

The Ohio Water Table

A Publication of the Water Management Association of Ohio

No. 131 / Quarterly



Extraordinary Commitment

\$1 million part of Ohio Farm Bureau Federation water quality action plan

By Larry M. Antosch, Ph.D., Senior Director Policy Development and Environmental Policy, The Ohio Farm Bureau Federation

Ohio Farm Bureau is investing \$1 million in a comprehensive water quality action plan that is an unprecedented private sector undertaking to improve the state's water.

Ohio Farm Bureau's board of trustees voted during a special meeting to commit significant resources to address agriculture's role in Ohio's water quality challenges. The decision was made in the wake of a two-day drinking water ban for Toledo residents in early August because of harmful algal blooms on Lake Erie. The board placed special emphasis on the Western Lake Erie Basin (WLEB).

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Introducing High School Students to Careers in Water Resources Management

By Carolyn Watkins, Chief, Ohio EPA Office of Environmental Education

Where will the next generation of water resources professionals come from? Would you be willing talk to students at a local school about your career? Would your facility be willing to host a field trip, or let a high school or college student shadow you for a day? Most high school students, and even teachers and career counselors, have little understanding of the wide variety of things water resources professionals do, or the training and skills required.

Ohio EPA has been working with the Ohio State University (OSU) and the Environmental Education Council of Ohio (EECO) to recruit **environmental career ambassadors** who would be willing to talk one on one with students about their careers, make an occasional classroom presentation or participate in local school career days. A brochure about the program is posted at <https://eeco.wildapricot.org/Resources/Documents/ECA%20brochure.pdf> Do you have internships or shadowing opportunities for high school or college students? Could you help recruit other

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Points of Interest:

- The Farm Bureau commits significant resources towards protecting Ohio's water quality.
- Ohio needs career ambassadors to mentor high school students in the environmental field.
- Research on cyanobacteria looks at DNA sequencing.
- WMAO annual conference to focus on the interaction between the economy, people, and water resources.

President's Column

Boris E. Slogar, P.E.



WMAO: A Strong Past, and a Bright Future

“Time and change will surely show how firm thy friendship...W-M-A-O”. It’s got a nice ring to it doesn’t it? Of course, if you’re a Buckeye alum such as myself, you know darn well where that phrase comes from. Nonetheless, I like it for WMAO too. I’m going to take a bit of liberty and borrow a famous quote from a revered Buckeye by the name of Woody Hayes. Coach Hayes smartly said, “you win with people”. So by this point you’re wondering if I’m having an OSU flashback. Well...that might be the case but these phrases came to mind as I thought about this month’s message to our membership. WMAO means many things to many of us, but when you get right down to it just what exactly is WMAO?

Your leadership team spent a day last week reviewing and cleaning out WMAO’s file archive. I could provide you with lots of details about WMAO records and documents which over the years would provide a historical perspective and tell a story or two. The thing is, what jumped out at me most in looking over those old documents, memos, newsletters and such was the trip down memory lane that an old water buffalo like me had remembering so many of the names and faces from our past. OK – so if you’re still with me here’s where I take a jump and bridge to where I’m going with all of this. WMAO is all about and is nothing without the people that make it happen.

Our organization has ebbed and flowed over the past few decades and continues to provide a forum for water resource professionals from all over the state to meet, learn, discuss, lament, ponder, and just plain socialize. From PDH’s, CEU’s, and certifications to thought-provoking banter, we get all of that with WMAO and its Divisions.

Keeping WMAO healthy and poised for the future is something that your leadership team is committed to. WMAO is nothing without the people that make it happen – and to that end we rely upon the WMAO community to keep this organization strong and vibrant. Your Board at its September meeting made a few changes necessary to keep our organization moving forward allowing it to grow and meet the needs of the membership and the divisions which make WMAO so strong.

“WMAO is all about and is nothing without the people that make it happen.”

WMAO relies entirely upon membership dues and conference revenue to stay afloat. We have been running in the red the past few years as rising costs have taken its toll. From a healthy long-term organizational perspective, your leadership team had to make some changes.

Membership dues were modestly increased (\$20) for individual memberships. Organizational-type memberships were also raised to better meet our rising costs while continuing to provide value to our organizational members. We did not raise dues for student or emeritus members. We are fortunate that this is the first membership dues increase in at least a decade.

We also increased conference fees to provide some profit in what had traditionally been a break-even at best event for us. We all recognize the broad range of learning opportunities and professional development hours that the conference provides at what will still remain at the low end of technical conference registration rates. This year’s conference registration fee is \$230.

Our vision for the future is a healthy WMAO with vibrant divisions that meet your needs while growing and providing better opportunities for learning and camaraderie. I hope you’ll understand why we made these necessary changes and we thank you for your continued support. How firm thy friendship – W-M-A-O!

The plan includes two aggressive goals: Farm Bureau will help all qualifying farmers in the Western Lake Erie Basin obtain required fertilizer certification by Earth Day 2015. This April 22 target date will bring farmers into regulatory compliance a full 29 months ahead of the state required deadline.

Further, Farm Bureau will help farmers in the watershed create nutrient management plans, which detail responsible fertilizer use, by Earth Day 2016. These plans exceed state legal requirements.

With thousands of farms in the WLEB, reaching these aggressive goals will require a high degree of cooperation and collaboration with farmers. The Ohio Department of Agriculture and Ohio State University's College of Food, Agricultural and Environmental Sciences are providing regulatory and educational oversight to the fertilizer certification program.

OFBF plans to hire a second staff member to specialize in water quality and nutrient management and expand OFBF's outreach and programming efforts. Fifteen years ago, OFBF set a national precedent by hiring a doctorate level expert to work with farmers on these issues.

*...Farm Bureau is
engaging on a
statewide basis
and will work
closely with
industry
partners...*

Other Farm Bureau action steps announced in the plan include:

- * Partnering with USDA's Natural Resources Conservation Service and various state agencies to establish a network of demonstration farms, which will assist in farmer training and show the public how viable farming and resource protection go hand in hand;
- * Working to gain additional funding for on-farm research projects and dissemination of the study results;
- * Securing funding for farm conservation programs;
- * Seeking resources for septic and rural water infrastructure improvements;
- * Partnering to promote public drinking water system improvements;
- * Supporting county Farm Bureau activities centered on local water issues.

Farm Bureau will continue to share information with public officials about potential legislative and regulatory actions and ramp up communications efforts to encourage a dialogue between farmers and Ohio residents. OFBF also will increase its commitment to Healthy Water Ohio, a broad coalition of conservation, business, university, water suppliers, tourism, public health and farm interests who are developing a long-range strategy to address the state's water resources.

While the emphasis is on watersheds such as Lake Erie and Grand Lake St. Marys, Farm Bureau is engaging on a statewide basis and will work closely with industry partners, Gov. John Kasich, legislators, other farm organizations, conservation organizations and various stakeholder groups.

Research Highlights from State of Ohio Water Resources Center



Figure 1. Sandusky Bay Marina sampling, October 2014.

The Ohio Water Resources Center is a federally authorized center situated at The Ohio State University. We fund State relevant water related research. Below are highlights from a recently completed project conducted by Dr. George Bullerjahn, Professor in the Department of Biological Sciences at the Bowling Green State University. If you are interested learning more about our research projects see the Ohio Water Resources Center webpage at wrc.osu.edu

The focus of the project titled “**Source Tracking of *Microcystis* Blooms in Lake Erie and its Tributaries**” was to identify the geographic sources of toxic, bloom-forming cyanobacteria in Lake Erie. The results can affect the lake management, as bloom events that occur in Lake Erie may rely on intervention strategies implemented upstream.

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A Water Luncheon Seminar

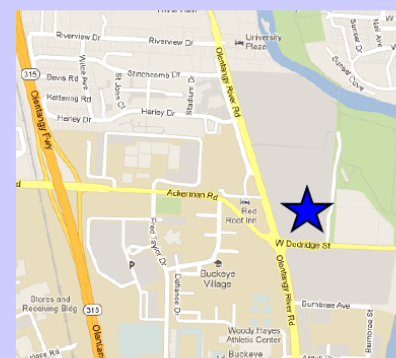


► Presented by:

The Water Management Association of Ohio
and
The Ohio Water Resources Center

October 15, 2014; 11:30 a.m. - 1:00 p.m.

Wilma H. Schiermeier Olentangy River Wetland Research Park,
The Heffner Building, 352 Dodridge St. Columbus, OH 43202



Removing microcystins from our water, a study to identify toxin-degrading bacteria in Ohio lakes

Xiaozhen Mou, Associate Professor; Department of Biological Sciences, Kent State University;

<http://drosophila.biology.kent.edu/users/xmou/>

An increasing number of freshwater lakes in Ohio and worldwide are invaded by cyanobacterial harmful blooms (CyanoHABs). One important harmful effect of CyanoHABs is the production and releasing of dangerous doses of cyanotoxins, mainly microcystins. Microcystins are highly hepatotoxic and have been reported to cause acute and chronic liver cell damage in livestock and human. In this past summer (August 2014), residents of City Toledo and some Michigan cities have received drinking water alert, due to detection of microcystins in public water systems. Development of practical and environmental friendly approaches for microcystin bioremediation is of urgent need. However, little is yet known on natural processes that lead to microcystin degradation. Filling in this important knowledge gap is one of the research focuses in Mou Lab at the Kent State University.

Due to its cyclic structure, microcystins are chemically stable under the environmental range of pH, light radiation and temperature. The removal of this toxin in natural environments is believed to be mainly through biological processes, especially microbially mediated degradation. In the past four years, a number of projects have been done by Mou and her colleagues to identify and culture indigenous bacteria that are involved in microcystins degradation in Lake Erie and the Grand Lake St Marys. Recent results show that Ohio bacteria may use an alternative pathway to transform and degrade microcystins than previously known mlrA gene mediated cleavage.

Please register by October 8, 2014. Late or on-site registrations cost \$5 extra and are not guaranteed a meal. For registered engineers who need Professional Development Hours (PDHs), this presentation offers 1 PDH.

[] WMAO Member (\$15) [] Nonmember (\$18) [] Student (\$7) Special meal? _____

Name _____

Organization _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Please send form and check to: WMAO-Luncheon, 8440 E. Washington St. #206, Chagrin Falls OH 44023.

OR, register online with a credit card at: www.wmao.org

Proceeds from the luncheon benefit the continued operation of WMAO and our scholarships. Sponsorship opportunities are available for those interested in providing extra support. More information on sponsorship is available at www.wmao.org

Careers - Continued from Page 1

career ambassadors? Sign up through OSU's **Environmental Professionals Network (EPN)** at <http://epn.osu.edu>, and check any of the career ambassador options you feel you might be able to help with. Teachers and career counselors will search the database by county to find local ambassadors, and contact you with an invitation to speak or participate in a career exploration day. You always have the opportunity to say no to any request.

OSU's EPN is an online community connecting Ohio professionals in:

- Water resources and water quality;
- Land use and conservation;
- Environmental health and policy;
- Energy, materials and sustainability; and Wildlife and ecosystems.

We encourage you to join EPN. Members share information, announce events and training opportunities, post/seek jobs, internships and volunteer opportunities, and find collaborators for projects. The network is not limited to OSU faculty and alumnae.

If you are willing to take the next step and be a career ambassador, when you set up your EPN member profile, simply check any of the **Career Ambassador** activities you might want to be involved in. Teachers and career counselors in your area may also contact you with a request to schedule a field trip, or whatever activities you selected based on your level of interest and availability. Short on time? Not sure you would be good at speaking to young people? You only sign up for what you're comfortable doing.

If you have questions or would like to help develop the ambassador network, please contact Carolyn Watkins, Carolyn.watkins@epa.ohio.gov.

...EPN is an
online
community
connecting
Ohio
professionals...

Research - Continued from Page 3

The funded work is targeting sampling at Sandusky Bay, the Maumee River and Lake St. Clair cyanobacteria, comparing the bloom-forming genera at each site using high-throughput DNA sequencing of diagnostic target genes. The results from the first year sampling indicated that all toxic *Microcystis* strains found in Lake St. Clair clustered with toxic strains found in samples previously collected from Lakes Erie and Ontario, demonstrating extensive genetic connectivity between the three systems and establishing Lake St. Clair as an important immediate and historical source of toxic *Microcystis* to lakes Erie and Ontario (Figure 2). Furthermore while Lake Erie *Microcystis* genotypes are found in abundance upstream in Lake St. Clair, nearshore sites in Lake Erie (Sandusky Bay and Maumee River) are dominated by microcystin-producing *Planktothrix*.

Researcher: Dr. George Bullerjahn's work is currently focused on enumeration and the physiological performance of phototrophs and ecologically important chemolithotrophs in aquatic systems. His group has identified genes and gene products inducible under nutrient (N, P) limitation and stationary phase conditions, and this work has aided in the development of whole-cell biosensors detecting the bioavailability of nutrients in environmental samples. Additionally, he examines the composition and dynamics of cyanobacterial and nitrifying communities in freshwater environments, focusing primarily on the N and P cycles in the Laurentian Great Lakes.

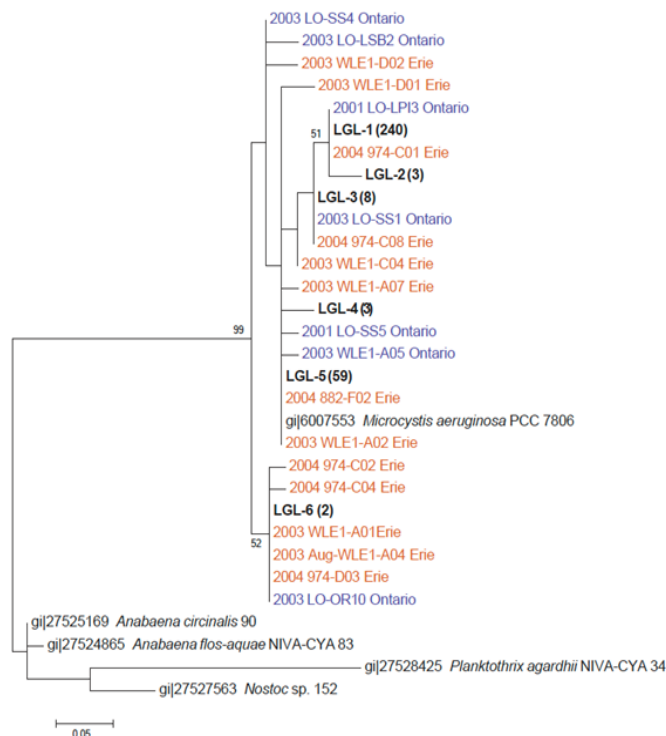
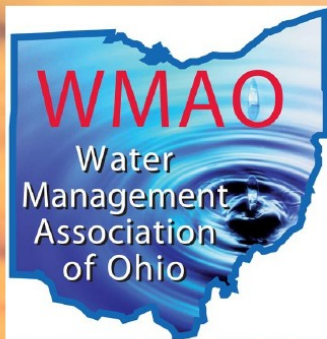


Figure 2. Phylogenetic tree of microcystin synthetase toxin (*mcyA*) gene sequences from Lake St. Clair, compared with environmental sequences from Lakes Erie and Ontario. The Lake St. Clair sequences (LGL) exist as six genotypes that are detected as abundant bloom formers downstream in Lakes Erie (orange) and Ontario (blue).



43rd Annual WMAO Conference
VALUING WATER: Exploring the interactions
between people, markets, and water
November 18 - 19, 2014
Doubletree by Hilton, Worthington/Columbus, Ohio

**NEW
LOCATION!**



Photo courtesy of Barrie Brewer at www.barriebrewerphotography.com

Register online at: www.wmao.org . CEU credit and qualification for Engineering and Surveying CPD will be offered.

Conference registration fee includes attendance at conference sessions, conference informational materials, continental breakfast, lunch, and refreshments. Conference attendees are responsible for arranging their own overnight accommodations at the [Doubletree by Hilton Hotel](#) Worthington/Columbus; 614-885-3334 or 1-800-870-0349. Ask for the WMAO Conference group room rate of \$99/night (includes WiFi internet), single or double occupancy (discounted group rate expires October 27th). An additional charge of \$10.00 per person will apply for the third and fourth person per guest room. Rates are subject to state and local taxes, which are currently 17.50%. Exempt employees can request relief from City of Columbus Hotel Tax by submitting relevant forms ([click here](#)) at hotel check-in.

Please consider becoming an exhibitor or conference sponsor! Visit <http://wmao.org/sponsors>
or register [here](#) as an exhibitor or sponsor.

To obtain a full refund of registration fees paid, cancellations must be confirmed with WMAO in writing by 4:00 p.m. on Friday, November 7, 2014. Should you have any questions about your registration, please contact Dana Oleskiewicz at 330-466-5631 or admin@wmao.org

VALUING WATER: *Exploring the interactions between people, markets, and water*

Tuesday, November 18, 2014

8:00-8:30	Registration and Breakfast / Coffee		
8:30-10:00	Welcome and Introductions		
	Keynote Address - Water Conflicts presented by Dr. G. Dennis Cooke , Professor Emeritus, Kent State University		
10:00-10:15	Break and Exhibits		
	Concurrent 1	Concurrent 2	Concurrent 3
	<i>Mineral Resource Management (MRM)</i>	<i>Ohio Dam Safety Organization (ODSO)</i>	<i>Ohio Lake Management Society (OLMS) - Water Quality</i>
10:15-10:45	Use of Flue Gas Desulfurization By-products for Coal Mine Land Reclamation (Butalia Tarunjit, The Ohio State University)	Integrating the City of Columbus Upground Reservoirs into the Scioto River Water Resource System: Part 1- Record-Setting John R. Doult Reservoir Adds Source (Jeff Brooks, City of Columbus)	Color variation in fishes across turbidity extremes in East Africa (Suzanne Gray, The Ohio State University)
10:45-11:15	Steel Slag Leach Bed Longevity Analysis (Sarah Landers, Raccoon Creek Partnership)	Fly Ash Dam Raising Using Nonconventional Components (Mohammad Ajlouni, American Electric Power)	Mind the Gap: The Federal Funding Gap Between Fundamental Research and Fundamental Solutions for Harmful Algal Blooms (Stephanie Smith, Beagle Bioproducts)
11:15-11:45	Using Abandoned Underground Mine Pools at Heat Pumps (Dina Lopez, Ohio University)	Emergency Warning Systems (Jon Kochis, Fairfield County Emergency Management Agency)	Excess nitrogen stimulates cyanobacteria growth and toxin production (Justin Chaffin, Ohio Sea Grant)
12:00-1:00	Awards Luncheon		
	<i>Education and Outreach</i>	<i>Stream Health</i>	<i>Ohio Lake Management Society (OLMS) - Stewardship</i>
1:15-1:45	Utilizing "Project WET" and "Healthy Water, Healthy People" in the Development of Ohio's Water Conservation Education Program (Leonard Black, Ohio Dept. of Natural Resources)	Headwater Stream Assessment (Elayna Grody, City of Columbus)	Regional differences in attitudes towards water quality (Robert Carlson, Ohio Lake Management Society)
1:45-2:15	The Science – Management Nexus in a Complex Institutional Setting: Promoting Agricultural Best Management Practices in the Western Lake Erie Basin (Pranay Ranjan, The Ohio State University)	Improving In-Situ Sequestration of Contaminants in Sediment Using Ultrasound (Zongsu Wei, The Ohio State University)	Communicating Watershed Facts Using GIS (Jim Swihart, Choctaw Lake Property Owners Association)
2:15-2:45	New funding opportunities for water education (Carolyn Watkins, Ohio Environmental Protection Agency)	Chemical and biological water analysis of varying ages of gravel pits, and the ability of raising Rainbow Trout, oncorhynchus mykiss, in the water bodies (Macgregor Donaldson, SOCHE-Freshwater Farms)	The Good, the Bad & the Ugly, a Community's Response to a Lake in Crisis (Donna Grube, Auglaize & Mercer County Convention & Visitors Bureau)
2:45-3:15	Break and Exhibits		
	<i>Next Generation of Water Professionals</i>	<i>Fishing Industry</i>	<i>Ohio Lake Management Society (OLMS) - Water Assessment</i>
3:15-3:45	Nature vs Nurture: What makes for an effective watershed group leader? (Joe Bonnell, The Ohio State University)	Value and Trends of the Great Lakes Charter Fishing Industry (Tory Gabriel, Ohio Sea Grant)	Exploring Buckeye Lake's Origins, History as a Canal Lake, and Early Lake Studies (Michael Gallaway, Ohio Environmental Protection Agency)
3:45-4:15	Recruiting the Next Generation of Water Management Professionals (Carolyn Watkins, Ohio Environmental Protection Agency)	Valuing the Lake Erie Fishery (Kevin Kayle, Ohio Department of Natural Resources)	Buckeye Lake Update - Presentation of 2014 Data (Jeffrey Bohne, Ohio Environmental Protection Agency)
4:15-4:45	Careers in Water Resources (<i>Students and Professionals</i>)	Impacts of Shoreline Alteration on the Nearshore Fish Community of Western Lake Erie (Christine Mayer, University of Toledo)	Urban Lake Assessment: Water Quality and Lake Condition in Cuyahoga County, Ohio (Julie Wolin, Cleveland State University)
5:00-6:00	Reception and Poster Session		
6:00	Networking and Hospitality		

Wednesday, November 19, 2014

8:00-8:30 **Registration and Breakfast / Coffee**

Concurrent 1

Concurrent 2

Concurrent 3

Wetlands

Nutrient Loading

Public Water Supply

8:30-9:00 Ohio River Basin Wetland Conservation Planning Project (Jerome Iles, The Ohio State University)

The implications of environmental policy on nutrient outputs in agricultural watersheds (Brent Sohngen, The Ohio State University)

Integrating the City of Columbus Upground Reservoirs into the Scioto River Water Resource System: Part 1 - Removal of Low Head Dam and installation of Pneumatic Weir Gate System (Matt Steele, City of Columbus)

9:00-9:30 The Nature Conservancy's Stream and Wetland Mitigation Program: Reducing permitting time and increasing success (Devin Schenk, The Nature Conservancy)

Water quality of Grand Lake St. Marys tributaries and potential for in-lake nutrient processing (Laura Johnson, Heidelberg University)

Integrating the City of Columbus Upground Reservoirs into the Scioto River Water Resource System: Part 2- Multi-Faceted Stakeholder Interactions (Ken Ricker, ms consultants)

9:30-10:00 Environmental causes of methane fluxes from an urban wetland (Timothy Morin, The Ohio State University)

Using Cover Crops and No-Till to Economically Reduce Phosphorus Runoff (James Hoorman, The Ohio State University)

Cost of treating cyanobacteria in drinking water (Dean Reynolds, City of Alliance)

10:00 - 10:30 **Break and Exhibits**

Water Use and Availability

Nutrient Management

Groundwater

10:30-11:00 Healthy Water Ohio – A Strategy for Water Resource Management (Larry Antosch, Ohio Farm Bureau Federation)

Goose Management (Lorraine Krzyzewski, City of Columbus)

10:30-10:50 - Groundwater Resources: An Innovative Succession Plan (Jess White, City of Dayton)

11:00-11:30 Water Withdrawals in Ohio: Recent Trends (Mitch Valerio, Ohio Department of Natural Resources)

The potential for pollutant runoff from surface irrigation of reclaimed wastewater in cold weather (Griffin Joshua, The Ohio State University)

10:50-11:10 - Hydrogeological Investigation of the Timken Faircrest Steel Plant Construction Dewatering Project Stark County, Canton and Perry Townships, Ohio (Curtis Coe & Jim Raab, Ohio Department of Natural Resources)

11:30-12:00 Water Resources Determining Ohio's Future: Water Efficiency Manual for Industrial, Commercial, and Institutional Facilities (Serena Alexander, Cleveland State University)

Sustainable Water Quality Management and Public Health Protection by Urban Wetlands (Tsong-Ta (David) Hsu, The Ohio State University)

11:10-11:30 - Chloride and Nitrate Trends in Ohio's Public Water System Wells (Michael Slattery, Ohio Environmental Protection Agency)

11:30-11:50 - Groundwater Availability in the Appalachian Plateaus (Kurt McCoy, U.S. Geological Survey)

12:15-1:00 **Lunch and WMAO Annual Meeting**

1:00-1:30 **WMAO Division Annual Meetings or Exhibits**

Climate Change

Watershed Management

Stormwater (OSWA) and Floodplain Management (OFMA)

1:45-2:15 Modeling Potential Impacts of Climate Change on Runoff in the Upper Scioto River Basin - Part 1 (Greg Koltun, U. S. Geological Survey)

What do markers tell us about septic systems in agricultural watersheds? (Christopher Spiese, Ohio Northern University)

City of Mansfield Flood Hazard Mitigation Initiative (Miles Hebert & Shawn Arden, EMH&T)

2:15-2:45 Sustaining Scioto: Investing Today Preserving Tomorrow: Modeling Potential Impacts of Climate Change on Runoff in the Upper Scioto River Basin - Part 2 (Greg Koltun, U.S. Geological Survey)

Ohio Watershed Plan Endorsement 2.0 (Greg Nageotte, Ohio Department of Natural Resources)

2:45-3:15 Adaptive Management Planning for Climate Change: Addressing Potential Impacts on Infrastructure Planning and Design (Lisa Jeffrey, Brown and Caldwell)

Discharge Quality Water From Dairy Manure: A Summary Of The McLanahan Nutrient (Renee Schrift, McLanahan Corporation)

Bolivar Dam - Innovative Seepage Control Measures (Kenneth Woodard, U.S. Army Corp of Engineers)

3:15-3:30 **Break and Exhibits**

3:30-5:30 **Ice Cream Social and viewing of documentary "Chasing Ice"**



43rd Annual WMAO Conference

VALUING WATER: Exploring the interactions between people, markets, and water

November 18 - 19, 2014

Doubletree by Hilton, Worthington/Columbus, Ohio

**REGISTER
TODAY!**



Please register online*:

www.wmao.org

*Use a MasterCard, Visa, Discover, AMEX, eCheck, or by purchase order or invoice.

OR

Scan and forward form to: admin@wmao.org

Mail in registration form:
WMAO - Conference
8440 E. Washington St. #206
Chagrin Falls, OH 44023



Questions?

Contact:
Dana Oleskiewicz
330-466-5631
admin@wmao.org

1. REGISTRATION FEE (includes meals) - Please check the appropriate fee category below.

Walk-in registration: Add \$25 to fee when registering on day of event.

Full Registration (Tues - Wed)

WMAO Member	[]	\$230
Nonmember**	[]	\$270
Student	[]	\$50
Emeritus (member)***	[]	\$100

One Day (select Tue or Wed)

[]	\$135	[]	Tuesday
[]	\$150	[]	Wednesday
[]	\$35		
[]	\$70		

[] Check here if you will only be presenting and will not be attending any other sessions or conference activities including meals (no registration fee).

** [] Check here if you would like \$40 of this registration fee applied towards a discounted 2015 WMAO membership (one time offer per member).

*** Must be retired from water profession and 65 years of age with 5 years of membership in WMAO (subject to verification).

2. REGISTRANT INFORMATION (submit a form for each attendee)

Name _____ Job Title _____

Company / Affiliation _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Will you be attending the reception with hors d'oeuvres on Tuesday? [] yes [] no **Total Fees**

Please indicate any special dietary requirements _____ Fee from above: _____

Additional Meal Tickets for Guests: Tuesday, November 18 - Awards Luncheon \$30 x _____ = _____

Wednesday, November 19 - Board Meeting Luncheon \$25 x _____ = _____

3. METHOD OF PAYMENT - please check appropriate box below

- [] My registration fee is enclosed (check # _____)
 [] Purchase order # _____ [] Please invoice me
 [] Please charge my credit card:

Name on card _____

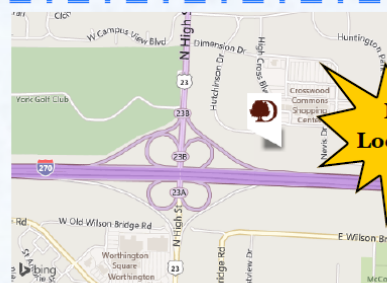
Card number _____

Expiration Date _____ Security Code _____

Email for receipt _____

Signature _____

TOTAL AMOUNT ENCLOSED \$ _____



Doubletree by Hilton Hotel, Worthington/Columbus

Conference Room Rate: \$99/night (until Oct. 27th)
 175 Hutchinson Ave., Columbus, OH
 614-885-3334 or 1-800-870-0349

WATER MANAGEMENT ASSOCIATION OF OHIO

8440 E. Washington St. #206
Chagrin Falls, OH 44023

330-466-5631, admin@wmao.org
Dana Oleskiewicz, Administrative Director

www.wmao.org

The Water Management Association of Ohio (WMAO) is the one organization dedicated to all of Ohio's water resources.

VISION: The Water Management Association of Ohio will be the most effective and respected independent water resources organization in Ohio.

MISSION: The Water Management Association of Ohio promotes the comprehensive understanding, conservation and multifaceted use of Ohio's water resources.

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2014 WMAO Executive Board of Directors

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