Aerial view of Whitewater Wastewater Treatment Facility, Whitewater, WI

52nd Annual W.W.O.A. Conference
October 16-19
Grand Geneva Resort, Lake Geneva
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The Clarifier is the publication of the Wisconsin Wastewater Operators’ Association and is intended to inform and educate the membership on issues related to the treatment and control of wastewater. The Clarifier is produced five (5) times each year: February, April, June, September, and December. All members are encouraged to contribute to the mission of the Clarifier.

The Wisconsin Wastewater Operators’ Association is a non-profit organization dedicated to educating, informing, and advancing the wastewater profession. WWOA has approximately 2,000 members divided throughout six regions: Southeast, Southern, Lake Michigan, North Central, Northwest, and West Central.
Presidents Message: We always get through the challenge

April showers bring May flowers. April showers were few, but May showers have been plentiful. Many have been dealing with more than beneficial rains this Spring. Flooding has occurred in many parts of the State, testing our knowledge and skills as wastewater professionals.

No matter what comes at us, we always find a way to get through the challenge. With all the education provided by WWOA and other members of our organization, treatment facilities are always prepared for the worst. Equipment is ready to go and plans in place for anything thrown our way. Keep up the good work. Our water supply is counting on us, the last line of defense.

WWOA has posted a news item on our website, brought to us from a Junior at Wisconsin Dells High School. During his research for a science/economics class report to raise awareness on the necessity of water conservation in the world, he came across this report. It is written by Summer Banks, titled, Water Conservation – 11 Things You Need to Know. Please share this with everyone you know. It would be an awesome item to hand out during school tours or share it with the schools in your area as an educational item for the day. As wastewater professionals, prevention of wasting water is just as important as renewing the supply.

The 52nd Annual Convention at Lake Geneva is set and ready to go. You should have gotten your registration packets in the mail. If by chance you don’t get one, don’t fret, go to the WWOA website. You can find the brochure online and check out everything that is planned for this year. Technical Committee Chair, Jeff Smudde and Executive Secretary, Karen Harter, have everything in place and ready to go. Get your rooms reserved, hotel information is online also.

After checking out the fantastic program set up for your enjoyment, fill out the online registration form, to reserve your spot at this one of a kind facility. It is filled with shops, restaurants and a couple of areas to wet your whistle. Bring the family along as part of the housing arrangements is an on-site, indoor, water park. This is another great opportunity to share your time with you family and learn during the same visit. Registration for the 52nd Conference is open now!

As I look at the calendar, my time as your President is passing way too quickly. I have seen quite a few of you at Regional meetings throughout the State. I look forward to seeing many more of you as the months move on. My goal is to visit at least one meeting in every Region and I am

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WWOA
New Members

JDavid Buckner – North Central
Kyle Casper - Southern
Jason Deglow – Southern
Roxane Frank - Southeast
Matt Fritze - Minnesota
Kerry Gulsrud – Southern
Brian Koll - Southern
Scott Oman – Southern
Tim Oman – Southern
Aaron Sanders – Southern
Richard Silvers - Southern
Joshua Soyk – North Central
Brian Vieth – West Central
William Voigt – Southern

If we missed anyone, please let
Karen Harter know:
secretary@wwoa.org
Jim Miller, September 9, 1955 – May 21, 2018

WWOA’s long-time friend, colleague, mentor, and motivator has passed away unexpectedly.

Jim Miller was more than that; he was a Lifetime Member of the WWOA, a longtime judge and supporter of the WWOA’s Operators’ Competition, and he was the Minnesota Wastewater Operators’ Association Secretary-Treasurer for many years. Jim brought countless people into the fold both in Minnesota and Wisconsin.

He kept everything operating smoothly, working and living his life around the needs of both organizations. Jim was also active in Central States Water Environment Association, and much more. He truly cared about the outdoors and environmental issues, and it reflected in his work. In the business of wastewater treatment, where we’re not always recognized for being a serious vocation, Jim brought professionalism to the forefront. He was our cheerleader, spokesperson, and steadfast promoter. Our industry will need more people like Jim Miller to follow in his footsteps and ensure that both the WWOA and the MWOA continues as the excellent educational organization that he worked so hard to create. We mourn the wastewater profession’s loss.

Jim was a husband, a father, and a proud grandpa. He also cared deeply about his friends and co-workers. As news of his passing became known, one theme was repeated over and over, “Jim encouraged me, taught me, and mentored me.” Could a person have a better legacy than this?

Farewell to an outstanding friend to all and our industry. You will be missed. Keep the water clean up there.

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happy to say that I am more than half way there. I must commend the Regions for the agendas they put together.

The training has been outstanding and the plant tours very enlightening. The Regions are the backbone of the WWOA and without you, we wouldn’t be where we are today. A strong, vibrant organization of more than just members, but friends throughout the state and beyond. Thank you again, for the honor and privilege of serving as your President.

As I write my message to you, I received a message that we lost a friend to WWOA and the industry. Jim Miller, MN WWOA Secretary/Treasurer, passed away the end of May.

Jim was a Lifetime Member of the WWOA, a fixture with our Operators’ Competition as a judge and mentor. I have known Jim longer than I care to admit. I can still hear him coaching me on at an Operator’s Challenge, “Today would be good”. He was always there to help at the WWOA Conference whenever we asked. Jim will be missed by many, here in the WWOA as well in the MN WWOA. I will remember Jim with great joy, admiration and respect.

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City of Whitewater Wastewater Facility

Background
The City of Whitewater Wastewater Facility is located at 109 County Road U on the north side of Whitewater. The original plant was brought online in 1981. Since then there have been updates which include RBC covers and supplemental air (1985), construction of a Preliminary Treatment building for screening and chemical phosphorus removal (1997), ARRA equipment and rehabilitation project (2009) and the installation of a boiler/heat exchanger unit (2011). Recognizing the existing secondary treatment process may not suit the long term needs or flexibilities of the community a Facility Planning effort began in 2008.

May 2016 pre-construction

This effort was tabled to become “shovel ready” for an American Recovery and Reinvestment Act (ARRA) project. Facility planning efforts were revisited and completed by 2014. Design and bid services were awarded and efforts began for a “Biological Upgrade” project. Construction began in February 2016 and is ongoing as of May of 2018.

The major goals of the project were to deal with our aging secondary treatment process (RBC’s) and remedy a failing electrical infrastructure system. From this point, we also identified deficiencies and bottlenecks within our existing...
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mechanical and biological processes. The following is a brief summary of updates that have been instituted.

Secondary Treatment
From 1981 until 2017, the RBC process served the City of Whitewater well. Due to the presence of a large dairy facility within the City, all processes were designed to meet large loading rates. This resulted in (48) 25’ long RBC shafts. This structure covered a large amount of square footage. A stark comparison to our current, more properly sized, activated sludge aeration basins. Currently, we have two trains. Each train is comprised of four Bio-P selector basins with floating mixers and two aeration basins. Each train is mated with one low head denitrification pump, one TSS, two ORP, two DO, two temperature and one ammonia sensor. In addition to this new aeration system, an old secondary clarifier was repurposed to serve as additional aeration capacity. This will allow us to fine tune our treatment and operating costs based on seasonal variations in flow primarily from the UW-Whitewater campus.

Aeration basin A5

basin (termed A5) is served by both fine bubble aeration and a surface mixer. All facility diffused air is provided by tri-lobe positive displacement package blowers. New 80’

secondary clarifiers were constructed and utilize a Tow-bro collection system and weir washing system.

Electrical Infrastructure
When the original electrical infrastructure was constructed it was done so without electrical manholes using rigid EMT conduit. Though the conduit runs were encased in concrete

continued on page 12
we had several circuits short over the years. In order to ensure we were investing new electrical systems on a solid backbone all buried electrical structures were replaced with this project. There are now six electrical vaults that will allow for dewatering and or maintenance as needed. The utility also elected to change from being a primary electrical customer to a secondary customer. In affect, this means we are only fed 480V from our electric utility. We no longer need our own switchgear, transformer etc. All distribution breakers and all but four MCCs were replaced as well. Communications are built on a fiber optic ring with Allen Bradley Control Logix PLCs. The SCADA system, along with reporting and maintenance software programs have also been updated.

**Sludge Thickening**

Prior to this project the utility did not have sludge thickening equipment. Our only means of reducing volumes of hauling liquid biosolids was to pump back supernatant from our biosolids storage tank to the headworks. This worked exceptionally well. We also had co-settled all of our secondary solids back to the primary splitter box. We do not have enough time under our belt to know if we will be able to pump back supernatant with the activated sludge process. A new thickening centrifuge, along with several piping strategies, was installed. This allows us to batch waste RAS in a more traditional fashion or we have the ability to waste mixed liquor off of the aeration basins in a continuous wasting mode. The centrifuge also grants us the ability to recuperative thicken our primary digester. Polymer is not being used for our wasting process, but we do use polymer when thickening digested sludge.
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Screening/Grit Handling
Due to I&I flow influxes our existing 3/8" mechanical bar screen was often times overwhelmed with grit. Therefore, a new 3/16" spaced bar screen was installed in a pre-existing channel. Upon reaching an operator adjustable high flow set point a motor actuated gate allows flow through both screens in order to handle the grit load. Grit is collected via an existing Pista removal system before being sent to a new “tea cup” style grit washer. So far, based on several rain events, the system has eliminated grit blockages.

HVAC
Hot water heat areas of the facility have been updated by the installation of new high efficiency boilers coupled with our ability to control individual space temperatures by using a variable air volume (VAV) system. Several new air handling units have been installed to handle supply air and filtering tasks. Controls for this system are being handled via a Pc application housed in the “cloud”.

Site/Facility Structures
Outside waste haulers will soon be able to utilize a new discharge station 24/7 through the use of an automated security gate. This station was incorporated into a truck loop on the north side of our campus. Also located on this

continued from page 12

HVAC VAV equipment

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truck loop is our biosolids loadout station and a collection system debris drying pad.

All of our secondary treatment process piping, pumps, blowers and electrical systems are located in a new process building which also contains our electrical switchgear, generators and sludge thickening equipment. The main control building which houses administrative and facility staff, laboratory and maintenance activities and some vehicle storage was renovated as well. Lastly, a vehicle and equipment storage structure was added as part of this project.

**Process Design Parameters**

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<tr>
<th>Parameter</th>
<th>Max. Month (Design Condition)</th>
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<td>BOD</td>
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<tr>
<td>TSS</td>
<td>6381 lbs./day</td>
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<tr>
<td>Ammonia</td>
<td>458 lbs./day</td>
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<tr>
<td>Total Phosphorus</td>
<td>86 lbs./day</td>
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**Process Information**

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<th>Parameter</th>
<th>WPDES Permit Performance*</th>
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</thead>
<tbody>
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<td>BOD</td>
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<tr>
<td>Ammonia-Nitrogen</td>
<td>4.5 mg/L 0.20 mg/L</td>
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<tr>
<td>Total Suspended Solids</td>
<td>10 mg/L 3.5 mg/L</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>1.0 mg/L 0.43 mg/L</td>
</tr>
</tbody>
</table>

* Based on performance from January thru April of 2018.

**Special Thanks**

A special thank you goes out to our utility staff for their interest, hard work, blood, sweat and tears in order to keep the plant fully functional during the numerous operational transitions. Also, I must thank all the dedicated trade people who continually worked together in a professional and courteous fashion to make this project tolerable and successful for all. Thank you to Harry Mathos and staff at the City of Beloit for their flexibility and allowing us to obtain seed sludge. Our engineering firm was Donohue and Associates of Sheboygan, WI. Thank you Allen Howe for your efforts during the construction phase. The general contractor was Miron Construction with very supportive subs: Pieper Electric, J.F. Ahern, HVA and Dane County Excavating.

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CONVENIENCE SAVES TIME.
Racine wastewater hosts southeast meeting at Roma Lodge

The Spring SE District meeting was held May 8th at Roma Lodge in Racine. It was hosted by the Racine Wastewater Utility and Racine Danish Kringle was served during registration! The City of Racine Administrator, Jim Palenick, welcomed the guests on behalf of the City of Racine, Mayor Cory Mason, Mary Frances Klimek and 15 City Alderman. Administrator Palenick said our meeting is a great way to network with colleagues and offers ways to learn more about our profession. He welcomed us to watch Foxconn over the next several years and the new infrastructure, new technology, the water utility and WWTP for Foxconn.

Jonathan Biagiotti, Product Consumer Development Manager from Predictive Maintenance Sensor, opened the technical sessions and provided information on ways to detect problems on machines. Sensors are placed on machines such as an air handling unit, cooling tower, chiller or motor. These sensors record the vibration of the machine and the data is sent to a Cloud. The technician from Predictive Maintenance Sensor can review the information and contact the WWTP to tell them the severity of the problem. They can also perform early stage diagnostic problems for the machine. Jonathan said there will be a live demonstration of this maintenance sensor this afternoon at the Racine WWTP.

The second speaker was Garret Kaminski, President/CEO, from North American Safety Systems. He spoke about safety at wastewater treatment utilities. He discussed confined space permit status and alternate procedures, how
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to control confined space hazards and when one would recategorize a space to non-permit status. Great news for WWTP. He said they are the only industry that manages confined space well and knows what spaces to permit. He also discussed air monitoring techniques and strategies. Test the air space every 4 feet up, down and all around. Pause at each position to get a reading.

A break between the sessions offered the attendees time to visit with the vendors and network with fellow professionals.

The next session was presented by Autumn Farrell, Audit Chemist with the Certification Services External Services for the WDNR. She discussed how the EPA has changed the LOD procedure. The effective date of new LOD procedure happened on Sept. 27, 2017. The EPA is revising the procedure because the procedure for calculating a LOD, (EPA calls it the MDL), has always been recognized as flawed. The bottom line is that it is only based on precision. And with the LOD formula, the better the precision, the LOWER the LOD. To correct this, the DNR has created a spreadsheet to use to assist you to calculate the LOD. The DNR will post this spreadsheet on their website in the near future. To use the spreadsheet, you will enter your information in the green cells only, and the spreadsheet will calculate the rest of the numbers for you. If any red alert warning defaults are shown, edit the green sheeted cells accordingly and the corrections will be made.

Business Meeting:
Nate Tillis, City of Waukesha, Chair of the SE District, called the meeting to order. The DNR update was presented by Geisa Thielen, Wastewater Engineer with the WDNR, SE District. She discussed performing the Whole Effluent Toxicity (WET) Test and completing the Report Form.

Once it’s completed and you have the WET Test Summary from the lab, send it to Kari Flemming, the Biomonitoring Coordinator with the WDNR to review. Her email is kari.flemming@wisconsin.gov and cc: Geisa Thielen at geisa.thielen@wisconsin.gov.

A new program the SE District is currently establishing is a tuition aid program to assist a full-time student currently enrolled in school. The membership discussed this topic and had no objections at the meeting. The SE Officers will keep the members informed of their progress.

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After lunch, Nate Tillis gave a big thank you to the City of Racine and Vendors for providing prizes for the raffle.

The next session was from Keith Haas, PE, General Manager of the City of Racine Water and Wastewater. He talked about relationships and how do we relate with other professionals, family members, friends, etc. He said we are in various types of relationships and some are more important than others. Be a mentor. Meet 5 new people at a conference. The more relationships you have, the better your survival. How wide does your network spread? Do the Golden Rule – Treat others the way you want to be treated.

Keith Haas also said that the Foxconn switch is On! There are many professionals involved: Lawyers, Engineers, Consultants, City and Government personnel, Contractors, Businesses and the Residents of the various surrounding cities.

The last session of the day was a presentation on Air Permitting at Wastewater Utilities by Tom Henning, PE from SEH. Air permits are driven Nationally by ambient air quality standards. Air permits are defined by how many emissions you have. The biggest pollutant at a WWTP is methane gas. Additional pollutants include sulfur dioxide, formaldehyde and hydrogen sulfide. If you are buying a new engine, ensure the engine is EPA Emission Certified or is a NSPS engine.

The RICE Rule was discussed. Also, operating permits are due March 1st of each year. Tom finalized his presentation discussing that the EPA is designating new ozone nonattainment areas. Watch for stricter emission limits and permitting requirements.

The meeting was adjourned, and the day ended with a plant tour of the Racine Wastewater Treatment Plant. A big thank you to Racine for hosting the day!

Submitted by Mary Ellen Mortensen, SE District Secretary
The biological makeup of activated sludge flocs appears to mostly consist of heterotrophic bacteria including Pseudomonas, Achromobacter, Flavobacterium, Alcaligenus, Arthrobacter, Citromonas, and Zoogela (Dias and Bhad, 1964, Pike, 1972, Tabor, 1976). Floc formation is dependent on the ability of microorganisms to stick to each other and other non-biological particles. While the science of floc formation is an ongoing study, it is generally believed that excocellular biopolymers connect microorganisms together.

These biopolymers make up by weight roughly 15-20% of the MLSS (Urbain et al., 1993). The strength of the flocs depends on the bridging quality of the biopolymers that are present naturally in floc forming bacteria. Zoogela bacteria, while a natural floc former, have extra high amounts of biopolymers associated with their thick slime capsules.

Low to moderate amounts of zoogela bacteria are not problematic in activated sludge flocs, but at higher abundance zoogela bacteria can cause problems with settling characteristics, dewatering ability, and promote foaming due to their water-retentive, excocellular biopolymers. Zoogela bacteria grow on organic acids (volatile acids) and alcohols and prefer higher F/M (food to microorganism) ratios at the front end of the aeration basin. Proliferation of zoogela bacteria can cause non-filamentous bulking, known as Viscous Bulking (or “slime bulking”). These bulking/continued on page 22
settling issues occur as the thick “slime capsules” from these bacteria make it harder for the sludge to compact, therefore taking up more volume. Note that nutrient limited conditions can also increase polysaccharide and cause Viscous Bulking, but limited nutrients are not a growth factor for zooglea bacteria. (Richard, 2018). Viscous bulking by zooglea bacteria is unique in that increasing the wasting rate or addition of chlorine to the RAS line are not recommended control strategies and can make problems exponentially worse. While it seems counter-intuitive, decreasing, rather than increasing the wasting rate is recommended to improve settling in these instances. In other words, the sludge doesn’t always settle better if the MLSS is lower. Also, if possible, reduction of the organic loading rate or more specifically the volatile acids concentrations may also help to discourage zooglea bacteria.

It is recommended to know what “normal” sludge conditions for a plant is in terms of floc structure, rank and abundance of filamentous bacteria, zooglea bacteria abundance, and other characteristics. Having this baseline information becomes beneficial in determining when operational considerations or changes should be considered. The goal of wastewater microscopy is to diagnose a condition or the “big picture” of what is going on within the system. When a condition begins to change sludge quality to the point that this may pose risk, operational changes are needed. Our goals are always to ensure permit compliance with the best possible sludge conditions in the most efficient manner and cost available.

Conference registration now open!
Go to wwoa.org to register for conference and hotels
Wrightstown hosts May 17 Lake Michigan meeting

The May 17th Lake Michigan District meeting at the Wrightstown WWTP was another successful meeting with approximately 90 operators and septage haulers, along with 12 equipment and process vendors. A special thanks to Energeneec for sponsoring the treats during the breaks.

The first presentation of the day was by Chris Shaw of the City of Appleton, who spoke on Anaerobic Digestion of High Strength Wastes within a TMDL. Chris started by discussing Appleton’s WWTP process. Next, Chris went into explaining what is anaerobic digestion and how it works. Chris provided the different parameters that the Appleton digester operates on. Chris then touched on anaerobic digester safety and covered the different standards and guidelines for anaerobic digester operation. Chris explained the different benefits of using the anaerobic digestion process for biological stabilization. Lastly, Chris discussed was the steps Appleton is taking regarding upcoming meeting requirements of the TMDL.

Next on the agenda was Adam Tierney of Northern Pipe. Adam’s presentation was titled Sewer Televising and Repairs. Adam began the presentation by discussing the need of sewer televising and the different equipment used to conduct the inspections. Adam then went on to explain the different items to look for during a manhole inspection. Adam finished his presentation by describing different methods of rehabilitations and trenchless repairs. Adam then turned the presentation over to Jake Swanson of Avanti International who had a presentation titled Municipal Grouting. Jake started his presentation off by stating that

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there is estimated over 5 billion feet of sanitary sewer pipe and between 30 – 40 million manholes just in the United States. Jake went on to list the effects of infiltration can have on a collection system and showed typical areas where infiltration occurs. Jake finished the presentation by discussing using chemical grout to seal off location of infiltration.

Jenny Pagel called the WWOA-LMD business meeting to order. Last quarter's minutes and treasurer's report were approved. The next item on the agenda was the WDNR update by Dick Sachs. First off, for the DNR update, results for the May 2nd Operator Certification exams are currently being mailed out. The second item was that in response to positive feedback, operator certification exams will continue being offered quarterly for the mean time. The third item was that it is CMAR time again and electronic CMARs are available. The due date for the CMAR submittal is June 30. Recent staffing additions made up the fourth WDNR update item. Dick announced that Roy Van Gheem has started working as a wastewater engineer, filling the position once held by Mark Corbett.

The sixth item on the WDNR update was updates regarding TMDLs. EPA approved the Milwaukee River Basin TMDL in March. The draft waste load allocations for the Upper Fox/Wolf TMDL are anticipated to be released this summer. Also, work is underway on collection baseline data for the Manitowoc River Basin TMDL. The last item for the WDNR update was regarding the Collection System subclass. The Collection System subclass study guide is on hold, so there will be no exam offered in November.

Following the DNR update, Jeff Smudde gave the WWOA Board of Director's update. Jeff reminded everyone to get the Operator of Year nominations turned in early. Secondly, Jeff asked everyone to start thinking about fielding operator competition teams again. The third item was to remind everyone that WWOA has scholarship applications available. Lastly, Jeff stated that there were still rooms available for the annual conference.

The third presentation of the day was by Josh Gable of Centrisys. Josh's presentation was titled Mechanical Means of Sludge Dewatering. Josh described the typical goals operators have for sludge dewatering. With the use of a table, Josh showed how cake dryness varies for different sludge types and dewatering equipment methods. Josh provided in great detail how a centrifuge works. Also, Josh explained how bowl speed, scroll speed, torque, and flow affect the cake output. Josh went on to discuss the challenges that older thickening technologies have when compared with centrifuges. Josh ended his presentation by exploring the evolution of thickening centrifuges.

The last presentation of the day was by Rick Mealy of the WDNR. Rick's presentation was titled How’s that New LOD Coming. Rick started off by stating that the new regulation for LOD procedure took effect on September 27, 2017. Rick then went on to discuss precision, what it is based on, and how it will now affect your LOD. Rick explained the good, the bad, and the ugly with new LOD procedure requirements. Rick showed the calculation method for determining initial LOD. Next, Rick explained what needs to be done at 13 months and also at year 3. Lastly, Rick finished the presentation by going through an example problem from start to finish.

Travis Coenen, the Village of Wrightstown Administrator gave an introduction of the WWTP by describing the flows, loadings, and treatment processes. A plant tour followed the plant introduction.

The next meeting will be at Oconto on August 16, 2018. Special thanks to Wrightstown’s Public Works Staff for hosting the meeting.
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2018 WWOA award nominations are now being accepted

Annual awards are an excellent way to honor fellow WWOA members and operators. These awards are presented each year at the Annual WWOA Conference in October. Please read through the list of annual awards and nominate someone that you feel is worthy of being recognized for their outstanding work and dedication to the industry and to WWOA.

Nomination forms are due by August 1, 2018. Exception to the August 1st date is the Regional Operator of the Year Award. Nominations for Regional Operator is due by July 6, 2018. All nomination forms can be found on the WWOA website at https://www.wwoa.org/organization/annual-awards/. All nominations should be sent to: Jeff Simpson, Awards Committee Chair, at j.simpson@craneengineering.net.

WWOA ANNUAL CONFERENCE AWARDS:

1. George F Bernauer Criteria include successful plant performance, and/or successful solution of important or complicated operational problems, and/or outstanding contributions in the field of wastewater technology in the State of Wisconsin. The nominee may be a municipal, industrial, or institutional operator, administrator, or educator in Wisconsin. It is not limited to WWOA members. Award includes a plaque, framed certificate, complimentary banquet dinner and hotel for the evening of the banquet (if needed). NOTE: The person who nominated the award recipient is responsible for letting the Executive Secretary know if the award winner needs a hotel room for the evening of the banquet.

2. Koby Crabtree Awarded to a WWOA member for excellence in technical support provided to others in the field of wastewater treatment. The individual should be a recognized authority in wastewater, share knowledge through presentation, contribute to problem solving, and provide service regardless of compensation. Award includes a plaque, framed certificate, complimentary banquet dinner and hotel for the evening of the banquet. NOTE: The person who nominated the award recipient is responsible for letting the Executive Secretary know if the award winner needs a hotel room for the evening of the banquet.

3. Service Award Presented to a person who has made an outstanding contribution to the WWOA in the areas of promotion, operation, management, program participation, or education. The nominee should be an active member of WWOA for a period of ten years. Award includes a plaque, framed certificate, complimentary banquet dinner and hotel for the evening of the banquet. NOTE: The person who nominated the award recipient is responsible for letting the Executive Secretary know if the award winner needs a hotel room for the evening of the banquet.

4. Newcomer of the Year Recognizes an operator, support staffer, or environmental technician with less than three years of experience as of August 1st of the year nominated. The nominee should demonstrate higher than average growth in their place of employment, a willingness to learn, innovation on the job, and exceptional enthusiasm for their profession. The nominator should be a supervisor, manager, peer, co-worker, or DNR personnel familiar with the day-to-day efforts of the nominee. WWOA membership is not required, and a two-year membership or renewal is included in the award. Award includes a plaque, framed certificate, and complimentary two-year membership to WWOA.

5. Regional Operator of the Year Awards Given out to someone who has demonstrated excellent plant performance, and/or successful solution to a problem, and/or contributions to the wastewater field. It is open to Wisconsin Certified operators of municipal, industrial, or institutional wastewater treatment facilities. The nominee should be a five-year member of WWOA. Award includes a plaque and a framed certificate.

6. Membership Award Given to the person who brought the largest number of new members into the WWOA for the year. This is determined by the website database. There is a report that we run every year called the Annual Membership Award Report. Award includes a framed certificate.

7. Lifetime Member A Life Member shall be one who has been an Active Member for 25 years or more in this Corporation or 25 years in the Wisconsin Wastewater Works Operators Conference and Wisconsin Wastewater Works Operators Conference Incorporated, the predecessor organizations of this Corporation, or a total of 25 years in both. Life Members shall have the same voting privileges as Active Members and Honorary Members. Life Members shall receive a 20% discount on current active membership dues. A Life Member wishing to hold an office in the Organization may do so only if they are paying full active membership dues. Award includes a framed certificate, laminated membership card, complimentary dinner at the banquet.

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WWOA BOD Meeting – Grand Geneva, Lake Geneva, WI
December 7 and 8, 2017

1. CALL TO ORDER, ROLL CALL: President, J. Bratz called the meeting to order at 10:00 am on Thursday, December 7, 2017. Roll call was taken. All present.

2. AGENDA CHANGES AND ADDITIONS AND CORRESPONDENCE:
No changes were presented.

3. APPROVAL OF MINUTES: Motion to accept minutes from the October 16, 2017 meeting with Sharon Thieszen’s changes made by J. Smudde, Second by D. Lintner. Motion carried.

4. FINANCIALS: Financials for September through November were reviewed. Motion to accept financials as is made by J. Simpson, Second by J. Smudde. Motion passed.

5. 2018 BUDGET: K. Harter gave the Board spreadsheet showing the numbers from 2011 to date. The budget was table until after the committee reports were given. After much discussion (upon resumption of the 2018 budget discussion), motion to accept the 2018 Budget was made by D. Lintner, Second by J. Bratz. Motion carried.

6. COMMITTEE REPORTS
a. Nominations: S. Thieszen/No Report. K. Harter to get the website updated for the 2018 nomination forms.

b. Promotional items: J. Cramer reported on the inventory he had on hand. Jim Johnson turned over all the promotional items to Mr. Cramer at the end of the October Conference. Cramer advised that he needs to order more hats as possibly more shirts before the next conference in October of 2018.

c. Membership: K. Harter/No Report

d. Scholarship: S. Leith reviewed the scholarships that were given out at the 2017 Conference. She reported on the change in scholarship for Billie Komorowski from a WWOA scholarship to the NCL Scholarship. There was a discussion on how to improve the scholarship process, getting the word out to everyone and who is eligible for the scholarships. She also discussed the need to work with Mike Raynovic (NCL) to better promote his scholarship opportunity, the standards require and to develop a separate application form for the NCL Scholarship. K. Harter asked if it would be possible to also give each scholarship recipient a student WWOA membership. Everyone thought that was a good idea. A motion to accept was made by S. Thieszen, second by J. Smudde. Motion carried.

e. Executive Meeting: J. Bratz/No Report

f. Career Development: R. Mealy reported that the purpose of the Career Development Committee was to promote a continuation of qualified operators that are available to fill the needs of wastewater facilities throughout Wisconsin. He went on to report that going back to 2014, there had only been two board reports submitted and they both referred to exhibiting at the Northeast Wisconsin Technical College (NWTC) Open House that is held annually in February. Mealy went on to explain that there are other options for WWOA to promote Wastewater Career Development. These included the WI School Guidance Counselor Conference, the Walworth County Fair and the Wisconsin State Fair. It was also pointed out that there are many University Job Career Days held throughout the State. To
Keep service personnel safe from hazardous valve pits with the Gorman-Rupp Above Ground Submersible Valve Package and explosion proof Infinity pump!

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do these, WWOA will need to develop handouts/brochures about the Association and the field. It was also brought up that a video talking about the wastewater industry would be beneficial in promoting the field and the Association. R. Mealy asked for any volunteers to expand the committee and make 2018 the Year for Our Career.

g. Awards: J. Simpson/No Report.

h. Operator Training: D. Linter/R. Hennessy reported that they were starting to look at different training opportunities for 2018. R. Hennessy put together a substantial list of possible topics along with potential presenters. Seventhwave has also started to plan their 2018 sessions and were interested in continuing our relationship with them. Although there is no financial gain for WWOA, it is an opportunity for our members to take advantage of the training that Seventhwave offers. They also discussed that WWOA needs to have more articles on the website from an educational aspect. The articles need to have a positive impact on the industry. D. Lintner also advised that the planning for the Midwest Water/Wastewater Operators’ Expo will be held at the Kalahari on February 6th and 7th.

i. Directory: K. Harter/No Report

j. Publicity: J. Cramer advised that a few award winners from the annual conference filled out press releases which were all submitted to the local papers of their choice. Cramer reported that Kevin Freber’s press release was in two different newspapers.

k. Regional Coordinator: J. Simpson No report

l. Government Affairs: J. Smudde/S. Thieszen reported that the Government Affairs Seminar will be held on Thursday, February 22, 2018 at the Madison Marriott West in Middleton, WI. The planning committee will be meeting on November 6th in Fond du Lac to plan the seminar for 2018. They are currently finalizing the agenda. To reduce costs, the Seminar brochure will not be printed and mailed this year. Seminar information and registration form will be sent out via email and posted on the CSWEA and WWOA websites. The Call for Papers has been mailed and emailed. These went out on November 28, 2017. Smudde reported that he has received 7 abstracts so far. He also advised that there was one minor change to the call for papers that allowed for the submitter to indicate which subject category the abstract fits into. He also advised that he was working on a potential keynote speaker for 2018 and will be looking into possible options for the entertainment and the Friday breakfast speaker.

m. Biosolids Symposium D. Lintner/R. Hennessy reported that the SBS committee is working on finalizing the 2018 agenda and registration form again this year. We will also do a small mailing to those that do NOT have an email address. The 2018 Spring Biosolids Symposium will be held on Tuesday, March 20th at the Holiday Inn in Stevens Point, WI.

n. Central States Liaison: J. Cramer reported that the CSWEA, WI Section held their Annual Business meeting on November 9, 2017 at the Global Water Center in Milwaukee. Highlights from the meeting included the Treasurers report and their discussion on re-tooling the annual meeting. Their total balance as of November 9, 2017 was $27,483.27. Young Professionals Committee advised that they would be holding multiple events in 2018. They also discussed attendance to YP Summit in San Antonio (2/18) and they are evaluating approaches to maintain an effective email contact list. Cramer also advised that they discussed the 2018 Government Affairs Seminar and the 2018 Spring Biosolids Symposium.

o. Web-Site: J. Bratz reported the website was running smoothly and had very few issues with conference registrations this year. Karen Harter and Jeff Bratz will be meeting with Webfitters in December sometime to review any website issues along with any updates that may need to be made for 2018.

p. Technical Program: J. Smudde reported that efforts for the Technical Committee are well underway. A letter has been sent to 20 individuals inviting them to participate in the 2018 Technical Committee planning meeting to be held on February 8, 2018 at the Kalahari Resort in Wisconsin Dells. The Call for Papers has been mailed and emailed. These went out on November 28, 2017. Smudde reported that he has received 7 abstracts so far. He also advised that there was one minor change to the call for papers that allowed for the submitter to indicate which subject category the abstract fits into. He also advised that he was working on a potential keynote speaker for 2018 and will be looking into possible options for the entertainment and the Friday breakfast speaker.

q. Local Arrangements: R. Hennessy/No Report

r. Operators Competition: R. Mealy advised that 2017 was a huge success with six teams competing. He also thanked all the competitors and the judges for taking their time to participate in the 2017 Operators’ Competition. Mealy also thanked the sponsors for the supplies and equipment and Jeff Bratz and Karen Harter for prompting him when needed. The 2017 Operators Competition winner was

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2018 WWOA Board of Directors Nomination

Have you been thinking about becoming more involved in the WWOA and not sure how to go about it? WWOA is looking for you. Nominations are being taken for the WWOA Board of Directors. Fill out the Board of Directors Nomination form and join us in working with an outstanding group of people and a great Association.

**WWOA Board of directors Nomination Form**

Positions elected at the WWOA Annual Conference: Vice President, Director Positions (2-year terms for Director Position)

Complete the following form and submit it to me along with a photo as soon as possible. If more room is needed, please add additional sheets as needed.

Name: ___________________________________________________________
Home address: _______________________________________________________
Occupation: _________________________________________________________
Employer: ___________________________________________________________
Education: __________________________________________________________
Organizational Experience: ____________________________________________

WWOA Affiliation:
Date Joined: _________________________________________________________
Offices Held & When: ________________________________________________
Committees Served & When: ___________________________________________
Regional Affiliation: _________________________________________________
Regional Positions Served: ____________________________________________

What do you see as the future of the WWOA? _______________________________________________________________
____________________________________________________________________________________________________
____________________________________________________________________________________________________

How do you feel this could be accomplished?
____________________________________________________________________________________________________
____________________________________________________________________________________________________

Other qualifications for WWOA office:
____________________________________________________________________________________________________
____________________________________________________________________________________________________

I wish to place my name into nomination for the office of: ____________________________

Other comments: _____________________________________________________________________________________
____________________________________________________________________________________________________

Committees you are interested in to serve on:

- Promotions
- Publicity
- Clarifier
- Membership/Director
- Permanent Arrangements
- Operator Training
- Scholarship
- Awards
- Library
- Government Affairs
- Regional Coordinator
- Operator Competition

Mail to: WWOA P.O. Box 451 Baraboo, WI 53913-0451 or email to: secretary@wwo.org
CALLING ALL INVENTORS

It’s time to TOOT Your Own Horn!

At this year’s WWOA Annual Conference we will feature an expanded “Tricks of the Trade”

So now is the time to showcase your invention, innovation, ideas, “tool of all tools”, management practice, etc.

Possible categories of Tricks of the Trade include Sampling/Monitoring, Improved Accessibility, Process Control, Containment/Algae & Odor Control, Cleaning, Preventive Maintenance, Safety, Public Education & Watershed Awareness, Automation, Signage & Communication, Data Management, and Training & SOPs

Please submit your Tricks of the Trade topic to Sharon Thieszen, sthieszen@newwater.us, by October 11. If you don’t like the limelight that’s fine, we will assist you or present your topic for you. Just submit a few PowerPoint slides or photos and we’ll help you put it all together.

For more information or to discuss your topic you can also contact Sharon Thieszen at (920) 458-1151.

“Tricks of the Trade” session will be Thursday October 18, 2018 at 10:00 am.
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“Stinks Like Team Spirit” team from the Lake Michigan District. Second place went to the Lake Michigan Defenders, also from the Lake Michigan District, with Third place going to the “Rag Babies” from the Southeast District.

s. Golf Outing: R. Herwig/No Report

t. Sporting Clays: J. Smudde/J. Thalke J. Smudde advised that the event was a great success.

u. Bicycle Outing: T. Crouse/No Report

v. Clarifier: J. Butt/No Report

w. Exhibitor Committee and M&C: T. Mulcahy/C. Strackbein K. Harter advised the 2018 Exhibitor Application for booth space was handed out to all the exhibitors at the 2017 Conference. It has also been sent to others via email. She also advised that she has already received paid booth registrations for the 2018 Conference in Lake Geneva, WI.

x. Permanent Arrangements: K. Freber/No Report

y. Resolutions and Bylaws: D. Falkner/No Report

z. Historical: T. Crouse/L. Lutz/S. Thieszen/No Report

aa. Others - No Report

A motion was made by J. Simpson and second by D. Lintner to accept the Committee Reports as presented. Motion Carried.

7. OLD BUSINESS:

a. Mission Statement

At the October Board of Directors meeting, R. Mealy thought that this whole issue of the name change was putting the horse before the cart. Mealy felt that the issue of not understanding what it is we all do for a living, while true, wasn’t going to be fixed with just a name change. He felt that more education of the public and the membership was more important now. Mealy brought up the need for Mission Statement that would clarify what the Association was about and what we did and all the different aspects of the membership.

R. Mealy presented what he felt was a working Mission Statement for the WWOA. It was decided after much discussion to continue to work on a Mission Statement for the WWOA and to discuss again at the April 2018 Board of Directors meeting.

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It was also brought up under Old Business that the BODs should have a copy of the Roberts Rules of Order at all BOD meetings, especially the Annual Business Meeting each October. K. Harter advised that she has a copy of this book. She will advise the cost for buying a copy for the entire BOD and advise at the April meeting.

NEW BUSINESS:

b. Rental of the Nimloc Unit (the Historical Boards Unit)

K. Harter advised that the Wisconsin Wetlands Association was wondering if they could possibly rent and use the WWOA Historical Boards Unit for their upcoming Annual conference. They advised that Nimloc no longer made a unit like this, Harter also confirmed that this was the case.

After much discussion, the BOD agreed to this for a cost of $150.00 and that they will have to pick it up and return to Karen Harter in Baraboo. K. Harter will let the Wisconsin Wetlands Association know.

Adjournment Motion to adjourn made by J. Simpson, second by J. Cramer. Meeting adjourned.

April Board of Directors Meeting will be held on, Tuesday, April 17 and Wednesday, April 18, 2018 at the Grand Geneva Resort, Lake Geneva, WI.
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- Glassware & Plasticware
- Coliform Equipment & Supplies
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- Spectrophotometers & Colorimeters
- Reagents, Titrants, Indicators & Standards
- ISE Meters & Probes - Ammonia, Chlorine, Nitrate, Fluoride & Chloride
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