

Buckeye Bulletin



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Lake Erie Health and Watershed Management page 29

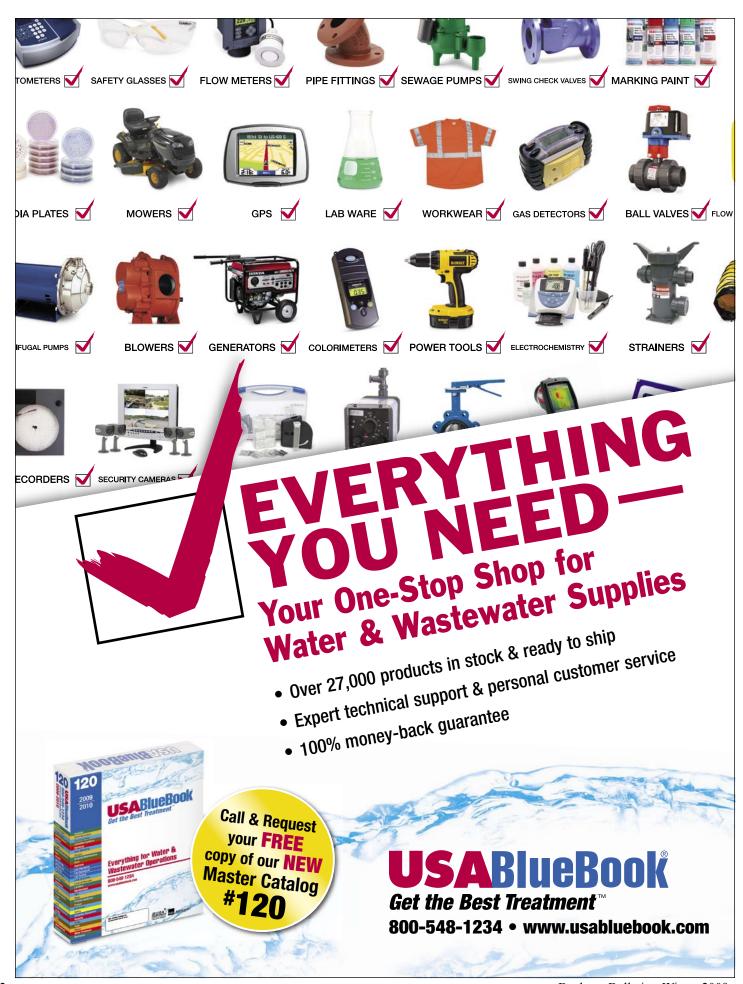
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Water Environment
Association

Preserving & Enhancing
Ohio's Water Environment







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On the Front Cover

Great Falls of Tinkers Creek in Bedford, Ohio by James Chambers

Contact Hour Information:

All OWEA training is submitted for contact hour approval.

Check out OWEA's website *ohiowea.org* for a complete listing of OWEA approved training.

Article Deadlines: 1st day of January, April, July, and October

Publication Dates:

Spring, Summer, Fall, and Winter

Advertising

Advertise your equipment or services in the **Buckeye Bulletin!** Reach about 2,000 customers four times per year. Advertisements should be supplied electronically tiff format (720 dpi) or press quality pdf (min 300 dpi).

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Please contact the OWEA office regarding photo requirements for covers and articles.

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2010 Ad Rates available at ohiowea.org/Buckeye Bulletin Full Color or Black & White available.

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Please call (614.488.5800) or email (info@ohiowea.org) the OWEA office with advertising questions. 2010 contracts will be available on the web at www.ohiowea.org.

Disclaimer

The Buckeye Bulletin (BB) is the official publication of the Ohio Water Environment Association, Inc., a nonprofit corporation founded in 1926, dedicated to the improvement of water quality in Ohio and the continuing education of water professionals. It is one of the top five member associations of the Water Environment Federation. Subscription is through membership in OWEA.

The ideas, opinions, concepts and procedures expressed in this publication are those of the individual authors and not necessarily those of the Ohio Water Environment Association, its officers, general membership, or the editor.

For further information on submitting articles or advertising, please contact our organization at:

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2009 - 10 Calendar of Events

November 2009

12 SWOWEA Operations & Maintenance

Seminar

12 NEOWEA Section Meeting

18 Executive Committee Meeting

December 2009

10 Biosolids Specialty Workshop

January 2010

20 Executive Committee Meeting

21 SWOWEA Lab Analyst Committee Meeting

28 21st SW Industrial Waste Seminar & Section Meeting

28 NEOWEA Operation Seminar

29 NWOWEA Executive Committee Meeting

February 2010

25 NEOWEA Industrial Wastes Seminar

March 2010

10 Government Affairs Workshop

17 NWOWEA Section Meeting

18 SWOWEA Section Meeting

April 2010

16 NWOWEA Executive Committee Meeting

May 2010

6-7 Ohio WEFMAX

13 Collections System Workshop

19 NWOWEA Section Meeting

Get Involved Join a Committee Today

The Ohio Water Environment Association has 23 Committees with focus on wastewater, stormwater, and association operational issues. See the list of committees on page 5. Three committee chair positions are currently vacant.

OWEA needs your skill, experience, and energy. Contact President Mark Livengood at *livengoodm@mcohio.org* or the OWEA office at *info@ohiowea.org* for more information on committees of interest to you.

2009-2010 Executive Committee

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NW Delegate Elizabeth Wick, Ohio EPA, NWDO

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Executive Committee Meeting Dates

November 18, 2009 January 20, 2010 May 6, 2010 - Cleveland

Meetings will be held at the OWEA Office unless otherwise noted. Check the OWEA website for meeting details.



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Publications Vacant

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President's Message



Mark Livengood OWEA President

In recent days, I have been having some random thoughts on many different items, all directly unrelated to each other, but some having a common link--water.

What does it mean when you dream about original "Johnny Quest" cartoons? I remember watching his dog "Bandit" always getting into trouble. The worst time was when Bandit was picked up by his collar by an Andes condor and dropped into the village-center fountain—hey—it's water related. By the way,

remember Dr. Quest's first name? (it was "Benton"). And his adult helper-watcher of kids and Bandit was Race Bannon. It's the water. I always thought Benton would be a good computer password...

I recently spent a weekend in St. Louis, Missouri with my wife and my parents, visiting my youngest daughter during her last "Parents Weekend" at St. Louis University. We arrived in town around noon on a Saturday with a cold front and rain moving through. About 4 p.m., with the clouds moving swiftly eastward, a double-rainbow appeared. I mentioned that it formed an arch—that perhaps the city should consider adopting an arch as their symbol. Too late. A rainbow—another water sign. I also highly recommend visiting the city's "The Hill" neighborhood for great Italian food in home-style restaurants. The water is good, but the wines are better. Next time you see Laura Tegethoff, ask her about The Hill.

Here at work, it's that time of year again—budget preparation. No more money. Do more with the same. Priorities. Insure safety and needed training. The water keeps coming in, getting treated, and discharged for other users (fish, canoeists, etc.). Other things also do not change. The Browns are 0-3. Other things do change. The Bengals are 2-1 and the Steelers are 1-2. OWEA is preparing its 2010 budget that will be approved in November 2009. OWEA guards its revenues following standard procedures, conservative investment guidelines, and routinely has our bookkeeping audited by a CPA firm.

The week prior to this writing, OWEA held a successful 2-day Plant Operations and Laboratory Analysis Workshop in Columbus. I had several staff members attend and they reported the topics and presentations were excellent. Thanks to the Plant Operations and Laboratory Committees for planning this top-quality event.

During that same week in September, OWEA's Biosolids Committee participated in the Farm Science Review in Madison County. Thanks to Dave Brewer and the committee members and volunteers for their help. Registration is available for OWEA's December 10th Biosolids Workshop at www.ohiowea.org.

I also have reviewed the comments our members submitted on USEPA's Draft Nutrient Control Design Manual. USEPA and OWEA entered into a Memorandum of Understanding (MOU) to outline such tasks to help USEPA meet its planned work load. Dianne Sumego was the lead-OWEA contact on this unique opportunity to review the draft document, and compiled all of the comments into a standard format for use by USEPA. I would like to personally thank the following persons for submitting comments (in no particular order): Dale Kocarek; William Barhorst; Dennis Meek; Kim Riddell; Paul Fletcher; Jason Tincu; Gary Hickman; Roger Gyger; Ted Marten; David Wilson; Karen Harrison; Helen Littleton; Mary Long; Robert Hollis; Richard Noss; Theping Chen; Shaun Beauchesne; and David Frank.

The 2010 Annual Conference planning committee is on schedule to provide an outstanding program in Columbus during June 2010. Cindy Jacobsen and Mike Frommer are co-chairs. Dale Kocarek, President-Elect, is seeking technical presentations. If you have an interesting topic, success story, etc., let Dale know.

Finally, by the time you read this, WEFTEC09 will have ended in Orlando. The latest news as of this writing shows a record number of exhibitors planned as well as exhibit space. WEF President Rebecca West has had a successful year of service for WEF and the Member Associations.

Please feel free to contact me via phone at 937.781.2559 or via email (*livengoodm@mcohio.org*) with any concerns, questions, suggestions, or water-related stories.

"You can't trust water: even a straight stick turns crooked in it" W. C. Fields

Mark Livengood livengoodm@mcohio.org

OHIOWEA.ORG NEEDS YOU!

The OWEA website, **ohiowea.org**, is the forum for sharing association news with our members and the public. We encourage members to use this resource.

Input from OWEA members and committee members is always welcome. What would YOU like to see on the website?

Have your clicked on your committee's or Section's page at ohiowea.org lately? (The Southwest Section hosts its own web page.) *Ohiowea.org* is a living electronic document and needs frequent updates. Please advise the OWEA office at

info@ohiowea.org webmaster@ohiowea.org

if you would like to add content, updates, or corrections to an OWEA website page.

Don't Miss Out On Important News **Update** Your Membership Profile

Maintain an accurate mail and email address so you receive timely communications from OWEA regarding upcoming events, important news affecting water environment issues, and your copy of the Buckeye Bulletin.

Please check your member profile at: www.wef.org by clicking on the Membership link. You can also make changes to your OWEA/WEF membership account by contacting WEF directly at 1.800.666.0206 or by email at csc@wef.org.



Steve Morrison, Sr.WEF Delegate

WEF DELEGATE REPORT





Phil Anderson, Jr. WEF Delegate

Congratulations to the Plant Operations Committee, speakers, attendees and other volunteers for the recent Plant Operations Workshop. This workshop was a huge success and OWEA has again received many favorable comments from the attendees. The popularity of this workshop continues to grow year after year and is another great example of why plant operators should become members of WEF and OWEA.

Everyone who had the opportunity to attend WEFTEC in Orlando recently had the ability to attend excellent technical sessions and visit the equipment exposition. WEFTEC continues to be the premier water quality event for our industry.

The WEF Board of Trustees (BOT) approved the 2009-2010 budget in July of this year. The approved budget is approximately \$23 million dollars, which reflects a budget that is essentially the same as last year. WEF's staff continue to manage the budget in a very sound manner while maintaining member benefits. Some of the highlights of this year's budget include: upgrade of the membership

database, increasing webcasts from 12 to 18, and adding one additional specialty workshop. These additional membership benefits and enhancements will be accomplished with no dues increase to the membership.

OWEA will be hosting a WEFMAX in Cleveland next year on May 6-7, 2010. WEFMAX's are WEF regional meetings for WEF HOD members and Member Association (MA) leaders to share information about their respective associations. It is also used to brief MA leader about the goings on at WEF. The event planning for this event is being chaired by Past President Gary Johnson, with assistance form Judi Henrich, OWEA Executive Administrator. This will be a great opportunity for us to showcase OWEA and the City of Cleveland.

If you have any questions pertaining to this report or any other WEF activities, please don't hesitate to let us know.

Steve Morrison *steve.morrison@woolpert.com*

OWEA Interns Tour the Olentangy Environmental Control Center

Gabrielle Brobst, a senior at Ohio University, and Elizabeth Leab, a senior at Ohio State University, are serving fall term student internships at the Ohio Water Environment Association. Elizabeth and Gabrielle are learning about association operations, as well as gaining an appreciation of the skills and dedication demonstrated by the Ohio water quality professionals who clean water and return it safely to the environment.



Ken Rosenbaum and Marty Hall of the Olentangy Environmental Control Center guided Gabrielle and Elizabeth on a tour of the OECC and explained the wastewater treatment process from influent to effluent, as well as the biosolids preparation process.

(l-r) Gabrielle Brobst, Marty Hall, Ken Rosenbaum, and Elizabeth Leab





ENGAGING A HIGHER LEVEL OF VOLUNTEERISM

by Dale E. Kocarek, P.E., BCEE - OWEA President-Elect

A term that I saw in Japan

Seven years ago, I had the good fortune to travel to Japan with a group to learn about the Kubota Membrane Bioreactor system. The trip was memorable and life-changing experience for me.

Our first full day in Japan was Sunday and we spent it touring the City of Kyoto, the capital of Japan during its feudal period, which ran between 1603 and 1860. I found Kyoto to be a charming city full of temples, beautiful gardens, and shrines dating from the middle ages. Outside many locations was a carefully placed sign, which described the purpose and significance of the monument and declaring it to be a "National Treasure". I felt that this was the perfect term to cast the right allusion of its reverence and respect.

The "Water Hero"

The Water Environment Federation (WEF) has enacted its own recognition of National Treasure for those who have contributed significantly to the organization and our industry. They are called "Water Heroes". WEF's definition of a water hero is someone who has contributed substantially and measurably to the promotion of WEF's message of sustainable water for the people of the earth, for without clean water, life is not possible.

The first time I heard the term "Water Hero" I was not exactly sure what WEF was intending. As we all know, American culture has denigrated the term hero as an often used label for self-indulgent athletes as opposed to those who have sacrificed their lives on foreign battlefields or have stood firm as a champion of an unpopular truth.

While definitions of hero vary, my personal definition is one who demonstrates traits of unique accomplishment for the benefit of others or without primary consideration of personal gain and whose primary interest is the greater good. By and large, I have found that most heroes are ordinary people who, in a particular situation, perform quietly with truth and honor, and become good examples from which to learn.

Ohio has been fortunate to have its share of worthy and influential individuals who have earned the title of Water Hero. Notable examples include Gary W. Johnson, Keith Riley, Kathy Cook, and Bill Hill. By looking at this list, it is clear what this title is all about. These heroes have all had substantial and positive impacts on our industry as teachers, educators, leaders, and voices of truth. Longevity is also a common denominator. Most have been within the industry for decades and have a long history of accomplishments. All have come up through the Chairs in their Sections and

served as Presidents of OWEA. After serving as President, a number went on to WEF or have been active. Once again, the common denominator is that they all have had jobs, careers, families, and served their communities in other ways. So, one is tempted to ask, why do they do it? To answer that question gets to the heart of what the "water hero" is.

Recruiting the right volunteers

As a member of the OWEA Executive Committee since 2004 and after being active in several standing committees, I have had to grapple with the practical realities of managing an organization that is driven largely by the energy, knowledge, and dedication of a volunteer force. During my first assignment as a Committee Chair in 1999, I found this task to be daunting. Soon after joining, it became clear that I could not do everything by myself, and that I needed to enlist the assistance of others. In my reports to the Executive Committee, I was told that I needed to find the "right" volunteers. However, I was prompted to ask – what constitutes the "right" volunteer, and more importantly, how do I find them?

Issues and myths of volunteerism

The subject of recruiting, training, retaining, and empowering volunteers is the subject of many books and articles in the world of non-profit organizations. One good publication is "From Good to Great, Lessons from the Social Sector". This is a companion publication to the famous book "From Good to Great", which will be the subject of a subsequent article in my column.

Suffice it to say that recruiting, training, retaining, and empowering volunteers is a complex process and goes beyond the scope of this article. However, in talking with others and from my own experiences, I have found that our volunteers come from all walks of life and have a broad array of talents, both realized and potential. As with all organizations, the key to success is matching the talent of the volunteer with the opportunity and their interest, recognizing that all are unpaid volunteers, and will always have primary allegiance to work and family ahead of OWEA and WEF. The time on the OWEA Executive Committee has taught me the following five things pertaining to our volunteer force:

1. Time commitment and life demands have the potential to impose rigorous challenges on the most passionate volunteer, and this may result in inconsistent delivery at times. We must recognize the demands on the time and available energy of our volunteer force. Accordingly, we must demonstrate patience and understanding.



- 2. Young Professionals (YPs), while popular with WEF and needed for the sustainability of OWEA, may have less time and resources for active and sustained participation than more senior members. Younger members typically have less flexibility in their positions at work and may have the added responsibilities of young families.
- 3. There is a feeling held by some that the Association is a "closed club" and the new volunteers are not welcome. I have heard this over the years, but I assure you that this is not true. OWEA and WEF are looking for volunteers in all capacities. Case in point, if anyone has articles for this publication *The Buckeye Bulletin* please let Judi Henrich know.
- 4. Some committees lack an effective plan to engage in a meaningful way, and this breeds dissatisfaction. Yes, this occurs from time to time. However, I assure you that our leadership has grown more aware of the continued need for strategic planning such that our organization maintains its position as one of value, and significance for the volunteers. As President next year, I plan to devote my term to strategic planning consistent with what WEF and our membership believes is important and relevant to our changing world. I encourage you to submit your ideas to me.
- 5. The belief by some of our members that they have nothing useful to contribute. I assure you that this is also not true. I have heard this lamentation most from our professional operators. I have come to know that our professional operators and maintenance workers are some of the most ingenious people I have known. Their ingenuity and knack for making "something out of (apparently) nothing" never ceases to amaze me. We love hearing about success stories great and small, and are willing to publish them in the *Buckeye Bulletin*, with full recognition. Also, many of you feel that writing something is a challenge, I will work with you to convey your desired message.

Types of volunteers

I have studied our "volunteers" since I was the Chair of the Public Education Committee years ago. Overall, I have seen a number of different types based primarily on ability, commitment and knowledge to the point where I have seen a pattern emerge. Thus, I feel that most volunteers can be put into four general categories.

Type 1: The Association Manager

Defining Traits: This type of volunteer is mostly involved with Executive Committees for our sections and our Member Association (MA). I am in this category as with the other ten on the Board.

Challenges: The journey to progress through all of the chairs in the section and the OWEA Executive Committee is 15 years, which is a very long time commitment by any measure of comparison. To put this in perspective, by the time I end my term as Past President of OWEA in 2012, I will have transitioned from being a young man to late middle age. Some feel this time commitment to be almost shocking. I have known few who have the interest for such an extended commitment to the organization in one continuous span of years. As it is, life is full of uncertainties. During a 15 year period almost anything can happen to change or derail the best intentions. Nonetheless, OWEA has been fortunate to have 11 dedicated professionals who have embarked upon this journey.

Changes Needed: More recently, OWEA and its Sections have made it easier for one to join the OWEA Executive Committee, without having to go through all of the Section Chairs, thereby reducing the length of commitment to getting on the EC. However, it should be noted that by the time a person has gone through their Section and joins the EC, they know what they are getting into and are ready to take on the challenge.

Type 2: The Take Charge Leader

Defining Traits: Periodically, OWEA sees a very energetic person emerge as a leader. Most commonly, this occurs on our committees.

Challenges: Anyone who has helped put on a successful workshop understands how much work goes into it with regard to focus, energy, and teamwork. I just attended another great Plant Operations Workshop. The challenge is to make sure that this volunteer does not become burned out or discouraged.

Changes Needed: While I am not concerned over the general welfare of our committees that hold workshops, I am concerned about those who do not have some type of outward manifestation to our members that is visible. Workshops become a focal point where critical mass is built. In the past as the present, we have had committees that held no workshop and were not visible. This is what happened with the old Public Education Committee. The only outward manifestation of that committee was our science fair award program. Looking back, taking on the entire mantra of "Public Education" was not a practical mission given our resources. After achieving several small gains, it lost its momentum again. Last year, OWEA took WEF's lead, and "sunsetted" Public Education in favor of the Utility Enhancement Committee, which has the mission of Public Education to a different audience.

Kocarek Korner



Type 3: The "Militia" (Assignment Based Volunteer)

Defining Traits: I came up with the name for this committee, because it reminds me of the colonial soldiers in the American Revolutionary War. Militia-men would work on their farms or shops, get called into a battle or skirmish, and then go back to their normal lives. I view this type of volunteer as the seasoned professional, who makes up most of our membership. We have found many our members willing to take on short-term assignments to share their knowledge and insights, but are not interested in a long-term commitment.

Challenges: The Government Affairs Committee's Technical Review Group (TRG) is a good example of putting this concept to work by offering short-term assignments. Both Vice Chair Dianne Sumego and I believe that OWEA has a tremendous wealth of knowledge and ability within its ranks. We also believe that this provides an excellent opportunity for our members to utilize their collective knowledge to advance our industry by commenting on proposed rules and offer comments on white papers and manuals. Our most recent achievement was the review of the EPA Draft Nutrient Control Manual. Comments were submitted on September 18, 2009 to EPA by a total of 17 reviewers. That was an extraordinary effort by our membership!

Changes Needed: This concept is new and was devised last year by Dianne to provide additional opportunities for volunteering. So far, it is working well.

Type 4: The Young Professional

Defining Traits: The Young Professional (YP) designation was developed by WEF approximately one decade ago to infuse the organization with a new generation of water leader to sustain WEF and become the next voice of clean water on the local, national, and world stage. YPs are WEF members less than 36 years of age, or a person of any age new to the industry.

Challenges: I have taken a special interest in this group, in part because I appreciate youthful enthusiasm and idealism. While I understand that YPs have been engaged in public service projects and gained positive notoriety, I feel that the biggest challenge to this group is associated with understanding motivations of Generation X and Y and specifically how to meld their beliefs and culture with WEF's. Whether we like it or not, YPs are our future, and our failure to understand and provide opportunities for meaningful engagement in our organization will be ultimately detrimental to continuing the message of WEF into the next generation.

Changes Needed: I believe that YPs need their own identity by undertaking projects to promote excellence and excitement within and outside of the YP contingent. As best we can, I would consider their involvement to be a success if they can look back from the future and recall this time with special fondness. Then, we can say we will have achieved sustainability to carry the voice of clean water forward to a new generation. For what I read about challenges on Planet Earth in the year 2050, we will definitely need the wisdom of those whose seeds of knowledge are being planted now!

Now that we know this, what is the next step?

As you can see, there is no single definition for the role that a volunteer can do for OWEA. We have a mixture of generational challenges, time commitments, and interest levels that need to be reconciled. However, if you take away one single message from this article, it is that there are opportunities for everyone, and everyone is welcome. Going further, I have several ideas to be considered.

- 1. If you are a volunteer with a new idea or something that you feel will help us meet an unmet need, please let us on the Executive Committee (EC) know what you think. Then, the responsibility is ours to evaluate an idea and respond. You are welcome to write to me directly.
- 2. Many of our most rewarding experiences are found in our committees, whether they be ad-hoc, standing, or annual conference. To enhance your experience, please also consider joining the same WEF committee if one is available—they are in many instances. You will immediately gain a boost of enthusiasm and a new perspective on what other member associations are doing in the United States. Ultimately, this will make OWEA stronger and your experience more meaningful.
- 3. I recall with fondness my tenure on the executive committee for the OWEA's Southeast Section. If you are interested in a higher degree of commitment, please consider joining the executive committee of your home section. Sections are one of the best things that OWEA has to offer, because they represent in essence the best of who we are and what we want to do, which is sharing information and enjoying each other's company as family. Also, the experience gained at the section level is priceless for being effective on the Executive Committee for OWEA later on if you wish to go further into the organization.
- 4. Please consider joining the Technical Review Group (TRG) that is housed under the Government Affairs Committee. The TRG is meeting an unmet need in providing constructive feedback to proposed rules and



regulations and on other matters. In the past, I felt that we did not do a very good job in making our influence felt to outside organizations in matters of education on the world water environment. As I stated, our members have a lot to share, and our collective wisdom is worth heeding.

What must the Executive Committee do?

I feel fortunate to say that I joined the leadership of OWEA at a time when I believe the passion of the volunteers on our Executive Committee was "white hot." I, too, was infected by this enthusiasm, and this experience has shaped me into the person that I am today. My term as President in 2010 will be built on the lessons learned from my esteemed colleagues over the past six years.

Also, as a member of the OWEA Executive Committee, I recognize that a large part of the burden for meaning, value, and effective engagement of volunteers rests with the EC. Accordingly, I have identified the following points as critical for us to sustain our volunteer force and make it a positive and worthwhile experience:

- 1. Everyone wants to be associated with an association or group that has prestige and a good reputation. OWEA is no different. We need to continue to increase our reputation and recognition and communicate WEF's message. I acknowledge that this is hard work and is done one small step at a time. We actively need workers to bring forth a consistent message to the community that we can be a resource to be relied upon and trusted. One of the things that President Livengood has done this year in response has been to send OWEA's Buckeye Bulletin to members of the Ohio General Assembly, so they get to know us better. While it is not in our purview to lobby legislators to influence their decision making, virtually all need to be educated in the fundamentals of our industry so they can craft effective legislation, and rid us of the burden of regulations that add unnecessary expense and burden to our ailing economy. So, in this one small way, we can take a proactive stance in helping Ohio's economy by our membership and participation in OWEA.
- 2. Where possible, we need to continue to draw on the strength and branding from WEF, for they are a prestigious organization of worldwide influence. Starting in about 2004, I feel that OWEA has done a better job in promoting WEF. Several recent OWEA Presidents, Deborah Houdeshell and Dianne Sumego, had extensive connections within WEF and helped bring us closer to them for our mutual betterment.
- 3. We need to find opportunities to harmonize with other organizations including the American Academy of Environmental Engineers (AAEE), which has a

large presence at WEFTEC. I am a member of both organizations and would like for us to draw closer to this important group.

The lessons that I have learned:

Recalling from childhood, most of us would agree that the best lessons learned are simple and transcending. It is no different here and I have identified four that stand out to me the most:

- 1. We must always appreciate the services of a volunteer. I do not think enough can be said about this. In doing this, we need to recognize that our members are being hard-pressed in many directions and being asked to do more with less. OWEA is run as more of a "social sector" organization than a business, and we must not forget that our organization does not adhere strictly to the "business model."
- 2. We must appreciate the skills and aptitudes of different people in our organization. Diversity and complementary strengths are "force multipliers." As a consulting engineer and former regulator, I rely heavily on perspectives from my colleagues in utilities and sales.
- 3. We need to recognize members who are young, show potential, and seek means to recognize and develop them as future leaders. I am now old enough to have seen several champions emerge who joined WEF fresh out of school. We must try to create a path for deserving individuals.
- 4. Lastly, it is imperative that we not forget the seasoned professional, who has much to offer us in knowledge and wisdom, and make us the great organization that we are today. They are critical to our past success and must not be forgotten as National Treasures. To quote several passages from the Book of Proverbs in the Old Testament, these traits knowledge and wisdom are worth more than gold.

About the Author:

Dale E. Kocarek is an Associate with Stantec Consulting in Columbus, Ohio and is the President Elect of OWEA.

Dale is also the Chair of the Government Affairs Committee and he may be reached at Dale.Kocarek@Stantec.com





NW SECTION

John Motycka, NW President

The Northwest Section held the Annual Spouses and Friends Day at Cedar Point Amusement Park on August 7, 2009. A luncheon and business meeting were held in the Coral Dining Room. Frank D'Ambrosia, outgoing Northwest President, was presented a plaque for his dedicated service to the section during the past year. After the meeting on a chamber of commerce weather day, the attendees enjoyed the park and all of its spectacular rides and attractions. Thank you, and great job, Frank for planning such a wonderful day.

The Northwest Section Collection System Committee held the annual Hands-On Workshop at Ruihley Park in Archbold on October 1, 2009. The theme of the workshop was "Collection System Maintenance." Attendees received training on the latest techniques in root control. Manhole rehabilitation, from sealing the chimney to completely coating the manhole with epoxy, was presented. Methods to chemically grout sewers were also presented. A pump manufacturer representative

gave a presentation emphasizing the importance of using gauges and how they can be useful when troubleshooting suction lift and submersible pump problems on lift stations. As usual, there was an excellent turnout for the event. A special thanks to the Archbold Wastewater Division for hosting the event. Hats off to Kevin Aller, NWOWEA Collections Committee Chairman, for organizing the workshop!

The Northwest Section Industrial Pretreatment Committee will

be hosting a workshop December 9, 2009 at the Northwest OEPA District Office in Bowling Green. Details of the event and registration information will be available on the OWEA website.

The next Northwest Section Meetings are tentatively scheduled for March 17, 2010 in Archbold and May 19, 2010 in Bowling Green.

John Motycka johnmotycka@allencountyohio.com





Stumped? Looking for a solution? Try the "ASK AN EXPERT" button at ohiowea.org

SW SECTION

Carl Gatton, SW President

A SE/SW joint section meeting was held on September 17 at Marysville. A tour of the recently upgraded plant and two technical presentations provided the contact hours. Kudos to the SE Section for assistance with the meeting and the arrangements! There were 73 attendees.

Recent meetings in the SW Section were:

October 22, 2009 Hands-On Workshop at the City of Dayton – Division of Sewer Maintenance

October 22, 2009 Fall Operator Education Day at Montgomery County Water Services

November 5, 2009 Lab Analyst Committee Meeting at MSD of Greater Cincinnati

Upcoming meetings in the SW Section are:

November 12, 2009 8th Annual O & M Seminar & Section Meeting in Blue Ash

December 18, 2009 Past President's Appreciation Luncheon at the Marriott Inn in Dayton

January 21, 2010 Lab Analyst Committee Meeting at TestAmerica, in Kettering, Ohio

January 28, 2010 21st Annual Industrial Wastes Seminar and Section Meeting in West Chester, Ohio

March 18, 2010 Section Meeting at Sugarcreek WWTP

For details about the meetings, please visit the SWOWEA website at www.swowea.org. The latest edition of The Southwest WAVE is also posted to our website.

On October 15, the Southwest OWEA Young Professionals along with the Cincinnati professional chapter of the American Society of Civil Engineers (ASCE) toured Cincinnati's abandoned subway

system under Central Parkway. The tour included an examination of the 48-inch pre-stressed concrete cylinder pipe (PCCP) transmission main that is routed through the subway tunnel. For details, contact Dan Martin, YP Committee Chair, at *dmartin@raconsultantsllc.com*.

Carl G. Gatton gattcg@co.warren.oh.us





NE SECTION

Bob Hruvosky, NE President

In July, the Northeast Section held its annual Bio-Massters Golf Outing. A total of 110 golfers came out to the Mayfair Country Club for a rainy start. Fortunately, the rest of the day was cloudy and dry. The course was in good shape for the four man scramble teams as they all were trying to get to 18 under par. All enjoyed

a steak dinner at the end and a lot of prizes were handed out. Throughout the day the Section raised money for our scholarship fund and for Water for People. The event ended up raising \$1,535 for our scholarship fund and \$1,020 for Water for People. We would like to thank our sponsors and volunteers for their generous support of this event. It was that support that allowed this event to be such a success.

In September, the Section had 70 people attend our annual social event, The Clam Bake, which was held at Grantwood Country Club. The weather was perfect for a clam bake (cold and rainy) although we were good and dry under the pavilion that had three sides covered. Good food, good times, and a good corn hole tournament was had by all. Congratulation to our new clambake corn hole champions Denise Seman and her son. We would like to thank our SMECCO contributors for making this event a success.

We would like to welcome Denise

Seman of the City of Youngstown as our 1st year Executive Committee member.

We would also like to welcome the new committee chairs – Plant Operations (Safety) – Jim Carrell and Young Professionals – Nick

Bucurel.

The upcoming Section meetings are at Solon on November 12, 2009. The Annual Operations Seminar is on January 28, 2010, and the Industrial Wastes Seminar is on February 25, 2010, both in Richfield, Ohio.

Our initiative this coming year is to increase our membership with a membership drive this fall, get our web page up and running, and increase Young Professionals involvement.

Bob Hruvosky

robert.r.hrusovsky@us.mwhglobal.com

Bob Hrusovsky, *President*Mike Welke, *Vice President*Ed Haller, *Secretary*Lance Willard, *3rd Year Executive*MaryAnn Driscoll, *2nd Year Executive*Denise Seman, *1st Year Executive*Art Kimpton, *Treasurer*Tom Angelo, *State Delegate*

John Leiendecker, Past President





SE SECTION

Greg Otey, SE President

The Southeast Section spent a beautiful sunny morning touring the City of Marysville WWTP on September 17th in a Joint Section Meeting with the Southwest Section. Rick Varner, WWTP Superintendent, and his staff conducted tours of this new facility, which serves 19,000 people including such major industries as Scotts Miracle-Gro Company, Nestle Corporation, and Parker Hannifin Hydraulics. Rick also served as host in welcoming us to the City of Marysville and, along with Tom Bulcher of Malcolm Pirnie, presented on the Design Considerations for the New Marysville Plant. Rounding out our meeting was a talk by Tyler Linton, PhD, with the Great

Lakes Environmental Center regarding Emerging Contaminants that impact our streams, lakes and rivers. Many thanks to Tyler, Tom and Rick (all SE Section Members....for those of you scoring at home) and the SW Section for their efforts in making our joint meeting a success.



Next up for the SE Section will be a Collection System Workshop hosted by the City of Marietta. This will be a "hands-on workshop" with a focus on maintenance, pump repairs, roof control, pipe grouting and manhole rehabilitation. Thanks go out to Steve Elliott, WWTP Superintendent with the City of Marietta, for heading up this workshop.

After the holidays, we will be returning to Columbus for our Industrial-themed meeting on February 11, 2010. It will be held at the Berwick Manor (where we have met before) and will feature Hanson Pipe. So be on the lookout for the meeting announcement and the next issue of the Pointe Source. Until then, stay safe and keep warm!!

Greg Otey
greg_otey@urscorp.com



YOUNG PROFESSIONALS

by Dan Martin

The 2010 OWEA Annual Conference Call for Abstracts has been issued. YP's are encouraged to answer the call for the June, 2010 conference to be held in Columbus. YP's will receive special preference in the selection of presentations for the conference. Please don't miss this opportunity to showcase your work and increase the likelihood that your employer will pick up the cost of your conference attendance!

We are actively seeking ways to increase operator involvement on the YP committee. There is interest from our committee and the Plant Operations Committee to form at least one YP Operations Challenge Team. This team will likely be made up of members from more than one utility. The existing Operations Challenge Teams are eager to mentor new participants in this fun competition. Please contact Dan Martin if you would be interested to learn more. dmartin@raconsultantsllc.com. 513.469.6600

Our hallmark activity for 2010 will be an **Ohio YP Summit** to be held this spring. We are going to build this gathering around a "green" activity such as the planting of a rain garden. We are closing in on a location in Central Ohio for the activity. We intend to offer some contact hour training in conjunction with the event. Please contact Dan Martin for more information. Special thanks to Anil Tangirala from Stantec for supporting this initiative!

Notable Happenings

• Check out SE YP's Matt Boone (Malcolm Pirnie), Kris Ruggles (Strand), and Robert Heady (Strand) rubbing elbows with none other than Governor Ted Strickland and his wife Frances at the Governor's Mansion in Columbus on August 29th. (See photo below) They were invited to the event as part of the Columbus Young Professional's (CYP) leadership conference. Matt and Kris are both actively involved in CYP representing OWEA Young Professionals. The conference was a forum for leaders of young professional organizations from around the state. Following the CYP meetings and conference, the Governor and his wife hosted food and drinks and then later took the attendees on a tour of their home.



 SE Section YP's are winding down from their event on October 23rd at the Columbus Southerly WWTP. This event featured presentations and tours of four current wet weather projects under construction; including new headworks, rehabilitation of existing aeration tanks and secondary clarifiers, the addition of new aeration tanks and secondary clarifiers, and an effluent pump station. All of these projects have had SEOWEA YP's involved, so this was a great opportunity to show off some of their hard work (as well as get a great view of some large scale construction projects in progress). A happy hour followed the event at Plank's Bier Garten sponsored by URS.

• WEF Buckeye Student Chapter at The Ohio State University hosted their annual Water EXPO on October 7th, 2009. This year we showed the Penn State documentary, "Liquid Assets". "Liquid Assets" is a public media and outreach initiative that seeks to inform the nation about the critical role that our water infrastructure plays in protecting public health and promoting economic prosperity.

The **Water EXPO** also featured information about WEF's "Water Is Life, and Infrastructure Makes It Happen" program. "Water Is Life, and Infrastructure Makes It Happen" is a grassroots program designed to educate the general public, local leaders, and media about the value of water and wastewater infrastructure and the importance of investing in its long-term stability.

Upcoming events include a rain garden project, a green roof project and a water-tasting event meant to highlight the value and quality of tap water. WEF Buckeye Student Chapter is always looking for sponsorship from local engineering firms and organizations who are interested supporting our student efforts. If you are interested in sponsorship, please contact Nick Elmasian at *elmasian.1@osu.edu*.

- Southwest Section held a tour of Cincinnati's abandoned subway system on October 15th in conjunction with the Cincinnati professional chapter of the American Society of Civil Engineers. The tour included an examination of the 48-inch pre-stressed concrete cylinder pipe (PCCP) transmission main running through the subway tunnel. A non-destructive evaluation was recently performed on the water main by the Pressure Pipe Inspection Company (PPIC). The non-destructive testing allows PPIC to detect pre-stressing wire breaks along the pipe (a concern in locations where melt water saturated with road salt has leaked onto the water main from above). The tour included a technical presentation and contact hour credit was offered. Naturally, the event was followed by happy hour at a fine local establishment.
- The Northwest and Northeast YPs are looking at possibilities for upcoming events. Contact Walter or Nick (information below) for additional details.

Contact your Section YP representative to become more involved in the Young Professionals Committee:

SE Section: Brandon Fox, bfox@co.fairfield.oh.us
SW Section: Dan Martin, dmartin@raconsultantsllc.com
NW Section: Walter Ariss, Walter.Ariss@epa.state.oh.us
NE Section: Nick Bucurel, NBucurel@pirnie.com

OSU Student Chapter: Nick Elmasian, *nelmasian@gmail.com* Please contact Nick if you or a Student/YP you know would be interested to develop a student chapter at a local university.

Special thanks to all the committee volunteers who make the YP committee vibrant! If you have any suggestions or questions, please contact Dan Martin, *dmartin@raconsultantsllc.com*, 513.469.6600.

WELCOME

new members who joined OWEA in July, August and September.

Jason Abbott Keith Kennedy

Bruce Alleman **Anthony Lammers**

Will Allomong Michael Lesh

Milt Baker David Levinson

John Barton Michael Mearini

Grace Miner Shaun Beauchesne

David Brown Jeffery Nock

Chris Demko Lacey Rogers

Nathan Dickman Paul Schwartz

Daniel Domigan Kyle Schwieterman

Ken Eckert John Shinn

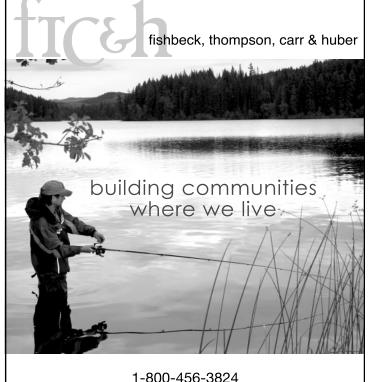
Jennifer Frommer Rangesh Srinivasan

Mark Gabor Daniel Stofan

Rod Hackney Paul Walker

Christopher Westbrook **Doug Hastings**

Denise Jeffery Kenneth Willings

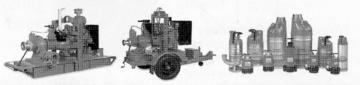


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Visit www.ohiowea.org

and select Career Opportunities.

Or contact OWEA: 614.488.5800 info@ohiowea.org







LAB ANALYST COMMITTEE

by Chairs Eva Hatvani and Nancy Taylor

Crystal Crucible Picnic 2009

The Crystal Crucible Society met for its 6th Annual Family Picnic and Induction Ceremony on Saturday, August 22 at the Delaware State Park. This year's inductees were Mary Tule (NW, City of Archbold), Jim Davis (SW, Montgomery County), Amy Starkey (NE, Stark County), and Dr. John Marks (SE, Zane State, retired). Mike Herdlick (At-Large Candidate, Tiffin University/Alloway Labs) was also invited but was unable to attend. All inductees were honored with a pin and plaque presentation at the OWEA State Conference, but we like to add our own little twist to getting "in" to the Society with a special ceremony every August.

We had a nice little tongue-in-cheek ceremony to welcome the new people aboard, and then we encouraged the new members to become mentors to others in our profession. In order to be nominated for the Crystal Crucible Award, one has to have 10 years of laboratory experience. We now have 39 members with a vast expanse of knowledge that newcomers to our profession have found very useful!

The deadline to submit a nomination for the next group of inductees is March 1, 2010. A printable application is available at www.ohiowea.org: Select: Committees>Laboratory Analysis Committee, (form at bottom of the page). If you know someone who has been working in the laboratory "trenches" for 10 years, is an OWEA member, and has done a good job to further the profession in a respectable way, please submit an application for them. Recognition from your peers is always a great morale booster.



Crystal Crucible "Ceremony" at the 2009 Picnic

Operations/Lab Workshop 2009

OWEA held its Annual Plant Operations/Laboratory Workshop in Columbus, Ohio on September 23-24, 2009. The meeting was well attended with 138 total registrants. We had positive feedback from several of the people who attended the workshop. They found the presenters well-informed and their material timely and interesting.

On the Lab side (Thursday Only), we had a wide variety of subjects. We started off the day with a presentation by Cheryl Soltis-Muth (NEORSD) about Laboratory Ethics and Data Integrity. She gave interesting case studies about individuals who were prosecuted for different acts of falsification. Kathy Richards (City of Akron) gave a talk about the dos and don'ts of collecting samples for organic analysis and Nancy Taylor (City of Newark) gave a presentation on

the link between excess nutrients and their effect on the Hypoxic Zone in the Gulf of Mexico. Mark Citriglia (NEORSD) talked about how the Sewer District is using qPCR to determine if some Lake Erie beaches are contaminated with human waste. This developing method is "cutting edge", using the actual DNA of the bacteria to determine its presence in the water instead of waiting 24 hours for culture results. After lunch, Eva Hatvani (NEORSD) and Nancy Taylor (City of Newark) helped the audience study for the Lab Certification exam by quizzing them using a game show format. We played "Deal or No Deal" and "40 CFR part 136 Pyramid". Everyone had a great time and there were even prizes for participants. Elizabeth Wick (OEPA) related what the EPA looks for during a compliance inspection and helped us all to better understand the importance of exact record-keeping. Jon VanDommelen (OEPA) taught us the differences between wastewater filaments. He brought his microscope and some mixed liquor samples and showed us how to do a Gram stain and a Neisser stain in real time. With his microscope hooked up to a projector, the audience was able to see the organisms Jon was talking about as he scanned the slides for filaments and other microlife. His presentation was very valuable for our members to see exactly how to stain samples and identify organisms that indicate the "health" of a treatment plant.

If there are any topics you would like to see covered in future workshops, let us know about that as well. OWEA thanks all the vendors that came out in support of our workshop, and those individuals that earned contact hours through our organization.



E. Wick presents "Tales from the Dark Side . . . "

Lab Certification News

Renewals for the certification program were mailed on September 29, 2009. Everyone is on the same cycle. If you do not receive your renewal form in the mail, one can be downloaded from the OWEA website.

If you have moved, please contact Eva Hatvani at *hatvanie@neorsd.org or* 216.641.6000 so we can keep you on our mailing list for renewal notification.

2010 Exam Dates

April 23, 2010 Cleveland and Columbus – Locations TBA Application Deadline is March 12, 2010

continued on page 17

Committee Reports



October 22, 2010 Cleveland and Columbus – Locations TBA Application Deadline is September 10, 2010

The test fee is \$95.00. Applications and Need-to-Know information available at: http://www.ohiowater.org/owea/For_the Lab/

Reinstatement of Certificate

If you did not renew your certification by Dec. 31, 2007, you are no longer certified. To be reinstated, you must provide proof of holding a certificate and submit a fee of \$95.00. If you can not provide proof of certification, you must retake all tests in sequential order.

NE LAC - Kathy Richards

• September 11, 2009

The NEORSD hosted the NESOWEA Laboratory Analysts most recent training session. Alex Stakleff of the University of Akron spoke about Hazardous Waste Management and John Hoffman of Alloway talked about SOPs and Document Control. Approximately 30 analysts were in attendance and everybody learned something! Courses have been submitted and are awaiting contact hour approval.

• October 2, 2009

A Wastewater Analyst Certification Review session was planned at the Akron WPCS training facility, 2460 Akron Peninsula Road.

Wastewater Certification Laboratory Review Manuals are still available, either electronically or as a bound copy. There will be an order form available online at the OWEA website very soon. Until then you can always reach me at: NESOWEALAC@gmail.com or 330.928.1164 ext. 484.

• December 4, 2009

Our next training opportunity will be covering the recently promulgated Method Update Report. Steve Roberts of the OEPA will be speaking and it is tentatively scheduled for December 4th. More information will be posted on the OWEA website calendar and on the Laboratory Committee and North East Section pages as it becomes available.

SW LAC - Roger Rardain

The SW Section Laboratory Analysis Committee held a meeting on July 23, 2009 at the Montgomery County Environmental Lab in Dayton, OH. Attendance was very good, with 40 people from 12 organizations attending. Technical sessions included:

- "Bioassay Sampling and Analysis" by Courtney VanVoorhis, Laboratory Manager of EnviroScience, Inc. (1 contact hour was approved)
- "Weighing the Right Way" by Craig Rowles, Laboratory Sales Representative, Mettler-Toledo (1 contact hour was approved)
- Laboratory Tour by the Montgomery County Water Services Lab Staff (0.5 contact hour was approved)

Refreshments were provided by EnviroScience and the Montgomery County Water Services.

Fall LAC Meeting will be held November 5, 2009 at 12 pm Metropolitan Sewer District of Greater Cincinnati Laboratory Division of Industrial Waste

800 Woodrow Street, Cincinnati, Ohio

Agenda (2.75 contact hours pending approval)

- PeCOD (a new way to analyze COD)
- Automated BOD Analysis Presentations by Aaron Gotway, ManSci, Inc
- Lab Tour Highlighting Automated BOD, Low level Hg analysis, GCMS, and Sample Custody

Winter LAC Meeting will be held January 21, 2010 Hosted by TestAmerica Laboratories 4738 Gateway Circle, Kettering OH 45440

Preliminary Agenda (2.5 to 3.0 contact hours pending)

- Low Level Hg Sampling and Analysis
- Laboratory Documentation
- pH Analysis
- · Laboratory Tour

To inquire about being added to our e-mail list or to get information about attending, hosting, sponsoring, or presenting at a future LAC meeting please contact Roger Rardain or Jim Davis.

SE LAC - Diana Liston

The Southeast Section of the Lab Analyst Committee held a meeting on August 12, 2009 at the Tussing Road Water Reclamation Facility in Pickerington. Lynda Eisenmann from Thermo Scientific spoke about the pros and cons of the new high performance ammonia ISE probe from Orion. We toured the wastewater treatment plant and talked about how the SE LAC committee can benefit members.

Steve Roberts, the new Quality Assurance Supervisor from OEPA, stopped by to answer any last minute questions about the DMRQA program.

We would like to plan one more meeting this year. The meeting would be for just an afternoon. If your facility can host, or you have any topic requests, please contact me. (See below)

We are rebuilding our contact list. If you would like to receive announcements for meetings, please send me your info.

NW LAC - Kevin Hughes

We would like to welcome Kevin Hughes to the Lab Analysis Committee.

STATE LAC COMMITTEE MEMBERS

State Chairs

Eva Hatvani, 216.641.6000, hatvanie@neorsd.org Nancy Taylor, 740.349.6774 x205, ntaylor@ci.newark.oh.us

Northeast Chairs

Denise Seman, 330.742.8820, dseman@cityofyoungstownoh.com Kathy Richards, 330.928.1164 x484, NESOWEALAC@gmail.com

Northwest Chair

Kevin Hughes, 419.488.5440, watertreatment@tiffenohio.gov

Southwest Chairs

Roger Rardain, 937.754.3075, roger.rardain@ci.fairborn.oh.us Jim Davis, 937.496.7051, davisji@mcohio.org

Southeast Chair

Diana Liston, 614.864.3370, dliston@co.fairfield.oh.us



PLANT OPERATIONS COMMITTEE REPORT

by Chairs Jim Borton and Kim Riddell

The Plant Operations Committee along with the Laboratory Analyst and Safety Committees hosted the Plant Operations, Lab, and Safety Workshop on September 23rd and 24th. Over 135 Ohio wastewater professionals attended the two day event and earned up to 13 contact hours. Presentations from Ohio's own experts, as well as nationally known experts, received high praises from attendees and generated significant interest in the 2010 version. If you missed the workshop, you missed 13 of the most interesting technical sessions offered in Ohio during 2009. In addition to separate Laboratory and/or Safety presentations, attendees heard from Jamie Gellner on energy reuse systems, Dr. Sam Jeyanayagam on emerging operations issues/technologies, Kevin Kreiny on Clark County's optimization experiences, Dan Miklos on treatability problems and sampling issues, Stacy Passaro on maintenance program aspects, Kevin Staton on ATAD operations, Jason Tincu on plant management concepts, and Dr. Eric Wahlberg on treatment plant optimization. Each presentation had something for both the beginner as well as the most seasoned operator to take home and think about or try. The Workshop organizers extend a sincere thank you to those that took the time to attend and share their knowledge with Ohio's operators, consultants and regulators.

Plan on attending the 2010 version on September 1 and 2, 2010. It will again be held at the University Plaza Hotel in Columbus. Workshop topics will be published in the spring, so put some money in the training budget and save it for next year's workshop.

The committee is in the planning stages for the 2010 Operations Challenge / Operator Education Day Event. We have had several communities offer their facilities as potential locations and we will be meeting soon to determine the location and date. The format for the day will be the same as this year's with the incorporation of an operator education day prior to the contest good for approximately 2 hours. Attendees to the operator education day would then be permitted to participate in a non-competitive, non-timed and easier version of the Operations Challenge for additional contact hours.

Operators, Lab Technicians, Consultants, Ohio EPA, Manufacturers Reps, etc., are you ready to go for bragging rights? Start preparing now! Look for more details on the OWEA Website, in your email box, future *Buckeye Bulletins*, etc. Rumor has it that the Young Professionals are gearing up a team (or two). Maybe the "old" professionals want to give the whippersnappers a run for their money?!

For those of you that have been asleep for the past few years or are new to OWEA, Operations Challenge is an event in which team members compete in one of two Divisions (I for previous winners and II for new teams or non-winning returning teams). The 4 member teams compete in events designed to demonstrate the skills an operator uses in day-to-day work. All team members are eligible to earn up to 12 contact hours and the winning teams earn the opportunity to represent OWEA at WEFTEC '10 in New Orleans! OWEA and its sponsors support this event and cover the team's expenses (to a preset budgeted amount) for representing Ohio at WEFTEC, so managers, don't worry about how much it costs to send a team to New Orleans, encourage them to sign up!







If you have interest in putting a group together, please contact Kim Riddell, *kriddell@cityofdelphos.com*, 419.234.4507 or Jim Borton, *jborton@woosteroh.com*, 330.263.5293. There are people out there that are willing to help you get started and Kim or Jim can put you in touch! The Plant Operations committee is looking forward to seeing you in May and again in September, 2010.



GOT BURKE? THE PAST, PRESENT, AND FUTURE

By Ed Nutter, Safety Committee Chair

Have you ever heard of or wondered what the George W. Burke Jr. Award is for? What does your facility have to do to earn such a special award?

The George W. Burke Jr. Award recognizes a municipal or industrial wastewater facility for establishing and maintaining an active and effective safety program. This award was established in 1982 in honor of George W. Burke Jr., for his many years of service to both the water environment field and WEF as staff manager of technical services. Mr. Burke was instrumental in developing WEF's annual safety survey and assisting in the production of several safety training aids and promotional packets.

The purpose of this award is to encourage an active and effective safety program in municipal and industrial wastewater facilities.

The OWEA Safety Committee oversees the Burke Award and all other Safety Awards for the OWEA. The most recent recipient of the Burke Award was the Taylor Creek Water Reclamation Facility, an extended aeration plant with an average flow of 2.2 MGD and a design flow of 5.5 MGD. The plant is located in the Southwest Section of the state, just east of Miamitown, servicing the northern part of the West Section of the Metropolitan Sewer District of Greater Cincinnati (MSDGC). They have additional responsibilities for three other plants, four large pump stations, and the maintenance of a high rate treatment facility.

The Taylor Creek Treatment Plant has 11 employees. Realizing that training is an important part of any safety program, Taylor Creek safety training is emphasized, as the zero accident rate shows. Plant Supervisor Ray King feels that the most important piece of their safety puzzle is the open communication, "that one-on-one" personal relationship between the employees and the Safety Department. MSDGC holds bi-monthly meetings between the Safety Department and all of its facilities to cover issues that have arisen and need to be addressed. Taylor Creek personnel also attend quarterly section meetings to address safety and training issues in their area.

What is the process involved in making such an important decision? In November, the Safety Committee starts planning the awards program. Facilities can go to the website: http://www.ohiowea.org/safety committee.php, and download an

awards application that must be completed and submitted by mid-February. The Committee then meets in early March to review the applications.

Just what is the Safety Committee looking for? What made Taylor Creek stand out over other facilities? The first thing the Safety Committee looks for is a completed awards application, with all applicable programs in place, low accident rates, examples of training that have been provided, and a completed OSHA 300 form. This past year, Taylor Creek provided all the required information while occurring ZERO accidents. Now, as much as the Safety Committee would like to have zero accidents at all plants in Ohio, we know that this can't be done. Accidents will and do happen, this for sure is a fact. We use the following formula to determine the accident rate for all facilities:

 $\begin{array}{ccc} & & & & N \times 200,000 \\ \text{Accident or severity rate} & = & & \text{EH} \end{array}$

N (injury illness rate) = number of injuries or illnesses or N (severity rate) = number of days lost

EH = total hrs worked by all employees during the calendar year

Small treatment plants look at the application and say, "How can we compete against big facilities that have their own Safety Department?" Past winners of the Burke Award have been small facilities, such as Eastern Ohio Regional Wastewater Authority with 9 employees (Burke winner in 2003 and 2006) to large facilities, such as the City of Columbus Jackson Pike WWTP (Burke winner in 1998) with approximately 100 employees. The Safety Committee tries to make it as easy as possible for all facilities by judging the applications on substance, not on quantity of papers filed.

Now is the time to start planning for the next Safety Award. The application will appear on the website soon. Submit an application, no matter if your plant is small or large, or have few or many accidents. Let the Safety Committee review your program and help you make it better. We may have some new ideas or we may know someone else who does.



Staff Members at Taylor Creek - Burke Award Winner

Ed Nutter has been employed by the City of Newark for 21 years, the last 5 serving as the Safety & Training Coordinator for the Division of Water and Wastewater. He has served as the OWEA Safety Committee chairman since 2002, and a member of the WEF Safety, Security, and Occupational Health Committee since 2006. He has judged the Operations Challenge Safety Event at WEFTEC the past 4 years. He holds an OEPA Class III Wastewater Operators license.





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The Ohio Water Environment Association holds four Specialty Workshops and an Annual Conference with an extensive technical program each year. Share your experiences, successes, and lessons learned at one of OWEA's Specialty Workshops or the Annual Conference as we work together to provide technical education and training for Ohio water quality professionals who clean water and return it safely to the environment.

Speaker and Presentation Protocol:

- 1. The best papers document actual case studies and projects as opposed to research or theory.
- 2. Papers shall not be used to engage in advertising or selling equipment or professional services.
- 3. Several criteria will be used to evaluate the abstracts, including originality, project status, technical merit, significance, and overall quality.
- 4. Manuscripts will be subject to revision or rejection if lacking in quality.
- 5. Accepted authors who do not submit a manuscript by the required deadline will be removed from the program.
- 6. OWEA does not offer honorariums, or pay travel or lodging expenses.
- 7. Presenters are expected to register for the Conference or Workshop and pay the appropriate registration fee.
- 8. If selected for giving a presentation, the speaker shall agree to present the final version to the Program Chair no later than the announced date.

ANNUAL CONFERENCE

The 2010 Annual Conference, June 15-17, 2010 is especially interested in receiving abstracts on the following topics:

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- ♦ Residuals management—looking to the future
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- Coping with the brain drain
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- Green technology—what works?
- Sustainable infrastructure design
- Project financing
- Success stories and lessons learned
- ♦ Laboratory topics
- Industrial pre-treatment case studies
- Safety program innovations
- Future regulatory initiatives

Abstract Contact: Dale Kocarek

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dale.kocarek@stantec.com, 614.486.4383

SPECIALTY WORKSHOPS

Government Affairs, March 11, 2010

Abstract Contact: John Owen

john.owen@epa.state.oh.us, 614.728.3849

Collections Systems, May 13, 2010

Abstract Contact: Bill Horst

horstb@mcohio.org, 937.781.2636

Plant Operations/Laboratory Analysts, September 1 - 2, 2010

Abstract Contacts: Jim Borton, Kim Riddell, Eva Hatvani, and Nancy Taylor

jborton@woosteroh.com, 330.263.5293 kriddell@cityofdelphos.com, 419.692.0991 hatvanie@neorsd.org, 216.641.6000 ntaylor@ci.newark.oh.us, 740.349.6774 x205

Biosolids, December 9, 2010

Abstract Contacts: Dave Brewer or Jamie Gellner brewerd@mcohio.org, 937.496.7096 jgellner@hazenandsawyer.com, 513.469.2751



Picture yourself behind the podium.

For more details, visit ohiowea.org and click on "Call for Abstracts".

WEBINAR PRESENTERS

The Utility Enhancement Committee plans to conduct several webinars in 2010. Submissions of abstracts on wastewater utility topics will be considered by the Utility Enhancement Committee.

Abstract Contact: Doug Clark

douglas.clark@bgohio.org, 419.354.6274

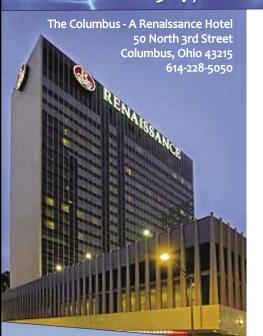




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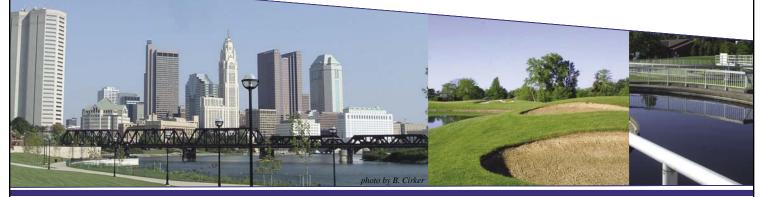
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Networking Meet & Greet - Tuesday Night

Annual Banquet - Wednesday Night

Plant Tour - Thursday

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Hosted by the Southeast Section. For information contact:

Mike Frommer 614.419.0598 mike frommer@urscorp.com Cindy Jacobsen 614.402.2802 cjacobsen@pirnie.com Ohio Water Environment Association 614.488.5800 info@ohiowea.org



RESIDUALS MANAGEMENT COMMITTEE REPORT

by Dave Brewer and Jamie Gellner

The OWEA Residuals Management Committee continues to remain active in the monitoring of issues related to biosolids management and to seek opportunities to serve the membership of OWEA. Since our last update, we have remained active in several main focus areas, including the following:

- Land Application Rules Revision At our last meeting, OEPA provided an update on the proposed revisions to the land application rules. OEPA was in the process of officially responding to the comments received from the second round of public comments on the proposed revisions. OEPA expects to finalize the revisions later this fall (i.e. final review and JCARR hearing). An update to OWEA members on the proposed changes will be provided at this year's Biosolids Workshop. The OWEA Residuals Management Committee will continue to be actively involved in discussions with OEPA regarding these rule changes.
- Farm Science Review This year the Farm Science Review was held on September 22nd through September 24th. The Residuals Committee provided manpower and educational materials on the benefits of biosolids land application at the OWEA sponsored booth. A large number of attendees visited the booth. Promotional flower pots with wildflower seeds and a small amount of potting mix containing biosolids (provided by City of Warren Nature's BlendTM) were offered to participants that answered biosolids related questions from the "wheel of trivia". Thanks to Bruce MacLeod and the rest of the residuals committee for their involvement in this effort.
- **Biosolids Workshop** The 2009 workshop will be held on December 10th in Columbus. This year's workshop will be focused on emerging trends and issues and will feature presentations on energy recovery, innovative processes, and the anticipated changes to the land application rules. We hope you will join us for this workshop. Register online registration at www.ohiowea.org. See page 23 for details.

Biosolids News

In addition to pertinent changes in the land application rules, the Residuals Committee continues to monitor trends and events outside of our state related to biosolids. We would like to share the following news with OWEA members:

• Kern County Biosolids Land Application - Appeals Court Decision - This highly publicized case involves the land application of biosolids from the City of Los Angeles, the Orange County Sanitation District, and Sanitation District No. 2 of Los Angeles County at a City owned farm in neighboring Kern County. In 2006, Kern County passed an ordinance banning all out of county biosolids. The municipalities applying biosolids filed a suit in US District Court requesting an injunction on the ban. In the initial court hearing (which garnered much interest and support from WEF and other agencies), the court ruled for the injunction and biosolids land application was able to continue. The decision was appealed to the Ninth Circuit Court of Appeals. The appellate court overturned the original court ruling, meaning that the ban passed by Kern County will hold (and land application in the county from out of county biosolids will be stopped). At the present time, the current injunction allowing land application to continue will stay in place until further review by the federal District Court. The municipalities involved, along with WEF and other member committees are also considering other actions to challenge the ban.

The Residuals Management Committee is focused on serving the OWEA membership through education, promotion of effective biosolids management, technical information on biosolids, and interface with OEPA on regulatory issues. We always welcome new membership and we would love to have you at our next meeting. If you are interested in getting involved or if you have any questions about the committee, please contact Dave Brewer, <code>brewerd@mcohio.org</code>, 937.781.2561 or Jamie Gellner, <code>jgellner@hazenandsawyer.com</code>, 513.317.0337.

Doug Alderman entertained and informed the masses with the "Environmental Wheel of Trivia" at this year's Farm Science Review. Doug is credited with developing the Wheel of Trivia, which has transformed the OWEA booth from being just another trade show booth among hundreds, to being one of the highlights of the Farm Science Review. This year Doug added the 'sing your answer' option if you landed on a purple color on the wheel. It was a riot with fun for all. Hats off to Doug.

Mark your calendar now for next year's Farm Science Review, September 21-23, 2010. Contact the Residuals Committee for more info or if you would like to help.

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2009 Biosolids Specialty Workshop

Thursday, December 10, 2009

7:45-8:15	Registration, Coffee, and Pastries
8:15-8:30	Opening Remarks
	Current Issues/Regulatory Issues - David Brewer, Residuals Chair
8:30-9:15	Overview of Changes to OEPA Land Application Rules - Jacob Howdyshell, Ohio EPA
9:15-10:00	Nutrient Management Planning - The Agricultural Side of End Use - David T. Scheiderer, Integrated Ag Sycs
10:00-10:15	Break
10:15-11:00	Up to the Hype: An Overview of 2nd Generation ATAD Performance - Jim Scisson, Phoenix and Scisson
11:00-11:45	Digester Gas Pretreatment for Energy Cogeneration - Mike Matariten, P.E., Molecular Gates Technologies
11:45-12:45	Lunch (provided)
12:45-1:30	Class A Digestion for Small Facilities - Dan Leavitt, City of London - Sidney Clark and J. R. Currie, CB&I
1:30-2:15	Beneficial Use of Digester Gas - Seasonal and Lifecycle Cost Considerations - Matt Fishman, P.E., Hazen and Sawyer
2:15-2:30	Break
2:30-3:15	Exploring the Feasibility of Biosolids to Energy Using Fluidized Bed Combustion and Heat Recovery - Kevin Rhodes, P.E., Woolpert
3:15-4:00	Biosolids as a Resource: Towards a Paradigm Shift in the 21st Century - Sam Jeyanayagam, Ph.D., P.E., B.C.E.E. and Robert Smith, P.E., Malcolm Pirnie

OWEA Refund Policy

Adjourn

4:00

- Cancellations within 24 hours of the workshop, or no-shows the day of the workshop will still be billed in full and will NOT receive a refund.
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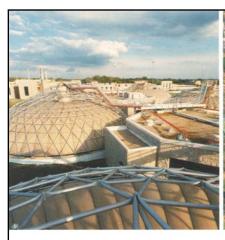
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Photos clockwise from top left: (1) Jim Grunenwald, Paul Matrka, and Ed Nutter; (2) Jim Borton, Kim Riddell, and Doug Clark; (3) Mike Frommer; (4) Mark Livengood, Judi Henrich, and Dale Kocarek, (5) Wooster sCRAPPERS; (6) Bowling Green Wastewater Rangers; (7) Dianne Sumego and Dianne Crilley.







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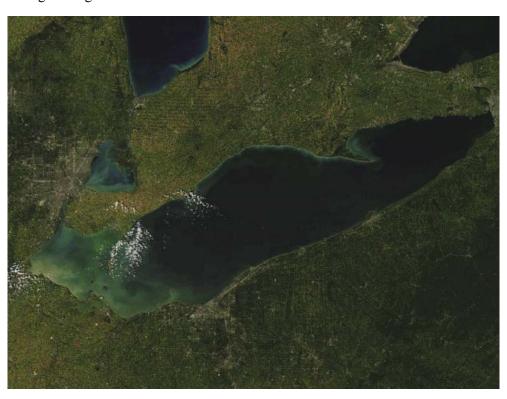
by Mike McNutt, Watershed Coordinator

Cuyahoga County Board of Health/Tinkers Creek Watershed Partners

Recent articles regarding the health of Lake Erie indicate a growing concern for perch and walleye populations. This distress could be linked to the increase in toxic blue-green algae concentrated in the western basin of the Lake and to a lesser extent

the near shore and eastern basin areas. According to an article in the Columbus Dispatch (Latest hatches raise alarms: Wildlife authorities say variety of factors are to blame for diminishing walleve, perch numbers). trawling surveys in recent years have produced results showing that fewer young walleye and perch are being found, although, depending upon the sampling location, perch seem to be doing better in the central basin of the Lake. If this trend continues, the estimated \$7 billion tourism industry could begin to suffer.

Lake Erie is the receiving body of all upland activities within its watershed boundary. Similarly, the Ohio River is the recipient of all activities for the rest of the State. Often we forget that the small streams and creeks that run through our backyards play a crucial role in the health of the lake or the river, and we might disregard our



Source: NOAA Coastwatch (MODIS Imagery)

personal environmental impacts as trivial or meaningless. How can fertilizing my lawn or washing my car have a negative impact on the environment? I am only one person. But what happens when thousands of people are fertilizing or washing their car on the same day? That's a lot of phosphorus and soap!



Watershed Management has become a crucial component of the concept of sustainability: the convergence of social welfare (people), economic prosperity (profit), and the health of the environment (planet). Currently, 33 watershed coordinators are funded through the Ohio Department of Natural Resources Watershed Management Program statewide. Additionally, other grassroots watershed advocacy groups exist throughout the State which promote sound stewardship of our streams, rivers, wetlands, vernal pools, lakes, and other natural features. While it is difficult to place a price tag on our natural resources, clearly the integrity of Mother Nature has become crucial to the long-term stability of our State. continued on page 30

Tinkers Creek Watershed



The Tinkers Creek Watershed Partners, located in Northeast Ohio, is a non-profit environmental organization that promotes stewardship through personal behavioral changes, watershed education, and ecosystem restoration. The watershed is 96.4 square miles in drainage area and is found in a portion of four counties; Cuyahoga, Summit, Geauga, and Portage. The Partners have been in existence for nearly four years. They have created a conditionally endorsed (as of press time) State Watershed Action Plan and have received two grants from the U.S. EPA— one to study the economic valuation of wetlands throughout the watershed, and the other to study the nutrient sequestration capacity of those wetlands. Further, the Cuyahoga County Board of Health, the entity who houses the Watershed Coordinator, has also received a Section 319 grant from the Ohio EPA to perform a stream restoration project in Hudson, Ohio. This project is a collaborative effort between the City of Hudson, the Hudson High School, and the Watershed Partners. The restoration process will include the creation of an outdoor land lab for the students to learn the physiology of streams, including how the proper functioning of those streams leads to increased water quality and wildlife habitat.

The Partners strongly believe that the cumulative impact of slight behavioral changes through education of both children and adults is key to the ecological recovery of the watershed. These alterations can include simple things like disconnecting our downspouts from our homes, businesses, and schools to using organic fertilizers on our yards. Municipalities can take a look at their codified ordinances regarding development and redevelopment regulations and strengthen them to require both the retention and treatment of storm waters prior to leaving their site through inexpensive techniques such as rain gardens.

The easiest way to solve a problem is to not have a problem to solve. Our personal understanding and the shared responsibility of being good stewards of our environment should be included in every decision we make in our personal, professional, and spiritual lives. Change can be difficult. The perception of the planet and its health is controversial. Could we be destroying the very thing that sustains us? Is it too big a leap to think that because we put everything from fertilizer and grease, to copious amounts of water from surface runoff untreated into our streams, we could be killing those streams? Or that we might be doing the same thing to our climate by creating Green House Gas Emissions, thereby influencing the temperature?

The work that the Tinkers Creek Watershed Partners and their peers from other watershed organizations perform is significant to health of Lake Erie to the north and, ultimately, the Gulf of Mexico to our south. The group is passionate about and dedicated to educating the 24 communities within the watershed through demonstration projects, workshops, and public outreach. Because the watershed is the largest tributary to the Cuyahoga River, we have an integral responsibility to Lake Erie and the health of its inhabitants. We are working toward greening the watershed, but we would prefer to have a blue Lake.

About the author:

Mike McNutt has been a Watershed Coordinator for almost 7 years. He has been with the Friends of Big Walnut Creek in Columbus for 3 years and then the Cuyahoga County Board of Health and Tinkers Creek Watershed Partners for nearly 4. Mike has a B.A. in Communication and a B.S. in Environmental Science, both from The Ohio State University. Mike will be speaking at the National Environmental Public Health Conference at the end of October in Atlanta about Sustainability and Public Health. He can be reached at mmcnutt@ccbh.net







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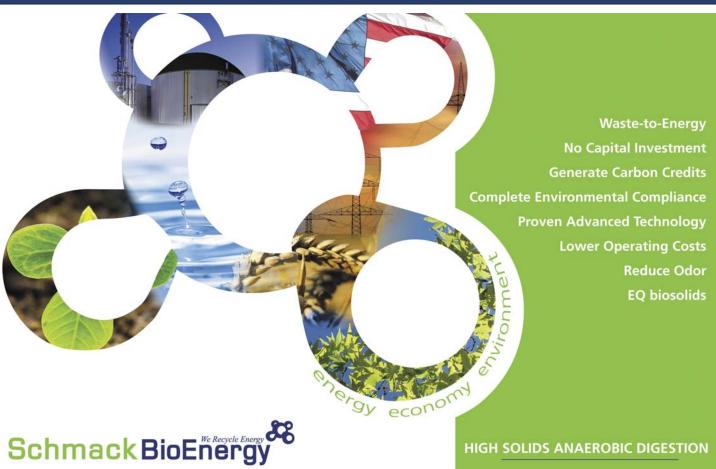
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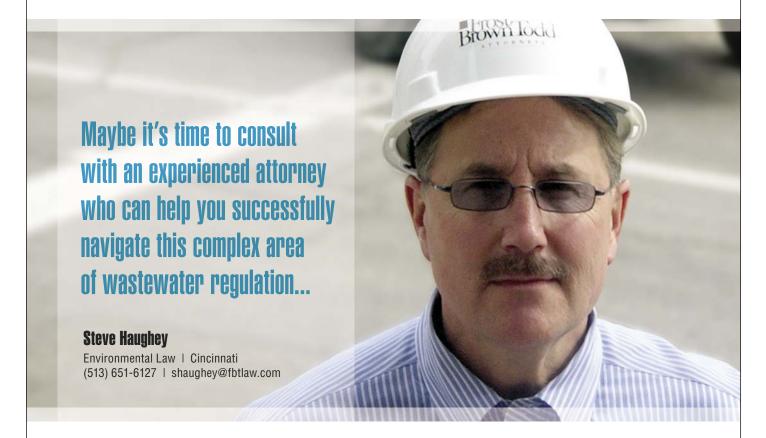
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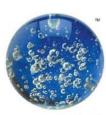
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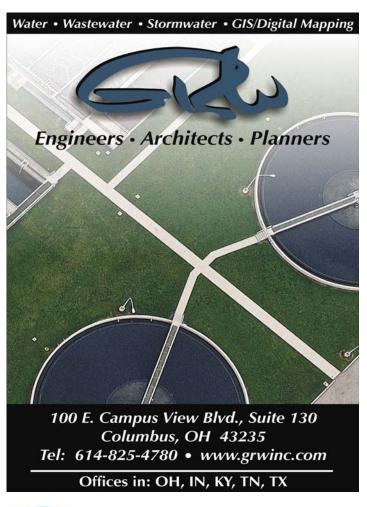
Our success continues to depend upon individual employee and team success.

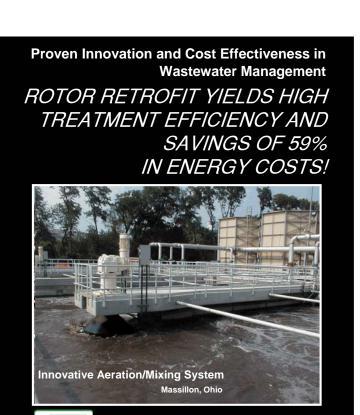
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VILLAGE OF JOHNSTOWN WASTEWATER TREATMENT PLANT

by Rob Shoaf, PE, Project Manager and Greg Otey, Vice President, URS Corportation

The Village of Johnstown is located approximately 20 minutes northeast of Columbus, and has experienced rapid growth in recent years. The previous wastewater treatment plant (WWTP) was a two-stage trickling filter process, consisting of primary clarification, first stage trickling filter, intermediate clarification, second stage trickling filter, final clarification, tertiary filtration and ultraviolet (UV) light disinfection.



Due to the rapid growth of the village and the aging of the existing facilities, the plant was not able to consistently meet the required effluent standards. In addition to suspended solids and ammonia nitrogen violations, there were numerous bacteria violations as indicated by fecal coliform organisms. In fact, there were 83 concentration-based violations in the 18-month period studied. The UV transmissivity of the trickling filter effluent was as low as 15%, so adequate disinfection was not achieved. Improvements were badly needed. Due to an extremely small site that is approximately 4 acres – with some of it designated as floodplain along with a 25-foot drop in elevation, a process had to be selected to allow construction of the improvements while maintaining the existing process.

The Village had begun operating a WWTP on this site in 1936 consisting of only primary clarification. Significant upgrades to the facility occurred in 1960, 1983, and 1994 as follows:

1960: 2-stage trickling filter process installed

1983: grit removal, Dynasand tertiary filtration,

and sludge drying beds installed

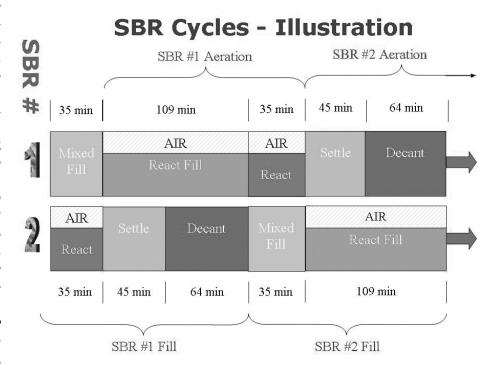
1994: new deeper nitrification tower and

screen improvements

The Village retained URS to assist them in reviewing options for improvements to the existing WWTP. The plant operating records and existing design plans were reviewed, and the existing plant was found incapable of meeting the required permit limits without significant improvements. URS prepared a Preliminary Engineering Report to demonstrate this evaluation, and then provided options with projected costs of the upgraded facility.

As part of the analysis, URS reviewed several options for the improvements including:

- Upgrading existing trickling filter plant to Trickling Filter – Solids Contact (SCTF) process with new filtration
- 2. Constructing a new Vertical Loop Reactor (VLR) oxidation ditch with final clarifiers
- 3. Modifying the existing tanks with a Sequencing Batch Reactor (SBR)
- 4. Modifying the existing tanks with a Membrane Bioreactor (MBR)



continued on page 38





After reviewing these processes, the SBR process was selected. The SBR process does not require a separate clarifier because it performs several processes self-contained in the batch mode; therefore, significant space and cost savings would be realized. Downstream facilities such as UV disinfection and post aeration would need to be designed significantly larger, since the SBR plant only discharges wastewater during a portion of each day instead of continuously. The MBR alternative, however, was deemed too expensive due to the necessary "over-sizing" required to accommodate the large variability of the influent flow rate.

The new facility is rated to handle a peak daily flow of 3.0 million gallons per day (mgd) and peak hourly flow representing 4.0 mgd, while still meeting the permitted effluent limits. The treatment scheme consists of the following processes:

- Fine Screen to protect downstream equipment from items larger than ½-inch
- Grit Removal to remove sand and grit inorganic substances
- Influent Pumping consisting of (3) 2 MGD pumps to pump the influent wastewater to the SBR tanks
- Sequencing Batch Reactor consisting of (2) 770,000 gallon aeration tanks w/ programmable logic controllers (PLC) to control sequencing operations



- Ultraviolet Disinfection utilizes UV light instead of chlorine to disinfect the treated effluent before discharge to Raccoon Creek
- Post Aeration adds required dissolved oxygen to treated effluent for discharge to Raccoon Creek
- Aerobic Digester consisting of (2) tanks to aerate and digest biosolids for land application or landfill disposal
- Sludge Filters consisting of (3) filters to reduce the weight and volume of biosolids for disposal
- Septage Receiving Station to provide nearby haulers a convenient place to discharge their septage for treatment

After the Preliminary Engineering Report was approved by Johnstown officials, URS provided design and construction services to complete the new WWTP. URS coordinated with Ohio EPA to satisfy the regulatory requirements, but also assisted the Village in completion of applications to obtain low-interest financing for the improvements. In addition, zero-interest financing was acquired for the Village through the Ohio Public Works Commission (OPWC). The Ohio EPA Water Pollution Control Loan Fund (WPCLF) was also utilized for a reduced interest rate to finance a septage receiving station. The URS services included the design of all of the improvements, bidding services, construction administration, and part time construction observation to help assure a quality project. In addition, a rate analysis was performed to evaluate the need for a possible rate increase.

Innovative and Creative Aspects

The Johnstown Wastewater Treatment Plant project produced several innovative and creative design solutions. The selection of the SBR process itself is innovative and drastically different from anything the existing Village operations staff had experienced. The SBR is a completely computer-controlled process. Construction of the new facility on the limited site was allowed to proceed while keeping the existing facility in operation.

The conversion of the existing intermediate clarifier into a post aeration basin overcame significant challenges associated with the SBR process. Since the SBR operation



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involves a batch-type sequencing process, wastewater is discharged for only a portion of each day. When the plant is discharging, it does so at a rate much higher than the influent flow. This created problems with level controls downstream of the new UV process. In order to overcome this issue, an existing unusable clarifier was converted to a post aeration basin, while utilizing its existing effluent weir. This allowed the SBR to discharge into this tank with minor fluctuations in water elevation through the UV process. This innovative approach saved the Village money and utilized existing facilities to the maximum extent possible.

Another innovative design included providing installation of Deskins Sludge Filters and associated harvesting equipment to allow the Village to produce biosolids with a solids concentration of 50% or higher depending on the time of year. The improvements to the headworks allowed the Village to provide a single trash dumpster to dispose of the influent screenings and grit, which reduced manual labor requirements. In addition, due to the use of a new concept in influent screening, the screenings are ground and thoroughly cleaned prior to depositing them in the dumpster. This significantly reduces the volume of solid waste to be disposed.

Due to cost considerations, the previous tertiary filtration building was converted to a blower building. Since there are residential homes in close proximity to the facility, it was requested that the noise level be kept as low as possible. Therefore, special HVAC and air intake designs were provided to minimize blower sound transmission to the outside of the building.

Coupled together, the numerous innovative techniques utilized on this project have proven quite successful, and may serve as a model for future creative design solutions. Besides the environmental benefit to the water quality of Raccoon Creek, this project provides Johnstown with a new facility that has a significantly higher capacity to accept future wastewater flow, which will act as a catalyst for new development. Due to the significant grant and low interest financing secured by URS, the rates for the Village residents have been stabilized for years to come.

URS won an ACEC Ohio – Engineering Excellence Award for this project in 2007.



Plant Profile Selection

The *Buckeye Bulletin* features a Plant Profile article in each of its four issues annually. The four sections of the Ohio Water Environment Association (NW, NE, SW, SE) contribute one Plant Profile article per year, on a rotating schedule. If you have a suggestion for a Plant Profile article, contact a member of your section's Executive Committee.

The Plant Profile article schedule for 2010:

Spring Issue - Northwest Section Summer Issue - Northeast Section Fall Issue - Southwest Section Winter Issue - Southeast Section



UTILITIES ENHANCEMENT COMMITTEE REPORT

by Doug Clark, City of Bowling Green

The Utilities Enhancement Committee met at the Ohio Water Environment Association headquarters in Columbus on August 27, 2009.

The emphasis of this meeting was on webinars. While our very first webinar, held on June 3, 2009, was a success, we do realize there is a learning curve required to have this become a successful method of training. With that in mind, three key areas on webinars were addressed.

- 1. Length: The first webinar lasted 2 hours, which, in our opinion, was too long. The committee has decided to limit the length of webinars to a 1 hour maximum.
- 2. Content: The first webinar covered two separate topics, which was a little difficult to follow. The committee has decided to try having 2 speakers talk for approximately ½ hour each on the same topic. Hopefully the speakers are from different sized communities, which will allow different view points on the same subject.
- 3. Price: Because this is a learning curve, the webinars will be free to all members and possibly a very modest registration fee to non-members until August of 2010. During this interim period of refining webinars, no contact hours will be given. The free registration with no contact hours will serve 2 purposes: 1) This will allow the Utilities Enhancement Committee time to get the logistics of officially tracking the contact hours for webinars. 2) Because it is free, and you will not have to travel to an official contact hour tracking site, we are hoping you will join in on the webinars to give us input, and to see the benefits of this new type of training.

WE NEED YOUR HELP! If you or your employer have done anything that you have found to be beneficial to your utility, please share your successes or lessons learned by being a speaker. If you do not like to speak in public, don't worry, as this is done by way of computers and you are not in front of a "live" audience. The sharing of ideas is how we all learn, so please share so we can all learn from you!

Utilities Enhancement Committee:

Chair: Doug Clark, 419.354.6275, douglas.clark@bgohio.org Vice Chair: Jim Hewitt, 330.375.2185, HewitJi@ci.akron.oh.us Secretary: John Newsome, 614.645.8460, jgnewsome@columbus.gov



COLLECTIONS COMMITTEE REPORT

by Bill Horst, Montgomery County

The Collections Committee had a very successful Specialty Conference on May 7, 2009, with the help of the entire committee, as well as Tom Brankamp, Specialty Conference Sub-Committee Chair. "Collections System Project Results and Success Stories" was the theme. Topics included an update on the Cincinnati MSD WIB Prevention plan, Columbus' newest I/I project, Long Term Control Plan Progress in Lancaster, with case studies of projects like the Orchard Meadow Overflow Elimination Project, the NEORSD Westerly Interceptor Box Culvert story, and many more, as well as presentations on modeling, I & I Source Identification, and Root Control. Attendance was excellent and at capacity for the site.

A thank you goes out to all those who spoke, and to the committee members who made it a successful day.

The Hands On Workshops were the focus of the Collections Committee for the fall of 2009, under the direction of Don Gallimore as Hands On Sub-Committee Chair. The workshops were presented around the state:

October 1 NW Section

October 8 NE Section

October 22 SE Section

October 29 SW Section

Topics focused on "Maintenance and Rehabilitation" including: Pump Repairs, Root Control, Pipe Grouting, and Manhole Rehabilitation. The cost for these hands-on sessions was kept low at \$20.00 to provide regional training for continuing education credit that is easy to obtain.

If you should have any questions about the Collections Committee or any of these activities please contact me at 937.781.2636 or *horstb@mcohio.org*.

Pictured below at Collections Workshop:

Front Row: Keven Aller, Don Gallimore, Mark Buchenic, Steve Donovan

Back Row: Tom Brankamp, Bill Horst, John Schroeder





GOVERNMENT AFFAIRS COMMITTEE REPORT

by Dale Kocarek, PE, BCEE, Stantec

The Ohio Water Environment Association (OWEA) entered into a Memorandum of Understanding (MOU) at the Annual Conference on Tuesday, June 23, 2009 at the Awards Breakfast. The purpose of this MOU is to establish a cooperative relationship between the OWEA and the U.S. Environmental Protection Agency (USEPA), Office of Research and Development (ORD), and National Risk Management Research Laboratory (NRMRL). The focus of the exchange is on joint research needs and findings in the areas of wastewater and stormwater infrastructure, including conveyance systems and treatment technologies.

OWEA has recently completed our first project as part of the MOU. The project was the review of the Draft EPA Nutrient Control Manual. OWEA reached out to our membership for participants and received responses back from 28 members with varying backgrounds and a cross section reflective of our membership. Member participation included reviews of one chapter to reviews of the entire manual. Comments were received back from 18 members in a very short time frame. On September 18, 2009, the OWEA Government Affairs Committee submitted comments on the Draft EPA Nutrient Control Manual to the USEPA NRMRL Office in Cincinnati, Ohio. We would like to thank the following reviewers, and their employers, for their time and commitment:

Dale Kocarek, Stantec William Barhorst, ARCADIS Dennis Meek, DM Engineering, LLC Kim Riddell, City of Delphos Paul Fletcher, Jones and Henry Jason Tincu, City of Xenia Gary Hickman, City of Columbus Roger Gyger, Mixing and Mass Transfer Tech LLC Ted Marten, City of Cuyahoga Falls Don Appleton, ITT Dave Wilson, Butler County Karen Harrison, JJ&G Mary Long, Black & Veatch Bob Hollis, Summit County DOES Rick Noss, Stantec Theping Chen, AECOM Shaun Beauchesne, Hach Dave Frank, ARCADIS

The review was led by Dianne Sumego, Past President of the OWEA and Chair of the Government Affairs Committee's Technical Review Group (TRG).

This was an exciting moment for OWEA and Government Affairs. Not only did we take on a proactive role in the review of such an important manual, but we have taken steps to create volunteer opportunities for our members. If anyone is interested in joining the TRG, please contact Dianne Sumego at *dianne.sumego@arcadis-us.com*.

Dale Kocarek

dale.kocarek@stantec.com, 614.486.4383





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News Note:

The Ohio Water Environment Association will host a booth at the CCAO/CEAO Annual Winter Conference. The County Commissioners' Association of Ohio/County Engineers Association of Ohio Annual Winter Conference will be held at the Hyatt Regency Columbus December 6 - 9, 2010. OWEA will share its message of preserving and enhancing Ohio's water quality environment by providing technical education and training for water quality professionals who clean water and return it safely to the environment.

WEF Communications



Dear OWEA Member:

The following article is a reprint of a communication received by the OWEA Executive Committee in late September. It is being reprinted for your reading to further drive home the notion that running and volunteering for OWEA needs to be done with a sense of 'professionalism'. I am happy to report that OWEA has an excellent professional relationship with WEF and the various companies and service providers that OWEA does business with.

The Sections are the first-stop for many of our members' face-to-face meetings and training sessions. Section leaders - please ask for any help you need to keep up the excellent services you have provided over the years.

Thank you,

Mark Livengood, OWEA President livengoodm@mcohio.org 937.781.2559

A SERIOUS BUSINESS

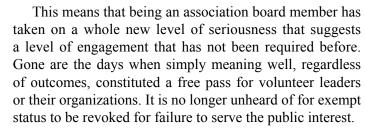
William J. Bertera Executive Director, Water Environment Federation

The economy is striking close to home. The National Recycling Coalition filed for bankruptcy in September with \$1.5 million in debts and less than \$1,000 in the bank... not even enough money to move out of its offices and put its furniture and records into storage. Yes, not-for-profit organizations can file for bankruptcy and each year many quietly do. This year, there will be more and some may be large national organizations. These are troubling times.

Managing not-for-profit associations is not rocket science but it is not as simple as it once was. There was a time in the not too distant past when adherence to the mission and compliance with a few basic precepts pretty much assured the unencumbered existence of associations. That has all changed. The public interest is now more demanding,

assumes more transparency and requires a comprehensive knowledge of not only the increasingly complex state and federal laws that govern and regulate not-for-profit organizations, but the psychology and politics of doing so as well.

This year, most associations with IRS tax exemptions and with incomes in excess of \$25,000 will be faced with a new federal reporting form (IRS Form 990) that will cause not-for-profit boards of directors and volunteer leaders to become, for the first time, not only more intimately involved in reporting what their organization is doing, but also encumbering them with real accountability for the manner in which the organization itself is governed.



None of this suggests that volunteer organizations are not governable by volunteers or that leading cannot be fun or rewarding, but it does mean that governing associations has become a serious business with real world consequences. It is not a lark or a place to "honor" loyal or respected members. Being a board member today requires hard work, dedication and a willingness to make difficult decisions. Some of this, as the board for the National Recycling Coalition learned, is not fun at all.

As has been true from the instance of the first not-for-profit exemption by the Internal Revenue Service, there are three basic precepts or duties to help volunteer board members and officers do a good job and to minimize their personal liability when things go wrong...as they sometimes do. Those duties are care, obedience and loyalty.

The first (care) means you have to actually work at doing the job of being a leader. You have to know what is going on, you have to prepare for meetings, you have to actively participate in decision making and you have to vote. Boards can only exercise control by voting...conversation alone is legally meaningless. Obedience means you have to have a reasonable sense of state and federal laws as well as your organization's bylaws and diligently make sure your organization is abiding by them. The third duty of loyalty is the most difficult because it requires putting yourself in the position of the members and organization you serve... regardless of your personal feelings or interests. It requires that everything you do be in their interests.

How do volunteers with other areas of expertise become experts in association management so that they can properly and effectively govern? They don't and are not expected to. Instead, volunteers are expected to make a good faith and reasonable effort to know as much as they can about their organization, its interests and operations and then exercise their best judgment on behalf of the organization. They ask questions, demand data and information, and then make decisions based upon that data and information. And in so doing, they do their jobs and meet their responsibilities.

Of course, it also pays to be smart. Make sure you are protected with indemnification





language in your bylaws and a complete safety net of associated insurance policies which includes a good Director and Officer Liability Policy. Safely managing not-for-profit is not so complicated that it mandates professional staff. Most of the associations in the United States today are volunteermanaged. But it does require that volunteer leaders take their responsibilities very seriously.

"Professionalizing" volunteerism to encourage those with the interest and talents to provide leadership is a full time responsibility for boards. Associations are not "clubs", they are serious institutions of the public interest and the federal government is starting to treat them and their leaders in just that way.

We need to as well.

About the author:

Bill Bertera is the Executive Director of the Water Environment Federation (WEF), an international organization of water quality professionals headquartered in Alexandria, Virginia.

He is a career association executive with extensive experience in not-for-profit management of both public and private sector organizations, especially those with environmental infrastructure interests.

Bill has served as Executive Director of both the American Public Works Association and the Rebuild America Coalition, the latter a national organization of engineering, construction and government organizations dedicated to rebuilding America's public infrastructure. He has also served as the Executive Director of the Society of Nuclear Medicine.

He has been Managing Director of the National Solid Wastes Management Association; and he has filled executive and management positions with both the International City Management Association and the National Association of Counties.

Bill has a B.S. degree in Business Administration and a M.S. of Public Administration degree in urban affairs.

OWEA

is a WEF Member Association (MA)

The Ohio Water Environment Association is one of the Water Environment Federation's 75 affiliated Member Associations, working together to achieve the mission of preserving and enhancing the water environment. In the United States, a Member Association must consist of at least 100 persons (OWEA has approximately 1900 members).

An OWEA member is also a WEF member. The Ohio Water Environment Association has two representives in the WEF House of Delegates, which advises the WEF Board on strategic direction and on policies and inititatives of the Federation. Steve Morrison and Phil Anderson are OWEA's delegates (see page 7). Steve and Phil also represent the interests of OWEA to the Water Environment Federation. If OWEA's membership numbers increase to 2000 or more, we would be eligible to have an additional delegate in the House of Delegates.

DANNY L. SMITH

Superintendent, City of Zanesville Wastewater Treatment Plant 1949 – 2009

By David Markley

Danny L. Smith, Superintendent of the Zanesville Wastewater Treatment Plant, lost his battle with leukemia on August 30, 2009. He was 60 years old.

Danny had been in his current position as Superintendent for ten years and was also an active member in WEF. He frequently attended Section Meetings, along with OWEA Conferences and Workshops.



Most recently, Danny was involved in most of the decisions made for

the \$28M Zanesville WWTP upgrade; he put in a large amount of time planning many of the details of the decision making process. I recall many discussions concerning the best option for sludge removal. He knew that sludge regulations were moving towards more stringent policies and that one day all municipalities would probably be required to produce a Class A sludge. Danny achieved his goal of getting a Class B sludge drying process installed and having the city recognized as one of the first WWTP's to install a Microwave Drying Oven that produces a Class A material.

Danny was not only involved with the WWTP Upgrade, but also spent much of his time meeting with engineers and city officials helping develop the City of Zanesville's Long Term Control Plan (LTCP). Danny was instrumental in getting the LTCP approved by the OEPA.

Danny enjoyed his free time too! When not discussing work, Danny would often tell me about his time spent with his family; these moments he greatly enjoyed.

While visiting him in the hospital, Danny would say that his goals when he returned to work were to finish the WWTP upgrade and to go fishing again on Lake Erie.

Of the many legacies that Danny left, one of his biggest is that he tried every day to do the right things for the City of Zanesville and for the personnel here at the WWTP. He was a dedicated, hardworking individual and a good friend that will be missed greatly.

In Danny's memory, the Southeast Section has made a donation to the Water For People Fund.

(The City of Zanesville Waste Water Treatment Plant would like to thank everyone for their outpouring of support during this time of mourning. Danny was well liked and respected by his colleagues and co-workers, and that was more than evident in the numerous phone calls, cards, visitors, and flower arrangements that were received at the plant. Your kindness and generosity was greatly appreciated by the staff and Danny's family members. - Amy Hursey)



METHOD DETECTION LIMITS: WHAT ARE THEY AND HOW DO I CALCULATE THEM?

by Dawn Taylor Medina County Sanitary Engineers - Liverpool WWTP

There is a lot of confusion over the term Method Detection Limit, or MDL. What does it really mean? According to 40 CFR, Part 136, Appendix B, the MDL is defined as "the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte". In practical terms, the MDL is a statistical analysis of analytical conditions at low levels for each analyte and instrument. It tells us with a 99% confidence level whether or not the signal we are seeing is actually the analyte or merely background noise from the instrument or procedure.

The MDL for a specific procedure may vary with sample type or matrix. It is up to each laboratory to decide if MDL's are run in blank reagent water or in another sample matrix. Blank reagent water must be as free of analyte as possible. All sample aliquots for an MDL determination must go through the entire procedure, including any distillation, digestion, or extraction, exactly like unknown samples. An MDL should be analyzed for each analyte at least annually. If more than one method of instrumentation is used for an analyte, an MDL must be analyzed for each instrument.

The first step in the MDL procedure is to estimate the detection limit. There are several ways to generate this estimate. You can use the concentration that has a signal-to-noise ratio (S/N) of 2.5 to 5. The S/N is a measure of the overall strength of a signal to the average background noise. It is calculated by dividing the average of a series of replicates by the standard deviation of the replicates.

Example 1

Standard Concentration 0.1 mg/L

Replicate 1: 0.112 mg/L Average = 0.101 mg/L

Replicate 2: 0.089 mg/L

Replicate 3: 0.125 mg/L Standard Deviation = 0.02137

Replicate 4: 0.078 mg/L

The S/N = Average/Standard Deviation = 0.101/0.02137 = 4.726. Since the S/N is between 2.5 and 5, 0.1 mg/L would be a good estimate of the MDL. If the S/N is greater than 5, analyze a standard at a lower concentration.

Example 2:

Blank 1: 0.040 mg/L Standard Deviation = 0.0265

Blank 2: 0.032 mg/L Blank 3: 0.028 mg/L To calculate the concentration that would produce a S/N of between 2.5 and 5, multiply the standard deviation by 2.5 and by 5.

```
2.5 * 0.0265 = 0.066

5 * 0.0265 = 0.132

(Concentration = S/N / Standard Deviation)
```

This indicates that a concentration between 0.07 and 0.13 mg/L would be a good estimate for the MDL.

An estimate can be made using 3 times the standard deviation of replicate analyses. Using the data from example 1:

3 times the Standard Deviation = $3 \times 0.02137 = 0.0614$.

This indicates that 0.06 mg/L is an estimate of the MDL.

The region of the standard curve where there is any significant change in slope can be used as another estimate of the MDL. There may also be known instrument limitations that can be used to estimate the MDL.

If the MDL is to be analyzed in blank reagent water, prepare a standard at 1 to 5 times the estimated MDL. If the MDL is to be determined in a sample matrix, analyze the sample by the normal procedure. If the target analyte is present in the sample at a concentration of 1 to 5 times the estimate, use this sample for the MDL analysis. If the analyte concentration is less than the estimate, spike with standard to bring the concentration into the desired range. If the concentration is greater than 5 times the estimate, obtain another sample with a lower concentration of the analyte. If the concentration is within 10 times the MDL, it may be used.

Analyze a minimum of seven aliquots of the sample or standard to be used to determine the MDL. Process each sample through the entire analytical procedure. More than seven aliquots may be analyzed, but all of them must be used to calculate the MDL unless they meet the criteria for a statistical outlier. Calculate results according to the usual method, with final results in the reporting method units. If the procedure requires a blank measurement to calculate sample results, a separate blank measurement for each aliquot must be analyzed. The average blank measurement is then subtracted from each sample measurement.

Calculate the variance (S²) and the standard deviation (S) of the MDL measurements.

Variance $S^2 = 1/(n-1) [\Sigma x^2 - {(\Sigma x)^2/n}]$



Standard Deviation $S = (S^2)^{1/2}$

Where n = number of replicatesX = results of replicates

For Example:

Standard Concentration: 0.2 mg/L

Relicate 1: 0.245 mg/L Relicate 2: 0.227 mg/L Relicate 3: 0.231 mg/L Relicate 4: 0.199 mg/L Relicate 5: 0.207 mg/L Relicate 6: 0.189 mg/L Relicate 7: 0.209 mg/L

Calculate the sum of the squares first:

$$\Sigma x^2 = [(0.245)^2 + (0.227)^2 + (0.231)^2 + (0.199)^2 + (0.207)^2 + (0.189)^2 + (0.209)^2] = 0.327$$

Then, the square of the sum, divided by the number of samples:

$$(\Sigma x)^2/n = [0.245 + 0.227 + 0.231 + 0.199 + 0.207 + 0.189 + 0.209]^2/7 = 0.324$$

Substitute these values into the equation for the variance:

$$S^2 = 1/(7-1)[0.327 - 0.324] = 0.0005$$

The standard deviation is the square root of the variance:

$$S = (0.0005)^{1/2} = 0.022$$

If you have access to Excel, it is much simpler to calculate the standard deviation. The Excel formula is:

=STDEV (A1: A7).

	A	В	С
1	0.245		
2	0.227	= STDEV (A1: A7)	
3	0.231		
4	0.199		
5	0.207		
6	0.189		
7	0.209		

The MDL is then calculated using the standard deviation and the **t** value for a 99% confidence level with n-1 degrees of freedom. The **t** values are found in the following table:

$$MDL = t_{(n-1, 1-\alpha - 0.99)} * S$$

Number of Replicates	Degrees of freedom (n-1)	T value t _(n-1, 1-α - 0.99)				
7	6	3.143				
8	7	2.998				
9	8	2.896				
10	9	2.821				

Example:

S = 0.022 (calculated above) 't value for 7 replicates = 3.143

$$MDL = 3.143 * 0.022 = 0.0629 \text{ mg/L}$$

For this example, analyzing 7 replicates at a concentration of 0.2 mg/L, the calculated MDL is 0.0629 mg/L.

The last step is to make sure the calculated MDL is reasonable and report the data. In order to be an acceptable MDL calculation, the analyzed concentration must be greater than the MDL and less than 10 time the MDL (MDL < Analyzed Concentration < 10 X MDL). In the above example, 0.0629 < 0.2 < 0.629.

There are several items that must be reported with your MDL calculation. The records must include the method number and title, analyst, date analyzed, and the MDL must be reported in the appropriate units. The sample matrix that was analyzed and any method options that could affect the MDL must be reported. Report on the average concentration for the analyte and, if a known concentration was added, report the average percent recovery.

About the author:

Dawn Taylor has been employed by Medina County Sanitary Engineers at the Liverpool WWTP as a Lab technician for 9 years. She previously was employed by private environmental labs for 8 years.

References:

Code of Federal Regulations: CFR

Title 40: Protection of Environment

Part 136 - Guidelines Establishing Test Procedures for the Analysis of Pollutants

Appendix B to Part 136 - Definition and Procedure for the Determination of the Method Detection Limit - Revision 1.11

Note from the Laboratory Analyst Committee:

Keep in mind that the MDL should not be confused with the Practical Quantitation Limit (PQL). The MDL indicates a degree of certainty that the given analyte is present, but not necessarily at a quantifiable level. THe PQL is about five times greater than the MDL and indicates a detection level with a considerable degree of certainty that any reported value is accurate.



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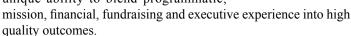
WATER FOR PEOPLE

by Keith Riley

Water For People Hires New CEO

Water For People recently announced the hiring of its new Chief Executive Officer, Ned Breslin. Ned served eight months as their interim CEO before the WFP Board selected him in May, 2009.

Mr. Breslin joined Water For People in January 2006 as the Director of International Programs, where he proved to have a unique ability to blend programmatic,



"It is with great honor that I accept the position of CEO and I look forward to carrying out the current strategic plan that will guide us to the end of 2011," Mr. Breslin stated. "Water For People has a striking mission and vision rooted in innovation and partnership which will help lead the way for the water and sanitation sector to create sustainable change in developing countries."

As Director of International Programs, Mr. Breslin oversaw the organization's expansion into the Dominican Republic, Peru, Rwanda, and Uganda, as well as led the existing programs in Bolivia, Guatemala, Honduras, India, and Malawi. During his tenure, international programs grew from a \$3.3 million budget to a \$6.5 million budget, supporting the provision of safe and sustainable drinking water resources to 91,722 people and sanitation facilities to 92,983 people in 2008.



"Ned has proven himself to be a motivational and charismatic leader over the past months," said Fred Elwell, president of the Water For People board of directors. "We are proud of the fact that he comes from the staff within the organization and proves out both the high quality of our staff and the commitment to run our organization with the mission and beneficiaries at the forefront of our efforts."

Water For People Leadership Workshop

On July 23-24, 2009, on behalf of OWEA, Keith Riley attended the Water For People Leadership Workshop in Denver. Water for People CEO Ned Breslin and 11 staff members attended, along with Board President Elisa Speranza (CH2MHill) and Board Member Paul Bowen (Coca Cola) with 57 people total in attendance.

Thanks to OWEA's Water For People Guardians:

2009 Fund Raisers:

2009	Current Total	\$6,554
Oct. 09	NE OEHA Donation	planned
July 09	NE Section Golf Event	\$1,024
Sterns &	Wheler Donation	\$75
June 09	5S Donation	\$500
June 09	Annual Conf. Auction	\$2,772
June 09	Annual Conf. Meet & Greet	\$313
June 09	Annual Conf. Golf Event	\$1,870

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photos provided by Water for People



WATER AND SANITATION FACTS

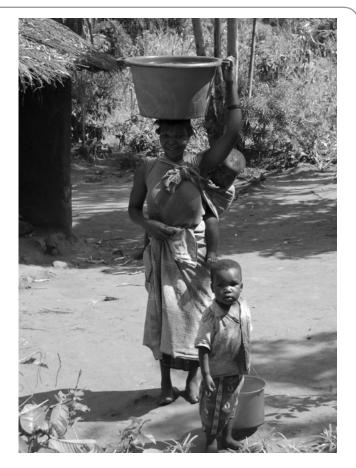
- An estimated 2.5 billion people lack adequate sanitation and 884 million people are without access to safe water. (UNICEF** and WHO, 2008*)
- Globally, more than 125 million children under five years
 of age live in households without access to an improved
 drinking-water source, and more than 280 million children
 under five live in households without access to improved
 sanitation facilities. (UNICEF, 2006)
- 90% of wastewater in developing countries is discharged into rivers and streams without any treatment. (UNDP, UNEP, World Bank, and the World Resources Institute, "World Resources 2000-2001", pg. 25-26)
- Diarrhea can be reduced by 26% when basic water, hygiene, and sanitation are supplied. (World Water Day, 2001)

WATER AND DISEASE

- 4,000 children die each day as a result of water-related illnesses. (WHO, 2004)
- In the past ten years, diarrhea has killed more children than all the people lost to armed conflict since WWII. (WSSCC, 2004*)
- Water is implicated in 80% of all sickness and disease worldwide.
- 19% of deaths from infection and disease worldwide are water related and waterborne diseases contribute to nearly 4 million child deaths. (Rehydration Project, www.rehydrate. org/facts/progress_water.htm)
- At any one time, it is estimated that half the world's hospital beds are occupied with patients suffering from water-related diseases. (WSSC, 2004)
- Diarrhea kills more than three million people each year and chronic diarrhea is a leading killer of people with AIDS. (USAID, 2004***)
- Major diseases transmitted by water: cholera, typhoid, bacillary dysentery, infectious hepatitis, and Giardia. (WHO, "Right to Water," 2003)
- Major diseases caused by lack of water: scabies, skin sepsis and ulcers, yaws, leprosy, trachoma, dysenteries. (WHO, "World Health Report" 2002)
- The average distance that women in developing countries walk to collect water per day is 6 kilometers (4 miles) and the average weight that women carry on their heads is approximately 20 kilograms (44 pounds), the same weight as airport luggage allowance. (WSSCC, 2004)
- Almost 70% of the world's citizens living in poverty are women. (World Water Day, 2001)

WATER AND ECONOMIC GROWTH

- Over 40 billion work hours are lost each year in Africa to the need to fetch drinking water. (WHO, 2004)
- Water-related illnesses cost the Indian economy 73 million working days per year. (WSSCC, 2004)



*The Water Supply and Sanitation Collaborative Council (WSSCC) is a global multi-stakeholder partnership organization that works to improve the lives of poor people. WSSCC enhances collaboration among sector agencies and professionals around sanitation and water supply and contributes to the broader goals of poverty eradication, health and environmental improvement, gender equality and long-term social and economic development. The activities undertaken by WSSCC were recognized in the United Nations General Assembly resolution A/RES/45/181 of 21 December 1990. WSSCC is hosted by the World Health Organization (WHO).

**The United Nations Children's Fund (UNICEF) was created by the United Nations General Assembly on December 11, 1946, to provide emergency food and healthcare to children in countries that had been devastated by World War II. In 1953, UNICEF became a permanent part of the United Nations System and its name was shortened from the original United Nations International Children's Emergency. UNICEF provides long-term humanitarian and developmental assistance to children and mothers in developing countries.

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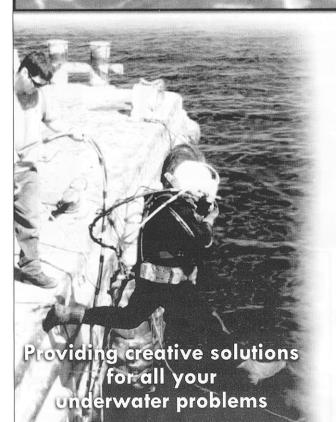
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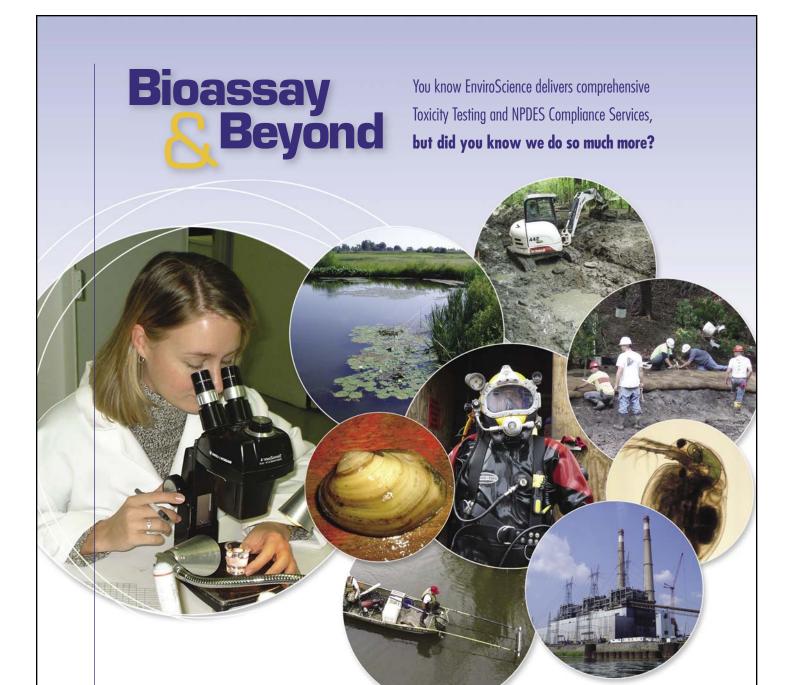
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