technologies. Currently there are several full-scale facilities operating around the world, including at the time of this writing four known operating installations of the Ostara Pearl® Nutrient Recovery Process in North America. While several phosphate precipitation products are chemically feasible for purposes of harvesting, the current municipal wastewater focus is on magnesium-ammonium-phosphate (MAP), which is commonly referred to as struvite. Struvite is formed from equal molar ratios of ammonia, magnesium, and phosphate and is chemically expressed as (NH₄)MgPO₄·6H₂O.

In the typical phosphorus harvesting arrangement at a municipal treatment works, the liquid stream resulting from dewatering of anaerobically digested sludge is often the feed to the harvesting system. Anaerobically digested sludge is typically rich in the necessary components for struvite, to the extent that struvite formation in and following anaerobic digesters is a familiar problem for municipal wastewater operators. By manipulation of the pH and chemical balances in the harvesting equipment, struvite can be precipitated and removed with high efficiency.

The previous research work sponsored by the district had concluded



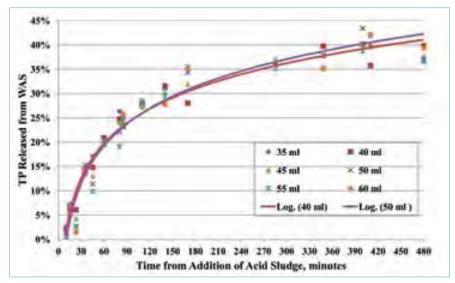
WAS phosphorus release and inhibition curves for VFA containing additives: Note the higher dose of VFA results in decreased release.

that combining WAS with primary sludge (or with the overflow from the gravity thickener handling primary sludge) and holding this combination of sludges for a period of time would result in release of some of the ortho-phosphorus contained within the WAS. This released orthophosphorus could be then separated via the filtrate from the sludge during thickening prior to digestion. While simple and effective, the extra liquid volumes involved required greater dewatering capability (more equipment) and also resulted in a somewhat diluted liquid feed stream, at least as far as phosphorus concentrations desired for

harvesting. Higher feed concentrations are desirable because they require less supplemental magnesium and sodium hydroxide (for pH adjustment) added in the precipitation reactor.

Our most recent research evaluated the use of acid-phase digester sludge (acid sludge) as well as other additives to trigger phosphorus release from WAS prior to digestion. Initially these experiments were started to explore the viability of using a small slip-stream of acid digester sludge as the VFA (volatile fatty acid) source. Once it was determined that this method was indeed viable, extensive experiments were





Depiction of phosphorus release performance for doses near the determined ideal dose for Nine Springs.

conducted at bench scale to determine the stability and effectiveness of the process and better define the successful operating range. Measuring the amount of ortho-phosphorus in solution over time permitted calculation of the total-P percentage released from the WAS. The specific materials and methods are discussed in greater detail in the paper (which should be accessible from the CSWEA website or by contacting the author directly). Experiments were also conducted at bench scale using filtered acid sludge (liquid only) as well as prepared VFA stock solutions made from acetic acid and propionic acid

(the two of which commonly comprise about 70% to 75% of the VFA in acid sludge). Results obtained using these created compounds were consistent with the results found using acid sludge, when compared on the basis of equivalent VFA

Overall, it was determined that addition of 5% (by volume) of acid sludge to 1L of WAS triggered release of about 40% to 45% of the orthophosphorus from the WAS in a time period under six hours. For this method it was confirmed that VFA was indeed the trigger material in question. Since VFA can be introduced from a variety



of sources, it may be more useful to the reader to think of this in terms of the actual concentration of VFA added (since strength may vary by source). Our experimental work found the most effective dose equivalent to 250 mg of VFA (expressed as acetic acid) added to 1,000L of WAS (at a concentration of around 4,800 mg/l TSS and containing around 4.6% total-P). A surprising finding from this work was that the VFA: Phosphorus Released ratio that was most effective was in the range of 2.5:1 to 4:1; this is below the values commonly cited in literature of 5:1 to 10:1 for biological phosphorus removal. This difference may be attributable to something unique about the sludge at MMSD that has yet to be determined or the fact that there is little work in the literature dealing only with orthophosphorus release (most work concerns itself with release and uptake as done in the EBPR process).

Another surprising finding was the observation of an inhibitory effect on ortho-phosphorus when excess VFA was introduced into the mixture. At first this was believed to be possibly due to something in the acid sludge itself, such as sulfides. However, the effect was consistently observed in all tests including those using stock solutions made from acetic and propionic which would not contain sulfides. At this time it is unknown why the inhibition occurs, but it does provide a warning for those desiring to use VFA introduction into WAS for release of ortho-phosphorus, that warning being that the addition of more VFA is not necessarily better and may both waste VFA and inhibit the release process.

Another substance to trigger phosphorus release was also tested and found to provide good results. This substance was a product marketed by Quality Liquid Feeds of Dodgeville, Wisconsin, and referred to in the paper as QLF. A sample of QLF was provided to us for testing and analysis, and our laboratory found the substance to contain no VFA, but rather had a high BOD content (which corresponded with the supplier's statement that it contains simple sugars and trace nutrients and has a high COD). A series of bench tests found that a very small amount of QLF (4 ml of QLF per 1,000 L of

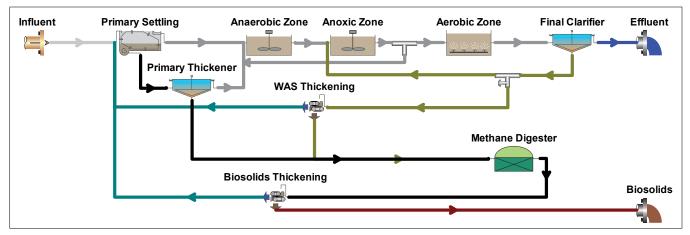


Illustration of the general process layout for Nine Springs WWTF after completion of the current Eleventh Addition work showing struvite harvesting.

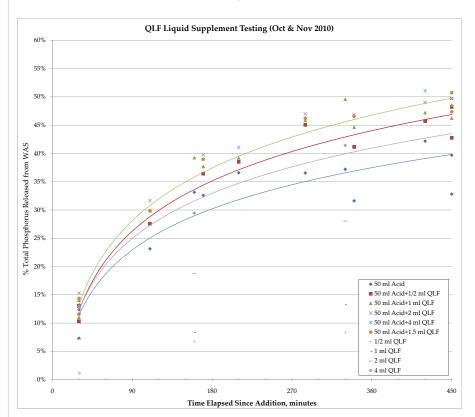
WAS) attained similar ortho-phosphorus release results to that of the acid sludge and other VFA containing solutions. Additional testing using an even smaller dose of QLF with the acid sludge (for example, 1 ml of QLF plus 50 ml acid sludge added to 1,000 ml WAS) produced even better ortho-phosphorus release results, at times approaching 55% total-P released which is nearly the maximum possible value for the Nine Springs WAS prior to digestion of the cells themselves. Use of this combination in the future is a possibility that will be considered at Nine Springs, but more importantly it offers a possible option for facilities who desire to release phosphorus prior to digestion but lack a readily available concentrated VFA source (such as acid sludge or a chemical source).

Currently, our solids handling improvements project is under construction and includes two acidphase digesters, two WAS blending tanks configured to accept acid sludge and thus permit phosphorus release, and struvite harvesting (we will be installing two of the new larger Ostara Pearl 2000® reactors). The results of this research have been used to design for phosphorus release and harvesting prior to digestion. By using the acid sludge (versus combining and co-thickening primary and WAS for example) as our trigger, the liquid stream to the GBT thickeners preceding digestion is lowered which permitted dropping a GBT from the design (saving capital cost). The liquid acid sludge recycle stream is also more concentrated in phosphorus and

magnesium, which should enhance the overall efficiency of the struvite harvesting reaction in the reactor. For our start-up scenario, we project we will be removing approximately 940 pounds of phosphorus per day from our watershed. Because struvite also contains a mole of ammonia and a mole of magnesium for each mole of phosphorus, the total weight of struvite product projected to be produced at

startup is around 3.7 tons per day.

While relatively few facilities use acid-phase digestion at this time, the concepts developed in this research are relevant to other facilities interested in releasing phosphorus from WAS for harvesting. One unanswered question from this research is if this process is proven viable on any EBPR sludge, or if there is some characteristic of the Nine Springs WWTP waste activated sludge



Results from the testing of non-VFA additive (QLF) for triggering release of phosphorus from WAS, showing comparable results.

"While relatively few facilities use acid-phase digestion at this time, the concepts developed in this research are relevant to other facilities interested in releasing phosphorus from WAS for harvesting."





that makes this process unique. While no experiments were conducted to confirm the consistency of this process on EBPR sludges from other treatment facilities, a recent article (Kelly et al (2010), "Wastewater resource extraction," Water Environment and Technology, 22 (12), 50-52.) discussed the use of sludge from an Autothermal Thermophilic Aerobic Digester (ATAD) to trigger phosphorus release from WAS. The article also specifically noted that the characteristics of ATAD sludge and acid-phase sludge should behave similarly, thus providing supporting basis that this is not a phenomenon unique to the Nine Springs WWTP.

Because the volatile solids concentrations in the feed to the fullscale acid phase digester is anticipated to be higher than that achieved in these experiments, it is reasonable to expect a higher resulting VFA concentration in the acid sludge that is produced. Correspondingly, with anticipated higher VFA concentrations, full-scale operations may result in a somewhat reduced acid sludae addition requirement.

Substances other than acid-phase digester sludge may also be considered for use in triggering phosphorus release from EBPR sludges. These substances may include (but not be limited to): ATAD sludge (untested in this experiment), acetic acid, propionic acid, and also non-VFA containing readily biodegradable carbon (RBC) sources. These RBC sources could be the QLF product tested in this study, products similar to QLF, or other carbon sources which were not tested in this study.

It is expected that the core elements (acid phase digestion, WAS P-release tanks, and struvite harvesting) of this design upgrade will be brought on line at Nine Springs in the summer of 2013. Additional modifications to existing digesters will then be conducted, with the completion of this upgrade expected in summer 2014. If all goes well and no surprises are encountered, by that time we will be able to describe a successful transition from bench and pilot scale testing to full scale operation of an efficient phosphorus harvesting process. CS



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- · We use vegetable oil-based inks to print the magazine. This means that we are not using resource-depleting petroleum-based ink products and that the subsequent recycling of the paper in this magazine is much more environment friendly.

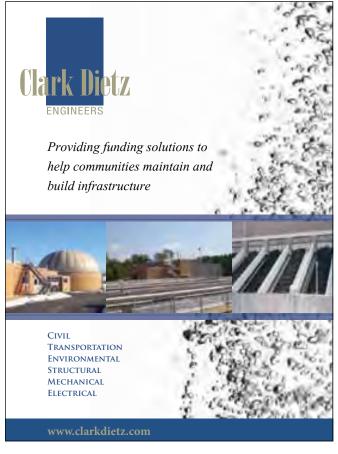
is more than just talk

As we continue to deliver valuable information through the pages of this magazine, in a printed format that is appealing, reader-friendly and not lost in the proliferation of electronic messages that are bombarding our senses, we are also well aware of the need to be respectful of our environment. That is why we are committed to publishing the magazine in the most environmentally-friendly process possible. Here is what we mean:

- During the printing process, we use a solvent recycling system that separates the water from the recovered solvents and leaves only about 5% residue. This results in reduced solvent usage, handling and hazardous hauling.
- We ensure that an efficient recycling program is used for all printing plates and all waste paper.
- Within the pages of each issue, we actively encourage our readers to REUSE and RECYCLE
- In order to reduce our carbon footprint on the planet, we utilize a carbon offset program in conjunction with any air travel we undertake related to our publishing responsibilities for the magazine.

So enjoy this magazine...and KEEP THINKING GREEN.

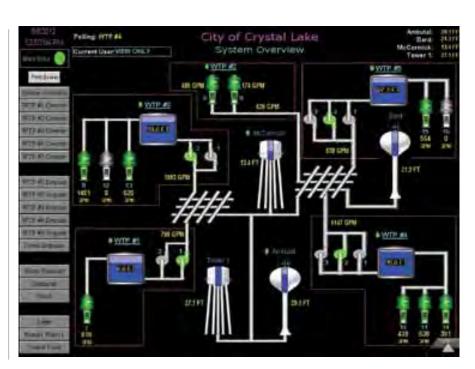


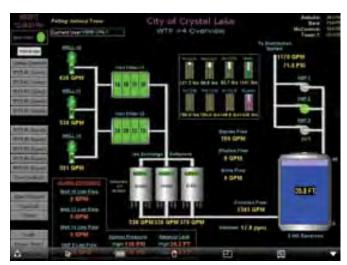




Tablet Computers and their Use in Wastewater Plants

elieve it or not, tablet computers elieve it or noi, iubic. 22 have been around for at least 10 years. They have undergone multiple revisions, editions, and within the last two years or so, we've finally got a handful of great products, with great battery life, great screens, and most importantly, they are cheap and easy to use. I don't think many would disagree that tablets can be fun, useful tools for our personal lives, but do they have a place in wastewater plants? By my estimation, the answer is yes. Both Android and Apple products are available for between \$200 and \$700, depending on the options you pick. We generally recommend agencies consider getting the units with the built-in air cards from a cellular carrier for between \$25 and \$40 per month, which makes the unit always available (provided you have good cell coverage, of course). I am often asked to







work with staff to help justify technology advancements for utilities, and tablets are no exception. If you are considering a tablet computer for your utility, here are the top 10 favorite reasons I've seen over the past year.

Top 10 reasons a wastewater plant should consider a tablet computer: 10. They cost between 25% and 75% less than a laptop.

- 9. Over a four-year life, tablets are estimated to cost you four times less than a laptop.
- 8. The batteries will last all day long without a charge; usually multiple days.
- 7. They can be pretty easy to secure and encrypt.
- 6. Your staff will learn how to use them a lot faster than a laptop.

- 5. Secure applications to remote into your Wonderware, iFix, or Rockwell SCADA system are usually less than \$15 for one user.
- 4. Remote access over a cellular connection is straightforward and secure.
- 3. Available military-grade cases for less than \$100 will protect the device from a drop onto concrete (it will still sink in your aeration tank though, but doesn't everything sink in those?).
- 2. Lots of other apps like Pump Energy, Dropbox, Evernote, Skitch, Skype, iCloud, CloudOn, AutoCad WS, and PocketCloud make tablets way more useful tool for wastewater and professional staff than anything you have now.

1. The environment will be safer. because you can respond to issues quicker and easier than you ever have been able to before.

So you may think your next question is which device to buy? Maybe you're disappointed I didn't vote Android or Apple for you. Don't be fooled into thinking that you can just run out and buy one and it will make you more efficient. It's best to plan out what it could be used for in your specific role, make a simple business case for buying it, check to see what others around you are doing, then make sure you are setting it up securely, as easy doesn't always equate to secure. Happy tapping, swiping, and pinching! CS

Tablets can be effective tools for WWTPs.



\$500 Scholarship FOR FUTURE WASTEWATER PROFESSIONALS

A Message from Craig Kelman & Associates, publishers of *Central States Water*:

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

On behalf of our professional publishing team and our advertisers who use the pages of Central States Water to convey their important messages, we offer this scholarship to a deserving individual who is or will be studying to become a wastewater professional in one of the member states.

Please visit the Central States Water website, for more details – **www.cswea.org**

Dear Friend of Infrastructure:

No one knows the challenges of managing your water, sewer, and stormwater infrastructure better than you do.

You know only too well the constraints of an aging system, shrinking budgets, unfunded mandates and the wrath of angry taxpayers. Yet, year after year, somehow, some way, you manage to go that extra mile and keep things working, ensuring that Minnesota's public health is protected, the ecosystems flourish and the state economy moves forward.

And your reward?

Well, that's the irony ... because if you do your job really well, and infrastructure performs (as it should) well, then no one will ever truly see or hear about you at all! Yes, the only time YOU get noticed is when things go wrong.

And take it from us, this is NOT the way to get to know your public — or for that matter — the way the public should get to know their infrastructure! That's why we created Liquid Assets Minnesota, a one-hour documentary co-produced with Twin Cities Public Television (TPT). Also on this DVD is a condensed 12-minute version of the entire program, and scene selections for various infrastructure topics.

Planners, engineers, mayors, managers and front-line workers from across the state take your customers into Minnesota's pipes, sewers and treatment plants. Imagine it ... Your customers, your council, your city hall, will see firsthand how their drinking water, wastewater, and stormwater systems really work and the challenges your city faces to KEEP IT WORKING!

The program has been well received since it first aired on TPT last December. Many communities have had the program broadcast on their local-access cable television stations. We hope you can find constructive uses for Liquid Assets Minnesota and that it helps raise awareness about the vital issues of water infrastructure systems in your community.

Sincerely,

Your Liquid Assets Minnesota Partner Team & Sponsors www.blueprintMN.com



Liquid Assets Minnesota

By Patti Craddock

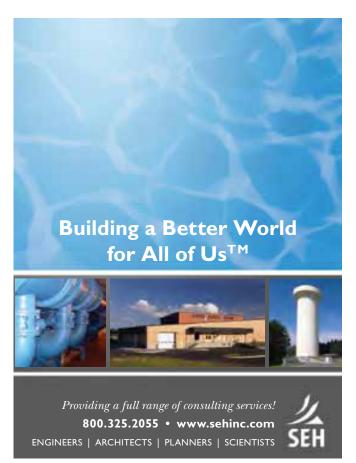
This letter will be mailed out with the DVD version of the documentary titled *Liquid Assets Minnesota* to Minnesota communities and legislators in early June. CSWEA Minnesota Section members will also receive a copy of the DVD. This documentary and the DVD jacket, a portion shown at left are the amazing products that evolved from the grassroots efforts of Andrew Sullivan, City of Eden Prairie.

Andrew pulled together several entities in the spring of 2009 to consider producing a Minnesota-version of *Liquid Assets* produced by Penn State Public Broadcasting. CSWEA was represented at this initial meeting and made the first monetary commitment to sponsor the documentary. After the initial \$5,000 sponsorship, creation of a partner team, several meetings and

independent committee work, the individual efforts of Andrew to build a website and get the word out (and lots of other work), a total of \$46,500 was raised. This budget provided funding for Twin Cities Public Television (TPT) to produce the documentary, animation graphics, and production of 8,000 DVDs with a story-telling jacket.

CSWEA was fortunate to be a part of this significant work and is very appreciative of Andrew Sullivan's creativity and tenacity in seeing this project through. This activity allowed CSWEA to forge new and strengthen existing relationships with partner team members – thanks go to the volunteer team members for their talents and time – and also a thanks to the sponsors that stepped up to support this effort. $\ensuremath{\text{CS}}$

"CSWEA was fortunate to be a part of this significant work and is very appreciative of Andrew Sullivan's creativity and tenacity in seeing this project through."





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The campaign aims to inform a range of audiences, including the general public, media, opinion leaders, decision-makers, and elected officials.

The goals of the campaign are to:

- Demystify water and wastewater treatment by showing the direct connections between what water sector professionals do and what the public values — create jobs, protect health, protect the environment, and provide clean water.
- Expand and deepen the awareness of the value of water.
- Explain that water is a precious and limited resource that needs to be recycled and reused.
- Elevate the profile of water sector professionals by building respect and appreciation for the services they provide.
- Create a foundation of public awareness to support needed infrastructure investments.

Support cutting-edge practices to deliver, recover, and reuse water resources.



How does it work?

Everyone who uses water is encouraged to join this coordinated effort to raise awareness about the value and importance of water. By joining our voices behind this campaign, each of us can contribute to a positive change.

For members of the water sector, the campaign will:

- Provide you with communication tools you will need to succeed.
- Help you to build alliances at the state, regional, and community level.
- Help you coordinate a flexible outreach and education effort that is easily tailored to what's happening in your state, region, community or agency.

For the general public, the campaign will:

Provide you with the information you

- need to be an educated and responsible consumer.
- Help you to create a personal connection with water.
- Show you how your life is inextricably linked to this vital resource.
- Help you to understand how important the water profession is and the essential services that it provides to your quality of life.

Millions of people around the world who lack access to clean water and basic sanitation, while others simply have to turn on the tap or flush the toilet. We forget that without clean water, OUR HEALTH, and our quality of life is at risk.

We forget about the vast infrastructure beneath our feet and the tireless dedication of water professionals who work day and night to keep our water clean. It's time we show OUR RESPECT for water and the men and women who provide these essential services.

We must increase OUR EFFORT in keeping our water safe and show OUR PASSION for the indispensable resource that our lives and OUR FUTURE depend on. Every aspect of our lives is directly connected to water and we must learn to value it. We all use water and we are all responsible for it. Our voice, our thoughts, and our actions are crucial to sustaining the quality of life that water provides.

Be as good to water as water's been to you. WATER'S WORTH IT! CS

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Changing Tides

By Bill Oldenburg

feel it is an honor and a privilege to have the opportunity to serve as the Wisconsin Section Chair for 2012-2013. I am humbled to follow in the footsteps of Jane Carlson and Keith Haas. Both have served as mentors and role models within their leadership roles in our fine organization. I would also like to thank Dan Arnott for the six years he has dedicated as Wisconsin Section secretary/treasurer. Dave has been the glue that holds our section together. His professionalism, eye for detail, and never ending guidance has served as a pillar to those of us moving through

the vice chair and chair roles. I am happy to say we will continue to have Dave's vast institutional knowledge as he is the incoming vice chair this year. Dave has now passed the secretary/treasurer baton to Josh Gable and I am looking forward to working with him this year. Josh and I will learn our new roles together and continue to build on the hard work of past leaders.

My primary goal for 2012-2013 is to keep our Wisconsin Section strategic plan on the front burner of each committee as we move forward. In reviewing the success of our last strategic plan, it became clear that our greatest challenge was implementation. Since 2000, we have developed excellent plans but then they stall. Part of the struggle is the fact we are a volunteer organization and everyone is challenged for time. As active members of Central States Water Environment Association, we dedicate our time and energy to both the association and the section in addition to the commitments to our already busy day jobs. It is difficult to ask people to do more when our time is such a precious commodity.

It is my opinion that the successful implementation of our strategic plan is simple. We just need to keep it in front of us! If each committee discusses the plan with its membership and recognizes how they contribute to the goals outlined in the plan, we as an organization will see success. I challenge each committee chair to keep the strategic plan as an agenda item at least twice per year. The Wisconsin Section board will have the strategic plan



on each of our agendas throughout 2012-2013. I challenge each of you as members to see where you can help make this plan a success.

In addition to significant changes to Wisconsin Section leadership, many significant changes to Wisconsin water rules are impacting our state this year. Wisconsin POTWs are continuing to see reissued WPDES permits with more stringent phosphorus limits, watershed adaptive management and water quality trading are being addressed, and SSOs requirements will impact collection system programs. Change is in the air...and in the water.

There are a variety of excellent education opportunities on the horizon for 2012. The 4th annual Industrial Pretreatment Seminar is schedule for June 12 in Oshkosh and is poised to be a big success. The CSWEA-CSX is scheduled for July 12-13. This is an excellent event to brainstorm and plan for 2012-2013 as well as cultivate our YPs into our next generation of leaders. This year is the 25th anniversary of the Classic Collection Systems Seminar in Watertown on June 7. Randy Belanger, Collections Systems Committee Chair, promises it will be extra special as they celebrate a quarter century of success. In addition, the 5th annual Northwoods Collection System Seminar will be July 27 in Marshfield. Once again, the Management Seminar will be held at Cabela's in Richfield on August 8.

This year the tides are changing. New rules are changing the face of environmental water standards in Wisconsin and beyond. New young professionals are changing the face of our organization and our leadership. Each new day provides us as water and wastewater professionals the opportunity to make a difference in our local environment. Each new seminar we offer provides us the opportunity to educate people and successfully implement the CSWEA mission statement to promote the "exchange of water quality knowledge and experiences among its members and the public and to foster a greater awareness of water quality achievements and challenges." I encourage you to embrace this change and ride the wave! CS

"My primary goal for 2012-2013 is to keep our Wisconsin Section strategic plan on the front burner of each committee as we move forward. In reviewing the success of our last strategic plan, it became clear that our greatest challenge was implementation."

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A Successful Annual Meeting and More

By Mark Eddington

t would be remiss if I did not begin this message by acknowledging Anne (and Eric) Lecuyer's 10 years of diligent service as the Executive Director of Central States Water Environment Association. In all seriousness, Eric's guidance through 10 tumultuous years of economic highs and lows has been immeasurable. A hearty congratulation is also in order for our new Executive Director, Dan Lynch. On behalf of the Illinois Section, we wish you the best of luck in the years to come. I also want to thank Dean Wiebenga and this past year's Local Arrangements Commit-

tee for a successful 85th Annual Meeting at Pheasant Run in St. Charles, Illinois. It is also worth noting that Rick Manner's efforts in assembling this year's technical program should be similarly recognized. The caliber of subject matter as well as that of the presenters was the best in recent memory. Last but certainly not least, Elizabeth Vogt's direction in steering CSWEA over the past year has been invaluable. With the same spirit our section extended Elizabeth, we commit both our time and effort to Randy Wirtz as the stewardship of this association is passed to him.

As many of you may be aware, the Illinois Section has a full dance card of events and educational seminars this year. It is exciting that new committees have been created (Technology and Biosolids) and existing committee rosters are adding depth. On June 5, the Illinois Section partnered with the Illinois Section of AWWA Information Management and Technology Committee (IMTech) to host the first Midwest Water and Wastewater Technology Conference at McHenry Community College in Crystal Lake. Whether it is GIS, SCADA, or GPS data collection, it is in your best interest to at least learn the acronyms to, if nothing else, keep your IT guy honest. Later in the month, on June 21, the Collection System Committee will be partnering for a second year with Fox Valley Operators Association and Illinois Association of Wastewater Agencies to host the 5th Collection System Educational Seminar at Aurora University. Our section looks forward to hosting operations, laboratory, and biosolids seminars this calendar year so keep an eye on the upcoming events.

Needless to say, CSWEA's ability to partner with other associations has brought together a broader group of water and wastewater professionals. Certainly, many of us are members of several of these fine associations and understand that each



association brings its own strengths to the table. Our ability, particularly during slow economic times, to offer worthwhile content at a value should be held paramount. An Illinois Section goal has been and continues to be outreach to other water and wastewater organizations to keep seminar attendance up and registration fees down, broaden technical subject matter, and to build professional networks.

The Illinois Section leadership team recently facilitated a steering meeting to discuss initiatives and goals for FY 2012/13. First and foremost,

our section is committed to continue to build committee rosters with talented individuals. We have been the beneficiary of a strong YP program and have seen YPs step up and become active in almost every committee we currently advertise. Our section is committed to enabling YPs to become active in our association while building their professional networks at the same time. Certainly the YPs are the easy and familiar candidates, but there are also seasoned professionals in our industry that are interested in becoming active and seeking opportunities to contribute. Each member of the Illinois Section needs to look to what he or she can do to build this association, so I am issuing a challenge to each member of the Illinois Section; encourage one new member to become active in our association. A second goal is to develop a student mentoring program. Student chapters have identified the need for mentoring early in their careers, another goal for each of us is to reach out to a student chapter in Illinois and identify a student you can mentor. We look to develop a mentoring program to roll out during this coming fall semester. The ability to encourage YPs before they enter the workplace can not only build the association but can also provide students a jump start to developing their professional network and leadership skills. The final section goal is to reach out to members outside of the Chicago Metropolitan Area. Certainly, geography is a hurdle, but with technology (teleconferencing, online meetings, etc.) now is the time to encourage down-state and rural water and wastewater professionals to join a committee and become active in CSWEA.

I'm very proud to represent the Illinois Section as its chair and, like many of you, am looking to move CSWEA forward again this year.

"The Illinois Section has a full dance card of events and educational seminars this year."

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Any Volunteers?

By Rob O'Connell

ow that our annual conference has concluded and the beanbag toss champion has been crowned, it is time to look forward to another exciting year. The annual CSWEA conference in St. Charles, IL was a great time with many familiar faces and interesting presentations ranging from sustainability to nutrient removal to plant and collection systems O&M. There also was a lot of food and drink, which always is a good sign. A special thanks to all who assisted in organizing the conference, and a very special thanks to Dean Weibenga for rallying the troops when it was needed.

As always, a change of leadership takes place at the annual meeting and this year was no different. At the business breakfast, the Minnesota Section was pleased to recognize two of our longstanding members for their many years of dedication to CSWEA. Ted Field, aka the modern day Garry Trudeau, was recognized for his service in guiding the Minnesota Section over the past three years. As many of you know, Ted has moved on to a new phase in his life, and many of us will miss his knowledge, personality, and leadership. I can say with confidence that Ted is one of a kind. The Minnesota Section also recognized John Glatzmaier. John's most recent role in the organization was as Minnesota State Section trustee and John has provided the section with dedicated service throughout his career. As we recognized both Ted and John, we also need to recognize all of those who are willing to spend the extra time to continue the efforts that many have made in the past.

It is fairly obvious that the Minnesota Section is in need of some younger faces. We need the next generation, current 20and 30-year-olds, to become active in our group so that when it is time we can turn to them for leadership. Hopefully all of us can



keep this in mind and make efforts to recruit young engineers, consultants, and others in the industry to sustain our organization. I do believe, though, that we also must provide them with reasons to become involved and to assure them that they are part of a larger group, a group that they can take pride in being associated with. For this reason, over the next year, I ask all of us to attend some of the young professionals outings and become engaged in their needs and desires. We all need mentors.

Looking at the 2012-2013 CSWEA calendar there are many great events that have already been

placed on the calendar. The annual CSX meeting scheduled for July 12 and 13 at the Dells, is a fun event that is designed to bring together the organization's leaders to discuss ways of modifying and improving our organization, sections, conferences and events. John Friel and I will attend, as we did last summer. Any ideas or suggestions, or if anyone wants to tag along you are more than welcome. The annual Minnesota Wastewater Operators Association's annual conference will be held in Grand Rapids, MN. This year's dates are July 24-27. This year's WEFTEC conference is scheduled for late September in New Orleans. That should be fun. The Minnesota Section's 27th annual Conference on the Environment is being planned for November 2012. And, as always the annual Innovative Approaches to Wastewater Operational Problems seminar will be held in St. Cloud next February.

Personally, I would like to thank this year's Minnesota Section Past Chair, John Friel, for all of his advice, input and knowledge as well as all of the effort he put into the organization during the 2011-2012 year. Lastly, I welcome your input regarding any topic or suggestion to improve the MN Section. I can be reached at 651-292-4591 or robert.oconnell@tkda.com. Thank you. CS





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WI Section CSWEA Northwoods Collection System Seminar

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AUGUST

WI Section Management Seminar

August 8, 2012 Richfield, WI

SEPTEMBER

IL Section Operations Seminar

Location and date to be determined

WEFTEC'12

September 29-October 3, 2012 New Orleans, LA

CSWEA-IWEA Welcome Reception

September 30, 2012

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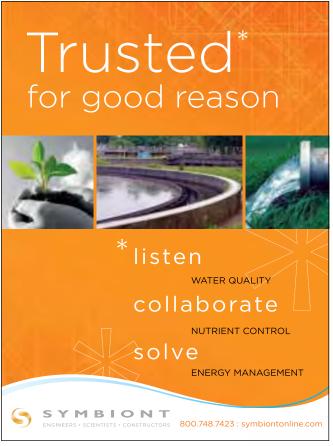
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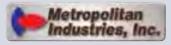
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