



**NOVEMBER 3, 2017** 

**VOLUME 48, NUMBER 1** 

IN	THIS ISSUE	
nt'c	Massage	

President's Message
Good Times at the Annual Joint Society Picnic and Casino Night 2
2017 Presidents and Governors Forum, ASCE Headquarters, Reston, VA
September Section Dinner Meeting4
Environmental and Water Resources Field Tours5
ASCE Region 2 Director Letter – October 20176
PAG-02 NPDES General Permit Expiration and Administrative Extension
Knoebels Picnic 7
NEW Master's of Science in Civil Engineering to Start January 2018 at Penn State Harrisburg8
Chesapeake Bay Stormwater Engineers: Survey of the Current State-of-the-Practice in Design of Stormwater Systems9
Dream Big: Engineering Our World
10
Announcement11
Sponsors 12
New and Events 14
Job Postings14

### **President's Message**



Welcome to the 2017 -2018 ASCE Central PA Section calendar year. Hope your football or soccer teams are winning and you have some time to enjoy the beautiful fall weather.

I would like to thank Joe Eberly for his dedication and hard work as last year's President of ASCE Central PA Section. Joe provided excellent leadership for the section

during his tenure. He has been a wonderful resource during the transition and remains so during my term. I aspire to follow Joe and the other presidents before him who have provided positive leadership for the Section.

If you want to know anything (and everything) about ASCE Central PA Section check out our website at http://sections.asce.org/centralpennsylvania/home Our website has been overhauled within the past year. Many thanks to those individuals who spent countless hours planning, developing and implementing the information-packed website. Special thanks to Chris Smith and Joe Eberly for maintaining the site. Also check out our Facebook page - ASCE Central PA and Twitter @ASCECentralPA.

ASCE Central PA Section has many social/professional events to offer; the list below contains some highlights. We would like to see you at a meeting or social. Please continue to monitor our newsletter, website, Facebook and Twitter for events. ASCE Central PA offers many opportunities to obtain PDHs for Pennsylvania Professional Engineering license renewal. From the tours, to monthly meetings, to webinars, to training programs there are many occasions to obtain the PDHs you need.

#### **Monthly meetings**

Technical committees (SEI - Structural Engineering Institute, GI - Geotechnical Institute, Transportation, Hydraulics/Environmental and Engineering Management /Ethics) provide speakers who share their expertise on riveting topical issues at our dinner meetings. One meeting per year, one of our six student chapters hosts and runs the meeting presenting a topic related to their school. Each of our dinner meetings offers a PDH.

### Tours/webinars/training events.

Each technical committee is tasked with presenting a tour, webinar or training event related to their topic or expertise. The tours/webinar/training events occur throughout the year. Generally each of the tours, webinars or training events offer one or many PDHs. If you have an idea for a tour please contact the any of the technical committee chairs or myself.

#### **Social Events**

There is more to ASCE Central PA than just PDHs, the organization offers many social events where members can participate with their families: Harrisburg Senators baseball games, annual Knoebels Grove







family picnic, the annual Christmas party to name a few. These events are great for socializing and enjoying some fun together.

Just prior to the dinner meetings, there is a chance for socializing, meeting new colleagues and catching up with old friends. The time before the meeting is a great opportunity where a college student may meet with a professional looking to hire or a life member may meet with a younger member looking to share knowledge about a topic.

### **Younger Members Activities**

ASCE Central PA Section Younger Members group is very active. Bill Kingston, the president of the Younger Member group, has planned many exciting and fun activities. Events include social events at local bars/pubs/breweries, service events such as interchange trash clean-up and other fun events, There are many opportunities to network with members of all ages and gain valuable contacts.

There are many occasions to get involved with ASCE Central PA Section. I encourage you to come out to a dinner meeting, a tour or a social event. Meet some new colleagues, catch up with some old friends. I hope to see you at upcoming Section events.

Gary D. Garbacik P.E. M. ASCE 2017-2018 Central PA Section President ggarbacik@gfnet.com

### **Good Times at the Annual Joint Society Picnic and Casino Night**

Submitted by: Christopher W. Smith, P.E., Past President

Each August, ASCE Central PA Section joins the American Society of Highway Engineers (ASHE) Harrisburg and Women in Transportation Seminar (WTS) Central PA for a night of picnicking and gambling (for fun of course). This year the picnic was held on Friday, August 25th and nearly 100 members and guests were in attendance. The festivities included: a golf chipping competition, social and networking hour, 50/50 raffle with half of the proceeds benefitting each organization's scholarship fund, and crabs, clams, shrimp, hamburgers and hot dogs for supper. The night



concluded with attendees playing casino games like black jack, poker and craps, where play money was won and traded-in for tickets. The tickets were in-turn used for a chance to win prizes like a GoPro camera,



Amazon Echo, Beats Solo headphones, and food experiences just to name a few. The three organizations will again hold the joint picnic next year on Friday, August 24th. Hope to see you there!





### **SECTION OFFICERS**

#### President

Gary Garbacik, P.E. <a href="mailto:ggarbacik@gfnet.com">ggarbacik@gfnet.com</a>

#### **President-Elect**

Kerry Henneberger, P.E.

#### **Vice President**

Brandon R. Motuk, P.E.

#### Secretary

Tim Carre, P.E. tcarre@pa.gov

#### **Treasurer**

Duke Slifko, P.E.

#### **Newsletter Editor**

Jason Taylor, P.G., E.I.T.

#### **WELCOME NEW MEMBERS**

Peter Brumberg Benjamin Wagner Qing Gong Brad Zelonis John Ward Jeremy Murphy

# **2017 Presidents and Governors Forum, ASCE Headquarters, Reston, VA**

Submitted by Gary D Garbacik, P.E., President

ASCE Headquarters held the 2017 Presidents and Governors Forum in beautiful Reston, Virginia on September 17 and 18, 2017. Over 100 Section/Branch Presidents and President Elects as well as Governors attended the forum. Kerry Henneberger, President Elect and Gary Garbacik, President attended the event for the Central PA Section.

The event provided useful information from ASCE Headquarters on everything from section/branch challenges to how to be a great leader. Our group met an interesting array of individuals, we had a gentleman from the Nigeria Section as well as folks from Michigan and Florida. Our groups were organized by the size of our section or branch with the two designation of small or large. Central PA Section is considered a small section.

ASCE is represented in 177 of 196 countries presently (as of August 2017). The Global Strategy Goals of ASCE include: Project a Global Image, Increase Global Footprint, Reserve a Seat at the Table (for all), Expand Products/Services and Implement a Sustainable Financial Model. International Student ASCE Membership has grown substantially in the past few years almost tripling since the 2012 count.

ASCEs organizational structure and Geographic Services Resources were discussed at length as well as section and branch best practices. One of the highlighted events continues to be the Dream Big: Engineering Our World movie. ASCE continues to develop ideas on how to integrate the Dream Big: Engineering Our World movie with K-12 students through fun and educational activities. The goal is to put Dream Big: Engineering Our World movie into every school in America. Winter 2018 is the goal for the initial distribution to high schools. Other schools will follow. If you would like additional information on how to sponsor the Dream Big: Engineering Our World movie for a school, send an email to ggarbacik@gfnet.com.

ASCE has goals to advance technology, lifelong learning and professionals influencing public policy. ASCE currently has 36 technical journals and institutes such as SEI and Geotech which are celebrating 20 years publication. Lifelong learning is key to professional development. ASCE provides 200 seminars and 300 webinars yearly. ASCE is recognized worldwide for our journals and other Civil Engineering publications.

During our time at the conference we had the opportunity to have dinner with the 2018 ASCE President-Elect Robin Kemper, P. E. LEED AP, F. SEI, F. ASCE. She shared with us many exciting ideas she has for the future of our organization.





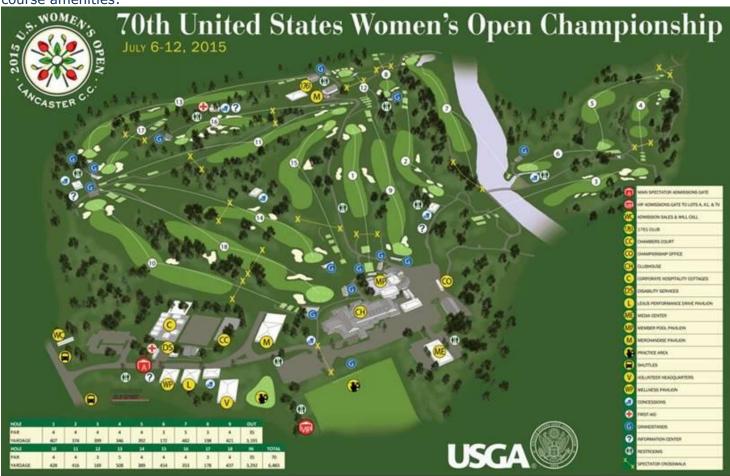


### **September Section Dinner Meeting**

Submitted by Michelle Madzelan P.E., Transportation Technical Co-Chair

The September's Dinner Meeting was a riveting presentation on the 18-month Planning for the 2015 U.S. Women's Open Golf Championship. The Championship was held at the Lancaster Country Club along State Route 23 and adjacent to Route 30. The speakers Mr. Charles Haley (ELA Group), Mr. Mark Henise (ELA Group) and Mr. Christopher Drda (PennDOT 8-0) explained the extensive traffic planning and coordination that resulted in successful traffic management, parking and busing. Coordination throughout the planning included PennDOT, several Municipalities, businesses, residents, Emotive Logistics (busing operations)- and the Open Championship Director. The ultimate traffic and parking plan offered safety and security to players, visitors, residents and businesses.

Here was the way finding map created by ELA Group that helped inform everyone on both the traffic and course amenities:











### **Environmental and Water Resources Field Tours**

Submitted by Andrew Orlovsky, P.E., Hydraulics and Environmental Technical Chair

This past year, the Capitol Region Water hosted two field tours. Approximately one dozen professionals and civil engineering students attended each tour. The tour of Dehart Dam, a water supply facility, occurred on Friday, May 19 and the tour of the Dr. Robert E. Young Water Services Center Treatment Plant occurred on Friday, September 1.

The Dehart Dam, which impounds Clarks Creek, is located in Middle Paxton Township in Northern Dauphin County. Construction of the dam was completed in 1941. The dam is 2000 feet long, 105 feet high, and 600 feet thick at the base. The tour was led by Mr. Tremayne Terry who is the Diversity Program Manager of Capitol Regional Water. The tour consisted of the observation of the dam's



earthen/rockfill embankment, the concrete spillway, and the dam's outlet/drawdown works, which includes the intake of the water line which transports drinking water to the City of Harrisburg via gravity flow.



The Robert E. Young treatment plant, located in the City of Harrisburg, services 60,000 residents which includes the entire population of the City plus a few surrounding communities. The plant has a capacity to treat 29 million gallons of water per day, but on average treats 7-8 million gallons per day. The tour was led by Mr. Mike McFadden who is the Water System Superintendent at Capital Region Water. The tour consisted of the observation of the plant's mixing, coagulation, flocculation, and filtration systems.

ASCE Central PA Environmental and Water Resources Technical Group would like to thank Mr. Terry, Mr. McFadden, and all of Capitol Region Water for the willingness to host our group.





### **ASCE Region 2 Director Letter - October 2017**

#### Launch of Region 2 Awards Program

On behalf of the ASCE Region 2 Board of Governors, I am pleased to announce the launch of a new series of awards to highlight and recognize the outstanding service of our Region 2 ASCE members:

- Outstanding ASCE Younger Member Award
- Outstanding ASCE Student Member Award
- Lifetime Achievement Award
- Outstanding ASCE Faculty/Practitioner Advisor Award

All 11,000+ ASCE members from any of our Region 2 Sections, Branches or Student Chapters are eligible. Nominations are due by November 30, 2017. Selection criteria for each award and the nominating process are described on the nomination forms located at: <a href="http://regions.asce.org/region2/awards">http://regions.asce.org/region2/awards</a>. Please help honor a deserving ASCE colleague by nominating them for a Region 2 Award. Thank you!

ASCE Board Meeting and National Convention

The Oct. 7-8 ASCE Board meeting in New Orleans, LA, was held just before the ASCE 2017 Convention. The weekend began amid the threat of Hurricane Nate. As it turned out, the storm pushed east and mostly missed New Orleans, but our thoughts were with those on the Gulf Coast who were affected.

The ASCE 2017 Convention on Oct. 9-11 was a tremendous success! All enjoyed networking and learning in 2017 ASCE President Norma Jean Mattei's home town and Kristina Swallow was inducted as 2018 ASCE President. We look forward to her enthusiastic and insightful leadership in the coming year.

Goals - The Board of Direction approved six goal statements for the Society:

- Civil engineers develop and apply innovative, state-of-the-art practices and technologies
- All infrastructure is safe, efficient, and sustainable
- ASCE advances the educational and professional standards for civil engineers
- The public values civil engineers' essential role in society
- An ever-growing number of civil engineers are members of, and engage in, ASCE
- ASCE excels in strategic and operational effectiveness

Following review of goals and strategies the Board expects to release its new strategic plan next March.

Policies - The Board adopted the Public Policy Committee's recommendation on two policy statements:

- PS 349 Sediment Management for Erosion Control, Channel Maintenance and Coastal Protection, to support "the beneficial management of sediments and dredged materials,"
- PS 526 Public Private Partnerships (P3), ASCE criteria to assess (P3) project delivery methods.

Board Structure - After considering recommendations of the Task Committee on Governance Structure for a modified Board structure the ASCE Board of Direction voted to retain the current Board structure. To share your views or to suggest ways the Society could serve you better please <a href="mailto:ema

John Casana, PE, F. ASCE ASCE Director, Region 2







# PAG-02 NPDES General Permit Expiration and Administrative Extension

Submitted by Andrew Orlovsky, P.E., Hydraulics and Environmental Technical Chair

As the PAG-02 NPDES General Permit for Stormwater Discharges Associated with Construction Activities (PAG-02) is set to expire on December 7, 2017, the Department of Environmental Protection (DEP) is announcing that PAG-02 will be administratively extended until December 7, 2018. Notice of the extension is published in the October 21, 2017 edition of the Pennsylvania Bulletin. Persons that are operating under the PAG-02 General Permit may continue to operate until December 7, 2018 or the expiration date of coverage identified on the permit coverage approval page, whichever is later. DEP is extending the availability of this permit to adequately complete preparation of the renewal of the PAG-02 General Permit and expects to reissue the renewed General Permit prior to December 7, 2018. From December 8, 2017 until a final, renewed PAG-02 General Permit becomes effective, DEP and county conservation districts that are delegated to issue NPDES permits will be unable to approve General Permit coverage for new projects. During this time the only available mechanism for NPDES permit coverage for new stormwater discharges associated with construction activities will be individual NPDES permits.

A Frequently Asked Questions factsheet is available at the following web address: <a href="http://files.dep.state.pa.us/Water/BPNPSM/StormwaterManagement/ConstructionStormwater/PAG-02">http://files.dep.state.pa.us/Water/BPNPSM/StormwaterManagement/ConstructionStormwater/PAG-02</a> Admin Extension FAQ.pdf

### **Knoebels Picnic**

Submitted by Rachel Govelovich, P.E.



A huge thank you to everyone who joined us at the annual Knoebel's Picnic! On July 22, nearly 150 members, family, and friends gathered at Knoebels Amusement Park for the ASCE Central PA Annual Picnic. The day began as members gathered at Pavilion A to check in, pick up meal and ride tickets, and meet up with other family and friends. The pavilion is available to ASCE all day and provides a place to keep non-valuables,

take a break in the shade, and catch some mist from the SKLOOSH next door. This year catered

lunch at the pavilion included chicken barbeque, macaroni and cheese, hot dogs, and ice cream! It wasn't long after lunch when Mother Nature decided to unfortunately cut the day short for most of us with a down pour that lasted a while. Those few who braved the rain and stuck it out managed to get their pick of rides that afternoon with no lines! Enjoy these photos from previous years and make sure to save the date for 2018 – July 28, 2018.







# **NEW Master's of Science in Civil Engineering to Start January 2018 at Penn State Harrisburg**

Submitted by Shirley E Clark, Ph.D, P.E., Professor of Environmental Engineering



Calling all Structural, Transportation, and Water Resources Engineers Interested in Pursuing a Master's Degree

Penn State Harrisburg's School of Science, Engineering and Technology is pleased to announce the launch of the Master's of Science in Civil Engineering in January 2018, as well as the Master's of Science in Mechanical Engineering. The MS CE program is designed to meet the needs of working professionals in central Pennsylvania in the vital area of sustainable infrastructure with specialties in structural, transportation, and water resources engineering. This new degree will complement the program's existing undergraduate degree in civil engineering and graduate degree in environmental engineering and will fill a gap in engineering graduate education in the region.

"We are pleased to add civil and mechanical engineering master's degrees to our graduate offerings at Penn State Harrisburg," said Dr. Rafic Bachnak, director of the School of Science, Engineering, and Technology. "Because we have undergraduate degrees in civil and mechanical engineering, the master's programs will provide a path to advanced study for our students. The addition of these programs enhances our engineering master's level offerings and provides more discipline-specific options, and enhances our efforts to maintain strong connections with local companies in this region by meeting their professional workforce needs."

The flexibility of the program makes it attractive to both part-time and full-time students, with fellowships and assistantships potentially available for full-time students. The department is working with various local firms and governmental agencies to develop an active internship program for students who wish to combine practical experience with a full-time education.

Classes will be offered in the evening in order to accommodate working professionals who are returning as part-time students to enhance their skills.

For more information, contact Mrs. Justine Yelk, Administrative Support Assistant, at <u>jes5437@psu.edu</u>, or Dr. Shirley Clark, Professor in Charge, at <u>seclark@psu.edu</u>.

Additional information on the program can be found at: <a href="https://harrisburg.psu.edu/science-engineering-technology/civil-structural-construction/masters-science-civil-engineering">https://harrisburg.psu.edu/science-engineering-technology/civil-structural-construction/masters-science-civil-engineering</a>





## Chesapeake Bay Stormwater Engineers: Survey of the Current Stateof-the-Practice in Design of Stormwater Systems

Submitted by Shirley E Clark, Ph.D, P.E., Professor of Environmental Engineering



As part of a Chesapeake Bay, EPA-funded research grant, Dr. Shirley Clark of Penn State Harrisburg is updating a survey from the 1990s on the current state of the practice on stormwater management design and review, with a focus in the Chesapeake Bay Basin and a new section on the implementation of green infrastructure. The older survey results are available

at <a href="http://rpitt.eng.ua.edu/Publications/Stormwater Management and Modeling/Designs for the Future.pdf">http://rpitt.eng.ua.edu/Publications/Stormwater Management and Modeling/Designs for the Future.pdf</a> (Chapter 4).

If you work in the Chesapeake Bay Basin even part-time, please take 10 - 15 minutes of your time and complete the survey on current practices and on the implementation of green infrastructure in the Chesapeake Bay Basin. All answers are anonymous. There are separate questions for designers and reviewers. The results of this survey will be published in approximately six months as part of a larger grant investigating the implementation of green infrastructure in the Chesapeake Bay basin. They will complement a series of in-person interviews performed by a colleague who focused on the Lower Susquehanna region.

The survey link: <a href="https://www.surveymonkey.com/r/ChesBayGIsurvey">https://www.surveymonkey.com/r/ChesBayGIsurvey</a>

Please share with colleagues and friends who work in the Bay Basin. We are trying to best document the state of the practice across the Bay watershed (five states and the District of Columbia).

Thanks and please contact me with any questions at seclark@psu.edu









### **Dream Big: Engineering Our World**

Submitted by Gary D Garbacik, P.E., President

Dream Big: Engineering Our World is in our area. The Dream Big movie is now showing through December 4, 2017 at the Whitaker Center in Harrisburg. Take your children to see the dramatic movie that has transformed the way people view engineers and engineering. The movie's breadth spans from the world tallest building to underwater robots to a solar car race. But most of all the movie describes the heart that drives us engineers to create better lives for humanity.

As of September 20, 2017, one million viewers have experienced Dream Big: Engineering Our World. See the ASCE website for the movie trailer http://www.asce.org/dream-big/

Dream Big continues to gain momentum. There is an initiative that will put the Dream Big movie in every high school in the United States within the next year or two. Another program which is currently under development has the grand idea of placing the movie in every elementary and middle school in the country. While the program is currently unfunded, there is growing grassroots support for this grand idea.

ASCE National provided a grant to ASCE Central PA to purchase tickets for the movie. The section used the grant to encourage students to attend the movie. The first group of students who participated in the Engineers Week Program at the Whitaker Center saw and were inspired by the movie. Movie tickets were provided to the students after completing the activities at the Engineers Week program at the Whitaker Center. Other organizations who benefitted were Chambersburg YMCA students, The Cumberland Valley Eagle Foundation Buddy Program, The Neighborhood Center and the Boys & Girls Club. The goal was to get as many students to see the movie as possible. A special Thanks to Jason Bowes who masterminded the program, wrote the grant application as well as maintaining the grant through its completion.



















advantage engineers





Providing clients with a range of services focused on transportation in PA:

- Highway & Traffic Engineering
- Surveying & HD Laser Scanning Hydrology & Hydraulics
- Stormwater
- Geotechnical Engineering & Drilling Inspection
- Right-of-Way Plans
- **Utility Coordination**
- Bridge Design & Inspection
- · Erosion & Sediment Pollution Control
- Environmental Analysis
- Noise and Air Quality Analysis Hazardous Investigations
- ACM & LBP Inspections
- Mitigation
- Permits

www.sqcivil.com ♦ 50 Grumbacher Road, Suite 10, York, PA 17406 ♦ Phone: 717-846-7151

CERTIFIED DISADVANTAGED BUSINESS ENTERPRISE







**Engineering and Construction Services** 

Structures. Highway & Roadway. Design Build. Traffic. Construction & Coatings Inspection. Survey & Mapping. NBIS Bridge Inspection.

Teamwork. Quality. Commitment. www.gpinet.com









# Quality Geophysics

Quality Geosciences Company, LLC

1102 Manada Gap Road Grantville, PA 17028 (717) 979-6237

www.quality-geophysics.com Rick.Hoover@quality-geophysics.com

### Geotechnical Construction Services

- Design-Build
- Foundations
- Earth Retention Systems







Engineers & Landscape Architects

Landscape Architecture
Land Planning
Construction Services
Civil / Municipal Engineering
Water / Wastewater Engineering
Transportation Engineering
Surveying & GIS Services
Retaining Wall Design

Offices in Lititz, State College and Butler, Pennsylvania



elagroup.com



717.432.4425

Follow us: www.ntmeng.com

@ntmeng

(a) @ntmengineering

Transportation Services Bridge Design & Inspection Stormwater Design & Permitting Hydrologic & Hydraulic Modeling

Geographic Information Systems (GIS)

Technical Training & Course Development

NTM is a registered DBE in PA, MD, DE, and WV and a WOSB with the federal government.

Dillsburg · Philadelphia · State College

Full Service Transportation Design and Construction Services

Teaming Our Talents For Your Success!



5001 Louise Drive Suite 101 Mechanicsburg, PA 17055 (717) 795-4666 Certified MBE/DBE



New Cumberland, PA Wysox, PA Allentown, PA Philadelphia, PA Sparks, MD

www.navarrowright.com Phone: (717) 441-2216

Since 1996

### **New and Events**

Event	Date	Location
ASCE 2017 Region 2 Assembly	November 4, 2017	University of Pittsburgh
November Section Meeting	November 8, 2017	Park Inn, Mechanicsburg
YMG Hershey Bears Hockey Game	December 9, 2017	Giant Center, Hershey
Section Christmas Party	December 13, 2017	Park Inn, Mechanicsburg

The summer and fall schedule is growing daily, please visit <a href="http://sections.asce.org/central-pennsylvania">http://sections.asce.org/central-pennsylvania</a> for more information.

### **Job Postings**

ELA Group, Inc - <u>Transportation Engineer</u>

Pennsylvania Turnpike Commission - Engineer Project Manager 2

Susquehanna Civil, Inc. - CBSI Bridge Inspector/Team Leader

C.S. Davidson Inc. – <u>Project Engineer (Water and Wastewater Services)</u>
- Cad Technician

NTM Engineering, Inc – Project Engineer (Bridge inspection / Design)

Penn State Harrisburg - Part-Tim Faculty Member (Construction Estimating)

Jobs postings are included on the Section Website at <a href="http://sections.asce.org/central-pennsylvania/node/10">http://sections.asce.org/central-pennsylvania/node/10</a>

### **Address Change? Questions About ASCE?**

If you are an ASCE member, and wish to update your address information, please visit: <a href="https://www.asce.org/myprofile">www.asce.org/myprofile</a>.

If you are a member of ASCE, and have questions, please email them to: <a href="mailto:centralpa.asce@gmail.com">centralpa.asce@gmail.com</a>.

Questions about the ASCE Central PA Section Newsletter? Send an email to Jason Taylor, Newsletter Editor, at <a href="mailto:jtaylor@sqcivil.com">jtaylor@sqcivil.com</a>.