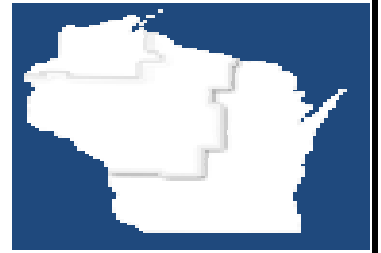




WISCONSIN SECTION

Northwest Branch



Newsletter No. 123

April 28th, 2014



President's Message – Past & Future

Dear ASCE Northwest Branch,

Welcome Spring aka Construction Season!

The sights of orange barrels are signaling the beginning of the busy season for a lot of our members. It's during this season that we become acutely aware of how fleeting time is and how little of it we have. Your volunteering of time to attend and promote ASCE activities is how this Branch becomes successful. Thank you for giving ASCE some of that precious time.

In the upcoming pages of the newsletter, you will be reading about the successes of the Northwest Branch and its' members. We've had members traveling the country attending conferences; making connections with legislative representatives; performing K-12 Outreach; and even climbing around in a dam (Keep reading the newsletter for the details on these events). This is one of the most active years that our Branch has had and it's because of you, our members!

The biggest success of the year for the Northwest Branch came in early March when the WI Section selected us to host the 2015 Spring Technical Conference, which is tentatively planned for March 2015 in LaCrosse. The Northwest Branch Board is excited for the opportunity to showcase our members' technical expertise, projects, presentations and companies. I am asking our members to consider volunteering some of your time to help support this event either by joining the planning committee, presenting at the conference, and/or having your company provide a form of sponsorship. Please contact Will Kratt (william.kratt@gmail.com) if you would like to help plan this momentous event. 2015 will be the first year that the Northwest Branch has hosted an event of this type, so it is a huge honor for the Branch to show our region of Wisconsin.

The overall success of this Branch is largely dependent on the leadership of the Board. These members volunteer their extra-curricular time to find interesting activities, speakers and networking events. In return, they gain leadership experience, networking contacts, and some unique opportunities. I ask our members to consider volunteering time and join the 2014-2015 Northwest Branch Board. The positions available are President-Elect, Secretary, Treasurer, and Directors-at-Large. Email any of the current Board members (contact information on the last page of the newsletter) with questions about these positions.

Thank you to our members, current Board, and previous Boards. Because you have taken the time for ASCE, we are having a phenomenal year.

Sincerely,

Jessica L. Felix, P.E.

Northwest Branch President

Email: felix.jessica@att.net

As always, the views expressed in the president's message are those of the author and do not necessarily represent the official positions of ASCE.

UPCOMING EVENTS

Goodell Scholarship Applications Due Soon!

This year the Northwest Branch of the American Society of Civil Engineers will be awarding one \$1,000 scholarship to a civil engineering student who lives within the boundaries of the Northwest Branch. This scholarship is to recognize the unselfish contributions to the civil engineering profession that were made by Mr. Harvey Goodell. Mr. Goodell provided leadership to the Branch for many years, having been a La Crosse area director from 1976-1984. He is most notably recognized by ASCE for his efforts in initiating and promoting the "Eminent Board" concept, which proposed methods for allowing private sector input in public engineering works. The hope of the Northwest Branch is that by awarding this scholarship, the spirit and enthusiasm shown by Mr. Goodell will be perpetuated.

Applicants need to fill out the application and attach a minimum of one (1) letter of recommendation. Applications should be returned by **Wednesday, April 30, 2014** to:

Will Kratt, PE

I&S Group, Inc.

201 Main Street, Suite 710 La Crosse, Wisconsin, 54601

You may also submit electronically to ascewinw@gmail.com. Put the note "Scholarship Application" in the memo line. Please note that applications received after the deadline will not be considered.

Eligibility criteria are as follows:

1. Applicants must have permanent residence within one of the following counties (which comprise the Northwest Branch limits): Adams, Barron, Buffalo, Chippewa, Clark, Dunn, Eau Claire, Iron, Jackson, Juneau, La Crosse, Lincoln, Marathon, Monroe, Oneida, Pepin, Pierce, Polk, Portage, Price, Rusk, St. Croix, Taylor, Trempealeau, Vilas, or Wood.
2. Applicants must have completed, or will complete in the present semester/quarter, at least one full academic year of study in the engineering curriculum.
3. Applicants must be attending, or plan to attend in the following semester/quarter, one of the following ABET accredited engineering institutions: University of Wisconsin – Madison, University of Wisconsin – Milwaukee, University of Wisconsin – Platteville, University of Minnesota—Twin Cities, University of Minnesota—Mankato, Michigan Technological University, Marquette University, or Milwaukee School of Engineering.
4. The scholarship will be awarded to one applicant, selected by the Northwest Branch Scholarship Committee, from all applicants meeting the eligibility criteria. Selection will be based on the applicant's demonstrated interest in the profession as reflected by the application responses and the letter of recommendation. The selection will be made no later than May 1, 2013.

PAST EVENTS

Lock and Dam 8 Field Visit, Genoa, WI

Michael Binsfeld, A.M.ASCE

The US Army Corps of Engineers routinely performs maintenance on the Mississippi River lock and dam system in order to maintain proper functionality. The locks were originally installed in the early 1930's as

means to control flooding and provide a commercially useable waterways transportation corridor. The lock system is quickly coming upon or has already surpassed the original design life intent and therefore projects that extend the useable life of these facilities are becoming more frequent.

On February 11th, the St. Paul District Corps of Engineers allowed the Northwest Branch to host approximately 35 individuals at Lock and Dam #8 in Genoa. This particular project required dewatering the main chamber of the lock to perform maintenance on the miter gates and bubbler system and also to repair the damaged concrete walls. In early December, bulkheads were placed in front of the lock gates and the entire lock chamber was dewatered in preparation for the work. This procedure is done about once every 20 years for each lock on the Upper Mississippi River system. The advantage of dewatering the main lock chamber is to make the lock work easier by means of utilizing equipment in a dry environment versus having work done underwater with divers. Inspections can also be performed to ascertain any additional areas of concern that may not have been realized without a full chamber dewatering.

The work is done during the winter months, which often creates difficult work conditions, to avoid impacts to navigational traffic. The locks and dams are often located in areas susceptible to high winds that can create dangerous wintertime working conditions. The tour group received a good sampling of the windy and cold workdays often endured on lock maintenance projects as wind chill temperatures plummeted below negative 20 degrees.



The photo to the left shows the completely dewatered lock chamber, which measures 110 ft wide by 600 ft long. The walls are 30 ft tall. During the tour, the group was able to see portions of the concrete walls being removed by mechanical means, as shown in the photo to the right. Areas along the lock chamber walls that have been identified as compromised or in poor condition were scratched down to a point where competent material was available for adherence of new concrete. Similar removal had been done to about 36 locations along the chamber walls using high-powered water jets aimed at removing fractured concrete. Once all the concrete demo locations are addressed, forms are placed against the wall and new concrete is poured in place.

Also during the tour, as shown in the photo below, the group had a rare glimpse inside the fill ports and baffle tunnels that allow the water in the chamber to rise and fall. Although these areas were not being serviced during this particular project, inspections were done in all chamber tunnels. The 18ft diameter tunnels run the majority length of the chamber.



The final phase of the project requires the corps to repair and resurface all 4 miter gates in the lock chamber, as shown in the photo to the right. Each gate varies from 27 to 30 feet tall and are nearly 55 feet in length.



Work is schedule to be complete in late March of this year, shortly before the river will reopen to navigational traffic. Thank you to all who showed up for the tour and stay tuned for many more exciting trips in the coming year.



Your friendly Northwest Branch Executive Board thanks you for your participation in Branch activities.

Engineering Outreach to Middle School Students

Dan Borchardt, P.E., M.ASCE

Dan Borchardt headed to Marathon City Venture Academy, on Wednesday, February 19th. Dan presented to 65 middle school students in the school's auditorium, and it was a great success. Students in Josh Eberhardt's technology education class received an introductory presentation that explained what engineering is, how engineers built America, and the design process that engineers go through when we start a project. Needless to say, the students soaked up a lot of information! This K-12 Outreach program

was set up by the ASCE Northwest Branch to promote the importance of engineering in the community.



December Social Event in Eau Claire

Teresa Davis, A.M. ASCE

On December 16th, ASCE members met at the Northwoods Brewpub Grill in Eau Claire for a brewery tour and social. The group was able to see the processes in which beer was brewed and bottled. Lots of visiting and story telling followed. It was great to have a nice-sized group attend the social, even though the weather and winter roads were uncooperative.



ASCE Sustainability Initiative, Committee on Sustainability Section/Branch/Liaison Workshop Atlanta, Georgia February 22-23, 2014

Teresa Davis, A.M. ASCE

The purpose of this workshop was to have the ASCE Committee on Sustainability (COS) and section/branch sustainability leaders to come together to not only network and discuss what each section/branch was implementing in terms of sustainability, but to help develop a workshop for the November 2014 International Conference on Sustainability Infrastructure (ICSI) Conference in Long Beach, California. The meeting began with introductions and followed with the purpose of the workshop, which included promoting awareness for the ASCE sustainability program and interaction among the representatives, sharing each branch/section's sustainability activities, and to provide an overview of the

ASCE national Committee on Sustainability (COS) strategic plan.

ASCE defines sustainability as the set of economic, environmental and social conditions in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely, without degrading the quality, quantity, or the availability of natural resources and ecosystem. We did learn through the weekend, as is true throughout the world, that each person has a different perspective/opinion on what sustainability means to him/her.

Each section/branch then presented its sustainability efforts. Teresa Davis (NW WI Branch president-elect) presented the sustainability activities of the Branch, which included the following:

- Jessica Felix, current Branch president, coordinated the presentation of “Sustainability Systems for the Built Environment” to ASCE members, UW-Stout construction management students, and others. The presentation discussed LEED, Envision, and other systems used to measure and “grade” sustainability in the construction industry.
- The NW WI Branch uses electronic newsletters, ballots, and invitations.
- Branch documents are stored electronically.
- The executive board holds meetings via conference calls.
- The Branch does its best to plan get-togethers in population centers, and carpooling to these events is encouraged.
- Two tours have been organized in the past year relating to sustainability: the Biomass Cogeneration Facility in Rothschild and the Black River Falls Hydroelectric Dam.
- As for our challenges, Teresa stated that our large geographic area was an issue. The NW Branch is composed of 26 counties, at an area of 23,006 square miles! High participation in activities is difficult due to this large area. (Teresa was humbled to hear that Alaska had a lot more distance between their members and geographic issues than the NW branch can ever imagine!)

The Wisconsin Section Sustainability Committee was not the only newly formed group. Some of the sustainability committees had been around for a few years and had some great ideas to offer, including the following:

- Many states/branches are looking into using Envision as the new rating tool for sustainable construction/engineering. Envision seems to be the major driver for involvement and education for sustainability.
- Texas is beta-testing a tool that looks at sustainability aspects from the cradle-to-grave view; a complete life-cycle analysis.
- The Los Angeles section became a non-profit to become more politically involved.
- Some branches (like ours) are reaching out to other disciplines, such as contractors, builders/developers, etc.
- Many branches/sections present a sustainability award for a project in their area to better showcase such work and increase awareness for sustainability.
- Some branches/sections do sustainability-related outreach to schools/clubs, such as “Infrastructure Day”, Earth Day activities, etc.
- Many branches/sections work with other professional organizations (American Public Works Association, American Water Works Association, local Chambers of Commerce, etc.) to form joint sustainability committees (to collaborate on sustainability projects and offer guidance to the industry).
- One common issue was how to get more people/members involved in sustainability committees and activities.
- Some sections/branches do sustainability marketing to municipalities, universities, owners and other engineering disciplines.

- A few sections/branches connect engineering/architecture/sustainability to quality of life.
- A key success factor for sections/branches has been to keep things simple; to work with what's there.
- A second key success factor for sections/branches has been to engage people around the things they like.
- A third key success factor for sections/branches is succession and mentoring.

ASCE discussed the progression of sustainable thinking to the realm that it is thought of “automatically, like safety”. An often-repeated phrase was, “We cannot afford NOT to do sustainability”. Each of the ASCE institutes presented on their sustainability efforts, and it was surprising to see how many of the institutes have been implementing parts of sustainability into their work for some time.

Some great ASCE references relating to sustainability include the following:

ASCE Vision for Civil Engineering in 2025: <http://content.asce.org/vision2025>; live and archived webinars relating to Sustainability, ISI, and Envision; a Coasts, Oceans, Ports & Rivers Institute (COPRI) sustainability short course to be added soon; Sustainability Guidelines for the Structural Engineer, in the fall of 2014 a course on life-cycle analysis is slated to be released, “Sustainability Guidelines for ASCE Sections, Branches, and Student Chapters”, ASCE’s sustainability blog, and join sustainability groups on LinkedIn.

If you are interested in becoming part of the newly formed Wisconsin Section Sustainability Committee, please contact Bridget Shuh Henk, Committee Chairperson, at bridget.schuh@gmail.com.



Committee on Sustainability participants: Bridget Shuh Henk and Teresa Davis are in the second row.

ASCE Legislative Fly-In, 2014

Tom Walther, P.E., F.ASCE

The 2014 ASCE Legislative Fly-In was held March 18 and 19, 2014 in Washington D.C. Approximately 200 ASCE members from around the nation attended the event including Northwest Branch member Tom

Walther, Wisconsin Section Past President Julie Hoppe and President Jon Lindert.

The event began Tuesday with a 3 ¾ hour Younger Member Program. This was followed from 4:00 to 5:30 with a session for all attendees explaining the Fly-In process and reviewing the focus issues to be emphasized this year. The evening concluded with a reception and then dinner. The dinner speaker was Janet Kavinoky, Executive Director for Transportation and Infrastructure for the U.S. Chamber of Commerce. She spoke on the topic of the need for a new transportation bill this year and federal transportation funding shortfalls.

Wednesday commenced with an education and training session on state and regional Infrastructure Report Cards. Then training was offered on conducting congressional visits and on this year's emphasis topics. The emphasis areas were passage of the Water Resources Development Act (WRDA) and surface transportation funding and a new federal surface transportation implementation law.

Senate and House versions of WRDA were passed in May and October, 2013, respectively. The bills are now in a conference committee. ASCE and multiple other organizations are pushing congress to develop a final version and to get this bill passed into law. Significant areas covered by this bill include reauthorizing the dam safety program, reauthorizing the harbor maintenance trust fund and creating a national levee safety program.

The current transportation funding law, commonly known as MAP-21, expires on September 30, 2014. The federal Highway Trust Fund is projected to become insolvent by late summer. Senate and House leaders are starting to talk about these topics and President Obama has put forth his ideas in his recently released budget bill. That said, little action has actually occurred and time is running out. If action does not occur soon federal transportation funding will cease and multiple transportation projects in Wisconsin will be literally stopped in their tracks.

The morning session was highlighted by a presentation by U.S. Secretary of Transportation Anthony Foxx. He also spoke on the topic of the need for a new transportation bill this year and federal transportation funding shortfalls.

After lunch busses transported attendees to Capital Hill to conduct visits with our Senators and Members of Congress. Due to a scheduled full staff retreat we were unable to meet with anyone from Senator Baldwin's office. The three of us did visit with the staff of Senator Johnson. Then individually Jon met with the staff of Congressman Mark Pocan, Julie met with the staff of Congressman Jim Sensenbrenner and I visited with the staff of Congressman Ron Kind. We also were able to meet with the staff of Congressmen Sean Duffy, Reid Ribble and Paul Ryan. We also dropped off ASCE Issue Briefs at the offices of all other Members of Congress who represent the State of Wisconsin.

The event concluded with the ASCE President's Congressional Reception for members of congress, their staffs and other invited guests. This was held in the Cannon Caucus Room of the Cannon House Office Building.



From left, Tom Walther, Jon Lindert, Secretary Anthony Foxx and Julie Hoppe.
Photo credit: Julie Hoppe

ASCE WI Section Spring Technical Conference

Kris Roppe, A.M. ASCE

The 2014 ASCE Wisconsin Spring Technical Conference was hosted by the Southeast Branch on Thursday, March 6 at the Country Springs Hotel in Pewaukee. The conference consisted of a Section meeting held in the morning, two main sessions featuring keynote speakers, as well as three different technical sessions.

The plenary session speaker was David Garman from the University of Wisconsin – Milwaukee. Dr. Garman is the founding dean of the School of Freshwater Sciences in Milwaukee. The presentation explained how the School of Freshwater Sciences is using research to solve every day fresh water problems including water quality and aquatic life.

Several technical presentations were given following the plenary session in a variety of civil engineering disciplines including structural, water resources & hydraulics, ethics, construction, urban planning & transportation, and geotechnical. Between sessions attendees of the conference were able to walk through the different vendor exhibits. Vendors for the 2014 conference included ACH Foam Technologies, Acrow Bridge, Contech, County Materials Corporations, Eblake & Associates, Ground Improvement Engineering, and EnvisionCAD.

The evening consisted of a social hour followed by dinner and presentations. The first presentation was given by ASCE National President-Elect Robert Stevens. Stevens presented on the current state of ASCE and the future outlook. The closing presentation was given by Brian Roper, Tom Buchholz, and Scot Becker of the Wisconsin Department of Transportation. The topic for this presentation was the unique situation of Pier 22 on the Leo Frigo Bridge Settling two feet overnight and the investigation, design, and construction challenges that followed in making repairs.

Renew your ASCE Membership for 2014



Online, in person, and wherever your membership takes you, ASCE benefits every Civil Engineer. See the ways you benefit from your ASCE membership at asce.org/101. Keep your benefits and [renew today!](#)

Update Your 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 www.asce.org or call (800) 548-272.

2014-2015 Calendar of Events

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

APRIL:

- April 11 – PE, PS, and SE Vertical Exam (offered in Madison, Milwaukee and Platteville)
- April 12 – SE Lateral Exam (offered in Madison, Milwaukee and Platteville)
- April 29 – Northwest Branch Board Meeting

MAY:

- May 8 – ASCE WI Section Board meeting hosted by Southwest Branch – Madison
- May 28 – Northwest Branch Board Meeting
- Wausau Social (additional information forthcoming)

JUNE:

- Northwest Branch 2014-215 Board Ballots due
- Northwest Branch Board Meeting

JULY:

- Northwest Branch Board Meeting
- Award 2014 Goodell Scholarship
- July 17 – ASCE WI Section Board meeting hosted by Southeast Branch – Milwaukee

CURRENT NORTHWEST BRANCH OFFICERS

President: Jessica Felix, WisDOT Northwest Region: Eau Claire; (715) 225-9302; felix.jessica@att.net
President-Elect: Teresa Davis, Brown and Caldwell: St. Paul MN – resides in WI; brunnete.80@gmail.com
Secretary-Treasurer: Will Kratt, I&S Group, Inc.: La Crosse; william.kratt@gmail.com
Past President: Will Kratt, I&S Group, Inc.: La Crosse; william.kratt@gmail.com
Wisconsin Section Northwest Branch Representative: Will Kratt, I&S Group, Inc.: La Crosse; (608) 789-2034; william.kratt@gmail.com

Northwest Branch Directors-At-Large:

1. Andy Walters, American Engineering Testing, Inc., Wausau, WI; awalters@amengtest.com
2. Mike Binsfeld, J.F. Brennan Company: La Crosse, WI; mikebinsfeld@fbrennan.com
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