

The ASCE-NCS Annual Awards Banquet

Celebrate Our Region's Outstanding Projects and People

Join us at the Hilton Arlington on the evening of Tuesday, March 24 for the National Capital Section's (NCS) signature event of the year. The Annual Awards Banquet gives us an opportunity to recognize and celebrate local excellence in projects, engineers, and students who have contributed to our profession and our community. Recognized parties include ASCE-NCS Outstanding Civil Engineering Project, Sustainability Committee's Award Winning Project, Meritorious Service and Community Service Award winners, NCS Student Scholarship Award recipients, Outstanding Graduating Seniors from local civil engineering universities, and members of the NCS who have achieved Life Member or Distinguished Member status during the past year.

The finalists for the **NCS 2015 Outstanding Civil Engineering Project** are the Quadrangle Development Corporation's **Marriott Marquis Convention Center Hotel** in Washington, DC, and Macerich's **Tysons Corner Center - Office Tower and Residential, Phase I** in McLean, VA.

The Marriott Marquis is the first project in Washington, DC, to utilize top-down construction, a method selected due to local zoning height requirements coupled with the need to provide the square footage the market needed. This resulted in the building going 100 feet underground. Because the building perimeter was set directly on the property line, use of this method made for a very challenging project. Constructing the building foundations, excavating, and removing the soil, placing the structural slab system and repeating for each floor from the street elevation to the lowest level demanded the highest level of focus and planning. The innovative use of structural steel wide flange members and plates as reinforcement for



the concrete slabs below grade allowed for seven stories of construction below grade, and the deepest excavation in Washington, DC.

Tysons Corner Center is an outstanding example of the principles of Live, Work, and Play that is transforming Tysons Corner into a true urban community with a direct link to Metro's new Silver Line. Along the main facade of the office tower is a glass cable wall system, one of the largest of its type in the country



Photograph ©Prakesh Patel

Join us **Tuesday, March 24, 2015**, at the Hilton Arlington, 950 North Stafford Street, Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$8), at the Ballston Mall garage (\$1 after 6 pm), and on the street (free after 6 pm). The Hilton is on the same block as the Ballston Station on Metro's Orange and Silver Lines.

Please click [HERE](#) to register by **March 18**. Registration and networking will be from 6–6:45 pm, followed by dinner. The program will end by 8:30 pm. The cost is \$55 for those preregistering, \$20 for students, \$35 for life members, and \$65 for walk-ins, as space allows. For questions, please contact [Christian Manalo](#).

Note that no-shows will be charged the full registration fee. We welcome walk-ins, including any registrations made after the guaranteed number of guests is provided to the hotel. However, the cost for walk-ins is higher because the Section is charged accordingly by the hotel for late registrations.

and the first in the DC metro area. Vertical tensioned cables anchored by post-tensioned beams at the street level and second floor support the 52-foot-high unitized glass wall and custom extrusions uniquely designed for this project. A stainless steel portal incorporated within the glass cable wall provides access to the lobby. Also located along the main facade are eight 56-foot-tall exposed architectural concrete columns with a remarkably smooth finish. Each column contains almost three full truckloads of concrete.

Attend the Banquet on March 24 to learn which outstanding project is selected as this year's winner. ■

President's Corner

This month, the NCS hosts our Annual Awards Banquet, an event that serves as a high point each year as we celebrate the achievements of the past year and recognize members who have truly stood out in our Section. We will recognize service award winners, new life members, and outstanding including scholarship recipients (to date, NCS has awarded more than \$300,000 in



scholarships!). In addition, we will hear from our two finalists and announce the winner of the Section's Project of the Year award.

To make this year's Banquet more exciting, we have the special honor of recognizing two Section members who recently received the honorary distinction of ASCE Distinguished Member – Dennis Kamber (ARCADIS) and Vice Adm. USN (Ret.) Michael

Loose (Parsons). In the more than 160-year history of ASCE, only 600 members have received this distinction, and NCS is fortunate to have 20 of these members active in our Section today.

I look forward to seeing you on March 24 at the awards banquet, which is sure to excite and inspire all who attend!

Christian Manalo
President, ASCE-NCS 2014–15

Civil Engineering and You

Alignment Sows Significance

By Ranjit S. Sahai, P.E., F.ASCE

When you studied civil engineering, you learned how to apply the principles of math and science to infrastructure. When you practice engineering, your horizon expands dramatically beyond the application of scientific principles. How you navigate this expanded horizon either chains you to mediocrity or propels you to significance.

The Leadership Training Committee of ASCE organizes and delivers content at its annual Regional Leadership Training Conferences for new and emerging leaders within the ranks of its volunteer-run Sections and Branches. The content delivered, as evidenced by looking through the list of sessions the Leadership Training Committee offers, covers other aspects of the engineering profession but scientific, *i.e.*, the dramatically expanded horizon.

A developer receives bids for the design of a project component and chooses the lowest bid to hire an engineer. Soon after construction, the project component fails. Investigation reveals that the component was the cheapest

on the market and not properly tested or documented by the vendor. It also reveals that the engineer was not very well versed in the proper design of such components. What steps taken by who and when could have minimized the risk of failure resulting in the loss of life and property? Your profession demands this expanded horizon for significance.

The larger your project is in size, scope and complexity, the greater the number of teams involved in its planning, design, construction, and maintenance. Consequently, the diligence required of teams coming together for a successful outcome is much higher. That you must understand the technical standards governing your profession is a given. The depth of understanding you develop about the "other aspects" of your profession, *i.e.*, life itself, determines

the complexity you can navigate with confidence for the successful outcome for your projects.

When you purposefully align your professional interest with your rational long-term self-interest, you sow the seeds of significance that harness the best within you to do your best work. The legends we discover when searching bodies of knowledge – John Smeaton, the father of civil engineering; Ralph Modjeski, the bridge designer; Thomas Telford, the Colossus of Roads; Gustave Eiffel, the Eiffel Tower designer; Fazlur Khan, the high-rise building designer; Henry Petroski, the failure analysis author and professor – inspire us to do our best, every day, one day at a time, in a purposefully woven sequence of events that lead to the significance we seek. ■



Images from the notebooks of Leonardo da Vinci: the greatest engineer to walk this Earth

Newsletter

Rachel Schneider, Editor

April 2015 Issue Deadline: March 15, 2015

To Submit Articles: newsletter@asce-ncs.org

NCS eNewsletter Archives: go to www.asce-ncs.org and click on the Newsletters tab.

Address Changes: Call 1-800-548-ASCE, e-mail member@asce.org, visit www.asce.org, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Include your membership number.

National Capital Section

Officers (2014–2015)

Christian Manalo, President

D. Scott Wolf, Vice President

Jordan Pitt, Secretary

Emily Dean, Treasurer

Rachel Schneider, Editor

Kelly Cronin, YMF President

Brian Barna, Director

Julia Devine, Director

Shri Yamijala, Director

Ranjit S. Sahai, Past President

Qamar A.O. Kazmi, Previous Past President

Committee Chairs

Please refer to the [NCS website](http://www.asce-ncs.org) for a current list of NCS committees and chairs.

ASCE NCS Call for Sponsors

As the volunteer-run, local Section of the ASCE, your sponsorships allow NCS to reward deserving civil engineering students with scholarships, promote our profession with public outreach efforts, and support the professional and personal growth of our members. The Section is committed to assisting civil engineering students with scholarships through its Scholarship Trust. Surplus funds from the Section add to the Scholarship Trust, subsidize the fees we charge our members for educational Section meetings, and help us nurture leadership opportunities for your employees through their participation in our committees.

In short, your contributions assist us in our quest to support the needs of civil engineering students and professionals in our region. Visible recognition for your support is a key part of the program. To assist you in selecting the level of support appropriate for your firm, we have outlined our specific sponsorship opportunities below.

e-Newsletter Sponsor/Website

Recognition: Exposure to more than 3,200 members and followers eight times per year through a business card posting in the NCS e-Newsletter. Silver, Gold, and Platinum sponsors receive recognition as Partners by having their logos posted year-round on our [website's](#) footer.

Annual Awards Banquet Passes:

The NCS Annual Awards Banquet will be **Tuesday, March 24, 2015** at the Arlington Hilton. With attendance at the banquet typically exceeding 100, we must rely on the generosity of others to support a quality event to honor deserving individuals. As a part of your sponsorship, your firm will be recognized in the event program, on a display board located within the banquet hall, on our [website](#), and twice in our eNewsletter.

Monthly Meeting Benefit: Your sponsorship entitles your organization the opportunity to exhibit promotional materials on a display table at regular

monthly Section meeting. Platinum sponsors also receive an opportunity to present their firm from the lectern before the meeting's keynote speaker. We hold eight Section meetings every year. As the number of meetings is limited, please confirm your meeting choice early. Platinum sponsors also receive a "Platinum Section Meeting Pass" that allows them to send one attendee at no cost to any or all regular Section meetings (Annual Banquet is excluded).

Scholarship Fund, Direct

Contribution: The NCS awards scholarships each year to outstanding students from five local universities. As in previous years, several thousand dollars in scholarships will be announced at the Annual Awards Banquet.

Please contact [Emily Dean, NCS Treasurer](#) for additional information. Thank you in advance for your continued support of the NCS. ■

Sponsorship Benefits	Sponsorship Levels			
	Item Sponsor	Silver \$500	Gold \$750	Platinum \$1,500
eNewsletter/Website Recognition				
Business card recognition in 8 issues	\$350	✓	✓	✓
Partner recognition on Website		✓	✓	✓
Annual Awards Banquet Passes				
1 complimentary pass	\$300	✓		
2 complimentary passes	\$500		✓	✓
Monthly Meeting Benefit				
Exhibit and table display	\$150		✓	✓
5-minute presentation				✓
Pass for attending regular Section meetings				✓
Scholarship Fund, Direct Contribution	\$100			✓
(Item Sponsor: Add Items Selected)				

ASCE-NCS Newsletter Patrons

 <p>Where Experience Meets Vision</p> <p>mcmjac.com</p>	 <p>NICHOLSON www.nicholsonconstruction.com</p> <p>Mark Rothbauer, P.E. Mid-Atlantic Regional Manager mark.rothbauer@nicholsonconstruction.com 412-221-4500</p>	<p>ANCHORS AUGERCAST PILES DIAPHRAGM WALLS DRILLED SHAFTS GROUTING MICROPILES SECANT PILE WALLS SOIL MIXING SOIL NAIL WALLS SOLDIER PILE WALLS</p> <p>BUILD ON US</p>
--	--	--

NCS Committee News and Updates



Monthly Happy Hours. The NCS Younger Members Forum (YMF) holds monthly happy hours in Arlington, VA or Washington, D.C. Happy hours are usually the first Wednesday of each month unless a holiday falls during that week. The February happy hour occurred on February 4, 2015, at *Blue Jacket Brewery* in Washington, DC, for about 25 members. The next monthly happy hour will take place in Arlington, VA at *Ireland's Four Courts* at 6pm on Wednesday, March 4. Look out for emails with specific locations for future monthly happy hours!

Professional Development: Arlington Memorial Bridge.

The NCS Younger Members sponsored a Professional Development event on January 28 at *Madhatter* in Washington, DC for a group of 30 people. The evening's presenter was Engineer-Historian J. Lawrence "Larry" Lee, Ph.D., P.E., with the Historic American Engineering Record of the National Park Service. Larry discussed his role associated with the Arlington Memorial Bridge, managing a thorough documentation project of the bridge as it currently stands, before any future rehabilitation/reconstruction work commences. The presentation included an extensive history of the bridge, particularly associated with its design and construction, along with prior maintenance and modification projects. Those in attendance also gained valuable insight into today's unique considerations of carrying out significant rehabilitation/reconstruction work



NCS YMF Members with Garrett Peck at Seneca Quarry Site on February 7, 2015

while preserving the aesthetic aspects of such a historic structure.

Professional Development: Seneca Quarry Tour.

As a follow-up to YMF's October professional development, 35 younger members joined local author and historian, Garrett Peck, on February 7, for a walking tour of the now abandoned Seneca Quarry site. Mr. Peck previously presented on the history of the Seneca Quarry and its influence on construction and architecture in the Metro DC area.

Stay Connected! Check out photos and stay up-to-date with YMF events by visiting the [YMF Facebook page](#). Also, follow us on Twitter (@asce_ncsYMF) at https://twitter.com/asce_ncsYMF.

Get Involved! Are you interested in getting involved with more Younger Members activities? Do you have ideas for social events or volunteering

activities? Would you like to be a board member? The ASCE NCS Younger Members Group is always looking for new members! Let us know if you are not already on our mailing list! If you would like to become more active with the YMF or would like more information on our events, please contact the [YMF President](#).

Centennial Committee

A call for volunteers. The Centennial Celebration Committee continues to plan activities that will promote the civil engineering profession and our accomplishments since 1916. Please join us by participating on the Committee as we strive to honor the civil engineers from our area that have not only played key roles around the world, but also built the infrastructure in



continued on page 5

ASCE-NCS Newsletter Patrons



Specializing in Design and Supply of Mechanically Stabilized Reinforced Earth® Walls and Precast Concrete Arch Structures

Keith Brabant

Mid Atlantic Regional Manager

12001 Sunrise Valley Dr., Suite 400, Reston, VA
800-446-5700
www.reinforcedearth.com

Highways & Roads
Bridges
Railways
Industrial
Waterways & Dams
Protective Structures
Commercial & Public Facilities



A. JAMES CLARK
SCHOOL OF ENGINEERING

Graduate Programs Designed for Working Engineers

- Civil & Environmental Engineering
- PE Exam Review (Fall/Spring)
- Project Management
(available 100% online)

www.advancedengineering.umd.edu

NCS Committee News and Updates

continued from page 4

the Washington, DC area for the benefit of the public. We are currently reaching out to federal, state, and District of Columbia organizations in our region, and local government organizations to inform them on our plans for promoting civil engineering accomplishments and then hosting a meeting for delegates from these organizations. We are also contacting local engineering firms to solicit their involvement in our promotional activities and working with local schools and universities to obtain their support in promoting the benefits of a civil engineering education.

We are seeking volunteers for the following Centennial activities:

- Researching projects for our Centennial Commemorative Book;
- Organizing tours of local engineering achievements;
- Outreach support to students and the public; and
- Assisting with our Centennial Gala Celebration.

Whether you are a Young Member, a Life Member, or somewhere in between, please contact the [Centennial Committee's Secretary](#) and join us today!

Water Resources and Sustainability Committee

Joint Dinner and Presentation. On March 10, 2015 the Sustainability and Water Resources Committees will host a joint dinner and presentation featuring Mr. Kent R. Hansen, P.E., Director of Engineering at the National Asphalt Pavement Association on the *Benefits and Design Considerations of Porous Pavement*. Mr. Hansen has over three

decades of experience on sustainable methods for reducing surface runoff through increased pavement water infiltration. The event will be hosted at [Ragtime Restaurant](#) in Arlington VA, within walking distance of the Courthouse Metro. The evening will begin with registration and networking at 6:00 pm, dinner from 6:30 to 7:00 pm, and the presentation from 7–8:00 pm. For additional information, please contact [Alex Rosenheim](#) or [Piers Causton](#) or (202) 210-1103.

Stormwater Class. For NCS members in the water sector, or just interested in water, Virginia Tech, Virginia Cooperative Extension, and ASCE Virginia Section Stormwater Committee is hosting a class titled *Modeling Urban Stormwater Best Management Practices for Effective Design in Falls Church, Virginia* on March 11, 2015. Visit <https://urbanmodelingbmmps.eventbrite.com> for more information. ■

April 2015 Section Meeting

NCS Sustainability Committee Presents Mr. Higuchi, Jr.

Please join us on Tuesday, April 21, 2015 as we honor sustainability in civil engineering in the Capital region. This year the NCS Sustainability Committee welcomes Mr. Sam Higuchi, Jr., National Aeronautics & Space Administration (NASA) engineer and co-chair of the Federal Interagency Forum on Climate Change Impacts and Adaptations. Mr. Higuchi will discuss the federal policies and programs for climate change adaptation, and NASA's programs for observing and understanding climate change phenomena and adapting its facilities.

The Federal Interagency Forum on Climate Change Impacts and Adaptations is an informal forum co-hosted by NASA, the Department of Interior, and the U.S. Global Change Research Program. Many agencies attend the forum while it provides a venue for presentations and discussions on issues relating to the impacts of climate change on agency resources and

operations, and adaptations of agency activities, facilities, or lands to respond to these impacts. Relevant new publications and reports from participating agencies and from sources such as the Government Accountability Office, the Council on Environmental Quality, and the Pew Center are regularly presented and discussed at this forum.

Mr. Higuchi, Jr. has been a civil servant in the federal government since 1984. His experience spans working at remote Antarctic facilities and a U.S. Navy installation implementing environmental programs; and headquarters experience managing agency-wide programs. His career also includes working for a consulting firm and a state regulatory agency. He has worked as a research scientist, regulatory engineer, facility environmental coordinator, civil engineer, environmental engineer, policy & program analyst, and program manager. He holds academic degrees in engineering, science, law, and public administration. ■

ASCE-NCS Newsletter Patrons



WJE | ENGINEERS
ARCHITECTS
MATERIALS SCIENTISTS

Wiss, Janney, Elstner Associates, Inc.

February Meeting Recap

Blue Plains Tunnel Progress: Deep Shafts and Tunneling in Soft Ground

By Ainsworth Marshall, P.E., M.ASCE

The construction progress of the Blue Plains Tunnel was the subject of the February NCS meeting. The Blue Plains Tunnel is the first segment of the DC Clean Rivers Project; DC Water's \$2.6 billion infrastructure project designed to reduce combined sewer overflow into the District's waterways by 96%.

James Wonneberg and Ryan Payne from the construction management team of the project presented on the methods used to construct the tunnel and associated deep shafts. James Wonneberg, P.E., CCM, is the Resident



Engineer responsible for construction management of the Blue Plains Tunnel since 2011. Ryan Payne, P.E., is the Field Engineer responsible for geotechnical and tunneling aspects of the project including analyzing tunnel boring machine (TBM) performance, construction oversight of the tunnel and shafts, and the deployment of DC Water's real-time TBM data monitoring and reporting software.

Mr. Wonneberg provided the background on how a combined sewer system works the steady decline in the health of the District's waterways, and the development of DC Water's long-term control plan to address the Consent Decree to reduce combined sewer overflows. Mr. Wonneberg described how construction of a 23-foot diameter, 15-mile long tunnel would capture water during heavy rainfall events and thus reduce future combined sewer overflows.

Mr. Payne elaborated on the details of constructing of the Blue Plains Tunnel and the associated deep shafts. He presented an overview of the different



Deep Shaft under Construction



Lady Bird, DC Water's massive Tunnel Boring Machine

methods used to construct the slurry walls, base slabs, and the final liners of the shafts. Mr. Payne also described Lady Bird, the earth – pressure-balance TBM currently constructing the tunnel. The TBM's production cycle, which includes mining, spoil removal, and installation of the 6 foot precast tunnel rings was reviewed.

For additional information about the Blue Plains Tunnel and the other projects associated with the long-term control plan, please visit the DC Water Webpage on the [DC Clean Rivers Project](#). ■

Employment Clearinghouse

The ASCE-NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If you have questions, are seeking employment or would like to post a position please contact the [newsletter editor](#) and visit our [jobs page](#).



ASCE-NCS Newsletter Patrons



Construction Module Afternoon Depth Exam Specifications

As promised in our February 2015 article, we are going to continue talking about the afternoon session of the PE civil exams. The afternoon session tests an engineer's ability to practice competency in one of the five sub-disciplines of civil engineering (construction, geotechnical, structural, transportation, and water resources and environmental). NCEES designed the PE exam for engineers with FE (EIT) certificates who have at least four years post-college work experience in their chosen engineering discipline. The exams are offered twice a year, in April and October. **Remember, new exam specifications begin with the April 2015 PE exams.**

The PE civil exam lasts 8 hours and is split into a morning and an afternoon session (4 hours each). The morning *breath* session of the exam was detailed in the [February issue](#) of our column. The afternoon *depth* section is composed of 40 multiple choice questions and focuses on a single area of practice in civil engineering (e.g., only construction or only geotechnical). Depth exam results are combined with breadth results for final score. As in the morning session, the afternoon depth section uses SI units and the US Customary System (USCS). When you take the PE civil exam, you select an afternoon module during *registration* and your answer sheet is scored based on the module you selected when registering.

According to the latest statistics, the scores vary among the five civil engineering disciplines. Based on October 2014 test results, for first time test takers, structural scored the highest with 73%; followed by water resources and environmental 72%; geotechnical 67%; transportation 64%; and construction 56%.

Answering our readers' questions, we will start with the **new construction**

depth exam specifications and continue covering each sub-discipline area of civil engineering separately in future articles.

PE Civil Construction – Afternoon Depth Exam Specifications

The afternoon session of the PE civil construction exam has questions that will require a variety of approaches and methodologies, including design, analysis, and application. Some problems in the afternoon session may require knowledge of engineering economics. A typical breakdown with approximate number of questions:

- **Earthwork Construction and Layout:** 6 questions,
- **Estimating Quantities and Costs:** 6 questions,
- **Construction Operations and Methods:** 6 questions,
- **Scheduling:** 5 questions,
- **Material Quality Control and Production:** 6 questions,
- **Temporary Structures:** 7 questions,
- **Health and Safety:** 3 questions.

Also be aware that the new exams use the following Construction Design Standards (beginning with the April 2015 exams):

- **ASCE 37** (Design Loads on Structures during Construction, 2002);
- **NDS** (National Design Specification for Wood Construction, 2012);
- **CMWB** (Standard Practice for Masonry Walls under Construction, 2012),

- **AISC** (Steel Construction Manual, 14th Edition, 2011);
- **ACI 318-11** (Building Code Requirements for Structural Concrete, 2011);
- **ACI 347** (Guide to Formwork for Concrete, 2004);
- **ACI SP-4** (Formwork for Concrete, 2005);
- **OSHA** (Occupational Safety and Health Standards for the Construction Industry, 29 CFR Part 1926, US Federal Version); and
- **MUTCD-Pt 6** (Manual on Uniform Traffic Control Devices – Part 6 Temporary Traffic Control, 2009).

One last reminder for exam applicants: When you pack your books and other reference material for the PE civil construction exam, do not forget the "*Reference Categories*" for the construction *depth* module. These include Construction Surveying, Construction Estimating, Construction Planning and Scheduling, and Construction Equipment and Methods.

Finally, during the exam do not rush and do not just dive in! **Read each question very carefully all the way through to the end.** In some cases, information provided at the end of the problem will clearly change your final answer. This month's problem set can be found [HERE](#).

Good Luck,
– Dr. Z.
drz@alfam.com



Upcoming Events *(Also available on the NCS website under the [Events tab.](#))*

March 4, 2015

Join the NCS Younger Members Group for their monthly happy hour from 6–8 pm at [Ireland's Four Courts](#). Join other younger members from the area for an early St. Patrick's Day celebration while you enjoy free appetizers and drink specials. (See newsletter brief.)

March 9–11

Global Marathon For, By, and About Women in Engineering and Technology provides global and regional opportunities for women and provides a place to put forward ideas, solve common problems and come together. Designed to be an interactive event, the Global Marathon encourages women to engage and ask questions through live internet chat, webcasts, and phone calls. Join in a live worldwide forum on topics for, by, and about current and future generations of women in engineering and technology.

March 10

Join the Sustainability and Water Resources Committees for a dinner and presentation by Mr. Kent R. Hansen, P.E., on the **Benefits and Design Considerations of Porous Pavement** at *Ragtime* Restaurant in Arlington, VA. For additional detail, please email [Alex Rosenheim](#) or [Piers Causton](#) or (202) 210-1103. (See newsletter brief.)

March 11

Virginia Tech, Virginia Coop Extension, and ASCE Virginia Section Stormwater Committee are hosting a class on *Modeling Urban Stormwater Best*

Management Practices for Effective Design in Falls Church, Virginia. Visit <https://urbanmodelingbmeps.eventbrite.com> for more information.

March 24

The **Annual ASCE NCS Awards Banquet** at the Hilton Arlington is an opportunity to recognize and celebrate local excellence in projects, engineers, and students who have contributed to our society and our community. (See newsletter lead article.)

March 26

ASCE hosts its **2015 Outstanding Projects and Leaders (OPAL) Awards Gala** in Arlington, VA. This is the Society's annual black-tie event to honor leadership, achievement, innovation, industry advancement of research, and journalism excellence. For nominations and Gala information, email [Jane Moran Alspach](#).

April 21

Join NCS for our monthly meeting at the Arlington Hilton. In April, the NCS Sustainability Committee welcome's Mr. Sam Higuchi, NASA engineer and co-chair of the Federal Interagency Forum on Climate Change Impacts and Adaptations.

April 23–25

At the **SEI Structures Congress in Portland, OR**, you can gain understanding of what affects Bridges and Transportation Structures, Buildings, Forensics, Non-building & Special Structures, Nonstructural Systems and Components, Blast and Impact Loading and Response of

Structures, Business and Professional Practice, Education, Research and Natural Disasters Program Focus – Sustainability, Environment, while learning from some of the leading experts and practitioners in the industry.

May 17–21

Austin, Texas will host the **World Environmental and Water Resources Congress 2015**. Created in 1999, the Environmental & Water Resources Institute is the recognized leader within ASCE for the integration of technical expertise and public policy in the planning, design, construction, and operation of environmentally sound and sustainable infrastructure impacting air, land, and water resources.

August 5–7

50th EWRI/ASCE Watershed Management Symposium in Reston, VA. This multidisciplinary event unites engineers, hydrologists, soil scientists, foresters, environmentalists, and other disciplines for technical presentations and networking opportunities in the midst of the Potomac and Chesapeake watersheds. For more information, visit the [website](#).

August 23–26

ASCE will sponsor **Pipelines Conference 2015** at the Baltimore Marriott Waterfront Hotel in Baltimore, MD. The conference will focus on recent advances in underground pipeline engineering and construction. Registration opened in March 2015. For more information, click [HERE](#).

ASCE-NCS Newsletter Patrons

