

The Ohio Water Table

A Publication of the Water Management Association of Ohio

No. 135 / Quarterly



Healthy Water Ohio Coalition Issues Strategic Plan

Larry M. Antosch, Senior Director Policy Development and Environmental Policy, Ohio Farm Bureau Federation

On September 3rd, an unprecedented coalition of Ohio water stakeholders issued its strategic plan for maintaining and strengthening the state's water resources. The Healthy Water Ohio (HwO) coalition's recommendations aim to preserve Ohio's valuable water assets for those who rely on them for consumption, recreation, food production and commerce.

The HwO plan identifies specific needs in the areas of policy, research, infrastructure and education. It also proposes the creation of a public-private Ohio Water Trust, funded at \$250 million annually to help enact the plan's recommendations. A portion of the trust funding could be accrued through the sale of state bonds.

Over the 21 month effort, the coalition hosted dozens of fact finding events and discussion meetings, heard from subject matter experts, engaged with government leaders and collected public input via a statewide survey. A 16-member steering committee representing conservation and environmental advocacy, business and industry, research and education, municipal water systems, agriculture, finance, public health, recreation and tourism and lawn, horticulture and turf management analyzed the input collected from the over 1,200 individuals to prepare the final recommendations.



Healthy Water Ohio
A STRATEGY FOR WATER RESOURCES MANAGEMENT.

The report's policy plan emphasizes the value of Ohio's existing watershed districts and recommends, when possible, the use of voluntary water quality and quantity management practices, encourages incentives and collaboration, calls for equitable and reasonable regulations and advocates for improved coordination among government agencies.

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Points of Interest:

- A call to get involved in WMAO is made by WMAO President, Boris Slogar.
- Ohio embarks on a strategic plan to protect our water resources.
- Bacteria and methane measured in wells to establish baseline information for potential impact from the oil and gas industry.
- Ohio Lake Management Society fully integrated with WMAO.

President's Column

Boris E. Slogar, P.E.

A Call to Action – and Elvis has Left the Building



According to the US Bureau of Labor Statistics (Sep 2014 data), there are 67,586 volunteers across the US with a bachelor's degree or higher. Of that group, 26.8% volunteered for an educational purpose while 2.5% volunteered for an environmental purpose. Further, 11.8% volunteered to provide professional or management assistance including serving on a board. Using that last statistic, there are 7,975 volunteers serving on a board somewhere in the US.

I also found a statistic released by the Corporation for National and Community Service which ranked Ohio 30th in the country in 2013 in volunteerism. So, to extrapolate this outward with little regard for statistical accuracy, one can conclude that within the Buckeye State, we are slightly below average at best with regards to volunteering. So where exactly am I going with this?

We've got a great board here at WMAO. The thing is, many of us are - how can I best say this in these sensitive times, becoming more aware of our need for fiber and plenty of sleep. Hey, there are plenty of miles left in the tank (speaking for myself), but to borrow a phrase from Whitney Houston, "I believe the children are our future..." OK, in this regard, I am thinking more of younger professionals full of new ideas, perspectives, and plenty of energy.

This isn't just a WMAO thing either. I happen to be honored to serve on a few other boards and the same can be said there too. I am noticing an alarming proliferation of bifocals on the boards that I serve on.

I've been a member of WMAO since 1989 and have served on the board much of that time. As my time as President of WMAO wanes (cue Old Lang Syne), I am thankful for the many great people that make WMAO what it is. But I can't help but notice a lack of younger professionals in our midst. Maybe this is a Millennial thing? At any rate, we need to reach out to the younger professionals and encourage them to get involved.

"...we need to reach out to the younger professionals and encourage them to get involved."

Please consider bringing a young planner, scientist, engineer, or other professional into an organization such as WMAO. Let's share with them our knowledge and experiences and learn a thing or two from them as well. This will certainly be a good thing! Is it me, or does this font look small?

As this is my last newsletter article as president, allow me to close by encouraging you all to attend our annual conference November 17th and 18th in Columbus at the DoubleTree Hotel in Worthington near I-270 and US 23. I also look forward to working with president-elect Alex Covert from USGS as the Covert Administration takes the helm at WMAO. That sounds so black-ops doesn't it?

Wishing you all the best and looking forward to seeing you in November....Boris

Healthy Water Ohio Coalition Issues Strategic Plan

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The HwO plan's research proposals include identifying knowledge gaps, establishing a formal Ohio water research group and improving coordination of research data.

The coalition agreed that significant financial resources will be needed to sustainably meet current and future water needs and enhance the state's economy and quality of life. The proposed Ohio Water Trust would be governed by a diverse stakeholder board, which would identify and provide financial support for on-the-ground water related projects. Possible projects could be those that improve water quality, reduce stormwater and other flooding, enhance agricultural nutrient management, reduce drainage maintenance and dredging costs, assist voluntary regulatory compliance and enhance habitat and recreational use.

Immediate next steps for the Healthy Water Ohio coalition include the creation of the Ohio Water Trust and the pursuit of capitalization funds. The full report is available at HealthyWaterOhio.org.

Nominations for WMAO Officers and Board of Directors

The Water Management Association of Ohio will be convening elections during its Annual Meeting Luncheon on Wednesday, November 18, 2015 in conjunction with the WMAO Annual Conference.

Positions to be filled include: President Elect, Treasurer , Secretary

WMAO Board directors and officers serve two-year terms, which begin immediately following elections on November 18, 2015. Details regarding the duties of the above-listed positions, and the governance regulations of WMAO are described in the current WMAO Code of Regulations available for download [here](#).

Note that all WMAO directors and officers must be members of WMAO. You may nominate yourself or another member by emailing Stuart Ravary at stuartravary@stoneenvironmental.com. Nominations may also be offered from the floor during the Annual Meeting Luncheon.

Job Posting at ODNR in Columbus

The Ohio Department of Natural Resources is seeking applicants for a Natural Resources Engineer full-time, permanent position located in Columbus. State salary range starting at \$72,134 annually. Application submittal deadline is October 27, 2015. For more information, see job posting [here](#) or search on careers.ohio.gov.

A Water Luncheon Seminar



► Presented by:

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

October 14, 2015; 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



From St. Rt. 315, exit east onto Ackerman Rd, continue past Olentangy River Rd onto W. Dodridge St, then left into Park driveway.

Developing a Comprehensive Hydroclimatic Database for the Midwest and Great Lakes Region: 1915-2100

Alan F. Hamlet, Assistant Professor, Department of Civil & Environmental Engineering & Earth Science, College of Engineering, University of Notre Dame.

A detailed understanding of the Great Lakes water balance remains problematic, primarily because only very limited data for overlake precipitation and evaporation exists. Models to address future changes in a comprehensive and physically based manner are not currently available. To provide an improved understanding of the future impacts to the Great Lakes, we argue that high-resolution regional climate models need to be dynamically coupled to the Great Lakes so that the complex interactions between the lakes and the atmosphere (precipitation, evaporation, ice, wind) can be more accurately modeled. Such models are expected to improve estimates of Great Lakes water levels in the future and provide detailed projections of future winter storms that produce lake effect snow and extreme summer convective storms which have caused severe impacts to Midwest cities. Access to high-resolution climate models coupled to the Great Lakes would also provide detailed forcing data for oceanographic models of the Great Lakes that are difficult to obtain from other sources.

Please register by October 9, 2015. 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, 8584b 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

Ohio Floodplain Management Association



HAPPY 20th ANNIVERSARY OFMA!

Shawn Arden, OFMA President

Earlier this summer, the Ohio Floodplain Management Association (OFMA) marked its 20th anniversary at the 2015 Ohio Statewide Floodplain Management Conference (OSFMC). It is hard to believe two decades have passed since the association was established. Today, OFMA's mission – to promote sound and effective floodplain management - remains ever so important. We thank the founding members of OFMA for their vision and dedication!

Speaking of the OSFMC, approximately 180 floodplain management stakeholders attended this year's conference, which was themed "*Advocating for Floodplain Management*". The Keynote Address was delivered by David Stearrett, Flood Insurance Advocate and lead within the Federal Emergency Management Agency's (FEMA) newly created Office of the Flood Insurance Advocate. His remarks apprised attendees of development of the Advocate's Office, changes to the National Flood Insurance Program (NFIP) and FEMA's priorities. In addition, Association of State Floodplain Managers (ASFPM) Executive Director, Chad Bergin, provided an update on ASFPM's activities, Executive Order 13690, and the Homeowner's Flood Insurance Affordability Act (HFIAA).

The OFMA Managing Board also held an election during the OSFMC for three Member-at-Large positions. Congratulations to Jerry Brems, Mike Mihalisin, and Matt Whitehead on your election to the Managing Board. We look forward to your upcoming service with the Association!

The OSFMC is a cooperative effort among the Ohio Department of Natural Resources, FEMA, and OFMA. Thank you to all of the sponsors and the conference committee for making the 2015 OSFMC a success!

Finally, OFMA looks forward to seeing our members and stakeholders at the WMAO Fall Conference in November. OFMA will lead a Floodplain Management Session during the conference. Please refer to the Conference literature for additional information.

The Ohio Floodplain Management Association is a Division of the Water Management Association of Ohio and a State Chapter of the Association of State Floodplain Managers. For additional information, please contact Shawn Arden, OFMA President, at ohiofma@gmail.com.

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floodplain
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Research Highlights from State of Ohio Water Resources Center

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 funded via OWDA subaward, conducted by Dr. Paula Mouser, Assistant Professor in the department of Civil, Environmental and Geodetic Engineering at the Ohio State University and Mary Ann Thomas, researcher from USGS, Ohio Water Science Center. If you are interested learning more about our research projects see the Ohio Water Resources Center webpage at wrc.osu.edu.

The results from their project titled “**Characterizing Methane in Geologic Formations of Ohio; Phase 1: Seed Grant to Investigate Natural Biogenic Methane from Domestic Wells Unaffected by Oil and Gas Production**” will serve as a starting point for compiling information about “baseline” methane in Ohio subsurface formations. This information could ultimately be used to assist investigations of stray gas complaints.

This information could ultimately be used to assist investigations of stray gas complaints.

Eleven domestic wells in southwestern and central Ohio unaffected by shale gas development were sampled (Figure 1) and methane was detected in all raw water samples. The volume percent of methane was 0.03-0.7 % for 7 samples and 61-92 % for 4 samples. The isotopic signature of methane was determined for the 4 samples with higher methane concentrations, and results were consistent with biogenic methane. During 2014, further DNA analysis and sequencing were conducted. The number of species (richness) identified within samples ranged from 33-97 when subsampled to 250. The PR_239 site was the most unusual from all other sites as it was dominated by the presence of OTUs within the *Firmicutes* (Figure 2 - Page 7). All other sites were dominated by various *Proteobacteria* (orange in Fig 2). Other dominant phyla include the *Nitrospirae* (nitrifiers), *Actinobacteria*, and candidate phylum OP3. The presence of certain *Euryarchaeota* was notable across the PR sites, while contributing on average less than 0.2% of the other sites. This group contains the methanogenic orders of microorganisms.



Figure 1. Groundwater sampling.

Researcher Profile: Dr. Paula Mouser investigates microbial-environmental interactions in engineered subsurface systems ranging from floodplain aquifers and drainage channels to granitic bedrock aquifers and deep hydrocarbon shale. She is also interested in how microorganisms interact with material surfaces, such as membranes used for water treatment and casing used for shale gas wells. Applications of such research include improving detection and remediation strategies for the protection of water resources, and optimizing technologies for water treatment.

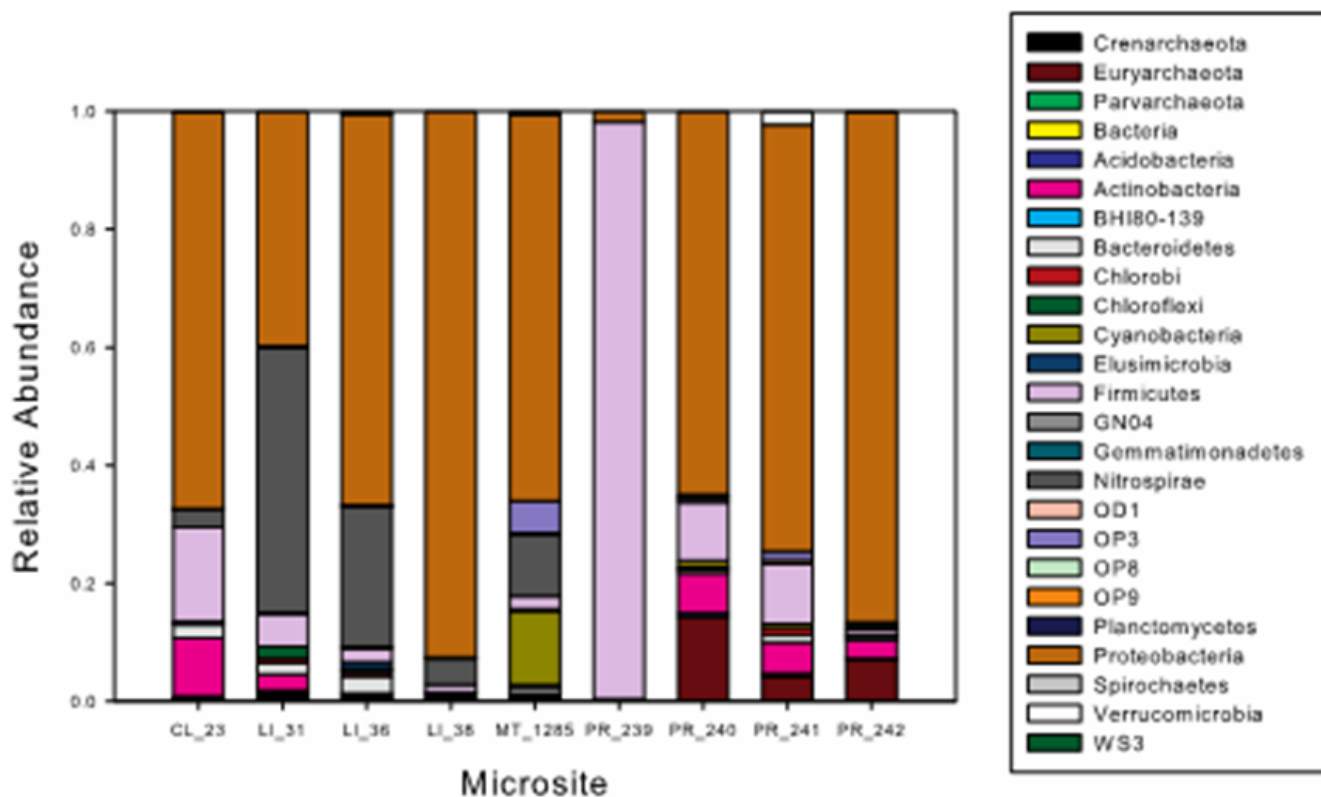


Figure 2. Bar chart of the relative abundance of Phyla OTUs detected in the survey.



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Ohio Lake Management Society



Eugene Braig, OLMS President

It is now time for reflection. This is likely to be my last such address to you, my lovely OLMS-ians; my tenure as president of the Ohio Lake Management Society (OLMS) and Director of Lake Management on the governing board of the Water Management Association of Ohio (WMAO) is coming to an end [wiping a single tear from the corner of each eye, one for each title].



Before I lose the majority of my readership in waxing nostalgic below, I want to first issue a call to service. Several of our offices have terms coming to a close with our annual meeting: president, treasurer (much easier following the merge of our administration and finances with WMAO), and two at-large manager positions. (A quick word of thanks to our outgoing board members: Doug Kane, Milt Miller, Marty Hilovsky, and—dare I say it—me.) Marty has been generous enough to offer his service for another term leaving three positions in desperate need of nominations before our November elections. I personally feel that our managing board is best served by a diversity of professional interests. I work in academia (specifically, university extension services); however, the input of agencies and municipalities, environmental consulting firms, pond-/lake-management professionals, lake-management committees affiliated with homeowners associations, etc. ad infinitum is every bit as valuable here as that of academics. I will be actively recruiting in the week(s) to come, but **I also encourage anybody whose professional lives intersect limnological interests to self-nominate by contacting me at your earliest convenience.**

...essentially reduced our own administrative labors and gave our pet applied-limnological interests much greater exposure...

Now, back to nostalgia: I assumed the OLMS presidency shortly after the merger that transformed us from a stand-alone professional society into a division of WMAO. In doing so, I had the opportunity to serve the organization by presiding over two related and substantial changes to follow. 1) Our annual meeting and conference merged with WMAO's. Abstracts submitted for presentation to OLMS now constitute a day-long, popular-to-overflowing session at WMAO's annual conference each autumn. Of course, I encourage attendance of the OLMS session at WMAO's 44th annual conference (<http://wmao.org/2015/08/44th-annual-wmao-conference/>), especially if you happen to have submitted an abstract and will be presenting on site. 2) The OLMS newsletter *Shorelines* has been absorbed into WMAO's *Water Table*. Again of course, I encourage you all to contribute by submitting your lakey articles to Dana Oleskiewicz. Both changes essentially reduced our own administrative labors and gave our pet applied-limnological interests much greater exposure among Ohio's aqua-professionals.

Our parent organization, WMAO, also made a substantial change in this span. I advise a student group with an aquatic-science focus at The Ohio State University, TerrAqua. Two of TerrAqua's recent past-presidents, Rachel Maltese (now studying at Lewis and Clark Law School in Oregon) and Emma Grace Matcham (still at Ohio State), led an effort to dissociate from a previous professional affiliation and seek a new one. A small committee of WMAO board members, led by Education Director Joe Bonnell, responded by amending WMAO's bylaws in 2014 to create a mechanism to recognize affiliate student organizations (ASO) within any of Ohio's college-level academic institution. TerrAqua has become WMAO's first ASO. As part of our educational function, as I have in the past, I encourage all OLMS members with academic affiliations to recruit student groups with limnological interests to consider affiliation with WMAO. One might say, "I believe the children are our future," but I won't just because that seems a little too clichéd.

Finally, OLMS's Citizen Lake Awareness and Monitoring program (CLAM: <http://olms.org/citizen-lake-awareness-and-monitoring/>) "provides an opportunity for Ohio citizens to take an active role in learning about aquatic ecology, lake and stream water quality, and watershed management. CLAM also documents the water conditions in Ohio and offers excellent networking for people and local environmental organizations." The management of CLAM has now been fully transferred to Susan James, Mohican School in the Out-of-doors, Inc. In addition to coordinating volunteers throughout the state, Susan monitors Pleasant Hill Lake in north-central Ohio. Under the auspices of CLAM, TerrAqua has adopted Columbus' Hidden Lake, a local quarry lake managed by a homeowners association. After several years and a substantial turnover of professional staff at The Wilds, eastern Ohio's free-range zoo, I have re-begun an effort to collaborate with their Restoration Ecology program. I'm planning to take on several lakes on their grounds in accordance with their managers' priorities. ...And a word of sincerest thanks to all our long-term CLAM volunteers! I encourage all of OLMS to follow the above link and do similar or consider donating to the program.

In summary, get and stay active because lake management is both groovy and important:

- self-nominate to OLMS's open offices;
- attend our session at WMAO's upcoming annual conference;
- submit limnological articles to the *The Ohio Water Table* newsletter;
- foster the future of the profession by mentoring students and young professionals and encouraging student organizations to affiliate with WMAO; and
- consider contributing, either actively or financially, to CLAM and citizen-science wherever it intersects lake management.

I've had a great time in this role. Please feel free to stay in touch. *sniffle*





44th Annual WMAO Conference
MOVING THE NEEDLE: Policies, Programs, and People that Drive Change
November 17 - 18, 2015
Doubletree by Hilton, Worthington/Columbus, Ohio



The 44th Annual Water Management Association of Ohio Annual Conference will present what is happening in Ohio that makes a difference for water resources by highlighting policies, programs, and people that drive change. We will focus on projects that effectively define the problem, minimize risk from poor water quality and excess or low water quantity, describe new approaches to mitigation, and show positive results. This conference provides a framework for further discussion on how to measure success, provide solutions, improve accountability, stimulate growth, encourage a systems approach, and promote sustainability and resiliency.

To view the conference agenda, visit: <http://wmao.org/2015/08/44th-annual-wmao-conference/>

Register online at: www.wmao.org or use the enclosed registration form. CEU credit and qualification for Engineering and Surveying CPD offered.

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



44th Annual WMAO Conference
MOVING THE NEEDLE: Policies, Programs, and People that Drive Change
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TODAY!**



Please register online*:

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*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
8584 E. Washington St. #206
Chagrin Falls, OH 44023

Questions?

Contact:
Dana Oleskiewicz
330-466-3631
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.

	<u>Full Registration (Tues - Wed)</u>	<u>One Day (select Tue or Wed)</u>
WMAO Member	<input type="checkbox"/> \$230	<input type="checkbox"/> \$135 <input type="checkbox"/> Tuesday
Nonmember**	<input type="checkbox"/> \$270	<input type="checkbox"/> \$150 <input type="checkbox"/> Wednesday
Student	<input type="checkbox"/> \$50	<input type="checkbox"/> \$35
Emeritus (member)***	<input type="checkbox"/> \$100	<input type="checkbox"/> \$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 17 - Awards Luncheon \$30 x _____ = _____

Wednesday, November 18 - Board Meeting Luncheon \$25 x _____ = _____

3. METHOD OF PAYMENT - please check appropriate box below

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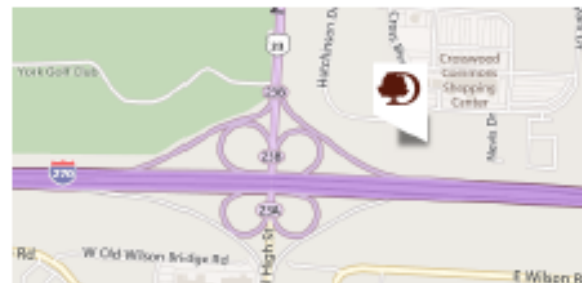
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TOTAL AMOUNT ENCLOSED \$ _____



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

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 6, 2015.

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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