



Illinois Section  
Founded 1916

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**ASCE Illinois Section**

# News

Vol. 60, No.3  
Fall 2019

## Illinois' Lake Michigan Water Diversion

*By Jerome McGovern*

Northeast Illinois is fortunate to be located next to one of the largest sources of fresh water in the world, Lake Michigan. The city of Chicago, as well as other lakeshore communities, provides potable water to their own residents and supplies others further inland. Over five million residents of northeast Illinois receive their potable water from the lake. The diversion of water from Lake Michigan by the State of

Illinois is limited to 3200 cubic feet per second (cfs) or just over 2 billion gallons per day. Who came up with that number you might ask? The answer is a long and complex story.

The diversion of Lake Michigan water to Illinois is set by the United States Supreme Court. It is currently 3200 cfs and it has been as low as 1500 cfs. The current diversion was established in 1967 and modified in 1980. This amount is based

on a 40 year running average. The yearly average fluctuates greatly and so a long-term running average was chosen. Illinois' diversion consists of four components, domestic diversion, discretionary diversion, navigational diversion and storm water runoff. Domestic diversion is the amount of Lake Michigan water diverted for use by public water supplies and industries in Northeastern Illinois. Discretionary diversion is the

(continued on page 7)



*Lake Michigan water intake crib*

## President's Notes

John G. Green, Ph.D., P.E.



My column for this issue concerns continuing engineering education. When most licensed professional civil engineers see those three words, they think of collecting professional development hours (PDH's) through their attendance at technical group luncheons, conferences, and training seminars. What I am referring to is something different. Whether we realize it or not, after several years of professional practice, each of us has gained civil engineering knowledge through our work experiences, from which less-experienced engineers could learn.

Mentoring is perhaps the most common way that we, as professional engineers can share our engineering experiences to educate the next generation of engineers. For many civil engineers who work for government or larger engineering firms, there are several less experienced engineers in their workplaces who could benefit from the advice and wisdom of their seasoned co-workers. Others, though, may be part of a smaller group of engineers, or may be the only civil engineer in their place of business. For those engineers, the ASCE Illinois Section provides a mentoring network to match up knowledgeable mentors with those early-career engineers seeking advice on how to develop and achieve meaningful and productive careers.

A step beyond mentoring would be to plan, create, and present seminars and online webinars on behalf of professional organizations, such as ASCE. If a civil engineer has worked on high-profile projects, or

achieved notoriety for good, solid work in one particular field as part of a government agency, organizations may approach the engineer, and ask that engineer to teach a seminar or webinar on a particular topic. However, for many knowledgeable engineers, that is not the case, and they may find they need to create their own opportunities by approaching potential hosting organizations.

Finally, for those truly dedicated to sharing what they have learned through work experience, there is always the option to teach formally. This usually means approaching a university where civil engineering is taught in your geographic area, like Northwestern University, the Illinois Institute of Technology, or the University of Illinois at Chicago, and becoming a part-time or adjunct professor. As an adjunct, one continues to work as before, but teaches a university course or two per semester bringing professional practice insights to college students as they progress through their formal civil engineering education. Then, beyond that, if a professional civil engineer enjoys teaching and researching engineering matters, one can always make the leap to join academia as a tenure-track professor.

In closing, you probably know more about civil engineering than you realize, and if you decide to share that knowledge, there are many opportunities and many bright young engineers that could benefit from your help. I urge you to get involved in continuing engineering education – you will find it to be a very rewarding experience.

## ASCE Illinois Section News

### ILLINOIS SECTION NEWSLETTER

E-Mailed to all ASCE-IS dues-paying members  
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# ASCE SEI/T&DI Event Spotlights

## Illinois River Bridge Replacement at Utica, IL

By Jiarong (Kevin) Zhang, PE, SE and Patrick Laux, PE, SE, M.ASCE

On July 31st, the ASCE SEI and T&DI technical groups co-hosted Kyle Videgar, Construction Engineer for Illinois Department of Transportation (IDOT) District 3, at the Starved Rock Lodge & Conference

**ASCE SEI & T&DI co-hosted  
a presentation by Kyle  
Videgar from IDOT at  
Starved Rock Lodge on  
July 31<sup>st</sup>, 2019**



Center to present "The Illinois River Bridge Replacement at Utica, IL: The Gateway to Starved Rock State Park." This event was planned as part of the ASCE IL Section president's initiative to hold more events outside of the

Chicagoland area to engage a wider base of our membership. Kyle's presentation included a fascinating historical overview of the site in addition to many facets of the design and construction of the bridge replacement.

For some background on the new crossing, IDOT contracted WSP (formerly known as Parsons Brinckerhoff) to perform the Phase I Study in 2010 and then to conduct the Phase II Design in 2015. The existing "Utica Bridge," as it is known to local residents, has a three-span, cantilevered, through-truss over the river. Additionally, this steel bridge has a two-span approach structure on each side. Given the limited remaining service life of the 1960-era bridge, the poor condition of the existing superstructure, and

the high future maintenance and rehabilitation costs, it was recommended for a full bridge replacement. In March 2016, the bridge Type, Size, and Location (TS&L) drawings were completed for a steel girder replacement bridge on

an adjacent alignment just to the east of the existing bridge. The final design plans were completed by WSP in August 2016, and the construction contract was awarded

**Official work on the bridge  
began in early 2017, with  
the existing bridge  
remaining open to  
accommodate traffic  
throughout the  
construction of the new  
bridge.**

by IDOT to D. Construction, Inc. for \$25.6M in December 2016. Veritas Steel of Eau Claire, Wisconsin was selected by the contractor to fabricate the over 3,000 tons of structural steel for the project. Official work began in early 2017, with the existing bridge remaining open to accommodate traffic throughout the construction of the new bridge.

**Long-span steel girders  
currently being erected for  
replacement bridge**

The replacement structure is a three-span steel bridge with variable depth plate girders. The structure is 1159-ft 6-in long and has (continued on page 10)

# 2019 Deep Foundations Institute (DFI) 44<sup>th</sup> Annual Conference

By DFI 44 Chicago Organizing Committee



The ASCE IL Section is proud to have members of its geotechnical community championing this event in the Fall. The 2019 International Conference on Deep Foundations, **#DFI44: Future >> Forward**, will be held October 15-18, 2019, at the Hilton Chicago in Chicago, Illinois. This conference will be a call to action to develop forward-thinking plans in geotechnical engineering through technical presentations and panel discussions. The 2019 Conference will provide an international forum for a wide range of

**The 2019 International Conference on Deep Foundations, #DFI44: Future >> Forward, will be held October 15-18, 2019, at the Hilton Chicago in Chicago, Illinois.**

geo-professionals to present, discuss, and debate all aspects of how we build on our current success to create and maintain a better tomorrow for us and future generations. All this will be happening across

the street from iconic Grant Park and Lake Michigan.

We will kick off the Wednesday sessions with The Chicago Legacy which will include local celebrity, Geoffrey Baer, a beloved Chicago historian, entertainer and tour guide. He will present his impressions of the history, culture and people that have shaped the Chicago corridor. Baer will set the stage for our panel of geotechnical experts who will discuss the Observational Method, deep foundations and earth retention, which are integral to the magnificent high-rise structures of the Chicago skyline. We will then have a question and answer session with our renowned panel which includes Rich Finno, P.E., Ph.D., D.GE, Tony Kiefer, P.E., Steve Scherer, Bob Schock, Bill Walton, P.E., S.E., and Mike Wysocky, Ph.D., P.E.

**#DFI44: Future>>Forward** is also about the next generation of engineers and contractors and we are excited to have former professor and current contractor, Rick Deschamps present on the intricacies of the Mentor/Mentee relationship and where you may fall in the spectrum.

The plenary will end with a session on DFI and Technology. This ses-

**The 2019 Conference will provide an international forum for a wide range of geo-professionals to present, discuss, and debate all aspects of how we build on our current success to create and maintain a better tomorrow for us and future generations.**

sion will include presentations from technology leaders currently working in our geotechnical community. Leaders from the DFI Project Information Management Systems (PIMS) committee will provide presentations and forward DFI's objectives.

We are grateful for the interest from the community which was demonstrated by the number of abstracts we received to participate in the conference. We have numerous presentations in our parallel (continued on page 11)



# Civil Engineers Still Need to Be Advocates!

By Maria Matthews and Patrick Lach, P.E., CFM

Although there has been recent success in Illinois to address infrastructure funding, federal, state and local policymakers **still** need civil engineers like you to put the latest and greatest state and national Infrastructure Report Cards in their hands and provide firsthand information about the current condi-

**Despite recent success for infrastructure funding in Illinois, our legislators still need to hear from civil engineers.**

tions of Illinois infrastructure. Connecting with state and federal policymakers in-district is an excellent way to form a relationship with them and their staff. Make sure you collect cards and create a lasting relationship with periodic e-mails to update or thank them for casting key votes.

In fact, the Illinois General Assembly will not be back in session until late October 2019 and your Congressional Delegation have in-district work periods until September 6 before they head back to session. This means that your representatives and senators might be in-town which would enable you to catch up with them at a town hall, picnic, roundtable or other event. Check out their websites, social media pages and local events pages in the newspaper to find out where

they'll be. If you need help preparing for these events, ASCE's Government Relations Staff is here to help. Simply contact us at [govwash@asce.org](mailto:govwash@asce.org) and we can send you talking points, handouts, and other materials.

Are you ready to get involved beyond voting and attending district events? Make sure you're among the first to know when to reach out to elected officials on critical infrastructure matters by becoming an ASCE Key Contact. Key Contacts are among the first to receive information from ASCE's Government Relations Staff when infrastructure policies are being debated. Whether it's a lift as simple as sending a quick e-mail urging them

**While legislators are not in session, it is a great opportunity to reach out to them in their home districts via meeting, email, roundtables, or town halls.**

to continue their dialogue on transportation funding or a phone call asking for a specific vote on a water infrastructure measure, Key Contacts will receive timely and in-depth briefing information that can be passed along to elected officials. Learn more by visiting ASCE's Key Contact page at <http://www.asce.org/keycontacts/> or email [keycontact@asce.org](mailto:keycontact@asce.org).

In addition to receiving e-mail updates with legislative information, you can follow along at your leisure by visiting ASCE Legislative Tracking page at <http://cqcrcentage.com/asce/state/illinois> for the latest information on legislative and regulatory action items at the

**Flex your rights as a citizen to advance the Society's initiative to improve the nation's infrastructure.**

state level. The page also features action centers that will highlight the latest state and federal Key Alerts requiring your attention. To check out the legislative trends in neighboring states visit <http://www.acec.org/advocacy/state-legislative/> and click on one of the state pages to view their legislative and regulatory reports.

Your advocacy efforts can help make infrastructure a priority to legislators. Flex your rights as a citizen to advance the Society's initiative to improve the nation's infrastructure.

Additional Resources:

- ASCE's [2017 Infrastructure Report Card](#)
- [2018 Report Card for Illinois Infrastructure](#)
- [Illinois General Assembly Legislative Bill Tracking](#)

(continued on page 6)

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# Civil Engineers Still Need to Be Advocates!

(continued from page 5)

- ASCE Key Contact Program: <https://www.asce.org/keycontacts/>
- ASCE Public Policy Statements: [https://www.asce.org/public\\_policy\\_statements/](https://www.asce.org/public_policy_statements/)

**Maria Matthews** is the Senior Manager for the Grassroots Programs and State Relations for ASCE out of the Washington DC office.

**Patrick Lach** is a Senior Civil Engineer at Hey and Associates, Inc. and currently serves as the Co-Chair for ASCE's State Government Relations and Grassroots Committee.

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# ASCE as a Sustainability Resource

By Kirsten Mawhinney

ASCE has long been supportive of moving our industry in a more sustainable direction. They are a founding member of the Envision

## **Sustainability is one of ASCE's three strategic initiatives.**

Rating System along with the Institute for Sustainable Infrastructure (ISI), the American Public Works Association (APWA), and the American Council of Engineering Companies (ACEC), to provide professionals with a measurable way of evaluating the sustainable aspects of infrastructure projects.

Sustainability is one of ASCE's three strategic initiatives. Out of this initiative came the development of their *Five-Year Road Map to Sustainable Development*. The *Road Map* is formed around four priorities:

**Priority 1 – Sustainable Project Development: Do the Right Project.** The purpose of this priority is to change the way we think about how we solve the engineering challenges we face and create protocols

and processes to support new approaches.

**Priority 2 – Standards and Protocols: Do the Project Right.** The Envision Rating System helps engineers figure out if they are “doing the project right” and to identify aspects of a project that may need a different solution to be more sustainable.

**Priority 3 – Expand Technical Capacity: Transform the Profession.** ASCE understands that to move towards a more sustainable approach to projects requires training and development opportunities for professionals.

**Priority 4 – Communicate and Advocate: Making the Case.** This priority is focused on communicating with ASCE's membership and the public on the importance of the environmentally, economically, and socially sustainable infrastructure.

As part of the Envision, professionals can get certified through ISI as Envision Sustainable Professionals (ENV SP). ASCE has expanded the resources available to

engineers by creating their *Sustainable Infrastructure Certificate Program* to help engineers design better sustainable infrastructure projects. The program involves a series of 6 courses that can be completed over a 2-year period to obtain the certification. Learn about this certificate program and other

**ASCE has expanded the resources available to engineers by creating their *Sustainable Infrastructure Certificate Program* to help engineers design better sustainable infrastructure projects.**

ASCE resources for sustainability at <https://www.asce.org/sustainability-at-asce/>.

**Kirsten Mawhinney** is the Civil Department Manager, Transportation at AECOM. She currently serves as the Sustainability Chair for the Illinois Section of ASCE.

# Illinois' Lake Michigan Water Diversion

(continued from page 1)

**The diversion of water from Lake Michigan by the State of Illinois is limited to 3200 cubic feet per second (cfs) or just over 2 billion gallons per day. Who came up with that number you might ask? The answer is a long and complex story.**

amount of Lake Michigan water diverted by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) to keep the Chicago Area Waterway System (CAWS) in a reasonably satisfactory sanitary condition. Navigational diversion is the amount of Lake Michigan water diverted by MWRDGC to keep the CAWS at a safe level for navigation. The stormwater component of Illinois' Lake Michigan diversion is calculated by the U.S. Army Corps of Engineers and represents the amount of stormwater from the diverted Lake Michigan watershed (approximately 673 square miles) which would have been returned to Lake Michigan. If you are a civil engineer in northeast Illinois you are probably aware that the Chicago River has been diverted away from Lake Michigan. This occurred in 1900 when the MWRDGC, then known as the Sanitary District of Chicago, completed construction of the Sanitary and Ship Canal. The purpose was to divert raw sewage that drained

into the Chicago River away from the lake and not into it. At that time there were no sewage treatment plants. The thinking was that Lake Michigan water would flow into the river and then the canal and dilute the sewage as it made its way to the Des Plaines River near Lockport, Illinois. The waters of Lake Michigan would not be polluted by raw sewage. This was known as the "Dilution System." The Sanitary District of Chicago then constructed the North Shore Channel in 1910 and the Cal-Sag Channel in 1922 to complete its dilution system. All sewers would outlet to the river or the canals and be transported away from Chicago and its suburbs. The design of the dilution system was based on diverting 10,000 cfs from Lake Michigan.

Only Chicago was happy with this plan. Downstate communities along the Des Plaines and Illinois Rivers resented their waterways being polluted. States that adjoin Lake Michigan were concerned that unrestricted diversion of water at Chicago would lower the lake elevation and have a detrimental impact on commercial shipping. The lawsuits began shortly after the Sanitary and Ship Canal opened. Lawsuits that are between states or entities that are in different states go through the federal court system. The State of Wisconsin sued the State of Illinois over the diversion issue and the case, *Wisconsin v Illinois*, eventually made its way to the US Supreme Court in 1922.

The US Supreme Court appointed a Special Master to study the technical issues and report back to the court in 1926. In 1930 the court issued its ruling that reduced the diversion of Lake Michigan at Chicago in stages to 1500 cfs by 1938.<sup>1</sup> With the reduced diversion of water the dilution system of treating sewage would not be feasible. The decision was not unexpected and the MWRDGC had already begun constructing sewage treatment plants. The controlling works and lock at the mouth of the Chicago River to regulate the flow of water into the river were completed in 1938.

Why is this important? As the Chicago area grew in the post-World War II building boom, suburbs in Cook County began asking to buy water from the city of Chicago's water system. Chicago was willing

**As the Chicago area grew in the post-World War II building boom, suburbs in Cook County began asking to buy water from the city of Chicago's water system.**

to oblige since it provided additional revenue to the city. Chicago began supplying suburban Cook County in the 1950's. In the 1980's communities in DuPage County began buying water from Chicago through the DuPage Water (continued on page 8)

<sup>1</sup> Chicago 1930-1970: Building, Planning, and Urban Technology,

Carl Condit, University of Chicago Press, P. 268, Footnote 18

# Illinois' Lake Michigan Water Diversion

(continued from page 7)



*Chicago River controlling work isolates Lake Michigan from the Chicago*

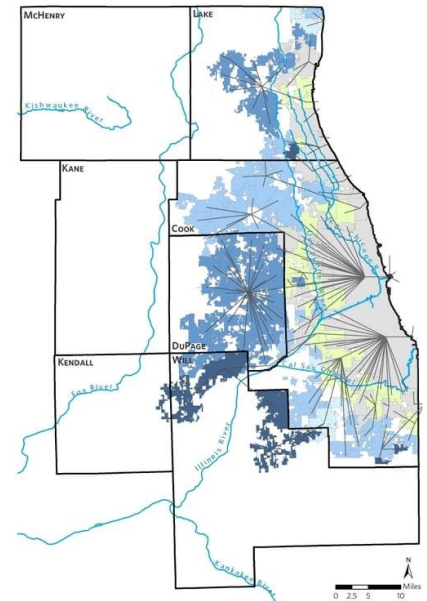
Commission. During the 1980's it became apparent that the way of calculating the diversion was not accurate and that the State of Illinois was exceeding the limit of diversion of Lake Michigan water and additional water would not be available to other communities. So what changed? Beginning in 1988, the way of calculating the amount of water being diverted was revised to be more accurate. Acoustical Velocity Meters were installed at Romeoville (currently at Lemont) to measure the flow rate and the use of computer modeling to estimate the runoff from the diverted Lake Michigan watershed to the Chicago Area Waterway System was implemented. Every five years the Army Corps of Engineers convenes a Three Member Technical Committee to review and recommend changes to its Lake Michigan diversion

accounting procedures. The latest report can be found here: [https://www.lrc.usace.army.mil/Portals/36/docs/divacct/technical/Eighth\\_Technical\\_Complete.pdf](https://www.lrc.usace.army.mil/Portals/36/docs/divacct/technical/Eighth_Technical_Complete.pdf)

By 1994 the yearly diversion had fallen below 3200 cfs. In the early 2000's ten communities in Lake County were granted Lake Michigan water allocations for their potable water systems. The attached graphic indicates how Lake Michigan water has migrated out from Cook County to DuPage, Will and Lake Counties.

Who regulates the diversion? The Army Corps of Engineers Chicago District is mandated to maintain an accounting of the diversion of water from Lake Michigan and publishes an annual report. The State of Illinois Department of Natural

Resources (DNR) Office of Water Resources is designated as the agency to control and regulate Illinois' diversion of water from Lake Michigan and is responsible for the allocation of this diversion. As part of these responsibilities the DNR requires all Lake Michigan allocation permittees to submit an annual water audit form (LMO-2). Annually, DNR posts a summary table showing usage, including non-revenue water. Non-revenue water is water that is lost to leakage from mains and storage tanks, inaccurate metering, unauthorized consumption and water used for flushing and fire-fighting. For the



*Chicago Metropolitan Agency for Planning (CMAP) graphic showing distribution of Lake Michigan water into Lake, DuPage and Will counties. The darker the color, the more recent a water allocation has been made.*

(continued on page 9)



# Illinois' Lake Michigan Water Diversion

(continued from page 8)

Water Year 2017 (October 1, 2016 to September 30, 2017) almost 13% of water diverted from Lake Michigan for domestic use was reported as non-revenue water. The Office of Water Resources reviews all existing allocation permits approximately every ten years. DNR wants to optimize the amount of Lake Michigan water available for domestic water supply and to balance the needs of all water users in northeast Illinois in order to promote efficient development and preservation of water supplies.

## Great Lakes Compact

Signed into law in 2008, the Great Lakes – St. Lawrence River Basin Water Resources Compact between two provinces of Canada (Ontario and Quebec) and the American states that border the Great Lakes (Illinois, Indiana, Wisconsin, Minnesota, Michigan, Ohio, Pennsylvania, New York) formalizes an agreement to prevent the diversion of water from the Great Lakes out of its natural drainage basin. As fresh water resources become scarce, everyone is casting glances at the plentiful waters of the Great Lakes. The purpose of the compact is to create a

framework that will protect the Great Lakes-St. Lawrence River Basin. The sections of the Compact concerning the diversion of water do not apply to Illinois due to the 1967 (modified 1980) U.S. Supreme Court Decree.

Diversion of water from the Great Lakes will be a major issue going forward as existing aquifers are diminished. Currently the City of Waukesha, Wisconsin has received an exemption from the compact so that it can receive Lake Michigan water. The existing groundwater source for Waukesha is polluted by radium levels exceeding Federal standards and requires extensive pretreatment. The City of Waukesha is 1.5 miles outside of the Lake Michigan drainage watershed but it is within a county that is partially tributary to Lake Michigan. Waukesha will purchase water from the City of Milwaukee, Wisconsin. Treated wastewater from Waukesha would be returned to Lake Michigan via a pipeline outfalling to the Root River.

One way to preserve the Lake Michigan water available to residents of northeast Illinois is

through improved conservation of the existing water diversion. The city of Chicago began making improvements to its water distribution system in 1990's that has reduced losses through leaky pipes and valves. As older homes are demolished or renovated new plumbing fixtures are installed. These fixtures are more efficient today than older fixtures they replace. The result is that water pumpage to Chicago's distribution system has fallen from 800 MGD in 1989 to 400 MGD in 2017. It is in everyone's interest to conserve Illinois' most valuable asset, Lake Michigan.

## References:

- Army Corps of Engineers website: <https://www.lrc.usace.army.mil/Missions/Lake-Michigan-Diversion-Accounting/>
- DNR website: [www.dnr.illinois.gov/WaterResources](http://www.dnr.illinois.gov/WaterResources)

*Jerome McGovern is a retired Principal Civil Engineer for the Metropolitan Water Reclamation District of Greater Chicago (MWRD).*

# ASCE SEI/T&DI Event Spotlights Illinois River Bridge Replacement at Utica, IL

(continued from page 3)



*Existing Bridge with Replacement Bridge Partially Erected (July 31, 2019)*

36-ft roadway width with a 10-ft shared-use path. The main span is 440-ft in length from pier-to-pier which provides for 350-ft of navigable waterway at the 65-ft 6-in vertical clearance over the Illinois River. The girders utilize a combination of weathering steels, Grade 50W and Grade HPS 70W. One of the fortunate features for the bridge's design is the high elevation of suitable bearing rock for the

footings at the base of the over 70-ft high piers. While the shallow rock was beneficial for design, it did pose some challenges to the contractor when excavating for the cofferdams.

A challenging aspect of the bridge design was the determination of a feasible erection sequence and a lateral wind resisting system. Computer structural modeling for erection and wind analysis, as well as a study of lateral bracing needs, was conducted. Two bays of lateral bracing were needed for the entire length of the bridge and a suggested erection sequence was provided in the plans based upon the analysis.

With the bridge slated to be completed in 2020, residents and visitors alike will continue to rely on this key crossing. As Kyle Videgar explained, the new IL-178 Bridge over the Illinois River is the key

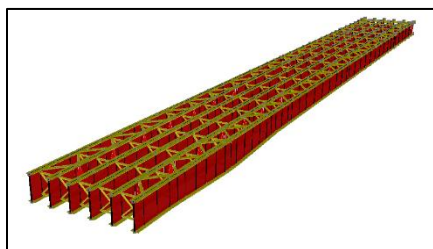
route, or gateway, into Starved Rock State Park—a top Illinois

**With the bridge slated to be completed in 2020, residents and visitors alike will continue to rely on this key crossing.**

natural and recreational destination.

*Jiarong (Kevin) Zhang, PE, SE is a lead bridge engineer with WSP USA. He was the lead structural design engineer for the IL-178 Bridge Replacement.*

*Patrick Laux, PE, SE, M.ASCE is a lead structural engineer at WSP USA and is a committee member of the Structural Engineering Institute.*



*Computer model for showing girder erection stage*

structure's two main piers. The rock allowed for the use of spread

# 2019 Deep Foundations Institute (DFI) 44<sup>th</sup> Annual Conference

(continued from page 4)

sessions on traditional topics of Drilled Shafts, Driven Piles, Earth Retention Systems, Alternate Foundations and Exploration and Testing. We will also be hosting the Manufacturer Supplier and Service Provider (MSSP) Expo Sessions which will provide presentations of interest to a wider audience and be housed in the Exhibit Hall. The conference will close with our theme of ***Future>>Forward*** in mind with plenary sessions on Safety in Geo-Construction and The Digital Future.

**Beyond the exciting technical program, this year's conference continues to offer plenty of opportunities for networking, technical participation and skill development workshops.**

Beyond the exciting technical program, this year's conference continues to offer plenty of opportunities for networking, technical participation and skill development workshops. Join us on Tuesday for DFI's technical committee meetings and the lunch-and-learn workshop, and that evening for the Women in Deep Foundations Networking Reception. Also, plan to attend the Poster and Cocktail Welcome Reception on Wednesday night.

DFI44 will be hosting students, the leaders of tomorrow, with a formal program to keep them engaged in the Deep Foundations industry. Industry professionals will be able to network with these students at our career fair and socialize with them at the networking events.

You can organize your schedule using DFI's 44th Annual Conference App. We look to you to spread the word on social media with #DFI44. Registration Link <http://www.dfi.org/dfieventlp.asp?13356>

**DFI 44 Chicago Organizing Committee consists of the following members:**

- **Conference Chair:** Dhooli Raj, P.E., Collins Engineers Inc.
- **Program Co-Chairs:** Ray Franz, P.E., D.GE, Hayward Baker Inc. and Cassandra Rutherford, Ph.D., P.E., Iowa State University
- **Session Moderators:** Joel Del-laria, S.E., P.E, Hayward Baker Inc. • Darren Diehm, P.E., GEI Consultants, Inc. • Fei Han, Ph.D., P.E., Purdue University • Bernie Hertlein, FACI, M. ASCE, GEI Consultants, Inc. • Brandon Hughes, S.E., P.E, Thatcher Foundations, Inc. • Hannah Iezzoni, P.E., GeoStructures, Inc. • Sara Knight, P.E., Strata Earth Services, LLC • Robert Kruger, P.E., McDermott • Justin Lewis, P.E, Hayward Baker Inc. • Patrick Lydon, P.E, Bencor Global, Inc. • Todd Schraeder, BSCE, Hardman Construction, Inc. • Mark Stephani, P.E., WSP-USA, Inc. • Dan Woeste, P.E., Geosyntec



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#Structures20

**Fall 2019**

In an effort to inform Illinois Section members of the discussions at monthly Board meetings, the Section Secretary contributes this article to the newsletter. Any questions or comments on the Board activities are welcome by contacting Andrew Walton at [awalton@ori-onengineersllc.com](mailto:awalton@ori-onengineersllc.com).

**■ Treasurer's Report**

▲ A treasurer's report was presented at the June and August 2019 meetings. All reports were approved.

**■ Highlights from Illinois Section Activities and Group Reports.**

▲ **ASCE Region 3 Assembly** – The ASCE Region 3 Assembly was held in Green Bay, WI this year on Friday 7/19/2019 thru Saturday 7/20/2019. Four (4) Illinois Section board members attended to represent the Illinois Section, including incoming Region 3 Governor John C. Lazzara, P.E., ENV SP, M.ASCE. Highlights included presentations on ASCE's 'Future World Vision' and 'Future Leaders' in addition to a discussion and overview of some the ASCE Historical Civil Engineering Landmarks.

▲ **2019 Annual Awards Dinner** – The 2019 ASCE IL Section Annual Awards Dinner will be held on Wednesday 10/2/2019 at The Art Institute of Chicago (Modern Wing) located at 159 E. Monroe St., Chicago, IL 60603 to celebrate local civil engineering leaders and projects. Award winners have been selected and notified.

Registration is now open for this event with multiple sponsorship opportunities available.

▲ **IS-ASCE Dinner Event at Starved Rock** – The ASCE IL Section hosted a dinner event for Illinois Section members outside of the Chicagoland area to present an update on the construction of the Illinois River Bridge Replacement of IL 178 over the Illinois River in Utica, IL. The event was held at Starved Rock Lodge & Conference Center on Wednesday 7/31/2019. Kyle Videgar, IDOT District 3 Construction Engineer, provided an overview of the historic Starved Rock multi-modal transportation network and discussed some of the challenges and unique aspects during construction of the \$25.5 Million bridge replacement.

▲ **ASCE Younger Member Leadership Symposia** – The ASCE Younger Member Leadership Symposia is being held at ASCE Headquarters in Reston, VA. Three (3) YMG members participated and attended one of the three weekend workshops held in July and August 2019. For more information about the ASCE Younger Member Leadership Symposia, please refer to the following webpage: <https://www.asce.org/event/2019/younger-member-leadership-symposia/>

▲ **ASCE IIT Student Chapter CAEE Career Fair** – The ASCE Student Chapter at Illinois Institute of Technology (IIT) will be hosting its 5<sup>th</sup> Annual Civil, Architectural, and Environmental Engineering (CAEE) Career Fair on IIT's campus at Hermann Hall located at 3241 S. Federal Street, Chicago, IL 60616 on Tuesday 10/8/2019 from 3-6pm. For registration questions or for more information, please contact ASCE-IIT Student Chapter President Zach Haney at [zhaney@hawk.iit.edu](mailto:zhaney@hawk.iit.edu).

▲ **ASCE National Convention in Miami, FL** – The 2019 ASCE National Convention will be held this year in Miami, FL from Thursday 10/10/2019 thru Sunday 10/13/2019 at the Hyatt Regency Miami. The ASCE Convention is ASCE's flagship membership event and is the single annual opportunity that the entire Society is represented together. The program for the Convention will be of an integrated, cross-cultural, technical, and educational nature. For more information about the ASCE National Convention, please refer to the following webpage: <https://www.asceconvention.org/>

▲ **ASCE Bylaws Update** – The ASCE IL Section has updated the Constitution, Bylaws, and Manual of Operations over the past few months. The updates have been made available on the IL Section website to Section members for a 30-day review period and will be adopted for the 2019-2020 IS-ASCE board.

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# News & Secretary Report

(continued from page 12)

## ▲ *ASCE Younger Member Group PE Exam Study Group Sessions* –

The ASCE Younger Member Group is offering the PE Exam Interactive Study Group Sessions for the October & April Professional Engineer (PE) Exam from Wednesday 9/4/2019 thru Saturday 10/19/2019. Participate in this revamped PE exam focused problem-solving sessions to prepare for this important next step in your career. Collaborate with an in-person instructor with multiple years of PE review course and industry experience. At the completion of the study group sessions, a full-day, in-person (8-Hour) mock exam will be offered for the specific disciplines to see what the exam experience is like.

▲ *Construction Institute (CI)* – The Illinois Section's Construction Institute (CI) will be hosting a dinner meeting focusing on the CTA's 95<sup>th</sup> Street Terminal construction on Thursday 8/22/2019 and another event to provide an update on the Jane Byrne Interchange Construction on Wednesday 9/18/2019. Both events will be held at Pazzo's located at 311 S. Wacker Drive, Chicago, IL 60606. A full day seminar to discuss Claims Avoidance and Resolution has also been scheduled by the National CI to be held on Friday 10/25/2019 at the Double Tree Rosemont. For more information or if you're interested in joining this institute, please contact CI Chair Zach Pucel at [zjpucel@transys-tems.com](mailto:zjpucel@transys-tems.com).

## ▲ *Environmental & Water Resources Institute (EWRI)* –

The EWRI hosted a joint luncheon event with APWA on Tuesday 7/9/2019 for the MWRD GI in addition to the EWRI Summer Social event held in Chicago's West Loop at Parlor Pizza Bar. Please contact EWRI Chair Megan Elberts at [melberts@geconsultllc.com](mailto:melberts@geconsultllc.com) with any questions or for more information.

▲ *Geo-Institute (GI)* – The GI will be hosting a dinner meeting to provide an overview on 'Mine Subsidence Engineering' on Tuesday 9/10/2019 at Pazzo's located at 311 S. Wacker Drive, Chicago, IL. Please contact GI Chair Alex Barlan for more information or with any questions at [asceilgeotech@gmail.com](mailto:asceilgeotech@gmail.com).

## ▲ *Structural Engineering Institute (SEI)* –

The SEI hosted a series of events in June and July including a 3-day Bridge Inspection Refresher Training from Tuesday 6/4/2019 thru Thursday 6/6/2019, the SEI Standards Lecture on ASCE 7-16 Wind Loads on Wednesday 6/5/2019, and a field trip/tour of the US Steel Works Plant in Gary, IN on Friday 7/19/2019. For more information on SEI activities, or if you have any questions, please contact SEI Chair Tom Janicke at [tjanicke@benesch.com](mailto:tjanicke@benesch.com).

## ▲ *Transportation & Development Institute (T&DI)* –

The upcoming September luncheon will feature IDOT Secretary of Transportation Omer Osman, providing an overview of the current IDOT program and recently passed Capital Bill. The event will be held at Maggiano's in Oak Brook, IL on Thursday 9/12/2019. Please contact T&DI Chair Nihar Shah for more information at [nshah@rme-i.com](mailto:nshah@rme-i.com).

## ▲ *Urban Planning & Development Group (UP&D)* –

The UP&D is looking for new members. If you're interested in joining this group, please contact UP&D Chair Bill Cussen at [wcussen@gsg-consultants.com](mailto:wcussen@gsg-consultants.com).

## ▲ *ASCE Younger Member Group (YMG)* –

The ASCE Younger Member Group held the Annual Bags Tournament at Joe's on Weed Street on Thursday 8/15/2019.

The Illinois Section Board Meetings are held every first Monday of the month, except for holidays. The next board meeting is scheduled for September 9, 2019 at 5:30pm at Clark Dietz's office located at 118 S. Clinton Street, Suite 700, Chicago, IL 60661. If you are interested in attending these meetings, please contact President John Green at [johnggreen@hotmail.com](mailto:johnggreen@hotmail.com).

By Andrew Walton, PE

ASCE IL Section Secretary 2018-2020  
[awalton@orionengineersllc.com](mailto:awalton@orionengineersllc.com)

## Illinois Section

## Activities

### ASCE IL Section ASCE YMG Fall PE Review Course

Date: Wednesdays, September 4 – October 19  
Time: 6:00pm – 8:30pm  
Place: WSP  
30 N. LaSalle, Suite 4200  
Chicago, IL  
Cost: \$375 for Course Classes and Mock Exam or \$125 for Mock Exam Only  
RSVP: Hussam Alkhatib ([PE.Review.YMG@gmail.com](mailto:PE.Review.YMG@gmail.com))  
[Course Flyer](#)

### ASCE IL Section Geo-Institute September Dinner Meeting – Mine Subsidence Engineering: An Overview

Date: Tuesday, September 10  
Time: 5:15pm – 8:00pm  
Place: Pazzo's at 311  
311 S. Wacker Drive  
Chicago, IL 60606  
Cost: \$50-General  
\$40-Government/Education  
\$25-Student  
\$55-At the door OR after RSVP date  
(Make checks payable to "ASCE IL Geo-Institute")  
<https://www.123signup.com/registration?id=rctyj>  
Contact: [asceilgeotech@gmail.com](mailto:asceilgeotech@gmail.com)  
[Dinner Flyer](#)

### ASCE IL Section T&DI Board Meeting

Date: Wednesday, September 11  
Time: 5:30pm  
Place: HDR  
30 N. LaSalle St.,  
Suite 3220  
Chicago, IL 60602  
RSVP: [NShah@RME-i.com](mailto:NShah@RME-i.com)

### ASCE IL Section T&DI September Technical Luncheon – Omer Osman, Acting Secretary, IDOT

Date: Thursday, September 12  
Time: 11:30am - 1:15pm  
Place: Maggiano's Little Italy  
240 Oakbrook Center  
Oak Brook, IL 60523  
Cost: \$50-Members  
\$60-General  
\$35-Government  
\$25-Student  
\$100 Bronze Level (Includes 1 seat)  
\$200 Silver Level (Includes 2 seats)  
\$350 Gold Level (Includes 4 seats-half table)  
\$550 Gold Level (Includes 8 seats-full table)

Lunch will be provided and attendees receive 1 PDH credit.  
RSVP: [Register here](#) – Regular (July 30 – September 9)

### ASCE IL Section Construction-Institute September Dinner Meeting

Topic: Circle Interchange Panel Discussion with IDOT's Bureau Chief of Construction, Paul Gregoire  
Date: Wednesday, September 18  
Time: 5:30-8:30pm  
Place: Pazzos  
311 Wacker Drive  
Chicago, IL 60606  
Cost: \$50-Professional  
\$35-Government/Education  
\$25-Full Time Student  
\$100 Bronze Level (Includes 1 seat)  
\$200 Silver Level (Includes 2 seats)  
\$350 Gold Level (Includes 4 seats-half table)  
\$550 Gold Level (Includes 8 seats-full table)  
RSVP: [Registration Link](#)  
Contact: Zach Pucel, [zjpu-cel@transystems.com](mailto:zjpu-cel@transystems.com), 847-636-3156  
[Event Flyer](#)

### ASCE IL Section UP&DG September Meeting

Date: Thursday, September 19  
Time: 5:30pm  
Place: Chandlers  
401 N. Roselle Road  
Schaumburg, IL  
RSVP: Bill Cussen: [wcussen@gsg-consultants.com](mailto:wcussen@gsg-consultants.com); 630-529-8000

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# Illinois Section Activities

(continued from page 14)

## ASCE IL Section SEI September Dinner Meeting

Topic: Design and Construction of the O'Hare Airport ATS Guideway Structure

Date: Wednesday, September 25

Time: 5:30pm - Registration and Cocktails  
6:00pm - Dinner, Presentation to follow

Place: Pazzos  
311 Wacker Drive  
Chicago, IL 60606

Cost: \$50-with reservation  
\$35-government/education (with reservation)  
\$25-fulltime students (with reservation)  
\$5 fee - without/late RSVP  
Make checks payable to ASCE Structural Group

1 PDH will be awarded

RSVP: [Register here](#) - by

Wednesday September 20<sup>th</sup>

Contact: Chris Knipp

[asce.il.struct@gmail.com](mailto:asce.il.struct@gmail.com)

[Event Flyer](#)

## ASCE IL Section YMG - Chicago's Sewer Innovations Dinner Meeting

Date: Thursday, September 26

Time: 5:30pm

Place: 525 W Monroe Street,  
Suite 1600  
Chicago, IL 60661

RSVP: <https://aisymg.123signup.com/event/details/rchgj>

Contact: [Tucker.raney@jacobs.com](mailto:Tucker.raney@jacobs.com)

## IIT ASCE Chapter 5<sup>th</sup> Annual Civil, Architectural, and Environmental Engineering (CAEE) Career Connection

Date: Tuesday, October 8

Time: 3:00 pm - 6:00 pm

Place: IIT - Hermann Hall  
3241 South Federal Street  
Chicago, IL 60616

Cost: \$250

Contact: Zachary Haney,  
[zhaney1@hawk.iit.edu](mailto:zhaney1@hawk.iit.edu), the ASCE-IIT President, or BJ Engelhardt,  
[jengelha@iit.edu](mailto:jengelha@iit.edu), who works in the Career Services Office at Illinois Tech.

[https://app.joinhandshake.com/career\\_fairs/11582/employer\\_preview](https://app.joinhandshake.com/career_fairs/11582/employer_preview)

## ASCE IL Section 2019 Annual Awards Dinner

Date: Thursday, October 11

Time: 6:00 - 7:00pm Cocktail Reception  
7:00 - 9:30pm Dinner & Awards

Place: Art Institute of Chicago  
Modern Wing

RSVP: <https://www.123signup.com/change?id=rcqbx>

Cost: ASCE Member/General (until Friday 9/28/18) - \$150.00  
ASCE Member/General Late Registration - \$175.00  
Educator/Government - \$95.00  
Student (limited availability of 60 tickets at this rate) - \$75.00

Sponsorship: Platinum (includes preferred table of 10 with logo identifier) - \$2,500.00  
Gold (includes 4 tickets) - \$1,500.00  
Silver (includes 2 tickets) - \$1,000.00  
Bronze (sponsorship only) - \$500.00

\*All Sponsors will have company logo displayed in the program and on presentation slides.

[Sponsorship Flyer](#)

[2019 Award Winners Flyer](#)

## ASCE IL Section Construction-Institute Claims Avoidance and Resolution Full Day Seminar - SAVE THE DATE

Date: Friday, October 25

Time: 7:00 am - 5:00 pm

Place: Double Tree by Hilton  
Chicago - O'Hare/  
Rosemont  
5460 N. River Road  
Rosemont, IL 60018

More details to come

**For all Section, Group and Committee events, check out the Section website at:**

[www.isasce.org/calendar/](http://www.isasce.org/calendar/)

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