

Newsletter No. 133 September 2019

President's Message



Dear ASCE Northwest Branch Members:

Since our last newsletter, there has been turnover in leadership on the branch board and Northwest Branch members have attended bridge tours, social gatherings, STEM outreach, and professionally and academically enriching conferences. Please take the time to browse this newsletter and catch up on branch activities. This past year we've done much as a branch, but looking forward, I am particularly excited to see the impact of the American Society of Civil Engineers' recent DVD release of *Dream Big: Engineering Our World*. However, before I rave about the potential that is *Dream Big*, introductions are in order.

Hello! I'm proud to greet you in this newsletter as the ASCE Northwest Branch's new branch President. I first came to the board as an active member of ASCE, fresh out of college where

I was an active participant in our student chapter's Steel Bridge team. I served on the Northwest Branch board for a year as a Director-At-Large, providing ideas and input to the board and assisting with planning the 2017 Annual Meeting. At the encouragement of then President, Kris Roppe, I ran for an was voted in as President-Elect. I served as President-Elect between the 2017 and 2018 Annual Meetings, participating in Branch board meetings and observing Kris as he fulfilled his duties as President. Kris is still serving on the board as Past President and advising me as he sees fit. The Northwest Branch board hosted the 2019 Spring Technical Conference held on Thursday, March 14th, 2019 in Eau Claire, WI. Thank you to all who attended the event and to those who assisted to make it a success!

I am humbled by the opportunity to be your president, and excited to share my experience with and promote Dream Big: Engineering Our World. I had first learned about the documentary at a multi-regional Workshop for Section and Branch Leaders back in 2017 when the film was still under development. I participated in a Sneak Peak event that allowed attendees to view the film prior to its release. It was appropriately educational, incredibly inspirational, and surprisingly entertaining to say the least. The film was released in 2017 and can now be viewed in IMAX and other large theatres around the world. As of December 2018, however, students and educators are no longer limited to just that. Many public schools in the United States have now received a DVD copy of the Dream Big film and an education toolkit. If you haven't heard of Dream Big until now, I encourage you to visit the film's website, http://www.dreambigfilm.com, and watch the trailers and behind the scenes videos, read testimonials, and find a theater near you. A second mailing of the DVDs and toolkits took place in June 2019 for areas where a museum currently has an exclusive contract to show the film. These areas include areas within a 200 mile radius of St. Paul which includes the entire state of Minnesota and the following Wisconsin counties: Ashland, Barron, Bayfield, Buffalo, Burnett, Chippewa, Clark, Douglas, Dunn, Eau Claire, Jackson, Juneau, La Crosse, Lincoln, Marathon, Monroe, Pepin, Pierce, Polk, Price, Ruck, Sawyer, St. Croix, Taylor, Trempealeau, Vernon, Washburn, and Wood. We have received a DVD copy as a branch as well and will explore a Dream Big movie event that will allow you to watch the 42-minute film and equip you in your interactions with students and educators. I have watched the film again since the branch has received the DVD, and it was a healthy reminder to me that engineers are innovators first and foremost. It's easy to get caught up in the nitty-gritty day-to-day tasks of our work, and we would benefit from occasionally taking step back to dream big.

In additional to a *Dream Big* screening, the branch is working on setting up other activities for 2019. We will be sending out invitations via email. Be sure to check in periodically so you don't miss out on any opportunities! The Northwest Branch Website has recently undergone a facelift, and we are looking forward to adding content as we move through 2019.

In past years the branch has offered a scholarship to students from the Northwest region. We received applications

in Spring 2018 and were proud two offer scholarships to two deserving students! We offered the scholarship again this spring, and we are proud to award it to a very deserving student. Congratulations William Berger from the Milwaukee School of Engineering!

Again, I thank you for the opportunity to serve on your board. You too can become more active such as helping out with STEM events, serving on the Annual Meeting and Spring Technical Conference planning committees, and attending socials and construction tours. As I said before, we are working on setting up events for 2019 and are always welcome to ideas from our members. If serving on the board or a committee is something that interests you or if you have an idea for an upcoming event, please don't hesitate to contact me!

Sincerely,

Corona Woychik Northwest Branch President

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UPCOMING EVENTS

Events

Check your emails from the Northwest Branch for all upcoming conferences, construction site visits, socials, outreach programs, and volunteer opportunities. The board is working diligently on lining up a great fall ASCE events!

2019 Wisconsin Section ASCE Annual Meeting

The Southwest Branch will host this year's Annual Meeting on Friday, October 4, at the Crowne Plaza Hotel in Madison, WI. A draft schedule of the Annual Meeting is attached at the end of this newsletter.

The Annual Meeting Planning Committee is pleased to announce that UW-Madison Assistant Professor Daniel Wright, PhD and Chief Meteorologist Bob Lindmeier at WKOW 27 ABC will present jointly as the Keynote address for the conference. Dr. Wright's presentation The Effects of Extreme Storm Events on Future Civil Engineering Design will address worsening rainfall extremes and how the overwhelming evidence of such has not translated into actionable information needed by engineers. Chief Meteorologist Bob Lindmeier's presentation Solving The Climate Challenge will address The Science, The Consequences, and The Solutions surrounding our current climate challenges.

The Planning Committee is also pleased to have Jon Schmidt, PE, SECB present The Decline of Engineering Judgment as the Conference Ethics Presentation. Jon is the President of the National Council of Structural Engineers Associations and his presentation will discuss the current state of the industry and the impact that federal, state, and local regulations are having on an engineer's ability to inject imagination and creativity into their work.

Finally, the Committee is thrilled to welcome ASCE President-Elect Kancheepuram "Guna" N. Gunalan to the Annual Meeting to address our membership. In addition to his address, President-Elect Kancheepuram is scheduled to present during a conference technical session.

Attendees of the entire meeting will be able to obtain up to 6 PDHs, including at least one Ethics credit. Four technical sessions are also offered throughout the day, covering a variety of specialty areas including structural, geotechnical, construction, environmental & water resources, transportation, and management.

For questions regarding the 2019 ASCE Wisconsin Section Fall Annual Meeting, including exhibitor opportunities, please contact the Conference Planning Committee at ASCEWISW.info@gmail.com

PAST EVENTS

Destination Imagination





On March 24, 2018, Andy Walters from American Engineering Testing provided a hands-on exhibit at the 2018 Destination Imagination Creativity Expo held at UW-Stevens Point. The exhibit was sponsored by ASCE (Northwest Branch). Over 1,000 students plus family members were in attendance for the event. The exhibit gave students the opportunity to batch their very own edible asphalt cookie while learning about design aspects that go into the concrete and asphalt pavement we drive on every day.



Summer Prescott and Red Wing Bridge Tours – June 18, 2018

A group of ASCE members and other professionals toured bridges in both Prescott and Red Wing.

The Point Douglas DrawBridge in Prescott carries US 10 over the St. Croix River. The bridge was

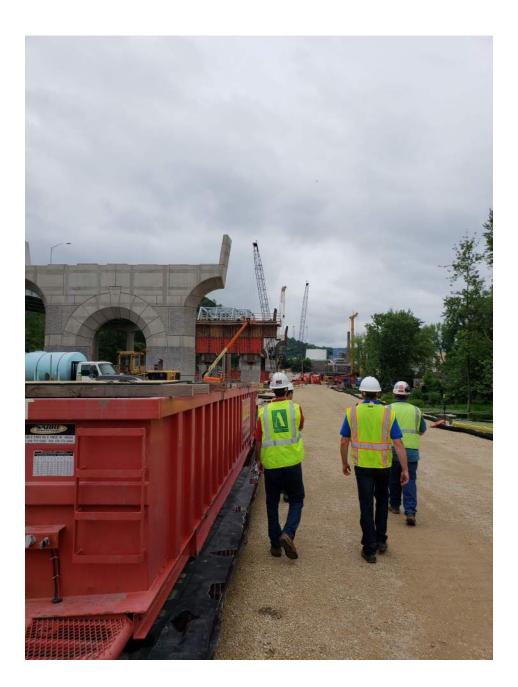
constructed in 1990 and replaced an older lift bridge. The total length is 672 FT and the width is 54 Feet with 4 traffic lanes and pedestrian access. The group was able to explore the different components of the bridge including the control room, hydraulic and mechanical equipment, backup generator, and counterweights. The tour concluded with an opportunity to witness the bridge in action both from the control room and below the deck.

The next stop was Red Wing Minnesota to view the construction of the newest Mississippi River Bridge. The Red Wing Bridge is being constructed to replace the Eisenhower Bridge over the Mississippi River and existing bridge over Highway 61. Construction began in May of 2017. The new bridge is scheduled to be open to traffic in fall of 2019 with final completion in August of 2020. At the time of the tour, construction of the piers was taking place with piers being formed and piling being driven. The piers were constructed first on the Wisconsin side with the construction moving west. The group was also able to view the abutment on the Wisconsin side



as it was being tested for settlement. The contractor was preparing to start construction of the abutment on the Minnesota side which involved close coordination with the railroad and City of Red Wing.

Following the tours, many of the group headed to Barn Bluff for a hike/picnic. The bluff trail lead to a scenic overview from which the entire City, Eisenhower Bridge, and new bridge construction could be viewed to round out the day.





Fall 2018 Red Wing Bridge Tour

A group of five Northwest Branch engineers enjoyed a beautiful fall day touring the Minnesota and Wisconsin portions of the Red Wing Bridge project. The tour started with a brief presentation in the field trailer, followed by a walking tour of the Red Wing side of the bridge. The construction crew was busy working on the geotechnical and structural aspects of the slip ramp coming into Red Wing.

The Wisconsin side of the tour showed that a lot of progress had been made since the June tour! Steel workers were tying rebar for the first four segments' deck pours, which was planned to be completed before the weather soured. Work was continuing for in-water pier construction when the water level was low enough. The new bridge's approach was surcharged and looked great. The tour group is so thankful to Mark Anderson of MnDOT and all of his expertise in showing us around. We will be planning at least one more construction tour in 2019 before the bridge is completed, so stay tuned!



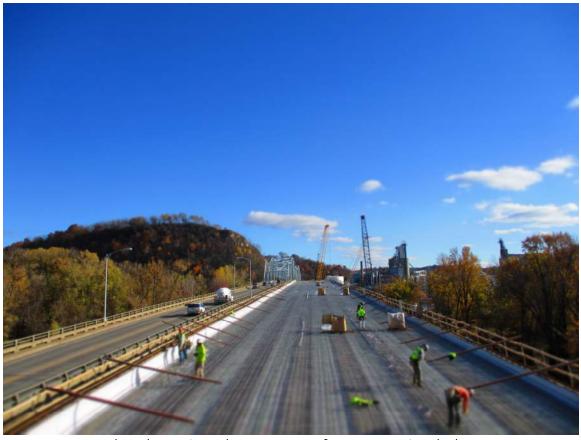
Wisconsin approach and piers



Red Wing slip ramp construction



Multimodal freight (barge and train) with bridge construction



Steel workers tying rebar to prepare for an upcoming deck pour



The new and old Red Wing bridges

STEM Event at UW-Stevens Point

Andy Walters (AET), Dan Borchardt and Rose Collins (MSA) participated in a STEM event at UW Stevens Point Friday, November 3 specifically designed to expose middle school boys to STEM careers. ASCE sponsored materials and provided student grants for the event.

The STEM event kicked off with ASCE assisting students with cooking up a batch of edible asphalt and teaching them the value of earthen building products and using recycled products in the mix.

The event then proceeded to a series of workshops and the workshop we assembled was: Would you drink this water? Murky water with twigs and mud simulated the run off that occurs in nature from farm fields or streets when rainstorms pick up sediment and from potable water picks up contaminants upon flowing through a residential home or business. This hands-on experience relies heavily on ingenuity, agreement with your team, and meticulousness.

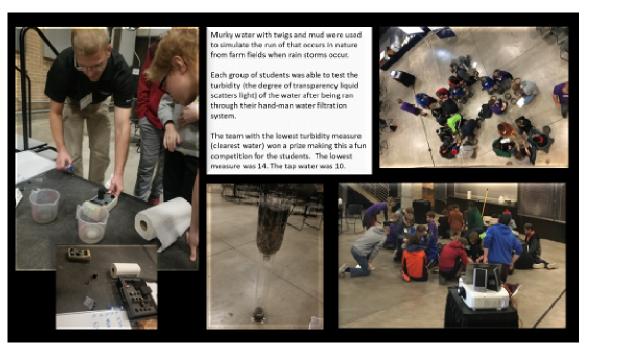
The students were setup into teams and shown how a natural water filtration system works by layering different types of rock, sand, and varying sizes of each. The students received a stack of sieves, bucket of mixed aggregates, and needed to design a filter that did not allow material to wash through the filter. Part 1 explained the importance of wetlands and infiltration through soils.



Part 2 of the experiment allowed students to experience trial runs similar to drinking water filtration. The students added flocculent to the water and they were able to touch and feel water filtration media, anthracite, green sand, and add varying amounts of each to their filter. The analysis showed how to create a better water filtration system each time they ran water through their design.

Each group of students was able to test the turbidity (the degree of transparency liquid scatters light) of the water after being ran through their hand-made water filtration system. Many of the students started with a turbidity reading of 300-400 and were enthusiastic about achieving a turbidity of 20-60 upon filtration.

The team with the lowest turbidity measure (clearest water) won a prize making this a fun competition for the students. The lowest measure was 14. The tap water was 10.





The 2019 ASCE Wisconsin Section Spring Technical Conference in Review

The 2019 ASCE Wisconsin Section Spring Technical Conference Planning Committee

Although record amounts of snow were still evident, the 2019 ASCE Wisconsin Section Spring Technical Conference took place at the Davies Center at the University of Wisconsin-Eau Claire on March 14th, 2019. The keynote speaker, Karrie Landsverk, delivered a presentation, "Open Your Silos and Feed Your Organization," which focused on increasing collaboration and connections across organizations. As with other ASCE technical conferences for our Section, three Technical Sessions were offered, in addition to an Ethics presentation, as well as an Awards Presentation.

The technical sessions included topics pertaining to Geotechnical, Structures, Leadership and Management, Transportation, Construction, and Environmental and Water Resources. Several presentations focused on local projects including the Eau Claire Half Moon Lake Bridge and Causeway, the downtown Eau Claire Confluence Development, and the River Prairie Development in Altoona; as well as projects elsewhere such as the Sentry Insurance Corporate Headquarters located in Stevens Point, and a Wharf Wall Failure and Repair project located in Milwaukee.

Given the date was March 14th, "Pi Day" was heartily celebrated with ice cream and "pie" for the afternoon break between the awards and the final technical session. A special thank you goes out to the ASCE Northwest Region Planning Committee, and the Davies Center staff, for their work and effort to make the conference a success!

Congratulations again to the 2019 ASCE Wisconsin Section New Life Members, and also to Outstanding Senior Civil Engineering Award-recipients, Sam Hovde, from University of Wisconsin – Platteville, and Blake Neuman, from Marquette University.



2019 ASCE Wisconsin Section Life Members at the Spring Technical Conference, with Wisconsin Section President Jared Wendt

UPDATE ASCE ONLINE PROFILE REGULARLY

Please update your ASCE online profile with current E-mail and mailing addresses to guarantee you receive ASCE newsletters and important information. As a reminder, those of you that have passed your PE exam, make sure to change your account with ASCE National. To update your ASCE profile, go to <u>www.asce.org</u> or call (800) 548-272.

2019 Calendar of Events

The calendar is simply a guide and may change throughout the year

September:

Northwest Branch Board Meeting

October:

- Northwest Branch Board Meeting
- ASCE Annual Meeting October 4th, 2019, Madison, WI
- Red Wing Bridge Tour October 10th, 2019

November:

Northwest Branch Board Meeting

December:

- Northwest Branch Board Meeting
- Happy Holidays!

CURRENT NORTHWEST BRANCH OFFICERS

President: Corona Woychik - ISG: La Crosse; corona.woychik@isginc.com President-Elect: Corona Woychik - ISG: La Crosse; corona.woychik@isginc.com Secretary-Treasurer: Andy Walters, American Engineering Testing, Inc.: Wausau; awalters@amengtest.com Past President: Wisconsin Section Northwest Branch Representative: Kris Roppe, ISG: La Crosse; kris.roppe@isginc.com

Northwest Branch Directors-At-Large:

Dylan Musgjerd - ISG: La Crosse; dylan.musgjerd@isginc.com Evan Berglund - Krech Ojard & Associates, Inc.: Eau Claire; (715) 553-7374 Dan Borchardt - MSA Professional Services: Wausau; (715) 304-0448 Mike Binsfeld - J.F. Brennan Company: La Crosse; mikebinsfeld@jfbrennan.com

Newsletter Editors: Andy Walters, Kris Roppe & Corona Woychik



2019 WI Section Annual Meeting Draft Schedule Crowne Plaza Hotel, Friday October 4, 2019, Madison, WI

<u>Time</u>	Session	Location
7:00 am – 8:00 am	Registration / Continental Breakfast	Pre-Function / Lobby
8:00 am – 8:50 am	Welcome, Announcements, and Address by ASCE President-Elect Kancheepuram "Guna" N. Gunalan	Three Lakes Ballroom
8:50 am – 9:50 am	<u>Conference Ethics Presentation:</u> The Decline of Engineering Judgment by Jon Schmidt, P.E., SECB	Three Lakes Ballroom
9:50 am – 10:10 am	Break / Exhibits	Pre-Function / Lobby
10:10 am – 11:00 am	Technical Session I	Koshkonong Odana I Odana II Two Lakes Ballroom
11:00 am – 11:15 am	Break / Exhibits	Pre-Function / Lobby
11:15 am – 12:05 pm	Technical Session II	Koshkonong Odana I Odana II Two Lakes Ballroom
12:05 pm – 1:40 pm	Lunch / Networking / Wisconsin Section Awards	Three Lakes Ballroom
1:40 pm – 2:40 pm	Joint Keynote Address: The Effects of Extreme Storm Events on Future Engineering Design by UW-Madison Assistant Professor Daniel Wright, PhD and Solving The Climate Challenge by Chief Meteorologist Bob Lindmeier at WKOW 27 ABC	Three Lakes Ballroom
2:40 pm – 3:00 pm	Break / Exhibits	Pre-Function / Lobby
3:00 pm – 3:50 pm	Technical Session III	Koshkonong Odana I Odana II Two Lakes Ballroom
3:50 pm – 4:05 pm	Break / Exhibits	Pre-Function / Lobby
4:05 pm – 4:55 pm	Technical Session IV	Koshkonong Odana I Odana II Two Lakes Ballroom