

## Innovation at WSSC

By Keith Tyson, PE

What if you could save millions of dollars and put pipes in the ground that last 30% longer? That's what the Washington Suburban Sanitary Commission (WSSC) is doing with its strategy of switching to zinc-coated ductile iron pipes wrapped in a V-Bio Enhanced Polyethylene encasement to help enhance the life of the pipes and prevent corrosion. Additionally, WSSC is using an innovative procurement strategy to acquire those pipes. WSSC is among the largest water and wastewater utilities in the country, and it is the largest water utility in Maryland. The WSSC service area includes nearly 1,000 square miles in Prince George's and Montgomery counties, Maryland, and serves 1.8 million residents with a network of nearly 5,600 miles of fresh water pipeline and over 5400 miles of sewer pipeline.

Join us on January 24th, 2017 and learn about innovation at WSSC focusing on:

- Zinc-coated ductile iron pipes
- V-Bio Enhanced Polyethylene encasement
- Supply chain management



WSSC installing a zinc-coated ductile iron pipe in a trench

### About the Speaker:

Keith Tyson, PE, is Technical Services Group Leader for the Engineering and Construction Team at the Washington Suburban Sanitary Commission (WSSC). The Technical Services Group provides engineering consulting services for the Commission with an emphasis on in-house design, construction contract specifications, cost estimates, environmental monitoring and regulatory compliance. Additionally, the group performs WSSC's surveying and property acquisition, manages the GIS system and maintains all engineering records. ■



Please join us on **Tuesday, January 24**, at the Hilton Arlington, 950 North Stafford Street, Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$10), 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. Registration and networking will be from 6–6:45 pm, followed by dinner. The program will end by 8:30 pm. The cost is \$45 for those preregistering, \$10 for students, and \$55 for walk-ins, as space allows. One Professional Development Hour is available to attendees. For questions, please contact [Jordan Pitt](#). Please click [HERE](#) to register by **January 19**.

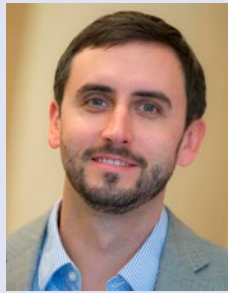
*Note that no-shows will be charged the full registration fee. We welcome walk-ins, including any registrations made after the guaranteed number of guests is provided to the hotel. However, the cost for walk-ins is higher because the Section is charged accordingly by the hotel for late registrations.*

## President's Corner

### Let's Dream Big for 2017!

It's another New Year and there is much to be excited about – new opportunities, new challenges, new administration? OK, so that last one may not be something that we are all overly thrilled about, but it begs discussion. A celebrity has taken the Executive Office. It's out with the old and in with the new! While our nation's political climate seems to have turned completely upside-down since last year, we shouldn't let ourselves become discouraged about the direction our country is heading. Regardless of your political preference, I hope you will join me in choosing to be hopeful for the coming year and optimistic about the challenges that lie ahead. As Einstein observed, "the only source of knowledge is experience." We as citizens of these United States each share an opportunity to make a difference in our communities by expressing our ideas and letting our voices be heard, and we as Civil Engineers play a critical role in that process by providing the infrastructure that our communities rely on. Though the future is uncertain and may seem bleak at times, we must continue to innovate and adapt to new laws and funding mechanisms that drive the work we do. Let us learn from our past experiences with the goal of making our future even better, and let our voices be heard.

This year is the year to "Dream Big" with ASCE. One of the major goals of the ASCE-NCS has been to enhance



our outreach to students at both the K-12 and university levels to help inspire and educate the future leaders of our industry. I am very enthusiastic about the planning efforts that are currently underway to provide student and community outreach for the upcoming [Dream Big IMAX film](#) that is

scheduled for release in February. As such, we formed the ASCE-NCS Dream Big Committee to highlight our focus on the Dream Big outreach efforts. *Dream Big: Engineering Our World* is a full-length feature film produced by award-winning documentary filmmakers MacGillivray Freeman Films in partnership with ASCE, and will bring engineering projects, both big and small, to the big screen – literally. The film is scheduled to be shown in IMAX theaters at the Smithsonian National Air and Space Museums' National Mall and Udvar-Hazy locations (exact dates and times are TBD). The film will highlight engineering projects through first-hand personal accounts to show how engineers have made civilization possible. I was fortunate to attend a "sneak preview" showing of a partial-length, unfinished version of the film at the recent ASCE Region 2 Assembly, and it was amazing; the film will surely do wonders to captivate audiences and inspire future generations of engineers.

Switching gears to ASCE-NCS events in January, the Reston Committee will host an Ethics luncheon on January 10th at the ASCE Headquarters in – you guessed it – Reston, VA. The

session will count towards the PDH requirement for ethics for those registered as Professional Engineers in the State of Maryland. If you live or work in the Northern Virginia/Fairfax/Loudoun County area and dread making the commute into Arlington for our regular monthly Section meetings, we hope the Reston Committee events will provide you with more accessible opportunities for professional development and networking. That said, I hope that you will brave the I-66 commute and join us for the ASCE-NCS January Section Meeting on the 24th where we have an exciting program scheduled to highlight innovative systems and new projects that are underway at the Washington Suburban Sanitary Commission (WSSC).

As always, I encourage you to reach out to me at [president@asce-ncs.org](mailto:president@asce-ncs.org) about any interest you may have in volunteering for our Dream Big outreach efforts or to express feedback or ideas about ASCE-NCS events. I am always interested to hear from our members about what we at the ASCE-NCS can do to provide value to our members. I wish you all the best for the New Year and hope it is a prosperous one!

Best regards,



Jordan Pitt  
President, ASCE National Capital Section

## Newsletter

Jim Palmer, Editor

**February 2017 Issue Deadline:** January 25, 2016

**To Submit Articles:** [newsletter@asce-ncs.org](mailto:newsletter@asce-ncs.org)

**NCS eNewsletter Archives:** go to [www.asce-ncs.org](http://www.asce-ncs.org) and view along the sidebar.

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

## National Capital Section

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### Committee Chairs

Please refer to the [NCS website](#) for a current list of NCS committees and chairs.

# Deadline Extended! 2017 ASCE-NCS Awards Banquet

Award Nominations Accepted Through January 31st!

The Annual Awards Banquet Provides an opportunity to recognize and celebrate local projects, engineers, and students who have contributed to our section and our community. Every year, the NCS presents a number of awards during its annual banquet, including Outstanding Engineering Project team, Community Service Award winner, Meritorious Service Award Winner, Student Scholarship award winners, and members of the NCS who have achieved Life Member Status.

NCS award candidates are nominated by the Awards and Nominations Committee which actively seeks recommendations from NCS committees and members. All members are encouraged to nominate, either by email of traditional mail, members and/or projects for one of these awards. The awards are given by the Awards and Nominations Committee and are given at the Section's Annual Awards Banquet held in March 2017.

Please submit all nominations to Brian Barna no later than January 31, 2017. A nomination form (.pdf) is available at the following link: <http://asce-ncs.org/images/misc/2016-NCS-POY-Nomination-Form.pdf>



Brian Barna, PE, M.ASCE  
Chair, Awards and  
Nomination Committee  
[bbarna@wrallp.com](mailto:bbarna@wrallp.com)

## Outstanding Civil Engineering Project

This award recognizes a civil engineering project within the Nation Capital region that demonstrates the greatest

civil engineering skills and represents the greatest contribution to civil engineering progress. The project must have been substantially completed within the preceding three years. In granting the awards, the Awards and Nominations Committee considers the contribution to the well-being of individuals, the resourcefulness in planning, the solution of design problems, the pioneering use of materials and methods, innovations in construction, impact on the physical environment, unusual aspects, an aesthetic values.

An award plaque is given, naming the project and the firms or agencies involved. The nominees are notified and invited to attend the banquet as guests.

## Community Service Award

The Community Service Award recognizes outstanding contributions by an individual toward community improvement in the Washington metropolitan area. The nomination can be submitted directly by the individual or by another

member. The nomination shall briefly describe the achievements and contributions of time and talent toward a civil engineering-related activity that has furthered the welfare of the community within a three-year period preceding the award. The Awards Committee reviews and selects the winner for this award. The awardee will be notified and invited as an honored guest to attend the banquet and to receive the award – an engraved plaque, naming the individual and accomplishment.

## Meritorious Service Award

This award recognizes an individual member of the National Capital Section who has made outstanding contributions to the work of the Section. The awardee must be an active member who has contributed significant time and talent to the Section and who sets a high standard of professionalism through service. The awardee will be notified and invited as an honored guest to attend the banquet and to receive the award – an engraved

## Life Members Forum Engagement Questionnaire

By Phillip L. Melville PE, Life Member and Fellow, ASCE-NCS Life Members Forum

Life Members of NCS received an email in November from Engineer Phillip Melville with a short questionnaire. It is in response to an ASCE-NCS request to re-engage with our Life Members. So far, around 40 replies have been received, and results have been tabulated. Any Life Member who received the questionnaire and

has not responded is encouraged to contact Engineer Melville and to offer comments by email ([phillipmelville@juno.com](mailto:phillipmelville@juno.com)). The Forum is a group of volunteers: no dues, no obligations and probably no meetings; just individuals willing to share past professional experience and maybe engage in civic

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# Sustainability Award Call for Nominations

By Alex Rosenheim, PE, LEED AP, M.ASCE, Sustainability Chair

The ASCE-NCS Sustainability Committee is calling for nominations to its 11th Annual ASCE-NCS Sustainability Award for Washington, DC area:

- Private industry outreach initiatives,
- Public legislation/programs, or
- Public and Private Construction and Infrastructure Projects.

The award criteria and other requirements for nomination are as follows:

- Advance or promote sustainable development of infrastructure, the built environment, or the conservation of natural resources as defined by the ASCE's Code of Ethics: Sustainable development is the challenge of meeting human needs for natural resources, industrial products, energy, food, transportation,

shelter, and effective waste management while conserving and protecting environmental quality and the natural resource base essential for future development.

- Adopt a long-term view, cognizant of the triple-bottom line of Environmental, Social, and Economic implications while emphasizing the impact of choices made now on subsequent generations.
- Be within the geographical limits of the NCS, i.e. the jurisdictions of Montgomery County, Prince George's County, Loudoun County, Fairfax County, City of Alexandria, Arlington County, or the District of Columbia.

Please provide a succinct description of the project or initiative (100 words or fewer) and include the following:

1: The public or private entity responsible for the program (include point of contact information, if available), and 2: Describe how the nomination meets the general criteria outlined above.

The nominating individual must provide his/her name, affiliation, telephone number, and e-mail address by **January 31, 2017**. For more information or to submit a nomination, contact the Chair of the ASCE-NCS Sustainability Committee, Alex Rosenheim, P.E., CCM, M. ASCE via e-mail at [tcc-sus@asce-ncs.org](mailto:tcc-sus@asce-ncs.org). The winner will be announced at the NCS Awards Banquet in March 2017. Anyone interested in becoming involved with the Sustainability Committee please contact Mr. Rosenheim. ■

# Discover Engineering Day: Fun for the Whole Family!

By Dean Westman, PE, M.ASCE, NCS Past President

Join us for Discover Engineering Family Day on Saturday, February 18th at the National Building Museum in Washington, DC.

The National Capital Section and our partner, Bechtel, will be looking for volunteers to help us with a kid friendly activity booth. This year, we will be asking our visitors to build a chair or table out of paper. The chair/table will be load tested with the full weight of the builder. For the less confident

builder, we'll have a selection of weighty engineering textbooks.

The National Building Museum is located at: 401 F Street NW, Washington, DC 20001

The NBM is accessible by Metro and is located at the Judiciary Square Red Line stop.

Look for the volunteer invitation in your e-mail later this month. ■



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## Introducing the New National Capital Environmental and Water Resources Institute Chapter!

Attention all civil and environmental engineers, hydrologists, and environmental scientists, we are pleased to announce the new National Capital Chapter of the Environmental and Water Resources Institute (EWRI).

**What is EWRI?** The Environmental & Water Resources Institute is ASCE's technical source for environmental and water-related issues. Their goal is to "[advance] water resources and environmental solutions to achieve a sustainable future." To learn more about the institute, visit their website: <http://www.asce.org/environmental-and-water-resources-engineering/environmental-and-water-resources-institute/>

**Can anyone join?** Of course! If you already selected EWRI when you renewed your membership, you do not have to do anything. If you have not yet renewed your membership or are



thinking of joining, be sure to sign up for EWRI as your institute of choice. You can even join EWRI without joining ASCE. Visit the website to learn more.

**Ok, I joined, now what?** Attend meetings, offer to present at a webinar or meeting, post information and answer questions on EWRI's collaborate site, or join a committee.

**Wait, what do you mean by a Committee?** EWRI committees "provide for the technical, educational and professional needs of its members, and to serve the public in the use, conservation, and protection of natural resources and in the enhancement of human well-being by:

- Advancing the knowledge and improving the practice of engineering and the related sciences;
- Lending expertise to the development of public policy, and;

- Partnering with governmental, industrial, educational and other organizations."

Curious? Visit the EWRI committee website at <http://www.asce.org/environmental-and-water-resources-engineering/ewri-committees/>.

**When do we meet?** Our first meeting will be January 24, 2016, as part of the regular ASCE-NCS Section meeting. Join us to learn about Washington Suburban Sanitary Commission (WSSC)'s recent innovations with zinc pipes, which they believe will help reduce corrosion, increasing the life of their pipes, and will cost less than their current pipe materials. Look for future emails for more information on upcoming events.

If you would additional information, contact [Sara DeGroot](#) or [Rachel Schneider](#). ■

## November Meeting Recap: The Capitol Crossing Project

By Brian Barna, PE, LEED AP, Vice President ASCE-NCS

Michael Randolph, PE, Design Manager for STV Incorporated and Rebecca Nordby, Project Executive for Balfour Beatty Construction DC were our guest speakers at the ASCE-NCS November Section Meeting. Mr. Randolph and Ms. Nordby presented the Capitol Crossing Project, a three-block, seven-acre, 2.2 million square foot development currently being constructed on a new elevated deck built to span across Interstate 395 in Washington, DC. This project includes three areas of improvement: utility upgrades along Massachusetts Avenue, new entry and exit portals to I-395 to ease traffic congestion and improve safety for pedestrians and cyclists, and a continuous deck constructed above the existing I-395 Center Leg Freeway. The new platform will serve to reconnect the Capitol Hill and East End neighborhoods and will restore the District's street grid at F Street and G Street as originally laid out in Pierre L'Enfant's master plan for the city.

Washington, DC has long wanted to develop this area and close the

separation between neighborhoods that was created when I-395 was constructed. Master plans which include building over I-395 date back to the 1980's when Marion Barry was mayor of the city. Ultimately, the city agreed to sell 'air rights,' or the right to develop the volume of space above the highway, to a developer, Property Group Partners. Balfour Beatty was brought on in 2007 to begin budget studies for the project. Finally, the first phase of construction (site preparation and utility relocation) began in 2014.



As one would expect, there were myriad challenges to overcome for this project. The site was congested, limiting

laydown areas and crane locations. The major highway running through the site could not be closed to traffic; therefore, one of the first phases of the project before vertical development could proceed was to build ramps to divert some traffic away from the site. Impacts to traffic for this project were unavoidable, so the project was able to reach an agreement with DDOT and other agencies to close traffic each night in a single direction. The Jewish Historical Society, an existing building with historical significance, had to be relocated twice.

The project reached a major milestone in October 2016 when the deck over the highway was completed. The first building over the highway, 200 Massachusetts Avenue, is expected to top out in January 2017. This building will feature 30,000 square feet of retail and 11 stories of office space. The estimated completion date for the full deck area over the highway and the north block of buildings is 2019. ■

## Dr Z's Corner: P.S. Stands for Professional Licensed Surveyor: Let's Talk about Surveying Licensure, Part-II

Let me start with a question: Abraham Lincoln, Henry David Thoreau, Thomas Jefferson, Daniel Boone, James Cooke and George Washington. What do these famous people have in common? They all engaged in surveying at some periods in their lives. Although the practice of surveying will not provide a sure road to the White House, many members of the profession like to think that important characteristics like problem-solving skills, paying attention to details, quick thinking, and self-reliance, helped these surveyors to become leaders. Unfortunately, many schools, including ours, dropped the Surveying course from their curriculum.

### **Principles and Practice of Surveying, Computer Based Test (CBT) Exam Specifications**

According to NCEES, effective beginning October 1, 2016, the Principles and Practice of Surveying exam will be computer-based as well. It is a closed-book test with an electronic reference. Examinees have 7 hours to complete the exam, which contains 100 multiple-choice questions. The 7-hour time also includes a tutorial and an optional, scheduled break. The exam uses the U.S. Customary System (USCS) of units and was developed with questions that require a variety of approaches and methodologies, including design, analysis, and application. The categories with average number of questions area as follows:

#### **1. Legal Principles (about 28 questions)**

*Topics:* Common/case law boundary principles, Sequential and simultaneous conveyances, U.S. Public Land Survey System, Controlling elements in legal descriptions, Riparian and littoral rights, Property title issues (e.g. encumbrances, interpretation, deficiencies), Sovereign land rights (e.g., navigable waters, eminent domain), Prescriptive rights/adverse possession, Easement rights, Parol evidence.

#### **2. Professional Survey Practices Principles (about 28 questions)**

*Topics:* Public/private record sources, Project planning (e.g., photogrammetric, geodetic, boundary), Control datums, Encumbrances (e.g.

easements, rights of way, mineral rights, subsurface rights), Control network accuracy standards, Supervision of and responsibility for field procedures, Supervision of and responsibility for the application of surveying principles and computations, Grading and site preparation, Survey maps/plats, Survey reports and Descriptions.

#### **3. Standards and Specifications (about 13 questions)**

*Topics:* Federal statutes, laws, rules and regulations, State/local statutes, laws, rules and regulations, Monumentation laws and ordinances, U.S. Public Land Survey System, American Land Title Association/American Congress on Surveying and Mapping (ALTA / ACSM) surveys, Geodetic control network accuracy standards, Federal Geographic Data Committee (FGDC) standards (digital mapping), US National Map Accuracy Standards (analog mapping), Federal Emergency Management Agency (FEMA)

#### **4. Business and Professional Practices (about 21 questions)**

*Topics:* Project planning (e.g. parameters, costs, budgeting), Contracts, Risk management (e.g. liability, safety procedures, insurance), Ethics, Communications (oral, written, graphical), Quality assurance procedures, Activities, background, and skills of related professions (e.g. engineers, lawyers, architects, planners)

#### **5. Types of Surveys (about 18 questions)**

*Topics:* American Land Title Association/American Congress on Surveying and Mapping (ALTA/ACSM) surveys, Control and geodetic surveys, Construction surveys (e.g. construction calculations and staking), Hydrographic surveys (e.g. elevations of submerged surfaces), Boundary surveys, Route and right-of-way surveys, Topographic surveys (e.g. scanning, photogrammetry, LiDAR, field), Condominium surveys, Subdivision surveys and Record drawing (as-built) surveys.

#### **Brief History of Surveying**

Surveying is as old as recorded civilization and nobody knows when surveying was first used. The history of land

surveying dates back thousands of years and forms of land surveying have been around since ancient man in all major civilizations across the globe. As long as there has been property ownership, means of measuring the property and distinguishing one's land from another became important and methods, techniques and regulations have been developed.

Ownership of land has and still is a very significant part of the lives of everyone in the world. For many scholars, the building of the Great Pyramid at Giza in 2700 BC is considered as one of the first examples in the history of land surveying. The Romans were the next civilization to advance on the initial land surveying techniques of the Egyptians. The early development of surveying cannot be separated from the development of astronomy or mathematics since these disciplines were closely interrelated. Geometry and surveying was particularly necessary in the Nile Valley to establish and control landmarks. In recent history, Napoleon Bonaparte was very enthusiastic about accurate land surveying. When Napoleon was trying to conquer the world, he always made sure that he had very precise maps available at the time, which were obviously very important for him.

I shall close with a final thought. During the Fundamentals of Engineering and Professional Engineering exams, timing is everything. The more time you spend on a difficult question; the more time you risk second guessing yourself. When you use process of elimination to eliminate a wrong answer, make sure you cross it out on your note pad. Don't leave it there to confuse you if you have to choose between two remaining answer choices.

And lastly, always trust your intuition and believe in yourself. You are braver than you think and more talented than you know. Definitely you will conquer the test!

Until next time,

Ahmet Zeytinci, P.E.  
Dr. Z. ([az@alfam.com](mailto:az@alfam.com))





## Committee News and Updates



### Younger Members Forum

**Happy Hours.** The ASCE-NCS Younger Members Forum (YMF) holds monthly happy hours in Arlington, VA or Washington, D.C. Happy hours are typically held the first Wednesday of each month unless a holiday falls during that week.

The ASCE-NCS YMF held their November Happy Hour at World of Beer in Ballston on November 2nd. Approximately 15 members attended the event.

The ASCE-NCS YMF held their December Happy Hour at Front Page in Ballston on December 7th. Approximately 30 members attended the holiday gathering where a Toys for Tots toy drive occurred.

The next monthly happy hour will take place in Washington, DC at Mellow Mushroom at 6pm on Wednesday, January 1, followed by Bluejacket in Washington, DC on Wednesday, February 1. Look out for emails with specific locations for future monthly happy hours!

**Stay Connected!** Check out photos and stay up-to-date with YMF events by visiting the new YMF Facebook page: <http://www.facebook.com/ASCENationalCapitalYMF>. Also, follow us on Twitter (@asce\_ncsYMF) at [https://twitter.com/asce\\_ncsYMF](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 ([ncsymfpresident@gmail.com](mailto:ncsymfpresident@gmail.com)).

### Construction Committee

By Jeff Tan, PE, PMP, LEED AP, Chair, Construction Committee

Professional Development Workshop. Construction Committee will meet on March 9th, 2017 from 5:00 pm to 6:00 pm at Bechtel, 12011 Sunset Hills Rd #110, Reston, VA 20190. This workshop will focus on the program management activities of a Federal agency (Federal Transit Administration) from 2006 to 2010 when it conducted program reviews of two projects. One of them was a local project, Dulles Phase I, which was the initial build-out of the system to its current terminus, Wiehle Avenue. The other was New Jersey Transit's ARC and the last will be NYCMTA's Eastside Access. In both cases, the projects were subjected to tremendous cost pressures, but each responded differently.

Call for Committee Members. Please join our mailist at this link: <https://groups.google.com/d/forum/asce-ncs-cc> and we will share information including professional development events, job openings, and construction

news. Please contact Construction Chair Jeff Tan at [sunjeffsun@gmail.com](mailto:sunjeffsun@gmail.com) if you need more information or wish to serve on the Committee's leadership team. Committee members commit to regular meeting attendance, have the ability to receive communication by phone and/or e-mail and are comfortable communicating their ideas in a group setting. We'd be delighted if you considered being a part of the Committee.

### Transportation Committee

A recent Transportation Committee meeting was held at the George Washington University on November 8th, 2016. Dr Samer Hamdar, PhD, Associate Professor at the George Washington University, and Director of the Center for Intelligent Systems Research, presented on "Bridging the Gap between Social and Transportation Networks: An Integrated Evacuation Decision Making Model." Among attendance were participants from a wide variety of fields. Most encouraging about this presentation was the significant attendance of university students, who asked highly technical questions.

Please look forward to registration emails that will be sent out in the near future. And remember, the attendance is at no cost and free food and beverages are served!

### Reston Committee

By Lisa Anderson, PE, LEED AP, M.ASCE, Reston Committee Chair

The Reston Committee met for a well-attended holiday social gathering at Carpool in Herndon, VA on December 9th. On Tuesday, January 10th, Ranjit S. Sahai, P.E., F.ASCE of RAM Corporation

*continued on page 8*



## ASCE-NCS Newsletter Patrons



**PARSONS  
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**Ethan Grossman  
Engineering**



will present Ethics 101. The meeting will start at 11:45am at ASCE Headquarters. Please RSVP by Wednesday, January 4th to Lisa Anderson: [lmanders@bechtel.com](mailto:lmanders@bechtel.com) or 703-429-6631. As a reminder, Engineers Registered in the State of Maryland must obtain 1 PDH pertaining to Ethics for continuing education.

To be added to the Reston Committee distribution list, please contact Lisa Anderson: [lmanders@bechtel.com](mailto:lmanders@bechtel.com) or 703-429-6631.

### **Dream Big Committee**

By Gillian Love, Dream Big Committee Chair

After a successful year of celebrating ASCE National Capital Section's Centennial we're looking for new ways to engage our membership in celebration and advancement of the engineering profession. *Dream Big: Engineering Our World*, a giant-screen film by McGillivray Freeman in partnership with ASCE and presented by Bechtel, showcases the impact engineering has had on our world and lives. More information can be found on the film at <http://www.asce.org/dream-big/>.

During the last year, NCS members and volunteers began promoting the Dream Big Film and we are happy to report that the movie is scheduled to premiere on Engineers Week this February. One of

the primary goals of the film is to educate young people about the important work engineers do and inspire them to consider careers in engineering. Through the newly-formed Dream Big Committee, NCS members will continue to support local and national efforts to promote the Dream Big Film and its



message.

Civil Engineering professionals interested in joining the Dream Big Committee or volunteering in outreach events with the NCS should contact Gillian Love at [GCLove@sgh.com](mailto:GCLove@sgh.com).

### **Education Committee**

By Mike O'Connor, PE, F.ASCE, Education Committee Chair

NCS' Vic Crawford is busy working with his group of elves on the NCS effort to reach out to K-12 students. Vic has been working on the STEM program managed by the American Association for the Advancement of Science (AAAS), with the program now over ten years old. Vic notes that the program is very strong in Fairfax County schools where the Reston Committee is located. Vic continues to look for volunteers for his efforts.

The Dream big movie comes out during E-Week in 2017! NCS' Ranjit Sahai has taken the lead in helping the Dream Big committee chaired by Gillian Love to plan events at the five student chapters that feature the film. Ranjit has already recruited a volunteer member (Alejandra Martinez) to help with the

event planning and logistics. **A special thanks to Alejandra!**

Efforts include Identifying potential dates when the movie showing can leverage existing events they might already be planning: GMU (George Mason University) has requested mid-February to coincide with their on-campus Engineers Week activities. We continue to await response from the remaining four universities from our five: CUA, GWU, HU, and UDC. Ranjit and his team are also working to identify which of the five universities have an on-campus theater with movie projection capability, while efforts are underway to secure a digital rights management key to allow the NCS to host viewings of the Dream Big movie. Additionally, the Education Committee is seeking a younger member volunteer to lead a discussion with students about the transition from student to professional life.

As part of the dream big movie roll out, ASCE Global has put together a grant program for local sections to partially offset the costs associated with presenting the film. Ranjit Sahai and Gillian Love submitted the NCS' grant application in December.

The committee continues its efforts to support the Directors on other items including Bylaws review. NCS is an "unincorporated association" that operates under the ASCE corporate umbrella. NCS' exempt organization status is a result of ASCE National's status determined by the IRS. National also takes care of all the charitable organization registration requirements for the NCS. This means that the NCS has to comply with National's "governing documents" requirements for our constitution and bylaws (C&B). ASCE National periodically updates its requirements for section governing documents including the C&B. The most recent revision was done in 2015. The most recent update to the National Capital Section governing documents was the 1997 Operating Manual. The Education Committee is working to review the approved 1997 documents for conformance with the 2015 ASCE National guidance and will report its analysis to the board of directors. **Any member with a burning desire to page through these documents is encouraged to participate.** Please contact Mike O'Connor ([mike@fplmuseum.org](mailto:mike@fplmuseum.org)) if you're short on light, evening reading.





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

### January 10

#### Reston Committee Ethics

**Presentation**, ASCE National Headquarters, Reston, VA. Join the Reston Committee as we welcome Ranjit Sahai, PE, F.ASCE of RAM Corporation presents Ethics 101. Contact Lisa Anderson for more information: [lmanders@bechtel.com](mailto:lmanders@bechtel.com).

### January 12

#### Sustainability Committee Social Networking and Planning Happy Hour/Dinner, 6:00 pm, [The Barking Dog](#), Bethesda, MD. Social gathering to discuss Sustainability in Infrastructure in general and specifically in ASCE and ASCE-NCS. We'll brainstorm and discuss upcoming plans in the DC area through the Winter and Spring 2017. Contact Alex Rosenheim for more information: [alex.rosenheim@gmail.com](mailto:alex.rosenheim@gmail.com).

### January 18

#### Geotechnical Executive

**Committee Meeting**, [Maggianos](#) at Tysons Corner, VA. Michael McGuire will present on LIDAR. Email Kellie Owens at [kowens@geostructures.com](mailto:kowens@geostructures.com) for a signup link.

### January 20–21

**Regions 1,2,4 & 5 Multi-Region Leadership Conference** in Newark, NJ. The conference includes the Workshop for Section and Branch

Leaders (WSBL), the Eastern Region Younger Member Council (ERYMC), and the Workshop for Student Chapter Leaders (WSCL). More information available [here](#).

### January 24

**NCS Section Meeting**, 6:30–8:30 pm, Hilton Arlington. Keith Tyson, PE will be presenting on the WSSC. Additionally, join us for the inaugural meeting of the NCS EWRI Chapter. See this month's featured articles for more information.

### February 1

**YMF Happy Hour**, 6:00–8:00 pm, [Bluejacket](#), Washington DC. Join younger members from the area for free appetizers and drink specials. Look for an email announcement with more details.

### February 15

#### Geotechnical Executive

**Committee Meeting**, [Maggianos](#) at Tysons Corner, VA. Andrew Isenhour will present on Geogrids in Roadways. Email Kellie Owens at [kowens@geostructures.com](mailto:kowens@geostructures.com) for a signup link.

### February 18

#### Discover Engineering Day,

The [National Building Museum](#), Washington, DC. See the article in this month's newsletter for more information!

### March 9

#### Construction Committee

#### Professional Development

**Meeting**, 5:00–6:00 pm, Bechtel, 12011 Sunset Hills Rd #110, Reston, Va 20190. An agent of the Federal Transit Administration discusses program reviews of large projects from 2006–2010. See the article in this month's newsletter for more information.

### March 15

#### Geotechnical Executive

#### Committee Meeting

, [Maggianos](#) at Tysons Corner, VA. Chuck Bailey will present on Local Engineering Gology. Email Kellie Owens at [kowens@geostructures.com](mailto:kowens@geostructures.com) for a signup link.

### April 19

#### Geotechnical Executive

#### Committee Slope Stability

**Symposium**, Tysons Corner, VA [Marriot](#). Speakers TBA. Email Kellie Owens at [kowens@geostructures.com](mailto:kowens@geostructures.com) for a signup link.

## Employment Clearinghouse

*The 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](#).*