November 2016

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Upcoming Events

November 8
ASCE Luncheon (note different location)

Younger Members Meeting

November 17
EWRI St. Louis Monthly Speaker Series Webinar

YMG MSD Plant Tour

EWRI St. Louis Monthly Speaker Series Webinar

December 10
GI MSE Wall Webinar

December 10
YMG Operation Food Search

December 12
ASCE Holiday Social

November Luncheon

Tuesday, November 8, 2016
Note change of location for this month only:
NORMAN K. PROBSTEIN GOLF COURSE @ FOREST PARK
6141 Lagoon Drive, St Louis MO 63112

"Hazardous Algal Blooms and Cyanotoxins: Developing Guidance for Drinking Water Utilities"

Bluegreen algae or cyanobacteria are becoming a common occurrence in U.S. drinking water supplies. In 2015, the U.S. EPA set new health advisories (HA) for total microcystins and cylindrospermopsin of 0.3 and 0.7 µg/L, respectively, for the most sensitive populations. Utilities are challenged by meeting these HAs due to many factors. In this talk, strategies and tools (e.g., AWWA CyanoTOX computational resource) for utilities to successfully meet treatment objectives for HABs in their water supplies will be presented and discussed.

Speaker

Dr. Adams is the Oliver Parks Professor of Engineering in the Department of Civil Engineering at Saint Louis University. He is a Fellow of ASCE and a registered professional engineer. Dr. Adams conducts research in the Water Quality and Treatment Laboratory at SLU on the oxidation and sorption processes for drinking water contaminants (including pharmaceuticals, cyanotoxins, taste-and-odor compounds, disinfection byproducts, and other compounds). His research group uses a fundamental approach to address water quality and treatment issues to develop actionable guidance for utilities in Missouri and beyond. His group also focuses on developing point-of-use treatment technology for use in developing nations. Dr. Adams is active in AWWA and other professional organizations.

Time, Date, Location

11:30 am to 1:00 pm, November 8, 2016, NORMAN K. PROBSTEIN GOLF COURSE @ FOREST PARK, 6141 Lagoon Drive, St Louis MO 63112. Registration starts at 11:30am and lunch is served at 11:45. The program will begin promptly at 12:00pm. One (1) PDH available.

Cost

$15/person, students and members in transition $5 (checks payable to ASCE).

Registration

Register and pay online at https://goo.gl/fiy5Xy. Please register by 3:00pm, Thursday, November 3. Call The Engineering Center for reservations by noon the Thursday before the event: 314-533-9333, or fax: 314-533-9336, or email: info@engineersclub.net. ASCE is charged for all reserved lunches. If you’ve signed up and can’t make it, please cancel by Thursday before the meeting or we may have to charge you for the meal.
The St. Louis Section Chapter of EWRI also continued its success as a technical institute engineering. This event also featured exhibits and interactive stations for students to learn about other technologies. NSBE members go door to door in underserved Black communities due to a scheduling conflict at the Engineers Club. One of the events the Younger Members Group continued their hard work from the year before and had another successful year in 2015-2016. Just a few of the events the Younger Members Group hosted or participated in included Operation Food Search, the St. Louis Science Center Engineering Career Day, and Rebuild Together. One event that was very successful was the “Meet a Professional Day Luncheon”. The luncheon matched 24 ASCE Student Chapter Members from St. Louis University, Southern Illinois University Carbondale, and Southern Illinois University Edwardsville with local professionals in their same field of civil engineering. The pairs had free discussion time to discuss careers, different fields of civil engineering, and their goals. The event was very successful.

The Committee for Diversity & Inclusion also had a very successful and busy year, as evident by their fourth consecutive ASCE Section and Branch Diversity Award. The Committee continued to promote the Society’s goals of supporting and encouraging the equitable opportunity for participation of all people within the civil engineering profession. A few of the events the Committee for Diversity & Inclusion participated in were a joint luncheon with ASCE and National Society of Black Engineers (NSBE), a job shadowing program and Summer Engineering Experience with Cor Jesu High School, a Build-A-Thon with the Girl Scouts, and Baden Enrichment STEM Center Open House. The St. Louis Section also sponsored and participated in the NSBE Walk for Education held at Florissant Valley Community College. The goal of the event was to increase awareness of the opportunities available through education particularly in the STEM field and to shatter myths about African-Americans in math, science, engineering, and other technologies. NSBE members go door to door in underserved Black communities and hand out information on college, scholarship information, SAT/ACT preparation tools, NSBE and share information on the benefits of majoring in STEM fields. The event also featured exhibits and interactive stations for students to learn about engineering.

The St. Louis Section Chapter of EWRI also continued its success as a technical institute by being named the 2016 Outstanding Technical Group/Institute Chapter by the ASCE/EWRI Local Activities Council. The St. Louis Section EWRI hosted the Water, Presidents Message

Matt Harper

I would like start off by reminding everyone that the November luncheon will be held at the Forest Park Golf Course due to a scheduling conflict at the Engineers Club.

October was a very busy month for the officers and committee chairs becoming acclimated to their positions. I led my first Board meeting and hosted our first monthly luncheon of the ASCE year. I would like to thank Michael Smith for presenting at the October luncheon on short notice. He gave a very interesting presentation on “What Civil Engineers should know about Property Boundaries. The first Board meeting of the year is always a long one because it includes reviewing the proposed budget for the year.

One of the first tasks as President is to complete and submit the Outstanding Section and Branch Award application. This includes providing information about the St. Louis Section and the many activities the committees and members participate in throughout the year. As I completed the application, I found myself very proud to be a part of an organization whose members and committee chairs volunteer so much of their time and effort to the Section and to promote and advance the civil engineering profession.

One of the committees I’d like to point out is the Younger Members Group. The Younger Members Group continued their hard work from the year before and had another successful year in 2015-2016. Just a few of the events the Younger Members Group hosted or participated in included Operation Food Search, the St. Louis Science Center Engineering Career Day, and Rebuild Together. One event that was very successful was the “Meet a Professional Day Luncheon”. The luncheon matched 24 ASCE Student Chapter Members from St. Louis University, Southern Illinois University Carbondale, and Southern Illinois University Edwardsville with local professionals in their same field of civil engineering. The pairs had free discussion time to discuss careers, different fields of civil engineering, and their goals. The event was very successful. The Committee for Diversity & Inclusion also had a very successful and busy year, as evident by their fourth consecutive ASCE Section and Branch Diversity Award. The Committee continued to promote the Society’s goals of supporting and encouraging the equitable opportunity for participation of all people within the civil engineering profession. A few of the events the Committee for Diversity & Inclusion participated in were a joint luncheon with ASCE and National Society of Black Engineers (NSBE), a job shadowing program and Summer Engineering Experience with Cor Jesu High School, a Build-A-Thon with the Girl Scouts, and Baden Enrichment STEM Center Open House. The St. Louis Section also sponsored and participated in the NSBE Walk for Education held at Florissant Valley Community College. The goal of the event was to increase awareness of the opportunities available through education particularly in the STEM field and to shatter myths about African-Americans in math, science, engineering, and other technologies. NSBE members go door to door in underserved Black communities and hand out information on college, scholarship information, SAT/ACT preparation tools, NSBE and share information on the benefits of majoring in STEM fields. The event also featured exhibits and interactive stations for students to learn about engineering.

The St. Louis Section Chapter of EWRI also continued its success as a technical institute by being named the 2016 Outstanding Technical Group/Institute Chapter by the ASCE/EWRI Local Activities Council. The St. Louis Section EWRI hosted the Water,
Water, Everywhere event at the Engineers Club of St. Louis, co-sponsored the St. Louis Earth Day Symposium for the 16th time, and represented the Section at the Local Section and Branch Workshop at the EWRI 2016 World Water & Water Resources Congress in West Palm Beach, Florida. They also had another successful year with their webinars series held jointly with Missouri University of Science & Technology.

I believe the success of the Section is a team effort, and after completing the Outstanding Section and Branch Award application this past month, I am proud to be the President of the St. Louis Section team. Thank you to all the Board members and committee chairs for your commitment to ASCE.

Sincerely,

Matt Harper, P.E.

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**Save the date!**

*Please save the date of Monday, December 12, 2016 for the 2016 ASCE Holiday Social.*

*The official invitation with registration details will be posted in the December newsletter.*

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**Administration Openings**

*ASCE St. Louis Section is seeking dedicated members to open chair committees as briefly described below, with the opportunity that the incoming chair will “make it their own.”*

**Newsletter Editor** – The Newsletter Editor will be responsible for producing and publishing the ASCE St. Louis Section monthly newsletter and mid-monthly updates, distributed electronically via email to Section membership. The Newsletter includes announcements regarding activities of the Section and furnishing news, both professional and personal, of special interest to the members. The Editor’s primary goal is to communicate to all local members news of past, present, and future activities and programs for the purpose of stimulating greater interest and participation in Section affairs.

**Membership Champion** - The Membership Champion will be responsible for promoting membership in ASCE of all qualified civil engineers, and to encourage active membership in the local section by all ASCE members in the area. Responsibilities also include outreach to non-member civil engineers in the area, inviting them to Section meetings, and encouraging them to join and become active in ASCE.

**Public Information Coordinator** – The Coordinator will be responsible for increasing public awareness of ASCE and civil engineering within the local community and to gain recognition of the Section within the Society. The Coordinator will organize press releases to local publications regarding special activities and local and national awards, as well as articles to highlight Section activities for ASCE publications. Please contact John Weiland ([jweiland@wadetrim.com](mailto:jweiland@wadetrim.com)) to further discuss the details of operating one of our Administrative committees.

**ASCE St. Louis Section Department of Professional Development Openings**

**Continuing Education/Attendance Committee** – The Committee will be responsible for greeting members and guests at general membership meetings, collecting event fees, documenting attendance, providing PDH certificates to attendees as appropriate, and notifying the president of any unanticipated dignitaries at the events. Please contact Alison Graves ([alison.graves@jacobs.com](mailto:alison.graves@jacobs.com)) to further discuss the details of operating one of our Professional Development committees.
ASCE St. Louis Section Annual Dinner 2016

The Section’s Annual Dinner was held September 23 at SqWires Restaurant Annex with 85 members and guests in attendance. Pianist Dave Becherer provided live music entertainment. The scholarship professional recognition award winners are shown below. More photos from the evening can be found at https://2016ascedinner.shutterfly.com/. We’d like to thank in particular Melantha Norton for organizing the outstanding dinner arrangements and Susan McCrary and the Awards Committee for their efforts to select which of the many worthy candidates that were recognized this year.

ASCE ST. LOUIS SECTION SCHOLARSHIPS

The ASCE St. Louis Section Annual Scholarships are awarded in recognition of membership in an ASCE Student Chapter, enrollment as a civil engineering student, excellence in academic performance, and active participation in issues reflecting the role of engineers in the advancement of our society. Each of the Section’s colleges is solicited for nominations. The scholarship awards were presented by Past President Shawnna Erter.

Alice Waldon
Southern Illinois University - Carbondale

Sam Runge
University of Missouri - Columbia

Michelle Bresnahan
St. Louis University

Amanda Fisher
Southern Illinois University – Edwardsville

Jonathan Kuchem
Missouri University of Science and Technology
2016 MIKE ALIZADEH / GEOTECHNOLOGY SCHOLARSHIPS
The Mike Alizadeh scholarship is awarded due to a generous endowment by the Alizadeh family, in recognition of pursuing a Master’s Degree in Civil or Geological Engineering with a geotechnical or environmental emphasis at a Midwestern university.

1st Place – Jesse Moyles
University of Missouri - Columbia

2nd Place – Matthew Watters
University of Arkansas

PROFESSIONAL RECOGNITION AWARDS

Gene L. Rovak, P.E., F.ASCE - Professional Recognition Award
The Professional Recognition Award recognizes the importance of professional attainment in the advancement of the science and profession of engineering and is presented to a Member of the St. Louis Section of ASCE who has made substantial contributions to the engineering profession and the St. Louis Section. This year’s Professional Recognition Award goes to Gene Rovak.

Gene earned a bachelor of science in civil engineering from Washington University in 1967 and a professional development degree in civil engineering from the Missouri University of Science & Technology at Rolla in 1976. After graduating from Washington University’s R.O.T.C. program and prior to beginning his career in consulting, Gene served on active duty in the U.S. Army, developing site and infrastructure systems for his unit in Phu Bai, Vietnam. Only 60 miles from the border with North Vietnam, Gene designed and built a heat-exchanger that provided the base with hot and cold running water and also developed an electrical supply system to provide reliable service to the soldiers stationed there.

Gene is a Senior Project Advisor with Horner & Shifrin, Inc., where he has over 40 years of experience in water resources, including flood and watershed analysis and design for a wide range of water-related facilities. He has particular expertise in interior drainage for urban levee systems, having developed simulation models for the two-way multiple-reservoir hydraulic analysis of complex systems before commercial or public software with similar capabilities was available. His design projects have included major river water intakes, urban levee systems, and the map revisions necessary to reflect the effect of new flood management systems, and he has performed watershed analyses for urban storm-water management and for alternate multiple-reservoir sites for river basins.

At Horner & Shifrin, Gene is often entrusted with new hires for training in hydrology and hydraulics, where he doesn’t just explain “how” to do things, he also explains “why”. Especially with the proliferation of hydrologic and hydraulic software, rather than training young engineers to “plug and chug” data into these programs, Gene teaches them the physical, real-world practical applications behind the model. According to one of Gene’s many mentees at Horner & Shifrin, the saying there is, “If you can’t work for Gene Rovak, you can’t work for anybody.” Gene’s teaching ability has been recognized and will reach a broader audience as an instructor with Forester University’s online courses, including being on a team of experts teaching the Post-Construction Stormwater BMP Master Class Series.
Within ASCE, Gene has served on the St. Louis Section’s Board of Directors all the way through President. He is a founding member and served as chair of the St. Louis chapter of the Environmental and Water Resources Institute, where he continues to be a very active member. And he is currently a governor of Region 7. Gene also served as the St. Louis Section Newsletter Editor where he converted the distribution from paper copies to email and as the St. Louis Section Webmaster where he developed the Section’s first website.

Gene has also served his community in numerous civic capacities, including:

- Executive Board, Creve Coeur – Olivette MO Chamber of Commerce
- Technical Committee Chair, Deer Creek Watershed Alliance
- City of Creve Coeur, MO Planning Commissioner
- City of Creve Coeur, Chair Stormwater Committee
- Subdivision Board of Trustees President (255 homes)
- Earth Day Symposium Steering Committee

**Alison N. Graves, P.E. - Young Engineer Award for Professional Achievement**

The Young Engineer Award recognizes professional contributions of younger members to the Society and to the St. Louis Section and is presented annually to a Member of the St. Louis Section of ASCE who is judged to have attained significant professional achievement, and who is less than 35 years of age. This year’s Young Engineer Award for Professional Achievement goes to Alison Graves.

Alison earned a Bachelor’s of Science in Civil Engineering from the University of Missouri - Columbia in 2006. Since then, she has worked at Jacobs Engineering where she has over 9 years of technical experience in roadway and site design, including several significant design-build projects such as the design of 12 grade separated roadways over a high speed rail from Fresno, CA to Bakersfield, CA; Maintenance of traffic planning for a segment of I-65 in Louisville, KY; and analysis and design work for the Page Extension. Alison also worked on the Lake Pontchartrain Vicinity Floodwall Replacement after Hurricane Katrina. Alison is a registered professional engineer in the state of Missouri.

Since 2011, Alison has been a very active member of the St. Louis Section of ASCE’s Younger Members Group helping out with everything from Bowling Night Organizer and participating in Science Center Career Day to volunteering with Rebuilding Together and Web Coordinator. This year, she spear-headed the first Meet A Professional Luncheon, matching 24 student chapter members with professionals in their field of civil engineering. The event was a resounding success with calls to make it an annual event. Alison has also contributed her time to the Central Region Younger Member Council where she was the planning co-chair in 2014, including raising over $14,000. Moreover, this past year, Alison took on the challenge of joining the St. Louis Section’s Board of Directors as the Director of Professional Development.

But she doesn’t only share her valuable time with ASCE. Alison is also a member of the American Council of Engineering Companies where she is a graduate of the Future Leaders Academy and is a corresponding member of the Transportation Committee and Governmental Affairs Committee. She has spent two sessions as Vice President of Membership with Toastmaster International at Jacobs where she is a Charter Member since 2011 and has won multiple awards and competitions. Also at Jacobs, she started a chapter of Jacobs Next which is a local network of 30 employees with 6 to 10 years of experience including monthly luncheons with speakers and she organized a mentor program this past year between young and mid-level engineers in St. Louis.

Alison’s other volunteer activities primarily focus on STEM outreach and supporting St. Patrick Center in downtown St. Louis. These include presenting and mentoring with Mathews-Dickey Boys’ and Girls’ Club; Participating in the Introduce a Girl to Engineering Day; Leading the Jacobs Next team to design, raise funds, and build a structure made of canned goods which were then donated to St. Patrick Center; and volunteering at St. Patrick Center’s Service Event.
Russ Batzel - Service to People Award

To bring public recognition to individuals who have performed outstanding service to people in their communities and to further public understanding and recognition of the identification “Civil Engineering - A People-Serving Profession”, the St. Louis Section grants the Service to People Award to an individual who is judged to have performed significant service to the community in connection with planning, design or construction of the people serving works of the civil engineering profession. This year’s Service to People Award goes to Russ Batzel.

For the past 20 years, Russ has held several positions as an employee of the City of St. Peters that has impacted the lives of every citizen of the City in a positive way. He has dedicated his career to public service, beginning as Director of Public Works Operations and being promoted ultimately to heading the Public Works Service department, where his role was expanded to include Fleet Maintenance, Streets, Utilities, and Storm Water. He later transitioned to Manager of Transportation and Development Services where his responsibilities included the Building and Planning and Zoning Departments and Economic Development. Recently this year he has been appointed to be the City’s next City Administrator.

Russ’s accomplishments in "serving people" are many and are quite diverse. Including:
1. Implementing his vision for the City’s Composting Facility. This recycling program not only turns the Biosolids created at the City's wastewater plant into a sought after landscaping material, it allows for 12 month a year disposal of yard waste that is composted. The City sells the compost to offset solids handling costs. St. Peters has the largest system of composted biosolids recycling in Missouri, and it is one of only two biosolids composting facilities in the state.
2. Russ has also brought innovation and technology to St. Peters roadways making the system one of the most intelligent in the St. Louis region. St. Peters had a traffic command center years before MODOT established the Gateway Guide System. He was also one of the first implementers of a "diverging diamond" interchange in St. Charles County at Mid Rivers Mall Drive and I-70, making one of the most heavily traveled and dangerous intersections in St. Charles County safer.
3. Russ also envisioned region wide storm water planning to address the needs of the watersheds of the St. Charles County region by developing the scope and finding funding for a USACE study of flooding issues on the Dardenne Creek. He later developed a stormwater master plan for St. Peters based on the findings of that study. His vision became reality when the $40M bond issue to improve the water quality and stormwater management throughout of St. Peters was approved by the voters, and the Capital Program initiated.
4. Russ was integral in the creation of the Lakeside 370 Park and Recreation Facilities/Premier 370 Business Park including the 140 acre lake, and camping area that now hosts the City’s massive "Celebrate St Peters" festival each year.
5. Russ has also supported expansion of the Great River Greenway network of trails throughout St. Peters over the past 10 plus years.

Russ has a BS Civil Engineering Purdue University, West Lafayette, Indiana and MS Engineering Management from the Missouri University of Science & Technology at Rolla. Russ is a registered Professional Engineer in the state of Missouri. Russ was presented a certificate signed by the President of ASCE in gratitude for his service.

St. Louis Section Project of the Year – Missouri River Wastewater Treatment Facility Secondary Treatment Expansion and Disinfection Facilities

Civil Engineering achievement within the St. Louis Section is recognized annually by ASCE with the selection of a “St. Louis Section Project of the Year Award”. The Award is given for achievement—not to an individual—so that the many individuals who have worked on the project are recognized as having contributed. Basis for the Award is “an engineering project that demonstrates the greatest engineering skills, and represents the greatest contribution to civil engineering progress and mankind”. This year’s Project of the Year Award goes to the Missouri River Wastewater Treatment Facility Secondary Treatment Expansion and Disinfection Facilities project to increase capacity from 28 to 38 million gallons per day (mgd)
average and a maximum of 80 mgd wet-weather flow to serve potential commercial, light industrial and residential development planned near the facility. The project owner is the Metropolitan St. Louis Sewer District, the engineering design firm is Black & Veatch Corporation, and the general contractor is Goodwin Brothers Construction Company.

The Missouri River Wastewater Treatment Facility expansion involved a complex, $94 million project involving new aeration basins, final clarifiers, an ultraviolet light disinfection facility and blower building. These new facilities replaced existing trickling filters with newer technology and increased the secondary treatment capacity. The solids treatment planning resulted in a new solids handling building that consolidated different facilities throughout the plant into one centralized more efficient building that housed new rotary drum thickeners, centrifuges, sludge pumps, sludge storage silos and a truck-loading station. The associated improvements to the solids processing included existing digester modifications as well as a new anaerobic digester.

ASCE Region 7 Director Jay Burress Recognizes the St. Louis Section’s Own Marsia Geldert-Murphey – 2016 Edmund Friedman Professional Award Winner

Installation of ASCE St. Louis Section 2016-2017 Officers

Officers sworn in for the 2016-2017 St. Louis Section Board by Region 7 Director Jay Burress. Pictured left to right are: Michael Buechter (Past President), Matt Harper (President), Lyle Simonton (President Elect), Chad Schrand (Vice President), John Welland (Director of Administration), Jordan Pettibone (Treasurer), Alison Graves (Director of Prof. Development), Christopher Toenjes (Director of Tech. Development), Brent Vaughn (Secretary)

Passing of the gavel from Michael Buechter to Matt Harper
Diversity and Inclusion Committee

Membership Renewals

It is time for membership renewals... **Please be sure to include your gender, date of birth, ethnicity, etc. on your annual renewal form this year.** Gathering this information on ASCE members is important for developing and implementing diversity and inclusion programming on the national and local level. Knowing these demographics of the membership helps move these efforts forward. ASCE recognizes the strategic and critical importance of advocating for and sustaining a diverse workforce and inclusive work environment. The Society is committed to implementing policies and programs designed to advance the profession by promoting an inclusive climate in the profession.

Reciprocal Memberships

**DID YOU KNOW THAT ASCE MEMBERS CAN BECOME A NSBE MEMBER FOR FREE?!?**

ASCE and National Society of Black Engineers (NSBE) are offering reciprocal dues discounts. This reciprocal membership is a great opportunity to enhance your career and broaden your professional network. ASCE members joining NSBE for the first time can do so for **free** through the ASCE website. The National Society of Black Engineers (NSBE), with more than 35,700 members, includes more than 394 College, Pre-College, and Technical Professional/Alumni chapters in the United States and abroad. NSBE’s mission is "to increase the number of culturally responsible black engineers who excel academically, succeed professionally, and positively impact the community."

For ASCE members, student membership to NSBE is free; dues for professional membership is free the first year and $25 (half price) for all subsequent years.

Getting your reciprocal membership is easy! Here are the steps on how to join NSBE and get your discount:

1. Join or renew your ASCE membership.
2. Follow the **Affiliate Organizations** link provided on the confirmation page.
3. From there, you can follow the link to join NSBE and receive your discount.

If you have already paid your dues, and would still like to join NSBE, contact ASCE Customer Service Department for directions at (800) 548-ASCE (2723). You can also find more information online at: [http://www.asce.org/nsbe-membership/](http://www.asce.org/nsbe-membership/)
**Younger Members Group**

### Join us for happy hour!

Come join the St. Louis YMG for our monthly meeting! The meeting will be held on November 8th from 6:00 to 8:00 pm at Urban Chestnut in the Grove.

**November YMG Meeting:**
**Tuesday, November 8, 2016**
Urban Chestnut
4465 Manchester Ave. 63110
6:00 PM to 8:00 PM

### Future City Competition

The ASCE YMG is in the process of starting a committee to host a Future City Competition for the St. Louis Region in 2018 and we need you! Future City is a competition for 6th, 7th, and 8th grade students to imagine, design, and research solutions to a citywide sustainability issue. We are looking for people who are interested in participating as a committee member for planning the competition. Please contact Melissa Marks at Melissa.Marks@ch2m.com if you are interested in joining our committee. More information about Future City and the competition can be found at [http://futurecity.org/about](http://futurecity.org/about).

### MSD Treatment Plant Tour

Join us on **Thursday, November 17th at 5:00 pm** as we join Saint Louis University’s ASCE Chapter for a tour of the MSD Grand Glaize Treatment Plant. Please contact Melissa Marks at Melissa.Marks@ch2m.com if you are interested in joining.

**Thursday, November 17, 2016**
Grand Glaize Treatment Plant
1000 Grand Glaize Parkway, 63088
Beginning at 5:00 PM

### Operation Food Search

Our YMG is giving back this holiday season. Join us on **Saturday, December 10th at 8:00 am** as we volunteer with Operation Food Search, a volunteer based organization that focuses on providing meals to those affected by HIV/AIDS or cancer. Please contact Melissa Marks at Melissa.Marks@ch2m.com if you are interested in participating.

**Saturday, December 10, 2016**
Operation Food Search
3117 Olive Street, 63103
Starting at 8:00 AM

Check out the [YMG website](http://www.asce.org/ymg) and [Facebook page](http://www.facebook.com) for more events and meetings throughout the year!
The St. Louis Section of EWRI is pleased to announce our tenth webinar jointly sponsored by Missouri University of Science and Technology on Thursday, November 17, 2016 at 11:30 am-12:30 pm.

This presentation will be broadcast live over a webinar. Registration is free for in-person (at USGS in Rolla) or webinar attendance. **Advance registration is required by noon on Tuesday, November 15, 2016** Please register online in advance at the following link: [https://docs.google.com/forms/d/e/1FAIpQLSe5oZ2aaJ2VwYbEKLUpTeSUov9mr3YQiZr907-jkVZVU_z07g/viewform?c=0&w=1](https://docs.google.com/forms/d/e/1FAIpQLSe5oZ2aaJ2VwYbEKLUpTeSUov9mr3YQiZr907-jkVZVU_z07g/viewform?c=0&w=1)

Registrants will receive detailed login & dial-in information or directions for in-person attendance prior to the event.

**Revised Recharge Areas of Selected Large Springs In The Big Four Region Of The Ozarks**

Ongoing work by the Missouri Geological Survey (MGS) is refining the known recharge areas of the largest springs in the Ozarks. In some cases, past tracer injection sites are utilized in attempts to replicate older traces from those locations. The data clearly show that there is value in applying newer dye detection techniques in attempting to replicate older traces. Some repeat injections and subsequent monitoring confirm earlier traces. Other replication efforts reveal additional recovery points that were undetected by the legacy traces, thus expanding known recharge areas. Still other replication efforts indicate that some older traces are not repeatable. Among the findings of the overall study to date: Mammoth Spring and Greer Spring share a portion of their recharge, with the majority of Greer Spring’s flow apparently passing under a gaining segment of the 11 Point River, ultimately surfacing more than four kilometers to the southeast. A simple and effective method is also described for illustration and comparison of dye recovery curves using fluorescent spectrometry data.

**Speakers:**

**James W. (Bill) Duley** is a graduate of the University of Central Missouri and a long term employee of the Missouri Geological Survey (MGS). His professional interests are centered on environmental geology applications. He began refining water tracing techniques shortly after his employment in 1979 and developed the first applied fluorescence spectrometric methods for water tracing in the U. S in the early 1980s. He retired from the MGS in 2011 as the Assistant State Geologist, but returned to work part-time in 2013 to help in refining the recharge areas of Missouri’s largest springs using water tracing techniques.

**Cecil Boswell** works as a Technical Assistant in the Geological Survey Program and has been employed with the program for twenty years. He is involved in both field and lab work with water tracing and oversees the Missouri Water Tracing Laboratory and has been part of considerable research in both dye and contaminate fluorescence.

Thank you to our joint seminar sponsor, **Missouri University of Science and Technology**!

Please contact Robert Holmes ([bholmes@usgs.gov](mailto:bholmes@usgs.gov)) with any questions, if you are interested in presenting, or have an idea for a topic.
2016 Annual Mid-American Environmental Engineering Conference

The St. Louis Chapter of EWRI was pleased to sponsor this one-day conference, hosted at Southern Illinois University in Edwardsville, for graduate students in civil and environmental engineering from six universities to share educational experiences and research. Faculty advisors and representatives of EWRI-STL Leadership were also present, for a total of about 60 attendees. Awards were given to two of the sixteen presentations. Attendees were from the following six universities:

- Southern Illinois University Edwardsville
- Washington University in St. Louis
- Missouri University of Science and Technology
- University of Missouri Columbia
- Southern Illinois University Carbondale
- Saint Louis University

From left: Conference Organizer Dr. Jianpeng Zhou from SIUE, award winner Ken Campbell (MS&T), award winner Yeunook Bae (Washington University), and Elise Ibendahl (EWRI STL chair)

Left: Attendees of the 2016 MAEEC Conference at Southern Illinois University Edwardsville
# Geo-Structures Confluence 2016

Geotechnical and Structural Engineering Conference

**Friday, November 4, 2016; St. Charles Convention Center, St. Charles, MO**

- **6:30 to 7:30**  
  Exhibitor registration and set-up

- **7:15 to 8:00**  
  General Registration and Continental Breakfast

- **8:00 to 8:15**  
  Welcome

- **8:15 to 9:05**  
  Wrigley Field 1060 Project  
  Darren Diehm, GEI Consultants

- **9:05 to 9:55**  
  The US 17 Washington Bypass - True Top-Down Construction  
  John W. (Wally) Jordan, AECOM

- **9:55 to 10:20**  
  Break with Exhibitors

- **10:20 to 12:00**  
  Soil is Not a Spring: Buildings are Not a Load  
  Panel Discussion with Kord Wisman, GI President; David Odeh, SEI President; Terry Holman, Turner Construction; Tom Cooling, AECOM; Ted Pruess, Independent Consultant

- **12:00 to 1:10**  
  Lunch with Exhibitors

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<thead>
<tr>
<th>Geotechnical Session</th>
<th>Structural Session</th>
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| 1:10 to 2:00  
  Cast-in-place Ground Improvement Elements for Liquefaction Mitigation  
  Morgan NeSmith, Berkel |  
  Updated Concrete Repair Code and Companion Guide  
  Jay H. Paul, Klein and Hoffman, SEAOI Palmer Award Winner |
| 2:00 to 2:50  
  Innovative GeoHazard Mitigation Techniques  
  Justin Anderson, GeoStabilization International |  
  Effect of Unanticipated External Loads on the Resilience of Chimneys and Cooling Towers  
  Phillip L. Gould, Wash. U. and St. Louis U. |
| 2:50 to 3:10  
  Break with Exhibitors | |
| 3:10 to 4:00  
  Ground Motions in Building Codes: From PSHA to Building Codes  
  Dr. Adrian Rodriguez-Marek, Virginia Tech. |  
  The Hyatt Regency Skywalk Collapse Remembered  
  Randall P. Bernhardt, Engineering Systems, Inc. |
| 4:00 to 4:50  
  Jet Grouting for Geotechnical and Structural Purposes  
  Stanley Worst, Schnabel Foundation Company |  
  A Novel Design Approach to Ice Accretion in Open Structures  
  Anthony J. Friedman and Douglas Antholis, KPFF |
Geo-Structures Confluence 2016 Registration Form

Geotechnical and Structural Engineering Conference
Friday, November 4, 2016; St. Charles Convention Center, St. Charles, MO

1. Please register online at http://goq.ql/Ke7mmIW or follow the instructions below and submit completed form and payment to the address listed.

2. Please complete the registration form below. Enter the names of individuals being registered (add rows if necessary). Exhibitors and Sponsors may wish to contact Lyle Simonton, 314-421-2460, x101, lsimonton@subsurfaceconstructors.com, for benefits of their registration. Please register by Friday, October 14, 2016 to receive the early registration discount. Registration after Friday October 14, 2016 will be considered Late Registration. Registration after Friday October 28, 2016 and walk-ins are welcome, but may receive fewer benefits as their attendance cannot be planned. Refunds will be provided only if requested within 10 days of the event. Any refund will be subject to a 10 percent cancellation fee.

Contact information:
Name:__________________________________________ Phone:_______________________________________
Firm:__________________________________________ Email address:_______________________________________

<table>
<thead>
<tr>
<th>Registration Class</th>
<th># Attending</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Professional by Friday, 14 OCT 2016</td>
<td></td>
<td>$175</td>
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<tr>
<td>Full-time Students by Friday, 14 OCT 2016</td>
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<tr>
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<tr>
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<tr>
<td>Meal Sponsorship (not a registered attendee)</td>
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<td><strong>TOTAL</strong></td>
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</table>

Please indicate attendee's primary interest, affiliation, or area of practice by checking one of the options below (required):
- Geotechnical or geo-environmental - ASCE Geo-Institute (GI)
- Structural - ASCE Structural Engineering Institute (SEI)
- Structural - Structural Engineers Association of Kansas and Missouri (SEAKM)

<table>
<thead>
<tr>
<th># Name(s) of registrant(s)</th>
<th># Name(s) of registrant(s)</th>
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<tbody>
<tr>
<td>1</td>
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<td>3</td>
<td>4</td>
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<tr>
<td>5</td>
<td>6</td>
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</tbody>
</table>

Vegetarian or other meal options are available upon request to Stephanie Spann at sspann@daviddmason.com

3. Email this completed form with the subject line “Geo-Structures Confluence 2016 Registration” to both sspann@daviddmason.com and hembpen09@sbcglobal.net on the same day that you mail your check.

4. Please make a copy of the completed form and mail it with check payable to “ASCE – St. Louis Section” for the total registration cost to the address below. Note: payment must be postmarked by Friday, October 14, 2016, to receive the early registration discount. Late (check) registration ends with postmarked by Friday, October 28, 2016.

Geo-Structures Confluence 2016 Registration
c/o Stephanie Spann
David Mason and Associates
800 South Vandeventer Ave.
St. Louis, MO 63110
Geo-Institute of ASCE – St. Louis Chapter

Presents a NEW webinar titled

**Details for Mechanically Stabilized Earth (MSE) Walls: Good Practices**

**DATE AND TIME:** Monday, December 5, 2016
- Doors open at 10:00AM for registration
- Live webinar from 10:30AM to 12:00PM
- Pizza and soda/water will be provided.

**LOCATION:** Geotechnology, 11816 Lackland Road, Suite 150, St. Louis, MO 63146

**COST:** $10.00 per person

**PDH:** Attendees will earn 1.5 PDH

**RSVP:** Please register by Thursday, December 1 at [http://events.constantcontact.com/register/event?llr=yonzmehab&oeidk=a07edchw3si6d67fec0](http://events.constantcontact.com/register/event?llr=yonzmehab&oeidk=a07edchw3si6d67fec0). Payment can be made by check or credit card.

Primary discussion topics include top of wall elements such as copings, traffic barriers and geomembrane caps; bottom of wall elements such as leveling pads; drainage features such as filters, drains and pipes; internal elements such as obstructions in reinforced soil mass and slip joints; wall initiations and terminations; and aesthetics. This webinar discusses typical good practice details.

If you’ve signed up and can’t make it, please cancel with Jake Schaeffer (jschaeffer@tsigeotech.com or 314-373-4013) by Thursday, December 1 or we will have to charge you for the meal.
Other Professional Development

59th ANNUAL MISSOURI S&T ASPHALT CONFERENCE
November 29-30, 2016

The 59th Annual Missouri S&T Asphalt Conference will be held on Tuesday and Wednesday, November 29-30, 2016, at the Missouri University of Science & Technology in Rolla, Missouri.

Presentations at the conference include: intelligent compaction projects, basics of plant operation, lift thickness issues, benefits of increased density, chip seal design and construction, cape seals, scrub seals, matrix slurry seals, high volume traffic chip seals, soil cement stabilization and cold in-place recycling, binder 101, performance testing, parking lot design best practices, PaveXpress examples, airfield vs. highway specification comparison, MoDOT’s current research; and MAPA Update/Transportation Funding.

The conference should be of interest to contractors, public agencies, consulting engineers, testing labs, aggregate producers, asphalt binder suppliers, and equipment technical reps. Personal Development Hours (PDH) will be awarded.

For conference program information go to http://asphalt.mst.edu/ or contact Dr. Dave Richardson, Conference Director (573-341-4487; richardd@mst.edu ) and for registration information contact Distance and Continuing Education, 216 Centennial Hall, Missouri S&T, Rolla, MO, 65409 (573-341-6222; dce@mst.edu).

If you are interested in being a sponsor, please contact Latesha Zach:

zachl@mst.edu ; 573-341-4442.
# FALL 2016 FE REVIEW SESSIONS

**ATTENTION SENIOR OR GRADUATE CIVIL ENGINEERING MAJORS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Instructor</th>
<th>Time</th>
<th>Place</th>
</tr>
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<tbody>
<tr>
<td>Mon. 10/03/16*</td>
<td>Surveying / Construction*</td>
<td>Prof. Sherrill</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Wed. 10/05/16*</td>
<td>Statics*</td>
<td>Dr. Fries</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Mon. 10/10/16</td>
<td>Statistics/ Math</td>
<td>Dr. Chew</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Wed. 10/12/16</td>
<td>Mechanics of Solids</td>
<td>Dr. Panahshahi</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Mon. 10/17/16</td>
<td>Dynamics</td>
<td>Dr. Yan</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
</tr>
<tr>
<td>Wed. 10/19/16</td>
<td>Transportation Engineering</td>
<td>Dr. Qi</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Mon. 10/24/16</td>
<td>Engineering Economics</td>
<td>Dr. Eneyo</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Wed. 10/26/16</td>
<td>Engineering Materials</td>
<td>Dr. Huang</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Mon. 10/31/16</td>
<td>Fluid Mechanics</td>
<td>Dr. Celik</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Wed. 11/02/16</td>
<td>Structural Design: Concrete</td>
<td>Dr. Panahshahi</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Mon. 11/07/16</td>
<td>Environmental Engineering</td>
<td>TBA</td>
<td>4:40 – 6:00 pm</td>
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<tr>
<td>Wed. 11/09/16</td>
<td>Geotechnical Engineering</td>
<td>Dr. Osouli</td>
<td>4:30 – 6:00 PM</td>
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<tr>
<td>Mon. 11/14/16</td>
<td>Structural Design: Steel</td>
<td>Dr. Cross</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
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<tr>
<td>Wed. 11/16/16</td>
<td>Hydraulics/Hydrologic systems</td>
<td>Dr. Zhou</td>
<td>4:30 – 6:00 PM</td>
<td>EB 0160</td>
</tr>
</tbody>
</table>

*IF YOU WISH TO PURCHASE A CIVIL (OR MECHANICAL OR INDUSTRIAL) ENGINEERING FE REVIEW MANUAL (PUBLISHED BY BRIGHTWOOD ENGINEERING EDUCATION) FOR A SPECIAL DISCOUNT RATE AND SAVE ON SHIPPING COST, PLEASE BRING $60 (CASH OR CHECK PAYABLE TO “CHI EPSILON”) TO THE FIRST OR SECOND REVIEW SESSION ON MONDAY, 10/3/16, OR ON WEDNESDAY, 10/5/16. PLEASE NOTE THAT WE NEED AT LEAST 20 PEOPLE TO ORDER THE MANUALS. ONCE THE MONEY IS COLLECTED, WE WILL PLACE THE ORDER AND HAVE THE MANUALS IN THE FOLLOWING WEEK. ALL SESSIONS ARE FREE TO CURRENTLY ENROLLED SIUE STUDENTS AND COST $10 PER SESSION FOR OTHERS. FOR MORE INFORMATION PLEASE CONTACT CALEB MAU, CHI EPSILON PRESIDENT, AT cmau@siue.edu OR (815) 592-8241.

**Mechanical and Industrial Engineering majors – many of the review session topics are also applicable to your major’s FE Exam. Please feel free to attend them as well.**
Employment

CIVIL ENGINEERS

The Metropolitan St. Louis Sewer District (MSD) is a Missouri State special purpose political subdivision that is responsible for the St. Louis area’s storm water and sewer collection and treatment. MSD ranks in the nation’s top wastewater utilities and is making a significant investment in capital infrastructure and asset sustainability over a multi-decade period.

The District is seeking candidates to fill several Leadership and Civil Engineer positions within the Engineering Department:

Principal Engineer - Design Division

This position in the Capital Projects group reports to the Program Manager and will work with other engineers in the overall design and bidding of capital improvement projects with District staff and coordinate the work of outside consulting engineering firms. Duties will include, but not necessarily be limited to oversight of the design of WWTF and pump station improvements, storm/sanitary/combined sewers; review of plans, specifications and cost estimates; address concerns of impacted property owners; participation in meetings with public officials and the public at large to answer questions about the construction project; and other matters associated with the successful completion of the District’s capital construction program.

Qualified candidates for the Principal Engineer position must have a Bachelor’s Degree from a recognized college or university with major course work in Civil Engineering, a licensed PE and 6 years of progressively responsible engineering design experience.

Civil Engineer - Design/Capital Projects

This position in the Capital Projects group will be responsible for coordinating the work of outside consulting firms. Duties will include, but not necessarily be limited to oversight of the design of storm, sanitary/combined sewers, and green infrastructure improvements; review plans, specifications and cost estimates; address concerns of impacted property owners; participation in meetings with public officials and the public at large to answer questions about the construction project; and other matters associated with the successful completion of the District’s capital construction program.

Civil Engineer – Construction Management

This position will be responsible for providing engineering evaluation and review assistance to the field inspection staff. Duties will include, but not necessarily be limited to the constructability reviews, shop drawing review; submittal review; claims of changed conditions evaluation; addressing concerns of the impacted property owners; participation in meetings with public officials and the public at large to answer questions about the construction project; and other matters associated with the successful completion of the District’s capital construction program.

Civil Engineer - Planning Division

This position will assist with the design of storm and sanitary sewer systems, sanitary pump stations and wastewater treatment plants. This position is for modeling/hydraulics sanitary sewer systems using XP-SWMM. Applicants must have a hydraulics background, strong organizational skills, a keen attention to detail, and a willingness to learn. Experience with XP-SWMM, HYDRA, sanitary pump stations and wastewater treatment plant computer applications are a plus.

Qualified candidates for the above Civil Engineer positions must be a graduate from a recognized college or university with major course work in civil engineering; have four years of progressively responsible related engineering experience, including at least two years of experience in modeling, sewer plan design and review and/or construction. Must be a licensed professional engineer in the Missouri or have the ability to become licensed within six (6) months of the date of hire.

MSD offers an excellent compensation/benefits program. For more information and to apply go to www.stlmsd.com/careers under Current Job Openings.

Metropolitan St. Louis Sewer District

Human Resources
2350 Market St.
St. Louis, MO.  63103

EEO M/F/V/H
To submit items to the newsletter...

Please try to get all announcements for placement in the newsletter to the Newsletter Editor by the 20th of the month prior to publication. Items may be sent via e-mail to Brent Vaughn (interim newsletter editor) at bvaughn@members.asce.org. MS Word files are the preferred file type. PDF files are also acceptable but may not look as sharp when inserted into the newsletter and hyperlinks might not carry through to the final version. For multiple page announcements, please consider providing a single-page flyer, concisely worded, with links provided to ancillary pages such as registration forms or other attachments. Also, please clearly include in the email subject line a concise title for the announcement and desired month(s) of publication.

Most news items will be available on the Section’s Web Page, which can be reached via the link on ASCE National Website (www.asce.org). Click on “Geographical and International Units” to link to the Section or go directly to our page at: http://sections.asce.org/stlouis/index.html. The Section’s Website Editor is Jeff Smith e-mail: JESmith@HNTB.com or via feedback directly from our website.

For more information and updates see our Web Page: Http://sections.asce.org/stlouis/index.html

This newsletter will be sent to all Section members via e-mail. Delivery of the newsletter hardcopy by First Class mail will be made upon request. Members have the responsibility to keep their contact information in the ASCE national database up to date. Please note that the St. Louis Section is only provided with members’ PRIMARY information on file at the Society level. To ensure that we can contact you, please edit your PRIMARY information to contain the information where you would like the section to contact you and how you would like your information to appear in our annual roster.

Please be sure to keep your PRIMARY contact information up-to-date by contacting ASCE at http://www.asce.org, or call 800-548-ASCE (2723).