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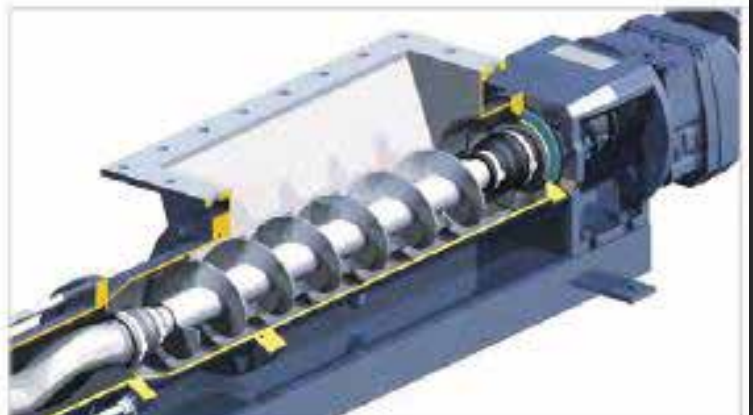
Dimensions

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
18012G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
18022G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1F036G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1F050G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1Q065G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1Q090G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1H115G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4
1J175G1L	42	14	8	12	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4	8	1/4

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President's Message

As I sat down to write my 5th (and yes final) President's message, I reread my four previous messages and was struck by the stark contrast between my first and last message. The first filled with hope and excitement about the year to come and the last filled with wishes for our members safety and health. A global pandemic, a cancelled conference and an extra long presidency was not what I had visions of when kicking off my year as President last June. It wasn't even what I had visions of when kicking off 2020, yet here we are... living a new normal that still seems to be changing somewhat daily. And still, some of the things that I wrote in my first message remain so very true!



Kim Riddell-Furry
OWEA Outgoing President

know and as my father and husband would be glad to tell you – I'm a talker who has to work on those listening skills some days."

I have certainly drawn on the experience and advice of both Fred and Jamie and also Ted Baker and Dale Kocarek throughout this year. I've tried to work on those listening skills as we've all been very passionate and thoughtful regarding the decisions we've had to make in postponing and cancelling events for OWEA. I'm still saddened by

the fact that we had to cancel conference, but it was the right thing to do for the association and safety of our members. I'm going to miss seeing you all there and miss the celebration that represents the end of each of our time spent as president of this amazing organization!

"I am truly honored to be the next President of Ohio Water Environment Association. Thank you to the membership for giving me the opportunity to continue to serve an organization and vocation that I've been very passionate about for over 20 years. It has been my privilege to have worked with many dedicated professionals on the executive committee since 2010. Without the volunteerism of the executive committee, section and committee leaders and our membership as a whole, OWEA would not be the strong and vibrant organization that we are today. It has been my sincere pleasure to have worked with Fred Smith and Jamie Gellner over the past two years that I have been an officer with them. They have both been amazing mentors as I prepared to become President and I only aspire to be the leader and listener that they both are... as many of you

It has been my pleasure, even in these trying times, to serve as the OWEA President this year. It has been wonderful to work alongside the dedicated individuals on our Executive Committee, the Section leadership, the OWEA staff (Dawn, Megan, Chelsea – you ladies rock!) and all of our awesome volunteers and members! I look forward to serving next year as Past President and working with Mike Welke as he steps into his role as the new OWEA President in late August. Mike is a very thoughtful and caring person and I know he's going to be a good leader for this organization. We made it through this year together and I am grateful for each and every one of you!

As many of you know, I'm very passionate about

Kim is the Director of Business Development for Alloway. She has a Bachelor of Science in Biology from the University of Toledo and a Master's Degree in Organizational Management from Bluffton University. Kim resides in Delphos, Ohio with her husband Eric and her two children. Alex is working on his degree in Wildlife Management at Hocking College and Emmalee is a junior in high school. The family resides in their renovated Queen Anne Victorian home that served the Delphos community as a funeral home for over 80 years. In her spare time, Kim enjoys cooking and hosting family and friends in their home for weekend get-togethers, family holidays and their annual Halloween party.

President's Message

operator education. OWEA is still working towards having operator preparatory courses. WEF is working to have the 2nd Fundamentals Manual out by the end of this year and we are working to have the courses (Fundamental and Advanced) out early in 2021. I'm excited to be able to jump in and work on something I'm so passionate about in the coming year! Leadership is great, but I do look forward to volunteering on projects again! So you see, this isn't really my goodbye to OWEA. I hope to continue to serve the organization as we move forward in our efforts to be the leader in operator education in Ohio and I can't wait to see you all next year at One Water 2021.

I'll leave you with this quote from James Kouzes and Barry Posner in *The Leadership Challenge*, "*Of all the things that sustain a leader over time, love is the most lasting. The best-kept secret of successful leaders is love: staying in love with leading, with the people who do the work, with what their organizations produce, and with those who honor the organization by using its work.*" I love OWEA and our members and I have been deeply honored to serve as your President.

Sincerely,
Kim Furry

2020 Annual Business Meeting

Please mark your calendar for our OWEA Annual Business Meeting held via Zoom on September 2, 2020 at 2 PM. You can hear from current leadership, sections and committees. Know what's going on with YOUR association!

Visit the calendar on ohiowea.org for Zoom link.

*Please note due the nature of this event, contact hours are NOT available.

Welcome New Members

April 2020 - June 2020

Kathleen Bertoldi
William Blakely
Joshua Bush
George Calko
Chelsea Cancino
Eddie Colbert
Andrew Cozzoli
Kenneth Darby
Maryann Figgins
Rob James

Nicholas Mastroianni
Sam McLeod
Courtney McVay
Joe Miller
Ryan Miller
Mitchell Wilkie
Andrea Mohr
Tomas Parry
Kevin Pataroque
Emily Poling

Shyam Sivaprasad
Mark Smith
Aaron Smith
Tiffany Snyder
Michael Spohr
Brent Stoll
Peter Thompson
Brent Ulicny
Jeffrey Yinger

Thank you for joining the Ohio Water Environment Association and the Water Environment Federation. We welcome your contribution to preserving and enhancing Ohio's water quality environment.

President's Message

I am excited and honored to be the next President of the Ohio Water Environment Association. I want to thank the membership for giving me the opportunity to continue to serve our organization. It has been my privilege to have worked with many dedicated professionals on the executive committee over the past six years. Ever since my first involvement with the Northeast Section residuals committee back in 1998, I knew then that I wanted to be the OWEA President one day. The relationships I formed as I went through the chairs have been invaluable to me. Each year along my journey I have learned something new. This has made me a better leader and a better person. I have met so many great people along the way that I truly consider them family.

I know that these are unprecedented times and that things are going to look different for at least the first half of the year. We appreciate everyone's patience as we navigate these uncharted waters in OWEA history. While we have cancelled the in person Annual Conference, we will have a virtual version of it September 9-23. It will be a great way for our members to get contact hours economically and also see some great new services and products with the exhibit hall. We also have had one smaller in person event (Collections) that went well and we are planning to hold some additional smaller in person workshops throughout the rest of the year. We plan to meet our membership where you are - whether that's virtual only, in-person only,



Michael Welke
OWEA Incoming President

or a combination of both.

I would like to thank Kim Ridell-Furry for her outstanding leadership this last year. I can only hope to be able to navigate the organization as well as she did, especially through this pandemic. I would also like to thank Fred Smith, outgoing OWEA Past President, for the time he has served on our board. Fred has been a constant source of calm and reason and we are very grateful for him. We are thankful that we get to keep him around for a few more years as he is our Junior WEF Delegate and will continue to serve in that roll. I would also like to welcome Melodi Clark, the new Southeast Delegate, as our newest board member. Melodi has been very active at the state and section level as the LAC chair in SE and for the state. She is also currently serving as the President of the SE section, the chair of the Crystal Crucible Society and is a member of the 5S. She is also active in Ops Challenge. Dawn, Megan, and Chelsea, our OWEA staff – you ladies always take care of business and do a wonderful job of supporting our members. The staff has really stepped up to provide for our members through this transition of going virtual and smaller in person events. You ladies continue to impress me every day.

I would like to thank the 2020 conference co- chairs Jennie Celik, and Angelina Joseph and the entire 2020 conference committee for all their effort in planning the 2020 conference. Even though the conference was

Upcoming Executive Committee Meeting Dates

September 8th, 2020

January 12th, 2021

May 11th, 2021

November 10th, 2020

March 9th, 2021

July 25th, 2021

Mike is the Superintendent of City of Warren's Wastewater Treatment Plant where he has worked for the past 32 years. He lives in Warren with his wife Kelly and they have two children and one grandchild. He has served in various capacities for OWEA from volunteer, to section committee chair, working his way through the section chairs, and now serves as the state Safety Co-Chair as well as OWEA's 2020-2021 OWEA President.

President's Message

cancelled this committee put a lot of hours of planning and hard work. I know that the conference they put together would have been great. I want them to know that their efforts were noticed. Thank you.

When I thought of what goals I wanted to achieve this year, I came up with only a few. The pandemic now added a goal to my list. First and foremost, is to do what we can to keep OWEA thriving. We will be working hard to keep OWEA operating in what seems to be the new norm. Second, I would like to expand on the Northeast section Student Design Competition. My goal would be to have each section try to provide a student design team to compete at the state conference. To help the section achieve this I am forming a new committee, the Student Design Committee. Third, I want to continue to work on the strategic plan that Fred started. Last I would like to continue working on operator training that Kim has been and is continuing to work on.

I want to say a special thank you to my wife Kelly, and my kids for putting up with my late workdays and for supporting me in devoting so much time to OWEA. I would also like to thank my employer, The City of Warren, for supporting me in being a part of this great organization. A special thank you to Larry Stadwick who volen- told me to be on the NE residual committee so long ago. Without his push my journey with OWEA would have never begun.

As all the past presidents and future presidents guide this ship (OWEA) through calm waters, stormy waters, and even through a tsunami, every one of these leaders did/will keep OWEA strong in its service to its members. I plan to do my best to do the same. One last lofty goal is to set the frame work for OWEA to become the best MA of WEF.

Again, thank you for this opportunity to continue to serve OWEA. Don't hesitate to contact me if you have any concerns, ideas or questions at mwelke@warren.org. I look forward to the next year!

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OWEA 2020



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COVID-19 has caused us to change most everything we do and become flexible in ways we never imagined. The OWEA virtual conference is no exception. This event will offer the ultimate in flexibility.

Our virtual conference will be on demand, meaning you log in when you want and for however long you want. You can view one tech session at a time or just see some of the latest products in our virtual exhibit hall. This is YOUR conference and YOU determine how you use it.

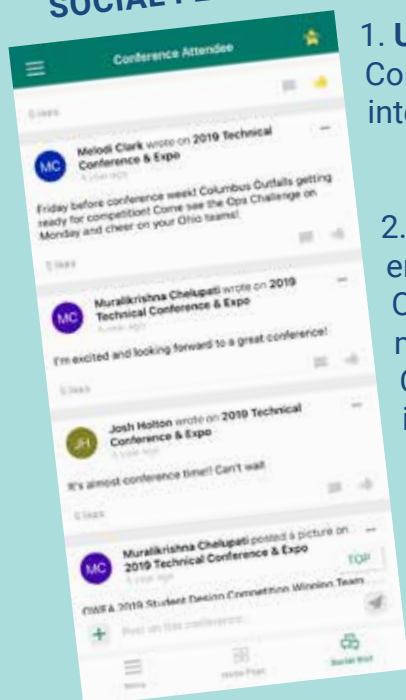
Whether you need nine contact hours or just one or two, whether you work third shift or are working from home, we have you covered.

This isn't just a webinar, it's an event, with exhibitors showing their latest products via video and attendees networking on the social media wall.

	Early Registration through 9/2/2020	Late Registration 9/3/2020-9/22/2020
Member Attendee	\$95	\$105*
Nonmember Attendee	\$125	\$140*
Member Exhibitor	\$195	Not Available after 9/2/20
Nonmember Exhibitor	\$225	Not Available after 9/2/20

*Please allow up to one business day to receive the emailed link for virtual conference. Virtual conference will not be extended past 9/23/2020 regardless of your registration date.

SOCIAL FEED



1. Use your computer or tablet to view the sessions. Comment your thoughts on the live social feed and interact with other wastewater professionals!

2. Download the app on your phone. We strongly encourage you to use the app to get everything OWEA Virtual Conference has to offer. Post a message to the social feed and interact with fellow Ohio #waterwarriors. While we can't get together in person, we can still connect.

3. Visit the virtual expo hall. Wastewater technology is always evolving. Stay informed and see what new products are out there.



Now is the time to register at ohiowea.org and be a part of something completely new!

www.ohiowea.org

2020 Award Winners

PROFESSIONAL WASTEWATER OPERATIONS AWARD

The Professional Wastewater Operations, P.W.O. Award, honors individuals doing front-line work who have contributed practical application, professionalism and dedication to their particular wastewater treatment system.

With a love of biology and chemistry, Tom uses his knowledge to optimize performance of the Akron Water Reclamation Facility's (WRF) treatment processes. When Tom recently worked to resolve a performance issue, he succeeded by working with the staff to design and implement a modified chemical feed system which resulted in exceptional disinfection and lower chemical cost. His knowledge of the wastewater treatment process is his strength, particularly the biology that supports effective treatment.

Tom has been heavily involved with the recent treatment improvement projects at the WRF, namely Step Feed implementation which doubled WRF's secondary treatment capacity from 110 MGD to 220 MGD.

He is in his element working out in the plant with the operators and is actively involved with design engineers and construction personnel during improvement projects. Tom believes in a true "hands on approach" to wastewater treatment and looks out for the operators in his facility. Trusted to maintain optimal treatment during construction, Tom ensures that the plant is running at peak performance once construction is completed.

Tom is dedicated to the WRF and its success and sustainability in order to provide a high-quality effluent.



Tom Sanderson
City of Akron

F.H. WARING AWARD

The F.H. Waring Award is presented to an individual who has demonstrated a significant contribution to the field of industrial waste treatment through administration, operation, research, development, or treatment.

Donna served as OEPA Northeast District Office's lead technical contact for the Industrial Pretreatment Program for 25 years. The NEDO has a dominant share of the state's approved pretreatment programs (45 programs). She was the "go to" person in Ohio, for complex issues facing POTWs regarding industrial contributors.

Donna was named the NESOWEA Pretreatment Subcommittee Chair in 2005 and served as Chair through 2019. She turned the committee into a leading source of information and activity. She took resurrecting this committee as a personal challenge. Today the NESOWEA Pretreatment Committee is known as a leading education forum, for municipal industrial pretreatment coordinators, across NE Ohio.

Through Donna's efforts on the NESOWEA Industrial Waste Committee, regular half-day seminars were hosted by OEPA NEDO, drawing up to 60 regular attendees. These workshops were first class educational events, offering continuing educational credits, and which grew in attendance and popularity.

Donna was involved with drafting Ohio EPA's pretreatment rule revisions to reflect federal "streamlining" rules and commented extensively on the DSW PTI rules.

Donna was recognized as the expert in the Northeast region on industrial pretreatment regulations and was always willing and accessible to help anyone that needed technical assistance.



Donna Kniss
Retired OEPA

J.W. ELLMS AWARD

The J.W. Ellms Award is presented to an individual who is in an administrative or supervisory position, stressing participation in conference activities, civic affairs, and leadership.

Dan is Superintendent for the Northwest Water and Sewer District (The District). As a licensed operator since 1982, he promotes training and continuing education for new staff. He has lead research on generational variances and educated employees on the importance of self-awareness and building work relationships despite differences in age. Dan helped start the Operations Challenge event in Ohio. He always fully supports The District's Operations Challenge Team training and time and encouraged leadership within the section to reach out and assist all participating Ohio teams. Throughout his career at The District, Dan has been pivotal in its growth. He has grown employee licenses from 1 to 70, maintained assets from \$50 M to \$300 M, and assumed operations of 14 small communities with failing water and sewer systems, 13 NPDES permits, 7 satellite sewer systems and 10 public drinking water systems.

One of Dan's greatest assets is making sure the employees are taken care of. He constantly encourages staff. He led The District's license incentive program, which offers additional compensation for each new license obtained. He makes employees aware of their resources, such as finding books or learning from a coworker who has knowledge to help pass exams. He realizes the importance of giving back to the employees for their hard work. Whether it's bringing in breakfast, organizing the employee open house, or organizing family day at the local baseball field, Dan knows how to make a difference in his employee's lives. Recently, Dan was a key advocate in supporting two staff members performing water and sewer relief effort in the Bahamas following Hurricane Dorian.

Dan is a licensed Class 3 wastewater operator and a Class 2 Water Supply operator. He has served as a Township Trustee and on the Hancock Wood Electric Board of Directors.



Dan Wickard
Northwest Water and Sewer District

W.D. SHEETS AWARD

The W.D. Sheets Award is presented to an individual who is active in the field of education and demonstrates outstanding accomplishment and service in the field of training and education of students for the positions in the areas of operation and design of wastewater facilities.

Mr. Radick has been actively involved in OWEA and WEF since the late 1960's focusing much of his time on operations and operator education. He is a past NW Section president and past state president and has served on numerous OWEA and WEF committees. Most recently, he served as chair of the WEF Plant Operations and Maintenance Committee. He was a lead author and reviewer on many WEF manuals focusing on development of quality materials for operations and maintenance related information. He was actively involved in the NWOWEA Operator Education Day operator training for over 10 years and developed and revised much of the training materials for the Class II/III review sessions that the section has utilized over the years. He has been an asset to the section and our ability to provide quality review sessions for operators for many years. Keith was an instructor for OTCO in both the basic and advanced wastewater treatment plant operations from 1972-1976.

Keith retired from the Floyd Browne Group where he worked as Environmental Specialist, Manager of the O&M Services Division, Manager of Field Services Division and finally as the Vice President of the Operations Services Division. Keith is a 5S member, a Quarter Century Operator and won the WEF Arthur Sidney Bedell Award in 1993.



Keith A. Radick
Retired

L.T. "TOM" HAGGERTY AWARD

The L.T. "Tom" Hagerty Award is presented to a public agency employee who unselfishly provides guidance and assistance to wastewater plant operators and superintendents as a part of his/her duties within an agency.

Lynette has worked for Ohio EPA NWDO-Division of Surface Water for 26 years and is responsible for implementing the NPDES storm water program and conducting compliance inspections in 12 Northwest Ohio Counties. She is an active member of the NW Section. She has drafted wastewater and storm water NPDES permits; reviewed Storm Water Pollution Prevention Plans and Storm Water Management Programs; conducted compliance inspections and MS4 audits, reviewed grants; and spoken at numerous training and outreach events. Lynette's position covers the industrial, construction and municipal areas of the program.

Lynette is very knowledgeable in all facets of the storm water program and works collaboratively with permittees to help them comply with the requirements of their storm water permits. She has gained the respect of the regulated community by treating them fairly and providing guidance when needed. Lynette's strong technical skills encourage the regulated community to call when they have questions. While they may not always like the regulations, they appreciate Lynette's professionalism and assistance with meeting storm water permitting requirements.

Lynette also spent 6 years in the Industrial, Public, and Semi-public Wastewater, Pre-treatment, Permit to Install, and Biosolids programs in NWDO. She is a graduate of the University of Toledo with a Bachelor of Science degree in Chemical Engineering. Lynette holds a Class III Wastewater Operators certificate and is a registered Professional Engineer in Ohio.



**Lynette
Hablitzel, PE**
Ohio EPA

PUBLIC SERVICE AWARD

The Public Service Award is presented to an elected Ohio official or officials demonstrating a significant commitment to the protection and improvement of the water environment. Awardees need not be a member of the Ohio Water Environment Association.

Mayor Horrigan's accomplishments in environmental stewardship and water reclamation are significant and include:

- Being pro-active in rebuilding relationships with USEPA and Ohio EPA.
- Promoting the All Akron Student Engineering Program to provide internships to Akron high school students- working on CSO projects.
- Supporting significant Association participation by staff at local (NES), state (OWEA) and national (WEF) levels.
- Leading Akron in the Cuyahoga River Gorge Dam Removal project to restore the river to its free-flowing condition.
- Partner in the ODNR designation of the Cuyahoga River as a State Designated Water Trail.
- Actively participating in the US Conference of Mayor's Water Council.
- Supporting a 2020 Capital Budget including \$179 million for water and sewer projects: \$52 million for combined sewer projects; \$29 million for sanitary sewer projects; and \$62 million in improvements to the Water Reclamation Facility.
- Holding a press conference at the Water Reclamation Facility to celebrate the 2019 completion of the Step Feed project.
- Conducting several media tours of the Ohio Canal Interceptor Tunnel construction site.
- Releasing the City of Akron Procurement and Inclusion Report aimed at developing strategies to increase access to opportunities for minority-owned, women-owned, disadvantaged, and local businesses looking to do business with the City of Akron.



**Mayor
Daniel Horrigan**
City of Akron

F.D. DEAN STEWART AWARD

The F.D. Dean Stewart Award is presented to an individual for his/her efforts in plant operations, maintenance, and especially for his/her keeping of records and reports of operations.

Steve Smith currently serves as the Superintendent at the Canal Winchester Water Reclamation Facility, where he has worked since 2005. Steve is responsible to operate and maintain a 2.48 Million Gallons per Day (MGD) water reclamation facility and a collection system that consists of 58 miles of sewer, 11 pump stations, and 1,195 manholes. Steve started his career in the water and wastewater industry in 1975 as a laborer with Ohio Utilities (now Aqua Ohio). He quickly ascended the ranks within Ohio Utilities to water treatment plant operator, then water superintendent and then wastewater superintendent. In 1998 he became Ohio Utilities' Superintendent of Operations for all water and wastewater plants in Ohio, and in 2001 he was promoted to General Manager of Ohio. In 2004 Steve became Superintendent of Utilities for the City of Pataskala.

Steve holds both a Class 3 Wastewater Works and Class 2 Water Supply certification in Ohio.

www.ohiowea.org



Steven M. Smith
City of Canal Winchester

ENGINEERING EXCELLENCE AWARD

The focus of this award is on a project and not a person. The selected project must have been in operation for a period of one (1) year and not more than five (5) years.



Scioto Greenways project consisted of three primary components: the removal of

the low-head Main Street Dam, the restoration of the Scioto River channel, and the creation of 33 acres of new urban greenspace. The Scioto Greenways was completed in November 2015. The project was a public private partnership lead by the City of Columbus and the Columbus Downtown Development Corporation. The project was designed by Stantec and the project lead was Bryon Ringley.

As a result of the project, the river's natural ecosystem is healthier today than ever before. It has become an accessible urban amenity for Downtown's residents, professionals and visitors. Today, visitors to the Scioto Mile can stroll, ride or run along multi-use pathways; lounge on the lush lawns; hit the water on a kayak, canoe or paddle board at one of four launches; or simply claim a space to rest on one of the many benches.

Scioto Greenways
Stantec

2020 Award Winners

FACILITY IMAGE AWARD

This Award is intended to recognize OWEA members who have enhanced the image of our profession by improving the physical image of their workplace or through outreach programs to schools and the general public.

The City of Fairfield's Wastewater Treatment Plant services roughly 42,500 domestic customers, Mercy Hospital of Fairfield, and a number of commercial and industrial establishments in the City of Fairfield. The Class IV Ohio EPA rated treatment plant treats about 5 million gallons of wastewater per day (MGD). The plant sits within the City's 215-acre, publicly-owned 'Public Utilities Campus' – in a mixed use recreational corridor. Accordingly, staff goes to great lengths to make sure the Wastewater Treatment Plant is well-maintained and aesthetically pleasing to all visitors of the Public Utilities Campus. Over the past several years, Fairfield has hosted numerous OWEA section events and Lab Analyst Committee meetings. Wastewater Treatment Plant tours are given to many organizations and groups. The City of Fairfield hosts, and staff help set up and coordinate, the annual Water For People 'Race for Global Water' 5K run. Similarly, the City hosts a designated clean-up location and staff regularly volunteers for the annual 'Clean Sweep of the Great Miami River' event.



**City of Fairfield
Wastewater
Treatment Plant**

The city of Willard operates a 4.5 MGD wastewater treatment plant. When the current superintendent and assistant superintendent took over the operation and maintenance of the plant, they knew they had some work ahead of them. The record room was piled with boxes that had fallen over, the administrative building had papers and boxes piled haphazardly all over. The laboratory had outdated equipment and SOPs. The team got to work organizing records into file cabinets, refinishing floors, painting walls, replacing lab equipment, updating SOPs, establishing record keeping practices, and taking professional training. They also installed a new security system and SCADA. When the vertical loop reactors were losing treatment efficiency, the team decided to tackle the project in house to save money. By emptying the tanks, removing the sludge build up and replacing the air release plates in house, they could fund the stainless-steel upgrades they desired to prolong the life of the equipment. They also replaced the biosolids conveyor system and painted surfaces inside the biosolids storage building. Concrete was replaced on the grounds and a new sign was placed with pride at the entrance to the plant.



City of Willard

Emphasis at the Willard WWTP is placed on operator training and teamwork. All the operators at the plant are involved in trouble shooting problems and finding the best solutions for long term operation and maintenance.

Because of all these efforts, they can treat more flow through the plant during dry and wet weather and still maintain compliance with the NPDES permit. Their hope is that by doing these improvements to the plant they will be better able to serve the surrounding unsewered communities.

LIFETIME ENGINEERING AWARD

The Lifetime Engineering Achievement Award was established to honor a member who, as an Ohio design engineer, has consistently delivered good basic engineering design of wastewater facilities over a period of 20 or more years. The awardee must be an Active, Lifetime, or Retired member of OWEA, recognized by his/her peers as having demonstrated a high level of competence in the design profession.

Brad is a registered Professional Engineer in Ohio, Michigan, and Texas. He is an active member in AWWA and OWEA. He is also a past president of OWEA's Northwest Section.

Brad has worked for Jones & Henry Engineers for about 20 years. He started as an engineer, moving up to project management, then a principal with the firm, and finally, he accepted his current position of President in 2017.

Brad has been involved with wastewater treatment plant projects small to large. Most recently, he worked with the City of Lima on upgrading the WWTP to provide enhanced treatment and increase wet weather flows from 56 MGD to 70 MGD. The project utilized Construction Manager at Risk. The improvements included new headworks, replacement of several primary tanks, new chemical feed equipment, replacement of the disinfection system and upgrades to the plant SCADA, all while maintaining treatment of influent.

Brad's dedication and service plus his expertise in wastewater treatment and project management has earned him the respect of those that have had the opportunity to work with him. His knowledge, skills, attitude, experience, and attention to detail has contributed greatly to helping wastewater operators treat the wastewater flows they receive and handle the solids generated during treatment.



Bradley Lowery
*Jones & Henry
Engineers*

Gary Haubner has spent nearly his entire career serving water and wastewater utilities on projects in Ohio and throughout the Midwest. He is a graduate of the University of Cincinnati, with a BS in Civil Engineering and a MS in Environmental Engineering in 1991 and 1993, respectively. He has been an active member of OWEA and served as President of the Southwest Section in 2007-2008. Gary currently manages Hazen and Sawyer's Midwest Region and serves on the Firm's Board of Directors. More than any other aspect of his job, he still enjoys working with clients on projects. He attributes his success to the many great people that he has worked with over his career.



**Gary J.
Haubner, PE**
Hazen and Sawyer

COLLECTION SYSTEM AWARD

The Collection System Award is presented to an individual for contributions to the advancement of state-of-the-art wastewater collection.

Ed has been working in the wastewater collections field for the City of Mason for 28 years. He began his career in the water and wastewater field in September 1992 with the City of Mason. He started in the department as a Maintenance Worker. In 1997 Ed was promoted to a Crew Leader, and in 1998 he was again promoted to Utilities Maintenance Foreman. In 2002 he was promoted to Utilities Foreman which put him in charge of the maintenance and operations staff. In 2016 he was promoted to the new position of utilities manager, the position that he holds today. Ed has been a dedicated member of WEF for over 20 years. In that time he has been a regular attendee at annual section meetings and section events. He has served at various times on the collections system committee. In 2019 he helped lead and organize the Southwest section's first ever safety committee event at his facility in Mason. In January of 2020 Ed was nominated to join the SWOWEA Executive Committee.



Leon Ed Smith
City of Mason

LABORATORY ANALYST AWARD

This award recognizes a laboratory analyst who has demonstrated excellence and professionalism in his/her daily laboratory work.

Gregg has been the Water Pollution Control Chemist at the City of Sidney WWTP for 19 years. Previous employers include the Lake County Public Works, Libertyville, Illinois and the City of Piqua WWTP. Gregg holds an Ohio Class 3 WWTP operator's license and Class 2 Wastewater Lab Analyst Certificate, and is a Crystal Crucible Award member. Gregg has a BS Environmental Biology from Eastern Illinois University. He is currently on the Lab Analysis Committee, has presented at LAC meetings, and coordinated quarterly meetings in Sidney. Gregg is responsible for NPDES sampling, analysis, and data entry. He also samples and analyze for Sidney's industrial pretreatment program. Gregg produced a spreadsheet program to track IPP surcharge and compliance results and billing. In 2009, Coordinated the lab work portion of a Hazen and Sawyer planning study to determine plant upgrade options. This consisted of several thousand analyses over a 3 week period to determine the various fractions (total, suspended, dissolved, colloidal) of COD, CBOD, and nutrients in influent, primary effluent and final effluent flows. Gregg shares SOPs and knowledge with surrounding villages as they seek to conform with OEPA lab criteria requirements.



Gregg Mitchell
City of Sidney

WEF WILLIAM D. HATFIELD AWARD

Presented to operators of wastewater treatment plants for outstanding performance and professionalism.

Marc started his career at the City of Mansfield as an operator. After thirteen years he entered the consulting world with Finkbeiner, Pettis, and Strout (now Arcadis) followed by Floyd Browne Associates. He was employed by both firms as an Operations Specialist- responsible for writing O&M manuals, coordinating equipment startups, training operators, and troubleshooting plant operational problems. Marc worked with plant personnel, always involving them in the process. Due to his knowledge and performance on projects, many clients repeatedly asked for his services.



Marc A. Morgan
City of Canton

After consulting, Marc headed back to Mansfield as Plant Manager. Currently, he is Superintendent of the Canton Water Reclamation Facility. Canton is a 39 MGD (average daily flow) membrane treatment facility which recently also replaced belt filter presses with centrifuges for improved solids dewatering. Marc has mastered the various aspects of wastewater treatment through his 46-year career.

Marc has continuously stressed the importance of education. He is responsible for monitoring contact hours for OWEA. He taught OTCO training courses and has been a constant presence at NESOWEA certification review sessions.

In his spare time Marc runs several smaller wastewater treatment plants and is involved in his local Lions Club, where he serves as President this year.

WEF ARTHUR SIDNEY BEDELL AWARD

Established to acknowledge extraordinary personal service to a Member Association.

Michael Frommer currently serves as the County Administrator for Delaware County, Ohio. Prior to joining Delaware County, Mike was a Vice President for AECOM for eight years. Mike also served as the General Manager for the Southwest Licking Community Water and Sewer District.

Mike graduated from Ohio Northern University in 1996 with a Bachelor of Science in Civil Engineering. He is registered as a Professional Engineer in Ohio and holds both a Class 3 Wastewater Works and Class 3 Water Supply certification in Ohio.

As a manager, Michael has prioritized and successfully mentored staff at all levels to reach their professional potential. Michael also encourages participation in WEF and OWEA, and he leads by example with his participation. Mike served the Ohio Water Environment Association for many years and was the President in 2014/2015. Mike was instrumental in the creation of the first OWEA strategic plan.



Michael A. Frommer
*Delaware County
Regional Sewer District*

2020 Award Winners

WEF LABORATORY ANALYST EXCELLENCE AWARD

Recognizes individuals for outstanding performance, professionalism, and contributions to the water quality analysis profession.

Karen Tenore was the Laboratory Manager at the City of Dayton WRF. Karen retired in 2019 with 29 years of service with the City of Dayton WRF. Karen holds an OWEA Laboratory Analyst IV certificate and an OEPA Wastewater Operator III certificate. Karen has been the SWOWEA Laboratory Analyst Committee chair or co-chair for over 17 years, attending all SWOWEA LAC meetings, most SWOWEA meetings, and numerous State OWEA conferences. Karen was active with the SWOWEA Education Committee, organizing the SW District Science Fair judges and helping judge the District 10 and District 1 Science Fairs. She also helped judge the Laboratory part of the Ops Challenge. Karen was instrumental in instructing operators and interns on laboratory processes to assist in furthering their abilities to attain certificates and enhance their resumes. Karen was always part of plant tours for grade school, high school, and college students.



Karen L. Tenore
*Retired from
City of Dayton*

Life Member

The Water Environment Federation's WEF Life Membership is bestowed upon members who have been active for at least 35 years and have reached age 65.

Gregory A Otey
Thomas A Fishbaugh
Ronald S Volkerding
Paul Usinowicz

Quarter Century Operator

Dale Kocarek
Stephen Elliott



ROLL CALL

**NOMINATE YOURSELF
OR A FELLOW OWEA
MEMBER FOR ROLL CALL
ON OHIOWEA.ORG.**



DAVE DAVIS

We are excited to announce that Dave Davis has joined the Sullivan Environmental Technologies team in the capacity of Aftermarket Sales and Business Development.

Dave will focus his efforts in

the area of central and northern Ohio to enhance our outreach in pursuing aftermarket sales, directly at the facility level, while also assisting with our business development for capital projects.

Dave grew up in Kenton, OH and has lived in the Piqua area since 1977. He is retired from the City of Piqua, after 32 years, where he last served as the Piqua Wastewater Plant Superintendent. Dave recently worked for a local consultant engineering firm as a Project Inspector and doing Business Development.

Dave has been married to his wife, Dani, for 38 years and has 3 grown sons, 1 married, with a grandson. In his spare time, Dave enjoys camping, racing, antiques and being with family.

Honored Members of Ohio's Crystal Crucible Society



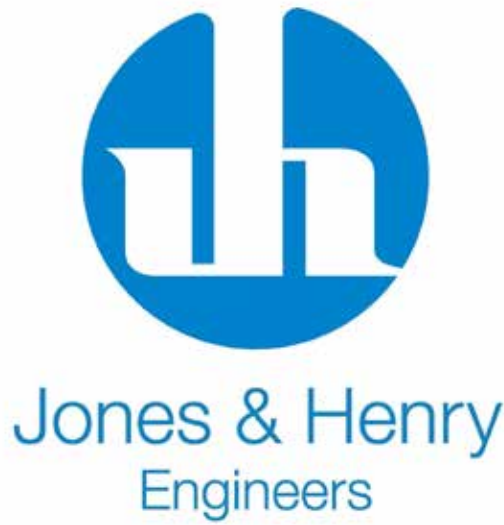
Alloway
Your Resource for Defensible Data

"Through the years, Alloway has strived to be your resource for defensible data. The Crystal Crucible Society is made up of distinguished analysts that also excel at providing defensible data and work diligently to provide this valuable information to the communities they serve. Alloway could not be more pleased and honored to support this group with our sponsorship of the OWEA!"

*John Hoffman, CEO
Alloway*

Kathy Cook 2003	Roger Rardain 2006	Paul Zeier 2010	Lori Kyle 2015
Eva Hatvani 2003	Marcy Bolek 2007	Keith Kroeger 2011	Brian McFarland 2015
John Hoffman 2003	Jeff Lamson 2007	Greg Mitchell 2011	Cheryl Soltis-Muth 2015
Jim Johnson 2003	Denise Seman 2007	Marc Morgan 2011	Leslie Vankuren 2015
Nancy Taylor 2003	Karen Tenore 2007	Bharati Torgalkar 2011	Mark Citriglia 2016
Jane Winkler 2003	Carol Wilson 2007	Jon van Dommelen 2011	Amy Lester 2016
Bill Dobbins 2004	Terri Brenner 2008	Matt Cox 2012	Todd Teman 2016
Mike Heniken 2004	Gary Hickman 2008	Wanda Harney 2012	Tony Hintze 2017
Amy Hursey 2004	Ron Moeller 2008	Sam Ludwick 2012	Joseph Koelliker 2017
Kelly (Decker) Steinmetz 2004	Kathy Richards 2008	William (Bill) Pfeiffer 2012	Rhonda Morris 2017
Don Calvert 2005	Tutu Rosanwo 2008	Tanna Rhoads 2012	Mike Ulatowski 2017
Dave Hill 2005	Cathy Simpson 2008	Ruth Ann Buzzi 2013	Tonya Cornell 2018
Claudia Kotich 2005	James Davis 2009	Bev Hoffman 2013	Steve Morris 2018
Dan Leavitt 2005	Michael Herdlick 2009	Paula Humphreys 2013	Robert Smith 2018
Kim Riddell-Furry 2005	Dr. John Marks 2009	Linda Sandefur 2013	Dan Stofan 2018
Paul Sandstrom 2005	Amy Starkey 2009	Josh Wehring 2013	Ryan Gierhart 2019
Mark Stoffan 2005	Mary Tule 2009	Kelly Berta 2014	Krista Greenwood 2019
Dave Wetzel 2005	Jim Borton 2010	Russ Bales 2014	Jennifer Macre 2019
Jeff Bates 2006	Mike Maringer 2010	Melodi Clark 2014	Laura St Pierre 2019
Dale Holmes 2006	Larry Moon 2010	Lynette Hodnicki 2014	
Dan McElhatten 2006	Rory Prigge 2010	Steve Roberts 2014	
George Noethlich 2006	Jerry Wright 2010	Terry Flood 2015	

Honored Members of Ohio's 5S Society



"Supporting the 5S Annual Breakfast at the OWEA Annual Conference has been a tradition for over 20 years."

"Receiving the 5S is a tremendous honor. This is a group of professionals who are experienced, who are willing to mentor, who lend advice, and who share the common bond of working together to provide a valued public health service to the communities of our state."

"For our company, it has always seemed like 'the right thing to do' to honor this group within the OWEA."

*- Brad Lowery, President
Jones & Henry Engineers*

Andrew Catanzarite 1985	Stan Holmquist 1985	Tom Hagerty 1989	Larry Rigby 1992
Tom Kutcher 1985	Michael Justice 1985	Merrill Riehl 1989	Keith Riley 1992
Ed Moats 1985	Robert Barefoot 1986	Robert Cottrill 1989	Dwane Stull 1993
Gino Silvestri 1985	Tony Catanzarite 1986	Jon Drescher 1989	Stuart Bruny 1993
Harold Augenstein 1985	Tom Harrell 1986	Kelsie Singleton 1989	Dave Hill 1993
Harry Baker 1985	Ted Lovejoy 1986	Robert O'Connell 1990	Bill Hill 1993
Clayton Blaney 1985	Edward Mohler 1986	Richard Melick 1990	Keith Radick 1993
Tom Cardarelli 1985	William Baker 1986	Dave VanFleet 1990	John Applegate 1994
Clyde Kirsch 1985	Donald Bowersox 1986	Ed Rogozinski 1990	Gerald Staiger 1994
Robert Manson 1985	Melvin Morgan 1986	Thom Saygers 1990	Dick Roberts 1994
Larry Moon 1985	Lou Risser 1987	John Kniepper 1991	Rick Varner 1994
Richard Schneider 1985	Donald Day 1987	Cliff Merritt 1991	John McCreight 1994
DeFro Tossey 1985	Gary N. Johnson 1987	Paul Flannigan 1991	Debbie Houdeshell 1995
Ronald Bell 1985	Ken Killinger 1987	Roy Duff 1991	Robert Mergel 1995
Chet Chwalik 1985	Steve Wordelman 1988	John Marks 1991	Gary Wagner 1995
Bill Cummins 1985	Res Calihan 1988	Lloyd Hagerty 1992	Al Rupp 1995
Stan Davis 1985	Albert Seiler 1988	Dan Bryan 1992	Ron Scott 1995
Galen Gault 1985	Gary W. Johnson 1988	Chuck Lenhart 1992	Lynn Marshall 1996
			Lew Debevec 1996

Tom Fishbaugh 1996	Gary Taylor 2002	Mike Stinehelfer 2008	Mike Heniken 2014
Dick Herriott 1996	John Leiendecker 2002	Dave Sprague 2008	Jamie Gellner 2014
Joe Roberson 1996	Ernie Stickler 2002	William Bryant 2008	Barb Wagner 2014
Chuck Zibbel 1997	Vui Chung 2003	Doug Clark 2009	Mike Maringer 2015
Greg Otey 1997	Patrick Antonelli 2003	Patrick Gsellman 2009	Michael Benza 2015
Leon Smith 1997	Terry Gellner 2003	Danny Sullivan 2009	Dan Martin 2015
Gene Norris 1997	Doug Brookhart 2003	Mike Frommer 2009	Tyler Linton 2015
Bob Brown 1997	Mark Livengood 2003	Cindy Jacobsen 2009	John Hoffman 2015
Jim Greener 1998	Curtis Truss 2004	Bruce Wiser 2010	Dan Wickard 2016
Everett McDarries 1998	Marc Morgan 2004	Jim Hays 2010	Steve Elliott 2016
Alice Godsey 1998	Dale Kocarek 2004	Mike Burgess 2010	Jason Tincu 2016
Roger Loomis 1998	Brad Borer 2004	Dail Hollopeter 2010	Jim Hewitt 2016
Sue Kutcher 1998	Donald Cuthbert 2004	Bill Slaven 2010	Bob Beyer 2016
Ted Boggs 1998	Darin Wise 2005	Frank D'Ambrosia 2011	Al Zamora 2017
Laura Tegethoff 1999	Elizabeth Wick 2005	Dan Johnson 2011	Mary Ann Driscoll 2017
Jim Johnson 1999	Bill Schatz 2005	Deborah Schafer 2011	Fred Smith 2017
Tracy Mills 1999	Carl Guenther 2005	Nancy Taylor 2011	Melodi Clark 2017
Jane Winkler 1999	Sheree Gossett-Johnson 2005	Steve Hallett 2011	Barb Browne 2017
Kathy Cook 2000	Phil Anderson 2006	Kim Riddell-Furry 2012	Terry Spiegel 2018
Steve Durall 2000	Harry McVey 2006	Dave Frank 2012	Bill Zawiski 2018
Mike Fox 2000	Jim Tegethoff 2006	Barb Swafford 2012	Brandon Fox 2018
Erwin Odeal 2000	Eva Hatvani 2006	Paul Matrka 2012	Paul Solanics 2018
Darryl Young 2000	Tom Angelo 2006	Dennis Meek 2012	Pete Schneider 2018
Tom Bulcher 2001	Ted Baker 2007	Doug Borkosky 2013	Jon Eckel 2019
Stephen Morrison 2001	Amy Hursey 2007	Mike Welke 2013	Kathy Richards 2019
William Myers 2001	Jim Scisson 2007	Dan Miklos 2013	Dave Wilson 2019
James Stanek 2001	Tim Hausch 2007	Ed Nutter 2013	Joe Tillison 2019
Jerry Coffey 2001	Rick Shoemaker 2007	Guy Jamesson 2013	
Dianne Sumego 2002	Jim Borton 2008	Jeff Lamson 2014	
Dennis Konicki 2002	Gary Hickman 2008	Lance Willard 2014	

A Chat with Incoming President Mike Welke

Interview by Megan Borrer

STAFF: How did you get involved in the wastewater industry?

WELKE: Funny thing, I actually was going to school to be an electrical engineer tech. Not the engineering but more to build the stuff they come up with. During that time one of my father's friends got me a summer job at the Wastewater Treatment Plant. I thought I'd be mowing grass and doing some sweeping and my first day I was actually at our main pump station in the wet well hosing. It was not what I expected. Luckily, I didn't actually throw up or anything.

I stuck it out and just continued on and got more interested as time went on. From the summer job I ended up getting hired in as casual laborer, then as a laborer, and worked my way up the chain where I am now the superintendent. A heavy portion of my career was in maintenance and I really enjoyed that. Tinkering with things was kind of what I was hoping to do when I was getting my degree. I only ended up just getting my associates degree at YSU because of the job I had here. The benefits are what made me decide not to go for my bachelor's and just start concentrating on my career here. It actually worked out really well. At first, I just thought I was going to cut some grass for the summer then move on to something else and continue going to school but it ended up being a career.

STAFF: How long have you been at City of Warren now?



WELKE: In September it will be 32 years. That's not counting my two years as a summer worker. So, this has been the only job I've really known except for side jobs here and there.

STAFF: How has COVID-19 affected both your work and your home?

WELKE: At work, we had gone down to half-staff and we rotated them every two weeks so I had fewer people here on a given day. I was considered essential. I could work from home or at work but I came in every day. I found it different and good in some ways because I didn't get pulled in so many different directions because no one was hardly here. Other times where I needed something done I was scrambling to find who's still here. It was a little eerie because you walk around and the parking lot is empty and usually I'm running into people throughout my trip around the plant. I could go three quarters or better of the plant and not see anybody.

At home, my wife was working from home. She's the Executive Secretary here at the plant and they set her up for remote access so she could do payroll from home. I would have to remember to bring her time slips so she could log them into the payroll system. When she was still working from home she was concerned about me being at the plant but I kept reassuring her that I wasn't really around anybody. I had the mask on when I was and tried to not

Fireside Chats

The Fireside Chats is a series for the Buckeye Bulletin focusing on leaders in the industry. The Question and Answer Feature will dig into their leadership role and how it has had an impact on the industry. We will be focusing on leaders from OWEA to Plant Superintendents and every leader in between. Please nominate your boss, coworker, or someone you admire for a future article by emailing Megan Borrer at: megan@ohiowe.org.



get too close. I was fairly confident that there wasn't stuff coming through the wastewater, I know the markers are there, but I wasn't so concerned about getting it through the wastewater and I'm not trying to go take a bath in it so I was pretty confident that I wasn't going to get it from that means, it would be more from contact with somebody else.

STAFF: I didn't know that you worked with your wife. That's not an experience that everybody has, how do you like working in the same place as her?

WELKE: I get asked that question all the time when they find out. I can say off the cuff, because she's not standing here next to me, at the plant is the only time that I could say that I'm in charge. I'm her boss. That lasts until I leave the office or the room that I'm in with her. But honestly, I'm out in the plant more than I'm in the office area so we're not together much. She's busy with payroll and other stuff related to her job. I know most people will say, "I don't know how you're doing it." There are certain times where I'm like, all right, I'm just not agreeing with what she's telling me. I have to walk that gentle line not just with her but so that no one else thinks that I'm taking the side of my wife over anything else. I let her handle a lot of her own, and anybody who knows my wife, knows she can definitely handle herself. She'll tell you how it is and doesn't care if you like it or not.

STAFF: What qualities do you think make a good leader and why?

WELKE: The quality that makes a good leader is someone that can listen and not just throw out orders. They need to listen and then make decisions based on what they're hearing, not to be swayed, but they need to gather information. I'm a big believer in hearing everybody's side and then making my decision. I believe everybody has a voice and should be heard. To me, a good leader is going to be able to listen, admit where they were wrong. Or maybe say, "You know, we're going to give it a try. I'm not sure it's going to work but, I want to give that a try." But also be able to say, "No, we need to go this direction." So, that's what a

good leader should be, one that can listen.

STAFF: Who is someone that you look up to in this industry?

WELKE: That's a long list! I've had so many people that I look up to, like John Leindecker, he was one of the first people to mentor me as I started through the chairs of the Northeast section. It was his mentoring that was like, "Man, I really want to keep going forward in this," not just this industry, but OWEA. I definitely listened and learned so much each year as I kept progressing forward in the NE Section.

Oh my god, in the industry itself, I have high respect for Doug Clark, who gave me some great advice as I started as delegate for Northeast section. He has been fantastic. Mike Frommer who said that he really liked how I listen to what everyone had to say then give my opinion. He told me that

he wanted to hear from me more often. Dale Kocarek for his encouraging words of wisdom. He sees a strength in me that I did not know I had.

I hope that as I go through this year as president, with no challenges [LAUGH] for this upcoming year I can reflect on some of those people that I

thought were great leaders of our organization as well as in the industry.

My work ethic comes from my father. He was a fireman. He always wanted me to know you don't call off work. You have to be coughing up a lung or bleeding out a kidney or something before you call off work. I'll have to admit now that I'm far enough into my career it's almost to a fault. I have such a ridiculous amount of time built up because I've never taken off. My sick time I can use is over 1700 hours and my vacation time is over 800 hours. I never take off. I'm always working because I really love what I do.

One of my previous directors Hank Angelo, who was the gentlemen who hired me in as summer help that started me on this path. He and my father were good friends. That got my foot in the door and I didn't want to be one of those favors that was owed. I wanted to prove that I could do it and I'd like to believe that I did.

STAFF: Looking to the future, what is a change you would like to see in the industry in the next five years?

WELKE: I'd like to see better communication between facilities

and EPA. Unfortunately, we have this offset between each other because they're regulatory and we're municipal. We say they're out to get us but there is actually a great blend between the two that can work so well together and I've seen it during my career here. I think that the communication between the two of us has to increase favorably. They're not out there just to hammer down on you, put fines and all these other restrictions, they want to work to make sure that we're all making the water that goes out of our plants safe for the environment. I think it's moving better now than I've seen in years. I'd like to hopefully see that continue and get even better. OWEA has been working with EPA a lot more in the last couple of years especially during the current pandemic. Issues come up and they ask "What do you think?" It's nice they consider us somewhat of a peer to be able to review some of the things that are coming down the pike, and it may change it, it may not.

STAFF: How did you originally get involved with OWEA?

WELKE: It was actually a superintendent here at the plant. He was the chair for Biosolids for Northeast Section and as I was being brought in from maintenance to work in the Biosolids division, he says, "Good. Now you can help me with the Biosolids committee!" That's kind of how it goes. Force volunteered. As he migrated out he was kind of tailoring me to take over as the Biosolids/Residuals Chair in the Northeast. Just that soul committee was where it started. I loved what was happening and I loved everything I've seen with the organization and that made me want to go further. And I actually asked my director at the time, Tom Angelo, about wanting to go to through the chairs of the section and put my name in the hat for that year. He was all for it and supported it.

I learned so much through each year of the chairs of the Northeast section that I'm pretty confident I could throw an event together from all that experience I gained. Then I was trying to do the same thing as I was walking through the years of the state, it's a little different than the section

"With the amount of different people that you meet, the networking never stops."

but I still learned something each year.

With the amount of different people that you meet, the networking never stops. The more people I was involved with through OWEA helped me as I was

moving up here at the plant as well as in OWEA. Getting to know faces and just having the conversations and at some of these events you get to talk to them and it's just like, "Hey, I have this. What do you guys have?" "I'm having a heck of a problem with my incinerators. What are you guys using that works?" It's just a great sharing of information. I know you could do any of that on the internet, but talking face-to-face is really key to the part of networking that makes this organization so great.

STAFF: What are some of your goals as incoming president?

WELKE: I would really like to see the student design competition expand across the state. I want at least one team from every section to be able to come to the state conference and present and send the highest scored presentation to WEFTEC as part of their student design competition. It's just not easy to snap your fingers, form a team and go, it's trying to get contact with certain universities. There's a lot of work, don't get me wrong, but I think if nothing else we were to take a baby step forward, and each section maybe reaches out to one university in their section. Just one and say, "Hey, can we put up a flyer to see if we get any students that might be interested in doing this?" Even if it's not part of the curriculum and see what happens, I think we might get lucky. Once you see the students say, "Wow, this was fantastic." Then they're going to get the universities to say, "This was fantastic. You may want to try to expand on this." When I hear the stories like Case Western Reserve and Cleveland State where it's part of their curriculum and these students are getting credit for it. Oh man, it's gonna bolster. It's not an easy task but I think we could have at least one university in each section of the state be willing to form a team. That's one of my biggest goals that I would love to do this year. I don't know if it'll happen. I mean, we have a lot of other trying things going on currently that may, unfortunately, push my goal back a bit.

Another goal of mine, even now with this current situation with COVID and everything else, is to hopefully continue to make our budget, making sure we can keep our members and our staff and everything else and will still be looked to from the national as one of the strongest MAs in WEF. That's kind of my newer goal is to make sure we survive and get through this and come out strong as ever. One way or another, we're going to survive because we're fighters. I think it's going to be a long hard task ahead of us.

STAFF: What advice do you have for someone looking to get more involved in the organization?

WELKE: I would love to just tell them, "Do it," but the advice is that you won't regret getting involved even in the smallest aspect. Being a part of any of the committees of the section or the state, you will not regret getting involved. The amount of work is only what you're willing to put into it. Being part of a committee, you'll have certain meetings you want to try to attend either via conference call or in person, when we get back in person, but it's all what you want to put into it. The people you're going to meet, the networking you're going to do, and you're going to learn things that you never thought that you could do. It is so well worth getting involved at just a committee at the section level or volunteering to help out at one of the section events.

I know in Northeast, Rod Dray, he's been a longtime member, but he's now retired and is getting more involved with us at section events. He's a fantastic guy. We put him everywhere, and he doesn't complain or anything. He just helps. Technically he's not officially on any committee and we were like, "Hey, do you want to?" "Nope, nope, this is what I like doing." He likes getting to know the committee members and getting to know the people. Hey, I'll take that. I think every section could do something like that. I know we struggle with trying to get people involved because they think that the tasks are overwhelming and too much. They don't have the time to devote to it. Well, you put the time that you can into it and you might find that you're going to try to put more time because you like it so much. I think everyone in the section boards would be willing to let people rotate around if they didn't feel comfortable in one committee or another, just to get their

feet wet. I never thought I'd be a biosolids guy, but I kind of was forced to do that too. Now I can talk a blue streak about biosolids because I like it that much and I never thought I would. I have an electrical background and now I'm talking biosolids, a whole opposite end of the fence.

STAFF: What do you want OWEA members to know about you as their president?

WELKE: I'm a hard worker. I will do everything in my power to make sure that OWEA continues to be one of the strongest MAs in WEF and represents its members in the state. I work to a fault. I am a listener. I like to gather all information. As Mike Frommer told me years ago when I was just getting onto the board, "I love the fact that you are a listener. That you want to hear everybody's opinion, and then you formulate yours, and at the right time you say it." His only advice to me was, "You need to make the right time to say your opinion more often." I've been trying to put my words out there more these last few years. I like to hear the opinion of everybody else because maybe I'm seeing things through one set of glasses and I need to look at them through another.

STAFF: Is there anything else that you would like to share with the OWEA membership?

WELKE: There's a famous movie *Dodgeball*, with the Average Joe's. I've learned so much through my stint through both Northeast Section and OWEA. I think I've grown a lot as a leader and a boss here at the Warren Plant, through my time at both Northeast and OWEA, but I'm just an Average Joe. I may not have all the exact numbers, I have a mechanical thinking mind, but I try to listen to all opinions. I will do my very best this year to make sure that OWEA is still strong and survives through COVID and anything else. Hopefully nothing else comes down the pike this year!

That's where I'm hoping that all I have to offer now will be a benefit to this organization. I'm confident that all of our members, on the board or not, are going to do everything they can to make sure that OWEA comes out strong and proves to WEF that we are one of the strongest MAs in the organization.

Maumee Area of Concern – Habitat Restoration in Action!

by Amanda Kovach, Partners for Clean Streams, Inc.

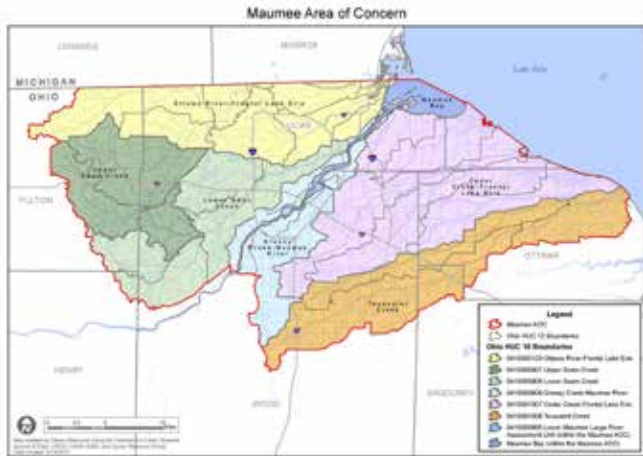


Image 1: Map of the Maumee Area of Concern and its major (HUC-10) watersheds. Image courtesy of Ohio EPA.

It is no small secret that exciting watershed restoration projects are happening in areas of Northwest Ohio that were historically impaired. This work, conducted under the Area of Concern (AOC) program, is being led and facilitated by numerous partners to the benefit of the wildlife, fish, and people that enjoy this region. A few of the many projects are highlighted here, along with a bit of background about the AOC program and the Maumee AOC.

In 1987, the joint U.S.-Canada Great Lakes Water Quality Agreement amendments formed the Area of Concern program. This program, specific to the Great Lakes Region,

Image 2: Aerial photograph of the Toledo skyline and the lower Maumee River. Photo courtesy of Hull & Associates, LLC.



defines AOCs as “geographic areas where significant impairment of beneficial uses has occurred as a result of human activities at the local level.” Due to significant habitat alteration, industrial impacts, uncontrolled sewage overflows, and struggling wildlife in the greater Toledo and outlying areas, the Maumee AOC was designated. The Maumee AOC covers 787 square miles, is home to approximately 558,000 residents, with 1,938 stream miles and approximately 45 miles of Lake Erie shoreline, and contains 11 independent watersheds. Waterways included in the AOC are the lower Maumee River, Ottawa River, Swan Creek, Toussaint River, and numerous smaller tributaries.

A suite of beneficial use impairments (BUIs) have been identified in the Maumee AOC. A BUI refers to an impairment of a specific condition in an AOC, and can reference negative conditions in a chemical, physical or biological component of an area. These conditions are typically significant enough to result in harm to specific

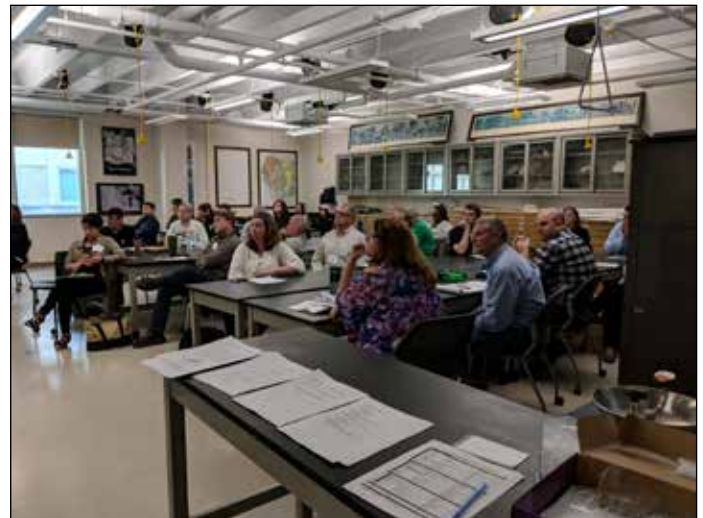


Image 3: Maumee Area of Concern Advisory Committee members & outside experts participated in a multi-day workshop to discuss restoration project ideas needed to address several Maumee Area of Concern impairments.

Image 4: Invasive vegetation was selectively treated with herbicide to prepare the Maumee State Forest project site for fall seeding. Photo courtesy of Ohio DNR.



segments of a waterway. There are 14 possible BUIs in total but not all are applicable to each AOC. The Maumee AOC began with 10 BUIs, but one has been removed, leaving the nine listed below. All BUIs designated for an AOC must be improved enough to be removed before that AOC can be considered for full removal from the program (i.e., delisted).

Maumee AOC: Currently Listed for 9 out of 14 BUIs

- BUI 1: Restrictions on fish and wildlife consumption
- BUI 3: Degradation of fish and wildlife populations
- BUI 4: Fish tumors or other deformities
- BUI 6: Degradation of benthos
- BUI 7: Restriction on dredging activities
- BUI 8: Eutrophication or undesirable algae

- BUI 10: Beach closings
- BUI 11: Degradation of aesthetics
- BUI 14: Loss of fish and wildlife habitat

Since the area's BUI identifications and AOC designation, an active group of Toledo-area community members and representatives from local nonprofit organizations, businesses, industries, and federal, state, and local government agencies have worked to address and improve the Maumee AOC's BUIs. This group, currently called the Maumee AOC Advisory Committee (MAAC), works as an advisory committee to Ohio EPA, identifying solutions (i.e., restoration projects or removal of pollutants) to the various BUIs. MAAC members also help to organize public environmental education opportunities.

Recently, the MAAC and its various subcommittees have been particularly focused on identifying and

Image 5: Heavy machinery was used to create wetland scrapes at the Maumee State Forest project site. Photo courtesy of Ohio DNR.





Image 6: Spring rains filled wetland scrape areas at the Maumee State Forest project site; wildlife quickly began to utilize the new wetland habitat. Photo courtesy of Ohio DNR.



Image 7: A view of Oak Openings swamp forest habitat following trash and debris removal activities at the project site. Photo courtesy of Metroparks Toledo.

implementing projects to address BUI 14; Loss of Fish and Wildlife Habitat. Although only three of these projects are highlighted below, there are many more projects being conducted successfully throughout the Maumee AOC's rivers, streams, wetlands, floodplains, and prairies.

Maumee State Forest

This project is located within the Maumee State Forest (managed by the ODNR Division of Forestry); approximately 20 miles Southwest of Toledo. The project site includes 113 acres, in which 75 acres was previously drained/farmed land and 38 acres is existing woodland. Historically, habitat in this area was largely oak-dominated woodlands and savannas unique to Northwest Ohio. These habitat types are a part of a globally rare (valuable) ecosystem known as the "Oak Openings".

Overarching goals of this project are to re-establish Oak Openings habitat (and associated trees/vegetation) and to provide quality habitat for a variety of migratory and resident wildlife. Management practices used to achieve these goals have included;

- Breaking or plugging drainage tiles in strategic locations to restore native hydrology (while making sure that adjacent properties and roads remain unflooded);
- Using heavy machinery (e.g., bulldozers and front-end loaders) to "scrape" strategically selected areas in order to recreate areas of native wetland habitat;
- Applying herbicide to invasive vegetation in preparation for native tree plantings and seed dispersal; and
- Planting upland areas of the site with 9,000 trees and wet/dry prairie areas with native grasses and forbs.

Once work is completed, all 113 acres of the site will have been returned native woodland, wetland, or prairie habitat!

This project is a collaborative effort between the Ohio Department of Natural Resources, Division of Forestry and The Nature Conservancy, with financial support provided by the U.S. Environmental Protection Agency and the Great Lakes Restoration Initiative.



Image 8: A rare yellow lady slipper orchid found in a restored area of Oak Openings wet prairie habitat. Photo courtesy of Metroparks Toledo.

Oak Openings Priority Conservation Area

The Oak Openings region includes areas of Northwest Ohio and is widely regarded as one of the state's most biologically diverse places. One-third of Ohio's rare plant and animal species are found here, within an area representing just 0.5% of Ohio's total land area. Historically, the Oak Openings region was dominated by expansive oak savannas and wet prairie swales. Since European settlement, the region's natural communities have been systematically altered through drainage, agriculture, fire exclusion, and urban expansion.

Through this project, Metroparks Toledo acquired four separate tracts of land, totaling 31 acres, within areas designated as Priority Conservation Areas by the Oak Openings Green Ribbon Initiative. These are areas where scientists have determined that additional habitat protection/restoration will provide the most benefit to plant and animal species of greatest conservation concern.

Metroparks' project goals are to ultimately provide habitat protection for threatened and endangered wildlife species that inhabit the Oak Openings, enhance habitat connectivity by creating corridors between existing protected parks and preserves, and improve water quality within the Lake Erie watershed through the protection of wetlands, floodplains, and uplands draining into the region's rivers and streams.

The specific management practices used to achieve the aforementioned project goals include;

- Preparation of the project areas for native plantings by removing woody invasive plants such as glossy buckthorn encroaching on prairie and savanna habitats using hydro-ax mowing and application of selective herbicides;
- Enhancement of existing high quality habitat through the use of prescribed fire, mowing and other best management practices; and
- Removal of trash and debris left behind by previous landowners.

Once project work is complete, all associated sites will be permanently protected from future redevelopment and will act as refuges for native wildlife for years to come!

This project is a collaborative effort between Metroparks Toledo, The Nature Conservancy, and the U.S. Environmental Protection Agency, with financial support provided through the Great Lakes Restoration Initiative.

Toussaint Marsh State Wildlife Area

The Toussaint Marsh State Wildlife Area was an existing impounded wetland complex located near the town of Oak Harbor, roughly five miles from Lake Erie. The site is adjacent to the Toussaint River and includes 125 acres of emergent and lowland shrub wetlands within western Lake Erie's coastal zone. Habitat in this area of Ohio was historically dominated by emergent and forested wetlands. Human activities dramatically altered this landscape, resulting in the loss of more than 90% of the historic wetlands.

The impetus of project work at the Wildlife Area was failure of existing water control management structures necessary to maintain quality wetland habitat. As such, the ultimate goals of this project are to restore and redesign the existing impounded wetland in order to improve the quality of habitat for fish and wildlife in the coastal region of Lake Erie and to restore the hydrological connections between the Wildlife Area and the Toussaint River.

Project work has been phased over a number of years. Phases I and II of the project are complete and Phase III will be completed this summer (2020). Primary management practices have included;

- Removal and replacement of existing water control and pump structures with improved infrastructure;
- Restoration of sections of the external levee; and
- Removal of more than one mile of internal levees.

The new and improved water control/pump

infrastructure will allow for use as flow through systems/ fish passage if desired, and also increases the efficacy of invasive species management within the wetland. Removal of the internal levees established one large wetland where four small wetland units previously existed, increasing connectivity and diversity of habitat within the wetland. Project partners predict that the creation of a larger and more continuous area will greatly benefit amphibian, reptile (turtles and snakes), and fish species that reside in the area.

This project is a collaborative effort among the Ohio Division of Wildlife, The Nature Conservancy and Ducks Unlimited, with financial support provided by the National Oceanic and Atmospheric Administration, the Great Lakes Fish and Wildlife Restoration Act and the National Fish and Wildlife Foundation through the Great Lakes Restoration Initiative.

Image 9: Aerial imagery of the Toussaint Marsh State Wildlife Area taken in the summer following the completion of project phases I and II. The waterbody surrounding the site is the Toussaint River. Photo courtesy of NOAA.



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City of Hamilton Water Reclamation Facility

by David Jenkins, City of Hamilton

1958 Plant/Current Plant

The City of Hamilton's Water Reclamation Facility (WRF) is located on the east bank of the Great Miami River on the southern edge of Hamilton, Ohio. The City of Hamilton is the county seat of Butler County and has a population 62,500 residents.

The WRF was built in 1958; the original plant was an activated sludge plant with a design flow of 18 million gallons per day (MGD). Of the 18 MGD, 12 MGD received only primary treatment and 6 MGD received primary and secondary treatment. The plant was designed for 65 % removal of total suspended solids (TSS) and biological oxygen demand (BOD). The primary sludge and waste activated sludge (WAS) were anaerobically digested. The sludge was dewatered with rotary vacuum filters and was landfilled for disposal. The tanks that were part of the original plant are now used for storm water retention.

The WRF currently has screening, grit removal, primary treatment, secondary treatment, final clarifiers, chlorination and dechlorination. The primary and waste activated sludge are sent to gravity thickeners. The thickened sludge is pumped to belt presses for dewatering. The dewatered sludge is conveyed to a trailer for disposal at the landfill or land application. The current design flow of the WRF is 32 MGD. The average daily dry weather flow is 8.0 MGD. The peak wet weather design flow is 62 MGD.



City of Hamilton WRF

Influent Pumping and Preliminary Treatment

The City of Hamilton WRF provides preliminary treatment for all of the incoming domestic wastewater from the municipality, and all industrial wastewater from the City's industries. The two processes for preliminary treatment are climber bar screens and aerated grit channels. The influent wastewater flows into the diversion chamber just ahead of the Influent Pump Station (IPS). A 60-inch interceptor conveys the influent flow to the diversion chamber. The influent flow is approximately 8 MGD, the average dry weather flow from Hamilton's residential, commercial, and industrial customers.

There are two sluice gates on the east side of the diversion chamber. These gates direct the influent to either of the 48-inch pipes that flow to the bar screen and wet well. A sluice gate on the north side of the diversion chamber can open, directing wet weather flow to retention tanks. The Influent Pump Station has two climber bar screens manufactured by Infilco Degremont, Inc. The bars are 0.5-inch wide and spaced 0.5-inch apart, across a 7.5 ft screen. A 30 hp electric motor in a submersible enclosure operates the bar screen's rake mechanism. The rake lifts the screenings 50 ft to ground level and deposits them on a conveyer manufactured by Custom Conveyor, Inc. After the wastewater flows through the bar screens, it enters the Influent Pump Station wet well. The wet well is 14 ft deep x



Influent Pump Station

21 ft x 32 ft. Three variable-speed vertical centrifugal pumps with long shafted drives lift the wastewater. Varidyne vertical induction-duty motors, manufactured by U.S. Motors, drive the pumps manufactured by Ingersoll-Dresser. Two of the pumps have a pumping capacity of 13,200 gpm and have 350 hp motors. One pump has a pumping capacity of 8,333 gpm with a 200 hp motor. Flow is pumped from the IPS wet well to the Parshall Flume and grit tanks.

The Parshall Flume and grit tanks were constructed in 2000. The flow passes through the flume into the grit tanks. An Inventron ultrasonic flow meter measures the influent flow as it flows through the open channel flume. The range of the meter is 0-32 MGD. The Hamilton WRF has two aerated grit tanks. The grit tanks reduce the velocity of the water to below 1 fps, allowing the grit to settle by gravity. Hoffman centrifugal blowers provide air to the tanks, preventing organic material from settling with the grit. Each grit tank measures 88.5 ft x 12 ft x 10 ft swd (standing water depth). Peak flow design for one tank is 28.5 MGD. Under normal operating condition, two tanks are put on-line when the flow exceeds 18 MGD. A catenary flight and chain scraper, manufactured by E&I, collects the settled grit. A conveyor belt carries the collected grit to a 20-yard dumpster for landfill disposal.

Primary Treatment

Screened, dewatered wastewater flows from the grit tanks to the primary splitter box through a 60 inch pipe. The splitter box provides even distribution of flow between the primary clarifiers. Wastewater flows from the splitter box to each clarifier through a 36-inch pipe. The Hamilton

WRF has three primary clarifiers manufactured by Eimco. Each clarifier has a weir-to-weir diameter of 100 ft and a side water depth of 7.8 ft. The tank volume of each clarifier is 524,000 gallons. Flow enters the clarifier through a 36-inch line and discharges into a center well. The primary effluent then flows to the Hamilton Pump Station through a 48-inch pipe.

Circular scrapers collect the settled sludge in the center of tank. Hayward-Gordon horizontal centrifugal pumps, rated at 300 gpm, draw collected sludge flows to the Primary Sludge Building through a 6-inch line and discharge it to the gravity thickener for concentration. Each clarifier has a centrifugal sludge pump and two in reserve.

Secondary Treatment

With the passage of the Clean Water Act in 1972, the Hamilton WRF was mandated to provide secondary treatment to all of the incoming wastewater. In 1976, the Hamilton WRF constructed the Hamilton Pump Station (HPS), two aeration tanks and two secondary clarifiers. With this upgrade, the WRF was able to provide secondary treatment to all of the incoming wastewater.

The HPS lifts the primary effluent to the aeration tanks for secondary treatment. The HPS wet well is 46 ft x 12 ft x 15 ft swd. The HPS has four vertical centrifugal Worthington pumps with long drive shafts, with motors by US Electrical. Two pumps are 125 hp with capacities of 7,000 gpm; two pumps are 75 hp with capacities of 6,400 gpm.

Primary effluent, and occasionally, storm water flow



Aerated Grit Tanks and Primary Clarifiers



Aeration Tanks

Plant Profile

discharge into the two secondary aeration tanks. Each tank is 290 ft x 86 ft x 16 ft swd. Each tank is 2,944,000 gallons. Under normal conditions, the aeration tanks operate in plug flow. During wet weather flows, the tanks are operated in step feed. RAS (Return Activated Sludge) blends with primary effluent at the head end of the tanks. Three single-stage Siemens blowers provide the air.

Secondary Clarifiers

There are two secondary clarifiers, for settling the mixed liquor. Each is 160 ft in diameter, 14 ft deep at the outside edge, and 15.5 ft at the center. Each holds 2,443,000 gallons. Mixed liquor flows from the aeration tanks outfall to the final clarifiers through two 48-inch pipes. The final effluent flows over the weirs into a launder, and then to the disinfection tanks through a 48-inch pipe. Four variable speed pumps control the RAS flow. Each is a Worthington vertical centrifugal pump rated at 4,400 gpm at 44 TDH. A 60 hp General Electric motor powers each pump.

Chlorination/Dechlorination

The effluent from the secondary clarifiers flows into an open channel through a 72-inch pipe. At the head of the chlorination tanks, there is a Badger ultrasonic flow meter to measure the effluent flow. The meter has velocity sensors and level sensor to calculate the flow. The chlorination tanks were built in 2000. The Hamilton WRF uses sodium hypochlorite solution, 10-15% chlorine by weight, to disinfect the final clarifier effluent. The sodium hypochlorite solution is stored in two 6,035-gallon storage tanks in the Disinfection building. Two Watson-Marlow peristaltic pumps feed the sodium hypochlorite. Upstream

of the chlorine contact tanks, a mechanical mixer disperses the chlorine solution through the effluent. Each chlorine tank measures 306 ft x 32.5 ft x 8.5 ft swd. Each tank is 633,687 gallons. One chlorine contact tank has a detention time of 45 minutes at 20 MGD. The second tank is normally put on-line when the flow exceeds 40 MGD. The disinfected wastewater flows to the dechlorination tanks through a 72-inch pipe.

Sodium bisulfite solution dechlorinates the effluent before discharge to the Great Miami River. It is stored in a 6,035-gallon storage tank. One of two positive-displacement metering pumps introduces the solution to the mixing tank. The dechlorination tanks are 35 ft long x 11.75 ft wide x 8 ft swd, each has a capacity of 24,609-gallons. The Hamilton WRF chlorinates and dechlorinates from May to October. The average daily use of sodium hypochlorite is 120 gallons per day. The daily average use of sodium bisulfite is 20 gallons per day.

Biosolids Processing and Handling

Primary sludge and WAS are sent to one of the two gravity thickeners. The gravity thickeners have a diameter of 80 ft and of 17 ft swd, with a total capacity of 640,000 gallons. Two Moyno progressive pumps and one Boerger rotary lobe pump transfer the thickened sludge to the Koline-Sanderson belt presses. There are three presses; normally two operate. Cationic polymer chemically conditions the sludge before application to the press. A belt conveys the dewatered sludge to the sludge loading building and into a trailer for disposal at a landfill. If weather permits, the dewatered sludge is stabilized with lime to create a Class



Secondary Clarifiers



Chlorine Contact Tanks

B sludge that is land applied. In 2019, the average percent solids of the thickened sludge and dewatered cake was 3.0% and 20.85% respectively.

Laboratory Operation

By Danny Knife

The City of Hamilton maintains and operates three laboratories; all play a large role in maintaining EPA compliance, plant optimization, and meeting all the City's laboratory needs. The City of Hamilton main laboratory is located at the Water Reclamation Facility; additional labs are located at the two Water Treatment Plants. Though each lab has a primary analytical focus, mainly water and wastewater, other City departments utilize the resources the lab offers. Three full time employees, a Lab Supervisor and two Chemists, operate the Hamilton Laboratory.

Lab personnel evaluate the wastewater stream from various points throughout the treatment plant. We analyze BOD, Ammonia and TSS samples from the influent, primary clarifier effluent and final effluent in-house, five days a week. We test the final effluent for E. coli seven days a week; we analyze Hexavalent Chromium in-house once a month. We send monthly influent and effluent samples to a commercial laboratory: eight phosphorus samples, two oil and grease samples, and metals analysis. The contract lab also performs upstream and downstream testing.

The Lab personnel analyze all biosolids program samples. We perform annual DMRQA, Bioassay, and

Priority Pollutants testing, as well as a quarterly QC program. We perform monthly and quarterly testing for an activated sludge package plant with UV disinfection that the City operates under a separate NPDES permit. We run daily pH, BOD and TSS tests to determine billing for an industrial user with a pretreatment program within the City. Along with our wastewater duties, the Lab staff tests monthly and quarterly samples of Phosphorus, Barium and TSS, and DMRQA, to comply with the NPDES permit for the City operated Power Plant.

2019 Operational Data (Averages)

Analyte	Influent	Primary Clarifier Effluent	Final Effluent
Ammonia	14.6 mg/l	12.3 mg/l	0.47 mg/l
BOD	144.0 mg/l	73.0 mg/l	3.7 mg/l
TSS	150.9 mg/l	71.5 mg/l	5.2 mg/l
Total Phosphorus	3.9 mg/l		2.5 mg/l
E. coli			43.8 #/100 ml



1958 Plant/Storm Water Retention Tanks



Sludge Thickeners

Diversity – Taking on the tight labor market challenge

by Thomas B. Merritt, President, H.R. Gray, an Anser Advisory company

I was recently reminded of a riddle that I first heard as a child. Even though it is decades old, it still resonates today.

A man and his son are in a car accident. The man dies, and the son is seriously injured. The son is taken to the hospital for emergency surgery. The distinguished surgeon takes one look at the boy and says, “I can’t operate on him! He’s my son!”

How the riddle asks, can that be?

Even today, a surprising number of us are not able to provide the answer — the surgeon is the boy’s mother. We are forgetting about half of our population.

While this riddle reflects an underlying bias many of us have pertaining to the medical field, it also points to a similar attitude ingrained in the construction industry

culture. Women are woefully underrepresented in our field. According to the Society of Women Engineers (SWE), only 13 percent of engineers are female. At the same time, as demand for construction services increases, we are challenged with a rising need for engineers. If we want to meet the growing demand, we need to recognize that we have nurtured a long-standing culture built by and favoring white male engineers. It is time for a change.

Diversity as the solution

Imagine what we could accomplish if we doubled the percentages of women entering engineering fields and earning engineering degrees. That could translate to a gain of tens of thousands of engineers who are creative thinkers, innovators and problem-solvers ready to tackle global issues like climate change, providing clean water and renewable energy.

In addition to meeting the growing demand for

The People Place

This Buckeye Bulletin series focuses on the people side of our industry, hence the title: The People Place. Traditionally, the Buckeye Bulletin comes loaded with mountains of technical pieces: plant profiles, industry trends, regulatory insight, project overviews, etc., which, without proper ‘people-care’ would not be possible! After all, your organization can only be as successful as the health, wellness, and productivity of your people and culture. Focus areas of this series are topics such as leadership, management, health and wellness, succession planning, work/life balance, recruiting/retaining, change management, knowledge transfer, career laddering/branding, etc. We hope you enjoy this series as much as we are excited to bring it to you! If you are interested in submitting an article or specific focus area, please contact Jason Tincu. (jtincu20@gmail.com) Thank you!



engineers, creating a more diverse and inclusive work environment leads to happier and more engaged employees. The public sector has embraced the concept of diversity and, as a result, has increased the number of women in leadership roles. Construction management firms that work with public sector service providers should commit to reflect the providers' values and successes by doing the same. By mirroring the public sector's commitment to building a more diverse workplace, we can remain competitive and create more relationship-building opportunities with our customer base.

Demonstrating the same commitment to diversity as your clients leads to direct benefits to your organization. In the construction engineering field where teamwork and strong communication are keys to success, developing more engaged team members and a collaborative environment are vital. As leaders in the field, we must ask ourselves and our teams, "do we have a culture in which all of our employees feel comfortable, included and valued?" According to SWE, 30 percent of women who left the engineering field cited organizational climate as the reason. Imagine how different the outcome would be if these women were encouraged instead of alienated.

In addition, we should also examine our organizational charts. Are women well represented in all levels including the top tier? These are things prospective employees coming into the workplace will notice. A diverse and inclusive atmosphere can play a significant role in the candidate's decision on whether to accept the job offer.

Attracting top talent requires breaking down the barriers that women continue to experience in our industry. Removing biases starting with the interview process and hiring based on talents and skills will lead to lower turnover, higher employee satisfaction and greater productivity. When organizations broaden their pool of candidates to include those previously overlooked, they are increasing their ability to hire the most talented and qualified workers.

Yet with the number of women graduating with degrees in engineering remaining disproportionate (20 percent), organizations seeking to hire more women are competing against one another to attract these female graduates.

To meet the growing demand for more female engineers, we need to encourage more women to seek degrees in engineering and enter the labor pool. One of the most effective ways to encourage young people to consider engineering as a career is to introduce them to women engineers who can serve as role models. When women are encouraged to represent the industry at college career days, visit middle and high schools and participate in STEM events, they are showing young women that there is a place for them in the engineering field.

Creating a gender-balanced business

As previously stated, competition for hiring female engineers is fierce. How can an organization stand above the rest as a great place to work for the women they are recruiting? There are steps industry leaders can take to create a truly gender-balanced business that will attract the best talent and build a top-notch team. They include:

- Creating a safe environment for every employee. This goes back to the basic concepts of value, respect and inclusion. If your employees feel that you value and respect them and that they are an integral contributor to your team, they will feel comfortable enough to step forward, give candid feedback and share new ideas.
- Taking decisive action to reject the "we've always done it this way" philosophy and, instead, taking a hard look at business practices that have, intentionally or not, contributed to gender bias. This can be challenging and anxiety producing as we look to abandon practices that are embedded in our culture. However, if we keep our focus on the end goal and open ourselves to new and divergent

ideas, we can begin to create change within our organization that will lead to greater equality and a happier, more diverse workforce.

- Creating more quality must go beyond a 50/50 balance of male and female employees. It is important to also look at the organization through a magnifying lens. While 50 percent of my team are female, do our workplace policies, training programs and advancement opportunities support both male and female employees equally? To effectively create a more diverse culture, we must focus our efforts on all aspects of the business.
- Expanding the company's benefit policies to include paid parental and family leave. According to the United States Congress Joint Economic Committee, businesses providing paid leave see an increase in productivity, higher levels of employee satisfaction and less turnover. At Anser Advisory we are working continuously to offer more benefits like these to our employees. We know that offering paid time off for new parents is also more likely to attract job candidates. A valuable tool when competing for top talent.
- Providing each employee with an assessment tool to gain insights into their individual personalities, communication preferences and key motivators. Everyone is unique and each deserves to have their uniqueness acknowledged and respected. When leaders recognize these differences, the results will include improvements in individual performance, more collaborative teams and increased overall productivity.

We are human therefore we are biased

As leaders, we must also be open to uncovering underlying biases of which we may not even be aware. Not only our own preconceptions, but those within the industry

and within our culture at large. We should be talking with employees, both men and women, about their personal experiences with equality, what could have been done to help them and how it shaped who they are today.

A woman in our industry recently shared her story with me. Not long ago she was informed that her advancement opportunities were limited because she had a young child at home and would likely have more children. The leader was concerned that she would not be as committed to her job as a man would be—simply because she was a mother. How many of us have allowed an employee's status as a mother to impact our decision about their career advancement? I doubt many of us question a man's professional ability when he becomes a father.

Unfortunately, situations like these are common and we must recognize that, even today, they are seriously impacting women's opportunities in the workplace. By listening to her story, I was able to gain a better understanding of her experiences and how they have shaped her career. It also raised my awareness of a very real challenge women continue to face and ensured my commitment to never allow this bias to restrict anyone's opportunities within my organization.

When we ask our employees about their experiences and what they think we can do to bring about change, we gain a better understanding of what gender bias is and how it affects not just the women who are impacted, but the team as a whole. By listening and acknowledging their very real concerns, we can begin to uncover biases within ourselves, our organization and the entire industry—leading to a greater likelihood that change will occur.

Change is good

Enacting change will result in a more diverse and positive environment across the organization and encourage greater productivity, enhanced critical thinking

and problem solving. Including individuals with different backgrounds, experiences and perspectives lends itself to a greater sharing of ideas and points of view, leading to better decision making and innovation.

Valuing the uniqueness of each team member, consistently communicating the organization's mission and demonstrating respect for others create an inclusive environment where employees are encouraged to collaborate, contribute their ideas and be the best they can be. By creating a culture that reflects the diversity within our society, we are building the foundation for success.

And if we want to attract—and keep—the best and brightest people, we must stop looking at just half the population.

Tom has more than 35 years of proven leadership experience, in both the public and private sector, and is locally recognized as a regional expert in public policy implementation, consensus building and strategic planning. He exercises strong organizational and development skills and is committed to developing team and individual performances. During his tenure at H.R. Gray, Tom has led change management activities and propelled growth through the identification and acquisition of key government contracts, developing and deploying the internal processes and systems critical to supporting expansion and the management of public construction contracts. With H.R. Gray recently joining Anser Advisory, Tom is now leveraging his extensive leadership experience in his new role as Regional Managing Director of the company's Midwestern Region.

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WEF Utility Partnership Program

The WEF Utility Partnership Program (UPP) is designed to allow Ohio utilities to join WEF and OWEA while creating a comprehensive membership package for designated employees. Utilities can consolidate all members within their organization on to one account and have the flexibility to tailor the appropriate value packages based on the designated employees' needs. Key benefits include:

- UPP is fully customizable, based on the needs of each utility, and a WEF team member will be on-hand to walk each utility through the enrollment process.
- ALL members at the utility will be enrolled, with synchronized begin and end dates, on ONE invoice, for an easy one-time per year payment.
- All members, who were already WEF members, retain original membership number, credit for all years of membership, and remain a full-voting WEF member.
- ALL employees at the UPP utility will be eligible for membership registration rates at WEFTEC, as well as the early-bird rate for Premium and Standard WEFTEC registration at anytime throughout the registration period.
- ALL employees at the UPP utility will also be eligible for member rates for the OWEA Technical Conference and Exposition, OWEA Workshops, and events.
- All employees at the utility will be eligible to register for a WEFTEC Exhibition-only pass at NO-Charge.
- WEFTEC registrations can be included in the UPP Membership transaction at the time of enrollment or can be grouped and submitted closer to WEFTEC.
- UPP also includes a special, NO-Charge membership for Public Officials designated by the Utility, at their discretion.
- Up to five new WEF/OWEA members can be added by the utility each year, at no charge for the first year of membership.
- UPP utility will be eligible for distributor pricing on all WEF products and services – that's 40% off list pricing. In addition to traditional items this discount also extends to online learning in the new WEF Knowledge Center.
- UPP members will be eligible for special discounted registration for other WEF Conferences and events.

OWEA currently has 33 municipalities signed up for the Utility Partnership Program. To learn about the benefits for your utility visit <http://www.wef.org/UtilityPartnership/>

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Ohio UPP Members

Allen County Sanitary Department
Avon Lake Regional Water
Butler County Water and Sewer
City of Bellevue
City of Canton
City of Celina
City of Columbus
City of Dayton
City of Fairborn
City of Fairfield
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City of Marietta
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City of Solon
City of Steubenville
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City of Urbana
City of Warren
Clermont County Sewer District
Delaware County Regional Sewer District
Fairfield County
Fremont Water Reclamation Center
Greene County Sanitary Engineering Dept
Lake County Dept. of Utilities
Metropolitan Sewer District of Greater Cincinnati
Montgomery County Environmental Services
Northeast Ohio Regional Sewer District

Oxidation Reduction Potential, a Versatile but Misunderstood Wastewater Treatment Monitoring Parameter – Part 2

by Rob Smith, Black & Veatch and Ben Barker, YSI

This is part 2 of a 2-part article on the parameter oxidation reduction potential (ORP). ORP reactions in water and wastewater treatment and interpretation of the ORP parameter were described in Part 1. Part 2 examines the application of ORP for wastewater process control including case studies.

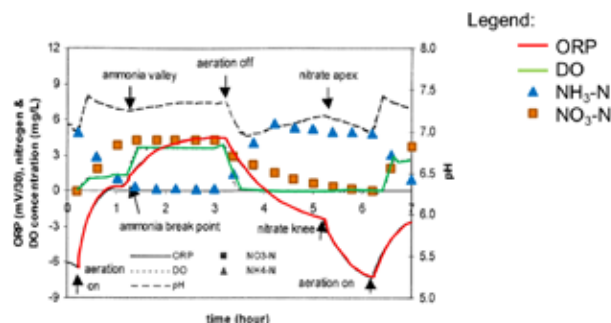
Applications for ORP Monitoring in Wastewater

ORP for activated sludge aeration control

Among the chief goals for modern WRRFs are nutrient removal and energy conservation. The traditional DO target concentration of 2.0 mg/L, grounded in scientific and empirical evidence, is based on making oxygen non-limiting to provide the most efficient removal of BOD and ammonia from wastewater. From the perspective of a bacterium, obtaining reducing power from oxygen provides the highest return on investment. However, this approach consumes a lot of energy. Furthermore, it also limits the diversity of the mixed liquor ecosystem. On the other hand, when oxygen is limiting, energy efficiency and bacterial diversity are increased. Therefore, some WRRFs are seeking innovative ways to achieve nutrient removal while minimizing energy consumption.

ORP is very useful in batch treatment systems like sequencing batch reactors (SBR) and aerobic digesters. ORP variation signals key endpoints in the nitrification and denitrification processes. A change in slope occurs at the point of ammonia and nitrate depletion as shown in the hypothetical example. This information can be used to control aeration on-off cycles.

The Fairborn Water Reclamation Center automated



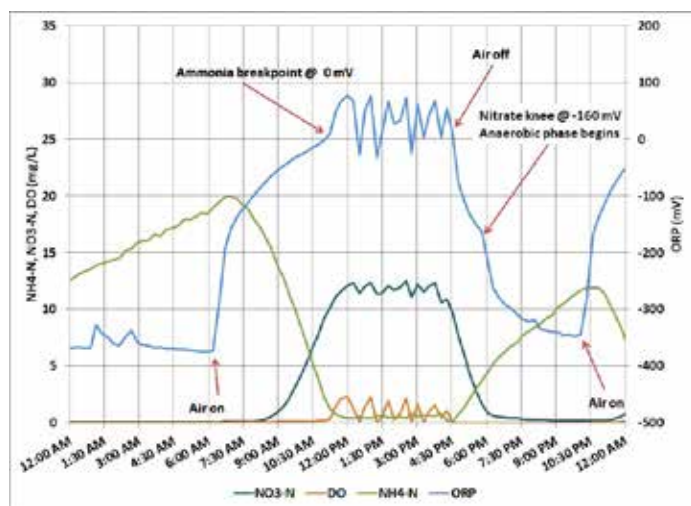
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Hypothetical example chart

aerobic digester operation based on ORP. One of the side benefits was reduced operations and maintenance labor for the final clarifiers. The nutrients in the dewatering filtrate would pass through main-stream treatment to the final clarifiers and stimulate algae growth on weirs and structural steel in the relatively still, clear water. The algae is unsightly and would have to be manually cleaned at regular intervals or else risk effluent violations for Total Suspended Solids (TSS). The cyclic aeration control depicted in the accompanying figure is described below:

- Start aeration at the beginning of the day and aerate continuously until ammonia breakpoint, as indicated by ORP, is reached
- Aerate intermittently during the day to keep solids in suspension and provide a consistent feed for dewatering
- Stop aeration at the end of the day
- Start aeration overnight when ORP reaches a pre-set minimum.

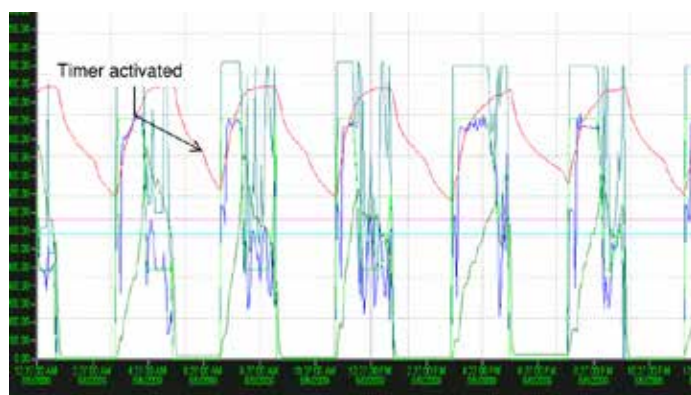
Fairborn has since upgraded the aerobic digestion system but ORP is still the basis for aeration control.



Fairborn ORP chart

The Fairborn example illustrates another key feature of ORP. A strategy based on ORP also allows for implementation of enhanced biological phosphorus removal (EBPR). The nitrate knee, besides signaling the depletion of nitrate, also initiates anaerobic conditions in which phosphate accumulating organisms (PAOs) release internal phosphate. Therefore, phosphate release is enabled by delaying the start of the aeration 'on' period following the nitrate knee (more on EBPR to follow).

ORP is also the heart of the aeration control strategy for Schreiber CSR (Continuously Sequencing Reactor) biological phosphorus removal system at the Greene County Sugarcreek Water Reclamation Facility. A 40 minute 'watchdog' timer is activated as ORP passes through the nitrate knee facilitating phosphate release. Aeration



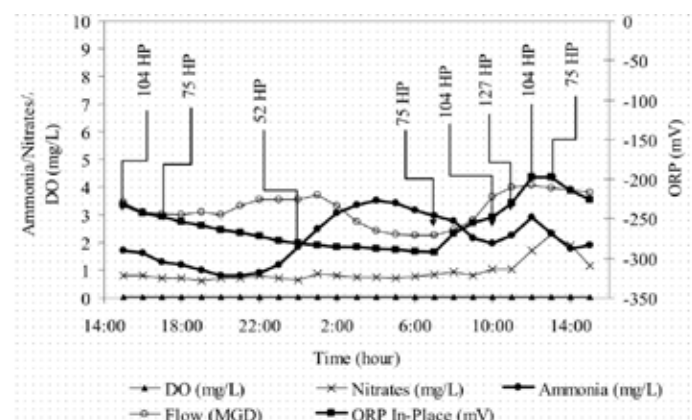
Sugarcreek ORP chart

resumes as the timer expires and phosphate uptake occurs. The strategy has demonstrated that an effluent TP less than 0.8 mg/L can be consistently achieved (Smith and Goble, 2010).

ORP is also useful for continuous flow systems. For example, energy efficiency of activated sludge systems can be increased by operating at DO concentrations less than 1.0 mg/L. A YSI customer in Illinois experienced an 80% reduction in aeration energy consumption as a result of an aeration improvements project that included a new automated aeration control system based on online measurements of DO and ORP (A. Poole, personal communication, 2013).

Nutrient removal is also enabled at low DO through simultaneous nitrification and denitrification (SND). An ORP sensor is a good supplement, or even replacement, for DO in this application because it provides more information. Whereas a DO sensor measures the concentration of oxygen, an ORP sensor measures the net effect of all relevant species, including nitrate. Furthermore, ORP also provides higher resolution and may vary from -100 mV to +100 mV in a region where DO is limited from 0.1 to 1.0 mg/L

SND is a well-documented feature of oxidation ditch technology. Therefore, it is not surprising that ORP is often used for automation of aeration control in oxidation ditches. A good example is presented in the chart below (Myers, et al, 2006). Nitrate concentrations less than 5 mg N/L are achieved with automation of each of two 2-speed



Oxidation ditch ORP

mechanical aerators. ORP tracks the variation in ammonia while the measured DO concentration is constant at the detection limit. Location of the ORP sensor between the aerators is a critical aspect of the strategy. The ORP signal would be dominated by DO at locations just downstream from the aerator masking variations in other important parameters like ammonia and nitrate.

S2EBPR

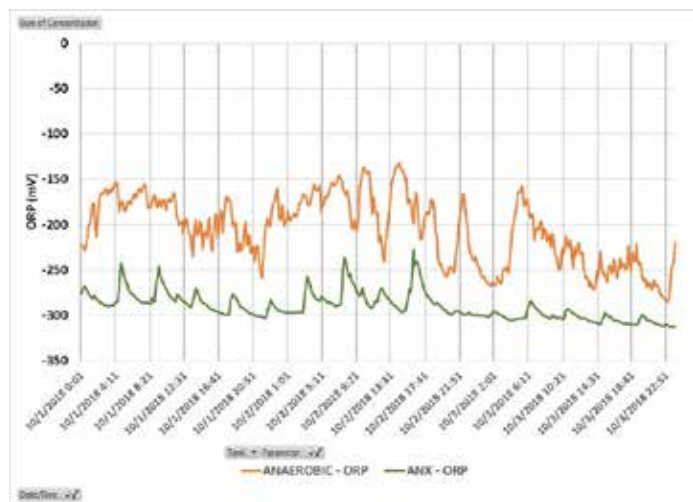
Recent discoveries into the diversity of PAOs is the driving force for design of more reliable EBPR processes. Weak wastewater and wet weather are a problem for conventional EBPR which relies on raw wastewater as a source of carbon. Alternatively, an internal source of readily degradable carbon can be created by passing a side-stream of mixed liquor or RAS through an offline or inline fermentation zone, a technology known as side-stream EBPR (S2EBPR). ORP provides a measurement of the reactor conditions needed for S2EBPR to succeed. Deep anaerobic conditions, as indicated by an ORP of -300 mV or less have been found to favor the growth of PAOs with desirable metabolic capabilities. For example, *Tetrasphaera* spp. that ferment higher carbon forms (not just VFA), produce VFA, which can be used by other PAOs, and take up phosphorus under anoxic conditions (Barnard, et al 2017). The Bradford, Ohio WWTP modified its conventional EBPR process to create an inline fermentation zone upstream from an oxidation ditch. The original anaerobic zone serves as a preanoxic zone to denitrify RAS prior to entering the “anoxic” zone. Anoxic zone mixers

are operated intermittently a total of 3 hours each day and the nitrate internal recycle gate into the anoxic zone is closed. An IQ SensorNet ORP sensor installed 5 ft. below the water level in each of the former anaerobic (upstream) and anoxic (downstream) tanks indicates fermentative conditions. Monthly average effluent Total Phosphorus (TP) averaged 0.54 mg P/L over the last 16 months with values as low as 0.18 mg P/L without the use of chemicals (van Dommelen and Roberts, 2020).

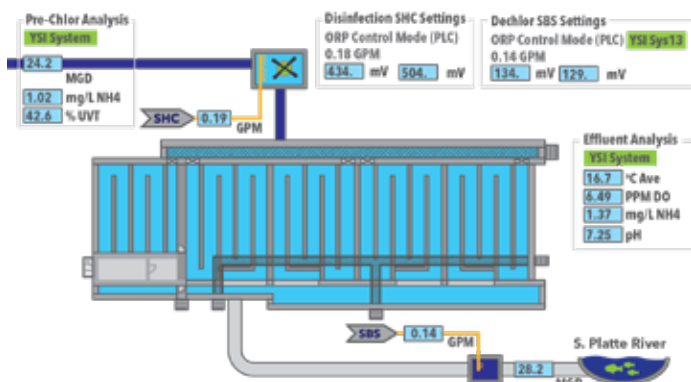
ORP for disinfection control

Chemical disinfection processes are used in wastewater treatment to destroy pathogens. In general, a high ORP value is desired to assure the desired pathogen kill is achieved. The target value depends on the chemical oxidant used and can be determined through trial and error. If chlorine is the disinfectant, excess must be removed before it can be discharged. This is typically achieved with bisulfite. The target ORP is determined by observing the dosage at which an abrupt decrease in ORP is observed signaling the point that residual chlorine is consumed, and the water is in compliance.

The South Platte Water Renewal Partners WRRF in Englewood, CO utilize chloramine disinfection by dosing chlorine to secondary effluent containing ammonia. The disinfecting power of chloramines depends on the types of chloramines formed complicating the use of total residual chlorine for process control. ORP on the other hand, is a measure of disinfecting power. Chlorine dosage is controlled to achieve a target ORP at a sensor downstream from the chlorine injection point. The target ORP is optimized to achieve the desired pathogen kill while preventing the onset of breakpoint chlorination which would result in higher chlorine consumption (see Part 1 of article in the previous issue). A second ORP monitoring system downstream from the sodium bisulfite injection point is used to control dechlorination. Sodium bisulfite dosage is controlled to achieve a target ORP which assures that all unreacted chlorine is consumed. A unique feature of the monitoring system is that a redundant ORP sensor is installed at each of the upstream and downstream monitoring locations.



Bradford ORP chart



South Platte chart

Summary

The examples provided demonstrate the versatility of the ORP parameter for monitoring and control of wastewater treatment. ORP is useful for monitoring biological and chemical processes. In biological processes ORP provides more information than DO, especially when the DO concentration is low. In chemical processes, ORP can provide a clear indication when reactions have completed.

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- "Plant profiles from across the state"
- "Social media and how it can affect your plant"
- "Shift transition process control communication"
- "Asset Management - a consultant's and a utility's perspective"
- "Resource recovery - pros and cons from a utility that has walked the path"
- "Greene County tornado outbreak disaster preparedness lessons"

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Please be well my friends!

by Nathan Coey, Wooster Water Utilities Manager, Safety Co-Chair

Well wishes Water Warriors! THANK YOU FOR ALL YOU DO! No one gave you an appreciation fly over, banging pots and pans or no dancing social media videos. You show up every day and make the daily mission of clean water a reality regardless of weather, unrest and contagion. As goes the water utility, as goes society. Based on the effort and resilience of the water sector, I expect nothing but the same resilience for society. I support all other missions that hold civilization together but Water Warriors stand alone. While all in it together, without you our hospitals will be closed, healthy hygiene practices could not happen and the fire crews will have dry hoses.

This safety update will serve as a reminder to encourage the continual great work related to safety. The committee reviewed all the safety applications and the submissions were nothing short of impressive with all the great work for the sake of safety. The Every Day Safety mindset works to eliminate risks, develop plans and speak up when safety is at risk. Our daily work on the front line as public health defenders includes a focus on life and wellness. Today I use this platform to speak up.

You are all up to date on all safety precautions and recommendations to combat the Covid19 reality. Based on the safety nominations a great majority of our members have great safety plans in place to make sure all go home safe. I want to speak of the emotional and mental drain of the current state of affairs. I speak not as a mental health professional but as a person that has had his own struggles. I have walked through anxiety and depression challenges with the help of great people. I hope to provide encouragement and options as we walk in this life together.

- Contagion, unrest and struggles of others will affect mental health. Do not rest in extremes and try not to answer the epic “whys” as they can be abundant and overwhelming. Change of attitude can make a difference. What can I learn? Who can I help? How

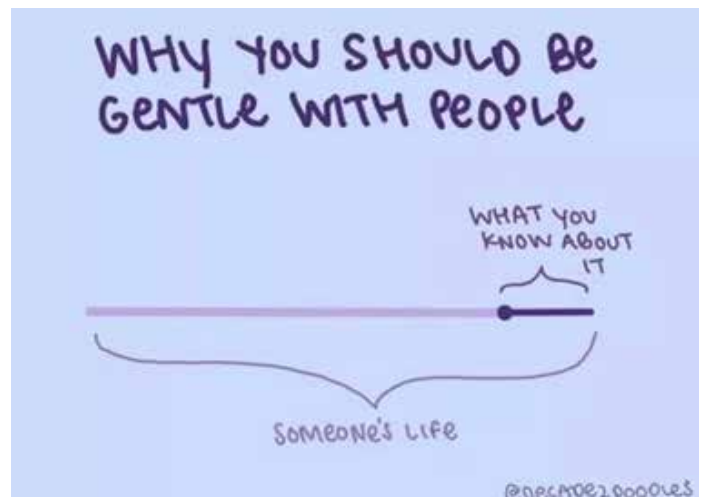
can I show love?

- Physical activity is imperative to a healthy mind. Get out, enjoy nature, take a hike, ride your bike and just move! I promise no one will judge even if it's a dance party on your patio. Smiles and laughter are good for you too! You are not expected to go from couch to marathon but baby steps will improve your mood and function. This time has allowed me to rekindle the appreciation of fishing. I have also found disc golf not only provides competitive outlet but hiking through some of our great local parks.
- Hydrate with water. Henry David Thoreau shared “Water is the only drink for a wise man.” Studies continue to indicate our ability, especially in Ohio, to over indulge in the various forms of libations. As a man that had an unhealthy relationship with alcohol, you will not find any answers or feel any better physically or emotionally when the bottle runs dry. If you are in an already compromised negative emotional state, booze pushes that harder. Water is a source for mental clarity and positive physical support.
- Try something new. What is holding you back? Schedules include never before flexibilities. Now is the chance to write your memoirs or embrace the poetry that speaks to you. Remember all those DIY projects you wanted to complete? Want to play guitar, there are tutorials everywhere. Remember those books we read in school, read those again and see your reaction as an adult. I have found rest in the writings of CS Lewis and Shakespeare's Sonnets.
- Connect with friends and family with all the video and distancing options available. Do not loose connections. For me when I would auger down in depression, I did not want to see anyone let alone talk on the phone. Push through, you will feel better. For those that have family at home embrace the movie nights and meals together. It is such a great

way to continue to build positive relationships and communication pathways for a world loaded with some uncertainties.

- Commitment to a renewed focus of what it means to be human. You now have the opportunity to focus on your identity and what makes you feel alive. What the world needs now is to see people that are alive and functioning out of their true identity. You are alive, you are chosen and you are loved! If you live out of that you can change the world from your front porch!
- It is OK to say you are a mess. It is so easy to say “I’m fine” when we are not. There are no Oscars for the act, drop it and quit the game of charades showing how well we are holding it together. What I continue to learn with every year added to my age is that we all have burdens and challenges. There is no immunity to the challenges of life. The reality is you are either in a challenge or going into one. The journey is the destination, embrace it. Humility and honesty still continue to be the greatest virtues and the foundation to wellness and meaningful relationships. Don’t fear raw and unpretentious discussions, you may be surprised what you learn about you and others.
- This last and final bullet point is timely and still raw for me. A family friend recently took his own life. It still remains to be shocking as no one saw this coming. I did some volunteer work with the gentleman and cannot make sense of this. When I got the phone call it was surreal to hear the words. I pulled up a picture of him and got emotional. He had so many folks to turn to but did not. With heavy hearts we often make vows. With this one I made a vow to never let a moment slip away. Every encounter we have with another human being is an opportunity to share love. NEVER underestimate the power of a kind greeting, smile, encouraging word or humor. You are a light bearer of something beautiful. Be gentle and kind as folks may not always show obvious signs of depression or suicide.

Statistics in Ohio are sobering regarding suicide. 1,836



souls are lost each year in Ohio or 5 per day to suicide. 78% of those annual souls are men. So from one man to another it is 100% REASONABLE to be hurting and struggling, it's NOT REASONABLE to walk this alone. Put your pride aside and reach out. We can easily express our opinions regarding sports but seem to bottle up if we feel like a pile of biosolids. Newsflash, you are not alone! I guarantee that even on your worst day there are people in your life that understand, love you and want to see you well. If you or someone you know is experiencing any crisis that has you contemplating suicide, Ohio has professionals standing by at 1-800-273-8255.

Please be well my friends! You are unique and chosen. You, your essence, your spirit is the wellspring of life for those around you and more so you and your great work keep civilization in Ohio functioning well during this time. The Apostle Paul sent a letter to encourage his friends while he was under difficult circumstances. He encouraged folks to “aim for restoration, comfort one another, agree with one another and live in peace”. John, Paul, George and Ringo in 1967 said “All you need is love, love is all you need”. Regardless of which Paul you identify more with, love is as vital as the air we breathe. So be safe. You are loved. You are chosen.

Love and Peace,
Nathan W Coey



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Your Resource for Defensible Data

MICROSCOPIC EXAMINATION OF ACTIVATED SLUDGE



Microscopic examination is an essential part of process control to facilitate the stable operation of activated sludge treatment. The micro-organisms present in the activated sludge have a profound impact on the overall treatment process. Whether used for preventative maintenance or diagnosing problems, microscopic examinations can provide operators with valuable insight into the health of their sludge.

Preventative Maintenance

Monitoring the biomass of your activated sludge system is just as important as other routine chemical analyses. The micro-organisms in the biomass are powerful indicators of operational conditions and will often show symptoms of stress or toxicity days before the actual performance of BOD, Ammonia, or TSS removal deteriorates. Routine microscopic examinations can assist operators in foreseeing treatment issues before symptoms of underlying issues ever appear.

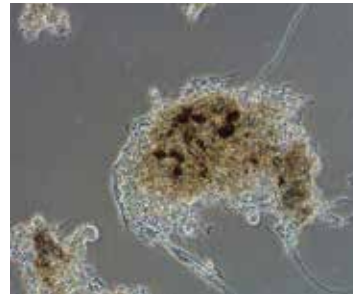
Don't wait for your biomass composition to become problematic, maintain permit compliance through routine microscopic examination!

Diagnosing Treatment Problems

Incorrect biomass composition directly corresponds with operational problems. One objective of activated sludge microscopy is to interpret process control issues so the operator is better able to generate solutions.

Simply identifying the symptoms of a problem does not necessarily point to the culprit. Take for example poor settleability; underlying issues could include a massive growth of filamentous micro-organisms, floc particles are too small, absence of protozoa, or dispersed bacterial growth. Each of these issues could potentially have a different method of treatment, illustrating why identifying the real culprit is invaluable to getting your biomass back on the right track.

*Determine the Floc Shape, Structure, Strength, Size, Diversity;
Presence of Filamentous Micro-organisms, Foreign Matter, Protozoa and Metazoa*





eBusiness Center's Certified Operator Staffing Reporting Service

by Anthony Nosko, Ohio EPA, Division of Surface Water, Central Office.

Welcome to the new service on the eBusiness Center that will be used for reporting staffing hours for the Operator of Record (ORC) at a facility for both Wastewater and Drinking Water. This article will focus on the wastewater side of things. The service will replace entering hours on eDMR and eventually ORC Notifications forms. This article will walk you through step by step from adding a facility to adding an ORC and finally

submitting staffing times for the month. This service is only for the ORCs of the facility and backup ORCs. A backup ORC can only be one class level lower than the class level of the facility. Backup Operators used for an hour reduction approval via staffing levels do not report their hours. The first thing to do is add a facility to your homepage. There are two facilities already added in the image below.

Service	Action	Status	Facilities	Delegations
Air Services	Request	Inactive	view/edit	
Asbestos Services		Inactive	view/edit	
Certified Operator Minimum Staffing Reporting		Active	view/edit	
Conference and Events Registration	Request	Inactive	view/edit	
Division of Surface Water Credible Data	Request	Inactive	view/edit	
Division of Surface Water NPDES Permit Applications (STREAMS)		Active	view/edit	
DMWM License and Registration Service		Inactive	view/edit	

Name	Core Person ID	Status	Actions
Tab Brewster	1132459	Active	Actions

Facility Search

Enter your PWS ID or NPDES Permit Number to search for your facility...

PWS ID / NPDES Permit Number

[Search](#)

Your search returned 1 facility:

Name	Core Person ID	Status	Actions
Anthony Nosko	9PC00001 - NPDES	Active	Actions

Click on **Add Facility** and you will be taken into the “Facility Search” page. You can search by the NPDES Permit Number or by the facility name. Once your facility is located, click select next to the name and it will be added to your homepage. The next step is to add an ORC to the facility.

Click on **Add Operator of Record** for the facility that the operator wishes to become the ORC of. Anyone with an eBiz account can request to add an Operator of Record to any facility. An operator search screen will open and a search for the operator can be done using the Core ID, operator's first and/or last name and the eBiz user ID. Once the operator is located, select the operator and more options

will drop down to be answered. If the operator has multiple licenses, the correct one must be selected to proceed. Next the operator must decide if they are the ORC, backup ORC or N/A for both the wastewater treatment plant and the collections system. Once all options are answered, the submit button will be available to be clicked. A prompt will appear asking for the submitter's pin number and the answer to their secret question.

To remove an Operator, click **Actions** and select **Remove ORC**

Operator Search

Core Person ID: eBiz User ID: First Name: Last Name:

Search

Your search returned 2 operators.

Core Person ID	User ID	User Name	Select
1140	tbrewster	Tab Brewster	<input type="radio"/>
1132459	opcert_user	Tab Brewster	<input checked="" type="radio"/>

Selected Operator has 4 certifications.

Certification Number	Certification Type	Certification Class	Expiration Date	Select
WW4-1132459-20	Wastewater Treatment	CLASS IV	12/31/2022	<input checked="" type="radio"/>
WS4-1132459-20	Water Supply	CLASS IV	12/31/2022	<input type="radio"/>
WW2-1132459-20	Wastewater Treatment	CLASS II	12/31/2022	<input type="radio"/>
WS2-1132459-18	Water Supply	CLASS II	12/31/2022	<input type="radio"/>

Wastewater Treatment Plant: Is this person an Operator of Record or a Backup Operator of Record?

☐ Operator of Record ☐ Backup Operator of Record ☐ N/A

Wastewater Collection System: Is this person an Operator of Record or a Backup Operator of Record?

☐ Operator of Record ☐ Backup Operator of Record ☐ N/A

Submit **Reset** **Done**

▼ e-DMR Test Facility 2 (9GS00001)

Review Staffing Time **Add Staffing Time**

Add Operator of Record **Remove Facility**

At least one Operator of Record should be Active for reporting time.

Name	Core Person ID	Status	Actions
Tab Brewster	1132459	Pending O&P Approval	Actions

Name	Core Person ID	Status	Actions
Tab Brewster	1132459	Approved, Pending Activation	Actions

Activate ORC **Remove ORC**

▼ e-DMR Test Facility 2 (9GS00001)

Review Staffing Time **Add Staffing Time**

Add Operator of Record **Remove Facility**

Name	Core Person ID	Status	Actions
Tab Brewster	1132459	Active	Actions

Ohio EPA Update

Once the request is submitted, the status will be pending Ohio EPA approval. The Ohio EPA will review the request to make sure the operator's license qualifies for the position being requested relative to the facility class level. If rejected by Ohio EPA, an email to the operator will be sent notifying them of the rejection. If approved, the operator will be notified to activate themselves. **Only the operator being requested to be the ORC or backup ORC can activate the account.** Once the operator has activated themselves, they can begin entering times for that facility.

Hours can only be entered for the current and previous month. All other months are locked. Click on **Add Staffing Time** to begin entering hours for the month. Hours are entered in military time. Example: 8:00 am-4:00 pm is 0800-1600. To choose any operator, click on the down arrow and a drop down of active and removed operators will be available. Hours for removed operators cannot be added so make sure the operator's hours are entered before removing them. If no ORC worked a certain day, leave that line blank. If there were multiple ORCs in one day, there are multiple columns to enter each of their hours for that day. In order to be on the collections and plant dropdown list, both options must have been selected; ORC or backup ORC, when adding an ORC to the facility. If the facility has an hour reduction approval or class exemption approval, enter the adjusted hours. Saving the entered hours can be done as many times as needed. The submittal of hours to Ohio EPA can only be done **twice** and prompt screens warning of this will appear.

If, as you work through this service, you have any questions or problems, please contact Anthony Nosko of the Division of Surface Water at Anthony.Nosko@epa.ohio.gov or 614.644.1987.

Add Staffing Time for e-DMR Test Facility 1
Operator Hours for
May 2020

Operator(s) of Record that have been removed are shown in italics.

Total Hours	Date	Collection Visit	Operator Of Record	Time In (HHMM)	Time Out (HHMM)	Operator Of Record	Time In (HHMM)
0	05-01-2020	Select ORC	Select ORC	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-02-2020	Select ORC	Select ORC	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-03-2020	Select ORC	Select ORC	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-04-2020	Select ORC	Andy Barienbrock (1135322)	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-05-2020	Select ORC	Tab Brewster (1132459)	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-06-2020	Select ORC	Select ORC	Start Time 1	End Time 1	Select ORC	Start Time 1
0	05-07-2020	Select ORC	Select ORC	Start Time 1	End Time 1	Select ORC	Start Time 1

Save Submit

New Login Page for Ohio EPA's eBusiness Center

The Ohio EPA will soon be integrating the eBusiness Center login process with the State of Ohio's OH|ID portal.

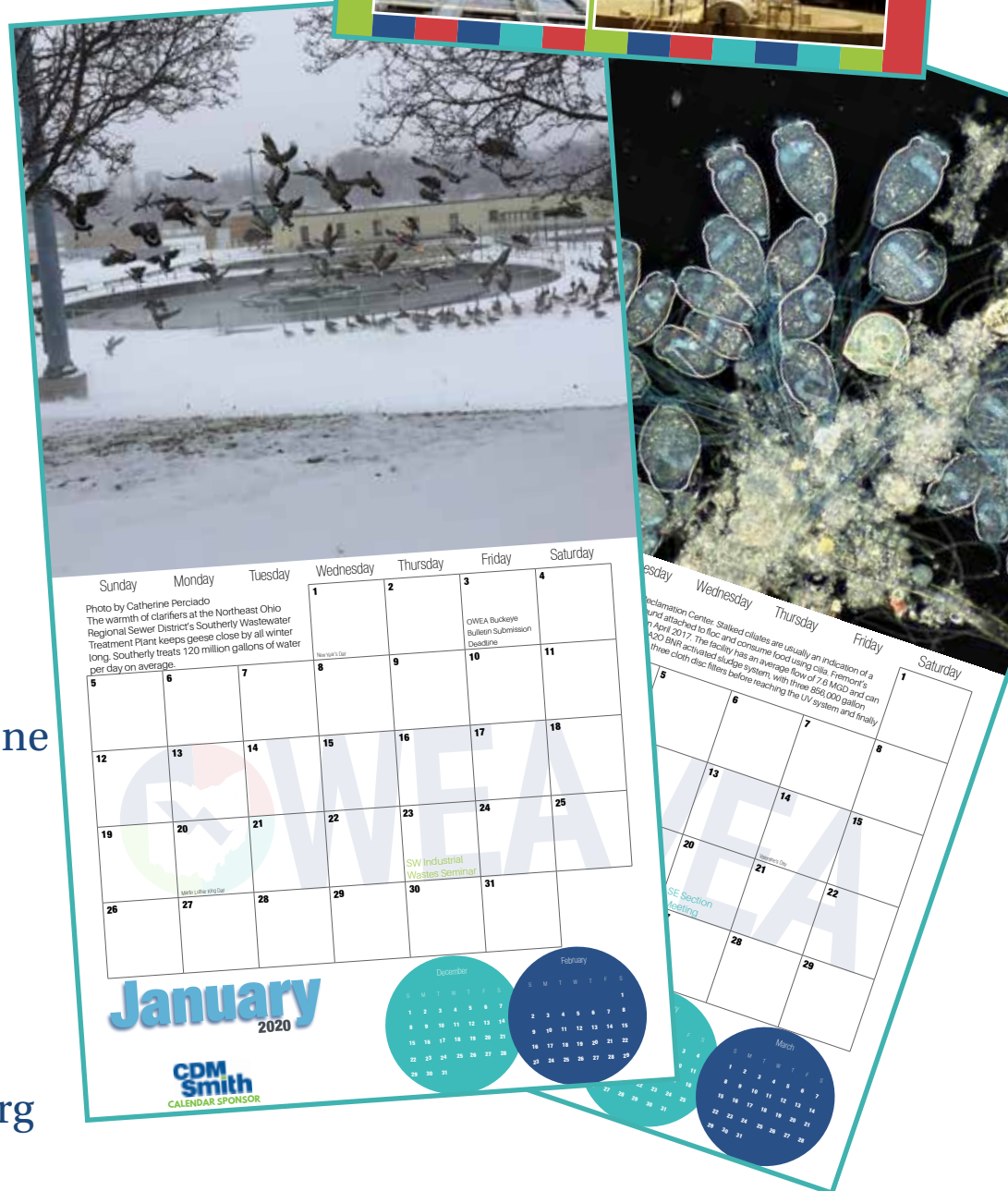
Once implemented, when you navigate to ebiz.ohio.gov, you will be presented with a new screen and login instructions to direct you to the services you need. In order to prepare for this transition, please confirm the email address provided for your eBusiness Center account is up-to-date. Keep a lookout for email from ebizhelpdesk@epa.ohio.gov with important information as this transition approaches.

Show off YOUR facility in our 2021 Calendar!

Deadline to Submit:
October 1, 2020



- Photos will be printed 12"x12"
- 300 DPI
- Photos not meeting the quality requirements will not be considered
- The featured plant must have at least one OWEA member
- Email photos and 100 word plant description to megan@ohiowea.org



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Do the SDGs Apply to Me? A Resounding Yes!

by Barry Liner

A relatively new and colorful lapel pin is becoming more common throughout Water Environment Federation (WEF; Alexandria, Virginia) events and throughout the water sector. This 25-mm (1-in.) circle is decked out with 17 multi-colored pie slices. It evokes the vision of an old Trivial Pursuit game piece on steroids and packs a lot of meaning and promise for making the world a better place by 2030.

The circle and colors depicted on these pins represent the United Nations Sustainable Development Goals (SDGs). Water professionals contribute toward meeting nearly all SDGs, but focus their passion and dedication to preserving the environment and protecting public health most directly on SDG 6 – Clean Water and Sanitation.

SDGs at a Glance

In 2015, the United Nations member states adopted the 2030 Development Agenda titled, *Transforming Our World: the 2030 Agenda for Sustainable Development*. This call-to-action for all countries was designed to work toward peace and prosperity for people and the planet. The agenda outlined 17 SDGs related to thematic areas such as water, energy, and climate; with associated targets and indicators.

SDG6, appropriately associated with bright blue, features targets for water reuse, access, efficiency, affordability, resiliency, integrated water resources management, reduction in untreated wastewater, and enhanced research and development for water technologies. By definition, water professionals worldwide contribute to achieving SDG 6 every day, as they have been for as long as water and wastewater professionals have existed.

www.ohiowea.org



WEF Actions

In 2019, WEF released a position statement in support of the objectives of the SDGs and recognizing the work that our members, Member Associations, and the water sector as a whole contribute to furthering progress. The SDGs align directly with four WEF Strategic Goals:

- Catalyze Innovation,
- Enhance the Value of Water,
- Provide a Broad Range of Content, and
- Leverage Global Network of Water Professionals

WEF will continue to foster progress toward achievement of the SDGs by increasing water sector and public awareness of the SDGs and their importance. WEF also will promote the work that water professionals are doing to further progress toward achievement of these goals. In addition, WEF is always seeking opportunities to build upon the work currently being done and to collaborate with our Member Associations and partners worldwide; this effort also supports SDG 17 – Partnership.

The SDGs represent the evolution of the Millennium Development Goals (MDGs). At the Millennium Summit in 2000, UN Leaders adopted the United Nations Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty. This declaration set out a series of time-bound targets - with a deadline of 2015 to meet the eight MDGs focused on Developing Countries. One of the critical goals was MDG Target 7.C: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation. The world met the target of halving the proportion of people without access to improved sources of water, five years ahead of schedule. Between 1990 and 2015, 2.6 billion



people gained access to improved drinking water sources. Worldwide 2.1 billion people have gained access to improved sanitation. Despite the impressive progress, 2.4 billion are still using unimproved sanitation facilities, including 946 million people who are still practicing open defecation.

Framing the Plan

The SDGs build on the lessons learned from the MDGs. At the heart of the 17 SDGs is an urgent call for action by all countries in a global partnership. These goals recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth — all while tackling climate change and working to preserve our oceans and forests.

The 17 goals also encompass 169 targets that are measured by 232 indicators. For example, SDG 6 challenges the world to “ensure availability and sustainable management of water and sanitation for all.” The eight

targets identified for the water sector (see sidebar on p. 61) demonstrate the full breadth and scope of the work of water professionals.

Beyond SDG 6

Water professionals are the front line in public health, the circular economy and sustainable communities. It would only make sense that water also directly affects most of the other SDGs including

- SDG 2 – Zero Hunger;
- SDG 3 – Good Health and Well-Being;
- SDG 5 – Gender Equality;
- SDG 7 – Affordable and Clean Energy;
- SDG 9 – Industry, Innovation, and Infrastructure;
- SDG 11 – Sustainable Cities and Communities;
- SDG 12 – Responsible Consumption and Production;
- SDG 13 – Climate Action;
- SDG 14 – Life below Water; and
- SDG 15 – Life on the Land.

Understanding the SDGs recognizes the value, both locally and globally, that the work that water, wastewater, and stormwater professionals already do, and will continue to do. The framework enables water, wastewater, and stormwater utilities and organizations to increase legitimacy in their relations with customers and stakeholders, provides a sense of pride to



operators, engineers, regulators, managers, academics, businesspeople, and all other professionals who work in the water sector and encourages using the global perspective on water resources to facilitate watershed-based solutions on a local level.

More information on all of the SDGs, including their targets and measures can be found at <https://sustainabledevelopment.un.org>.



Dr. Barry Liner is Chief Technical Officer at the Water Environment Federation and leads WEF's Water Science and Engineering Center.

"This article solely reflects the personal opinions of the authors, not necessarily WEF and its members. It is provided for educational purposes only, and is not intended to substitute for the retainer and advice of an appropriate professional. No warranties or endorsement of any kind are granted or implied."

Contact Email: bliner@wef.org



SDG 6 - Clean Water and Sanitation Targets

6.1 — By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

6.2 — By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

6.3 — By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

6.4 — By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

6.5 — By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

6.6 — By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

6.a — By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

6.b — Support and strengthen the participation of local communities in improving water and sanitation management.

Office Offerings



If it's one thing the COVID-19 pandemic has caused everyone to focus on, it's FLEXIBILITY. You have had to learn how to work differently, learn new technology and in some cases learn a whole new way of doing business. This is especially true for the OWEA office. While we are now back in our office, observing social distancing, we are creating a much different OWEA experience.

The last time I wrote this article we were still planning an in person State Conference. In the interest of safety, this has been switched to a completely virtual offering. This took a great deal of flexibility from our conference co-chairs, board, speakers, sponsors, exhibitors, and staff. We are so grateful that everyone had pivoted and remained

supportive through this massive change. Our 2020 OWEA State Conference will be offered in an on demand setting, so you can see the latest in products and services and grab up to nine contact hours whenever it works for you from September 9 -23. You can return to the platform as many times as you wish during this time. Whether it's one technical session during lunch on September 10 and then six hours of sessions and a visit to the exhibit hall on September 12 or one technical sessions everyday for a week, we have you covered. We wanted to ensure this conference is FLEXIBLE to fit your needs!

Due to conference being virtual this year, we have also had to show FLEXIBILITY in how we handle our awards. We are so proud of all of our winners and want to celebrate with them in person, but that's not possible this year. We will instead be featuring them in this issue of the Buckeye Bulletin and gathering at the 2021 One Water to honor them in person.

We are also being FLEXIBLE with our in person workshops. We have had to change how many people can attend and what the event looks like. While no event is without risk, we are working with our hotel partners to ensure we can execute these smaller in person workshops in the safest manner possible. This requires some flexibility from not only us, but from our attendees. At our recent Collections workshop our attendees did a great job of maintaining social distance and wearing masks. If you want to join us in person (and we hope you do!), we ask that you show flexibility and be prepared for the room and food service to look different. What's not different is the amazing education and networking. We might not be able to be closer than six feet right now, but we can still be together, so consider joining us for our November 18-19 Plant Operations/ Lab

We know that many of you can't or aren't comfortable leaving your plant or office right now and we want to provide the ultimate in flexibility for our virtual webinars. We are offering a free one hour webinar every month for the rest of 2020. In addition to that programming, we are also offering mini virtual workshops the week after our in person events. Our sections are also offering a variety of virtual events at low or no cost. These webinars are all live, meaning at a set date and time and will require attendees to remain attentive the entire time.

As with all things COVID-19, change happens very quickly. Lots of things have changed since my last Office Offerings, but one thing that hasn't changed is our dedication to our members and their development. We want to be flexible in how and where we serve you, whether that's in person at one of our smaller events or virtually through our numerous online offerings. We can't wait to see you again, either in person or online!

DAWN LARSEN, CAE,
EXECUTIVE ADMINISTRATOR





wef membership

the power of **We**

ENHANCE YOUR INDUSTRY SKILLS

Stay on top of advances, trends, and proven solutions through WEF's highly regarded technical education and training opportunities.

FACILITATE LIFELONG LEARNING

Choose your training and earn CEUs and PDHs through WEF's educational programs, including: WEFTEC®, WEF Specialty Conferences, hot topic seminars, workshops, and webcasts.

CHAMPION PRODUCTIVE RELATIONSHIPS

Within WEF and Member Associations (MAs), members work to help each other develop and grow professionally, while building valuable relationships with industry partners and prospects.

ENRICH YOUR LEADERSHIP POTENTIAL

Gain leadership skills that can be applied to your career by volunteering your service to WEF and a WEF MA committee.

INCREASE AWARENESS AND RECOGNITION IN YOUR FIELD

Each year, WEF presents awards for outstanding contribution to the water environment profession.

MASTER YOUR CAREER GOALS

Tap into the leading career network for the water community, WEF's Job Bank, where dozens of new jobs are posted each month.

Join WEF's membership community of more than 35,000 water professionals, and experience the power of "we", through leadership, passion, collaboration, scholarship and service.

Crafting the Perfect Title

by Dale E. Kocarek PE, BCEE, Past President 2010-2011

What Authors Desire

In writing this article I came to realize that those who have lived before us experienced many of the same things as we are now: disease, upheavals in government, and natural disasters. Those events inspire the creative mind and heart to write. Whatever one will say about 2020, it will be remembered. What will be the perfect title for this year?

Professional writers tell me that they work hard to strive for the perfect title and opening lines. The objective is to capture interest and set the stage for the story they are to tell.

A Tale of Two Cities

The Tale of Two Cities was written by Charles Dickens (1812-1870). In terms of creating the greatest opening lines and visual imagery, Dickens has few equals. A Tale of Two Cities was set on the eve of the French Revolution. The opening lines show Dicken's skill as a writer.

“ *It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way – in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.* ”

The French Revolution was an undoing of the political structure of feudal Europe. Times were uncertain and perilous. What started by eliminating the monarchy, turned into a deadly counter revolution. Uncertainty and

upheaval lasted for years until Napoleon Bonaparte (1769-1821) came to power.

The Year without a Summer

The Year without a Summer is a name given to the year 1816 when global temperatures dropped several degrees due to volcanic eruption of Mount Tambora in Indonesia in 1815; an event far across the world. The eruption was reported to be the most destructive in the last 10,000 years and sent 12 cubic miles of gases, dust and rocks into the atmosphere. Snow fell in New England in June and other parts of the northern hemisphere making it impossible to grow crops that year. This catastrophe was global and resulting in starvation in the most critically impacted parts of the world. It is reported that the gloom inspired Mary Shelly (1797-1851) to write Frankenstein that year. Fortunately, the worst of the impact was over in one year.

No Ordinary Time

The book No Ordinary Time was published in 1995 and written by Doris Kerns Goodwin (1943-) on the life and Presidency of Franklin D. Roosevelt (1882-1945) and his wife Anna Eleanor Roosevelt (1884-1962). The emphasis was on the years prior to World War II and through the end of her life in 1962. After spending the previous 8 years as a progressive on the New Deal and trying to end the Great Depression, Roosevelt saw that war was imminent, wanted to support Britain and China with critical material by working proactively with business to mobilize for World War II. Wanting to retire after two terms in 1940, he and others felt it imperative to run for a third term to apply his skills of planning, administration, working with Congress and preparing our nation for a possible large scale war. The Lend Lease Bill (HR 1776) was signed into Law in March 1941. While Lend Lease did not keep us out of the war, it sustained Great Britain through 1941, which helped save the free world.

Essential Employee

This is an exciting new term, which applies to our industry! The title speaks volumes of how important our water and wastewater operators are to keep producing clean water, reclaiming dirty water, and maintain our infrastructure.

We have all spoken on the importance of the front-line operator and at times been frustrated why becoming an operations professional was not the career of choice. We have all spoken about what a good and rewarding career this can be. Ironically, it is now one of the only jobs in our fold, which we can call secure. This is an excellent teaching moment to emphasize once again how important operators are to our health and world economy.

Where We Are

I was thinking how to describe the period we are in now in mid-summer. Things are not back to where we thought they would be by now. My best mental image is the settleometer test.

As we know, the test is simple and involves stirring the floc and removing a stirring paddle. In the next couple of minutes, the liquid moves in the jar with very limited settling. Slowly then the energy dissipates and shows signs of initial settling (the desired outcome). I feel that we are at the cusp of when the mixed liquor starts to settle. A murky edge has begun to emerge but is not defined yet. It will take a longer time for things to be back to normal.

This is an analogy of where I feel we are now in dealing with the pandemic. We have learned much but are not out



*Settleometer Tests at Time 0 and 10 Minutes
Compliments of Andy Krispinsky, City of Aurora Ohio*

of the woods. We have physical barriers, and there is nothing medically to stop the virus other than good practices. By now, we know how to be safe in most instances, which is better than we were in March. We wish we were further along.

Changed Perspective



Our thinking has been forever altered. What we interpreted one way six months ago looks different today. I found an innocent little rubber pet toy in my mother-in-law's house recently. Now it reminds me of the tiny organism that has turned the world upside down. The mind has a strange way of playing tricks. A year ago I would not have noticed it at all.

On the plus side, our views of cleanliness and sanitation have become more exacting than ever before. I view this as a good thing to become part of a changed culture as we move on from here.

We Can Do It!

I had the pleasure today (July 23, 2020) of attending our in-person Collection Systems Workshop at the Doubletree in Dublin, Ohio. As a board member I wanted to see for myself if we could pull off an in-person event under the Governor's current requirements.

The workshop was attended by approximately 60 people in a specious room capable of holding 150. In short, the workshop was fantastic. We wore face masks, maintained social distancing and other healthful precautions. The presentations were great. Much credit goes to our Collection Systems Committee, Workshop Speakers, and our staff, who worked hard to make this a success and make attendees feel at ease. This shows that it can be done!



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Kelly Kuhbander, President

I want to start by thanking our outgoing President, Erik Torgersen who did an amazing job not only as President but also over the past several years serving on the executive committee. I also want to thank Keith Heffner for his many years of service to the Southwest section. Keith just finished serving as the SWOWEA Vice President and was set to serve as section President this year but made the decision to retire and move to Florida to care for his relatives. Erik and Keith, we sincerely thank you both for all the time and energy you have given to this organization.

I grew up in Northwest Ohio and attended Ottawa-Glandorf High School. I received my Bachelors of Civil and Environmental Engineering from the University of Dayton and my Masters of Business Administration from Xavier University. I live in Madeira with my husband Justin and our three kids Bryce(8), Lyla(6) and Remy(3). I work for Strand Associates in Cincinnati and I am very thankful to Strand for supporting my involvement in SWOWEA.

I have been involved as a SWOWEA committee member for nearly a decade. I started serving on the young professionals and watershed committees and after several years was nominated to join the executive committee. My time serving the organization has been rewarding and I have certainly learned a lot about the organization and the wastewater industry as a result of my involvement in OWEA. I have particularly enjoyed meeting and getting to know the wonderful people that comprise our membership. I look forward to serving as the SWOWEA President for the coming year.

The Southwest Ohio Executive Committee is currently comprised of the following individuals:

- Erik Torgersen - Past-President, TDE Engineering, LLC
- Kelly Kuhbander, President, Strand Associates, Inc.
- Dave Reinker, Vice-President, City of Miamisburg
- Justin Bahar, Treasurer, MSDGC
- Kevin Stillwell, Secretary, Structurepoint
- Bryan McNutt, 1st Year Director, City of Middletown
- Ed Smith, 2nd Year Director, City of Mason

As a volunteer organization, we will all be working together to provide the Southwest section with the best events that we can during this challenging time. We will be keeping the health and safety of our members as our highest priority. As I am sure you are expecting, many of our events will be held virtually in the coming year. We are all learning and adapting to this new normal, and we will continue to improve our virtual events based on your feedback and what does and does not work. We are working more closely with other sections of OWEA to plan events on a shared calendar - our members are encouraged to attend the virtual events hosted by all the sections state-wide. This is an opportunity for our members to hear from other areas of the state by attending low cost or free virtual events.

I wish everyone the best as we continue to navigate through the countless challenges and changes that are constantly being thrown at us. It has been and will continue to be an incredibly challenging year for most. Please continue to stay positive and give yourself and others the grace that we all need and deserve from time to time. The wastewater industry is essential - you should all be very proud of the important work that you do.

Feel free to contact me with any questions or concerns related to SWOWEA in the coming year: Kelly.Kuhbander@Strand.com



Melodi Clark, President

I am truly honored to serve as the Southeast Section President of OWEA in the 2020-2021 year. This year has been a year that none of us have ever experienced before. Our section EC has tried to navigate these uncharted waters with our section member's best interests in mind. I have had wonderful experiences while serving on the Executive Committee and I am ready to lead our section into these uncertain times.

I am currently the Surveillance Lab Manager for the City of Columbus. I hold a BS in Biology with a concentration in Microbiology from The Ohio State University. I have over 25 years of experience in the laboratory field. I am a Crystal Crucible Member and a 5S member. I am the State Lab Chair and the Southeast Lab Chair. I sit on the Plant Ops Committee. I also chair the Crystal Crucible Committee. I am heavily involved with Operations Challenge as I currently compete and coach the Columbus Outfalls. I was one of the ONE WATER Chairs for 2018. I have been married for 18 years and have two daughters (12 and 15). We love everything Disney and the beach. My spare time is spread between travel soccer and ROTC drills for my children.

For 2020-2021 our Executive Committee will be chaired

by Chris Tarr-Past President; 1st Vice President Tiffany Magg; 2nd Vice President-Josh Holton; Secretary-Amy Eberhardt; Treasurer-Aaron Pennington; 3rd Year Director-Jamie Mills; 2nd Year Director-Kelli Jameson. I would like to welcome aboard our 1st year director-Corey Smith from Delaware County. Welcome to our Executive Committee!

We held our first ever online webinar for contact hours on July 15th. Jeff Henderson the Safety Officer from the City of Columbus gave a presentation on how Department of Public Utilities handled Covid-19 and the plans they put in place to bring staff back safely. This was for 1 OM contact hour.

With these unprecedented times we are hoping to have an in person meeting on August 13th at Canal Winchester WWTP. This meeting is our Safety/Regulatory/Biosolids/Awards Section Meeting. Due to not having any in person meetings and the State Conference being cancelled the time of this article we have not selected our 2020 Award winners. We are looking at doing more webinars moving forward to accommodate everyone's needs so they can still get their contact hours.

I am looking forward to this year and being your president of the Southeast Section of OWEA. Please feel free to reach out to me with any questions or suggestions for this upcoming year.

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Section Reports



Todd Saums, President

I am honored and humbled to serve as the 2020-2021 Northwest Section OWEA President. It seems that just the other day, Kim Riddell-Furry was twisting my arm to become the next section secretary. I had no idea for what I was signing up. I would like to thank Mark Lehnert and the rest of the NWOWEA executive committee for their confidence. I have learned a great deal about OWEA and WEF while volunteering alongside such a knowledgeable group of people. They are all extremely passionate about the organization and its members, and are continuously working to make it better. The last several months have been stressful for so many individuals and families due to Covid-19, and our members are no exception. The executive committee has been working diligently to assure our members and area operators have proper training and contact hours in these uncertain times. Although 2020 may be uncommon, I assure you the NWOWEA will continue working toward a better organization for our members and area water and wastewater professionals.

I began my career in the water and wastewater sector in 2007 while employed with the Village of Carey in the Public Works Department. In 2011, I furthered my career

with the Northwestern Water and Sewer District and have been with the organization ever since. I have worked within several departments while at the Water and Sewer District in order to learn various areas of the industry, which in turn allowed me to obtain a class II water supply and a class II wastewater treatment license. Over the last 3 years I have been working within the engineering department and most recently focused on inflow and infiltration reduction efforts. I have been involved with the NWOWEA executive committee for 5 years and assist at the state level when possible. I have a Bachelor of Science degree in Management and Technology from Bowling Green State University and will be pursuing a Master of Public Administration this fall from Ohio University.

The Northwest Section meetings are tentatively scheduled for October, March, and May. The dates and locations for the meetings will be announced as soon as they are confirmed. These may be in person and/or a virtual format. If you are interested in hosting a meeting or presenting on specific topic please contact myself or another executive committee member.

I look forward to the 2020-2021 year as the NWOWEA President. I encourage you to get involved with your section and committees if you have ever had the interest. The relationships and networking you build within OWEA are invaluable.

Todd Saums, tsaums@nwwsd.org

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NESOWEA

Michael Cook, President

It's an honor to serve you and this organization as the President for the Northeast Section of OWEA for the 2020-2021 program year. I've served several years on the Executive Committee for the Northeast Section, gained plenty of new knowledge and skills while growing professionally, and gained many new colleagues and friends in the process. Serving OWEA has been a pleasure, and this program year has many challenges ahead for us.

Right now I'm on my back patio which has become my "COVID Office" this summer, just as much as my office inside the house. My phone calls and conference calls over the past couple months have had the added bonus of children, dogs, or birds chirping in the background. Since mid-March, I've been getting out of the office primarily for construction-related activities only. Engineering, sales, and design-related coordination activities have typically been occurring over video conference calls, which have now become the norm. COVID 19 has impacted our daily lives, habits, and work – and will most certainly impact our section's activities and ways of doing business moving forward in the years ahead.

About Me

I'd like to take this first column as an opportunity to introduce myself to this organization. My professional career in the water sector began 19 years ago upon graduation from the University of Akron with a Bachelor of Science in Civil Engineering. I spent my entry-level engineering years with Burgess & Niple in both the Akron and Painesville Offices supporting the water resources and utility infrastructure groups, while obtaining a professional engineering license. I enjoyed my time there, as I was first integrated into the water and wastewater sector of the industry as a design engineer. Since then, I've worked for both AECOM (formerly Metcalf & Eddy) and URS in

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the downtown Cleveland Offices and continued down the water sector path in greater and more challenging engineering and management roles for wastewater, drinking water, and stormwater. In 2014, I moved from the engineering consulting world to an engineering technical sales role at Advanced Drainage Systems (ADS). In this current position, I cover the northern half of Ohio and work with engineers, municipalities, owners, and contractors in specifying, using, and installing ADS water products. I am primarily focused on design and regulatory support for our line of stormwater quality products and sanitary/storm sewer. I enjoy this role tremendously, as it allows one to see and interact with in the industry in a much greater fashion.

At the personal level, I've been married to my wife Kim for 14 years, and we reside in Rocky River and have two (2) children – Madeline (age 12) and Michael (age 5). They keep us happy, busy – and exhausted! My hobbies and interests outside of the office are vast, but primarily include: traveling and outdoor family activities, cooking, vegetable gardening (about 9 months of the year!), fly fishing, playing saxophone and acoustic guitar, sourdough bread making (a quarantine addition), and encouraging/supporting my children in everything they do. In addition, I'm a new Jeep owner and enthusiast!

Recent Events and Upcoming Activities

Our section's recent planned activities have been cancelled or conducted in a different fashion over the past couple months. Our annual Innovation & Ethics Seminar in Richfield, OH (April) was cancelled for this year. Of note, our May Business Meeting was planned to be held at the City of Niles Wastewater Treatment Plant but has been rescheduled as the host site for our Fall Section Meeting, currently scheduled for September 17th.

On the bright side, at the time of this writing our annual Northeast Section "Biomasters" Golf Outing is currently being held on July 17th at Grantwood Golf Course in Solon, OH with a limited amount of participants and social distancing measures in place. This event is always a highlight of the summer for the Northeast Section. Additional events in the program year ahead will most

Section Reports

likely have a remote/ off-site component open to attendees that do not attend in person. These details will be worked out in the weeks and months ahead.

The Northeast Section looks forward to opening our doors and hosting the 2020 OWEA Technical Conference & Expo here in August! Special thanks to the 2020 Conference Co-Chairs - Jennie Celik and Angelina Joseph – and many thanks to the OWEA Staff (Dawn, Megan, and Chelsea) for your tireless work toward making this a successful event, including the added burden of COVID 19.

Student Design Competition

The annual Northeast Section Student Design Competition was held on Friday, April 24 and was conducted over the ZOOM video conferencing platform. This event was once again led by Krishna Chelupati, and teams from local universities in northeast Ohio participated. As a judge this year, I must say that I was thoroughly impressed and floored by the smooth operation of the competition over the ZOOM platform. The student design teams presented their projects over power point, with multiple speakers, transitions, and audience questions – all occurring without difficulty. A round of applause to Krishna and his team on organizing and conducting this event in such spectacular fashion remotely. Congratulations to Case Western Reserve University, who won the event and will represent Ohio at WEFTEC 2020.

Our Section and Executive Committee

My sincere appreciation is extended to all our volunteers and members of the Northeast Section; however, I'd like to specifically mention by name the employers and leaders that make up the current Executive Committee while they attend many behind-the-scenes engagements throughout the year. These individuals and organizations include: Doug Harris (City of Canton), Bill Zawiski (Ohio EPA), Jennie Celik (HDR), Steve Baytos (Avon Lake Regional Water), Krishna Chelupati (Stantec), Mary Ann Driscoll (Burgess and Niple), and Todd Taylor (ms consultants). We look forward to bringing an additional person into the Executive Committee here soon for the program year ahead of us. I also want to thank Advanced Drainage Systems, who

continue to support my time and this organization. We are all proud to be a part of this section, filled with willing and energetic volunteers who are passionate for our organization and the advancement of clean and affordable water for everyone. Thank you for reading this column, and thanks for everything that each and every one of you do to make our world and our water – better every day.

Michael J. Cook – NESOWEA President

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- The Ohio Water Environment Association is offering a year-long OWEA/WEF membership to students with an interest in the water quality/wastewater field. This is a dual membership with OWEA (as the state member association) and WEF.
- Students must be enrolled in a minimum of 6 credit hours in an accredited college or university.
- Encourage students to apply for a free year-long OWEA/WEF membership at:
<https://www.ohiowea.org/membership.php>

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Laboratory Analysts

by Melodi Clark and Tony Hintze

Greeting's from your state lab co-chairs. Unfortunately there is not a whole lot to update. I am sure like everyone else we all are still trying to navigate through this difficult time with Covid-19. We currently do not have any meetings or trainings set up for the state lab events. We are here to help in any way if you have questions on how we all are running our labs and keeping our staff safe. Please stay safe and we hope to see you soon.

Committee Mission Statement

The OWEA Laboratory Analysis Committee (LAC) strives to provide relevant and timely information on laboratory regulation and policy for the collection and analysis of wastewater and surface water samples. We strive to provide training in a relaxed, stress-free manner, to ensure the ability for participants to gain knowledge and skills to benefit them in their professional environment.



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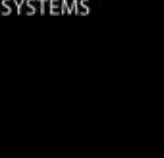


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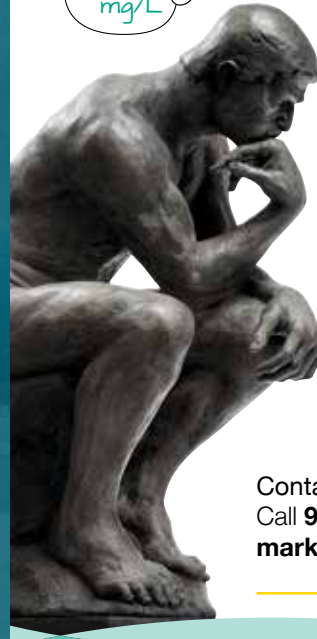
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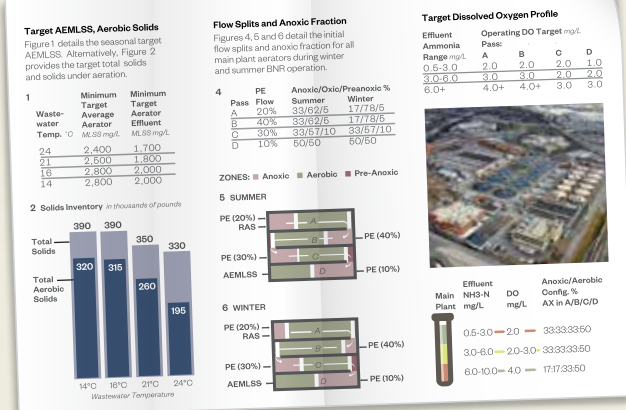


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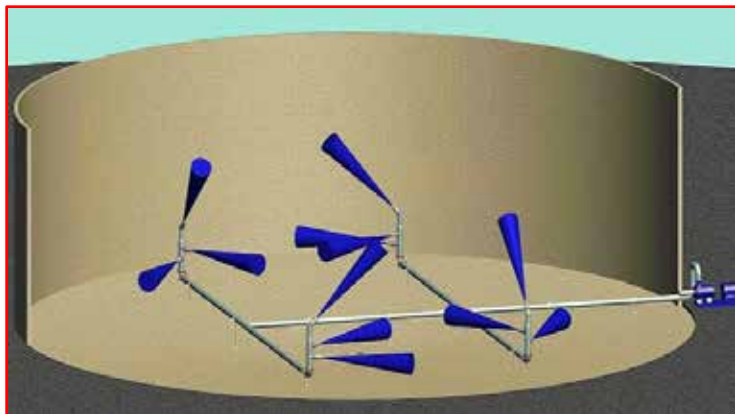
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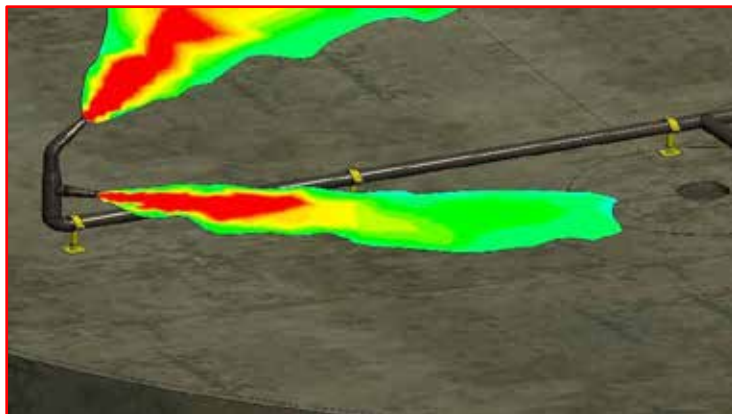


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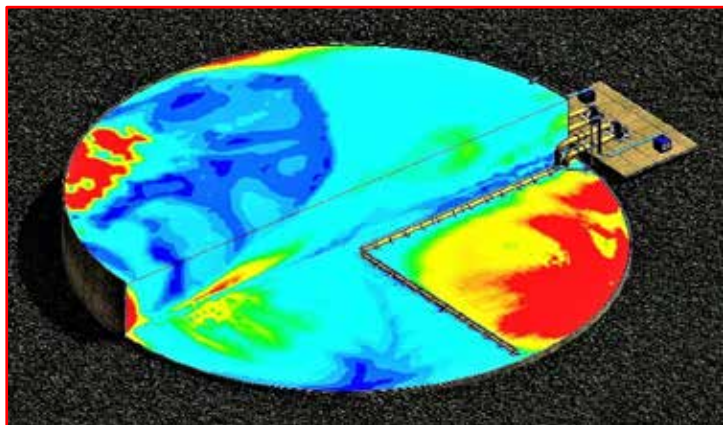
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