# CIVIL SOURCE

## ASCE UTAH SECTION NEWSLETTER

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#### PRESIDENT'S MESSAGE

by Mark Chandler, PE, PG, CFM

Welcome to Spring and the extremes of weather. This past weekend we were in the 70s and 80s, and as I sit writing this, I am watching heavy snow fall. Many of you know that I am a water engineer, which is probably why I wander into the weather so often in these articles. Our success or failure is so dependent upon our weather and how we adjust to it. But really, this is one of the biggest challenges of Civil Engineering. We are working with tools and principles that have been relatively well understood in many cases for centuries. At the same time, we are constantly being bombarded with refined approaches, mathematics and tools that help us more efficiently do our work. There are a few challenges that come from the improved efficiency and consistently evolving tools, and if we are not careful, the tools will drive the work and not the engineering. One challenge is that with improved efficiency, we have more demands on production. This can result in people who are good at throwing together plans in some drafting program, but not actually engineering the design properly. An additional challenge from this is the pressure to sacrifice quality for quantity. State Code clearly lays out that all stamped plans should be in "compliance with all applicable laws and rules and the standards of the profession". This is one area that I never truly understood when I was going to school. For us to properly perform as engineers, we must understand these laws, rules, and standards. This is the difference between a "technician" and an engineer. With continued pressure to deliver faster and cheaper in some instances, engineers can find themselves operating more as technicians. We must resist this pressure and maintain the "standards of the profession" in providing complete and correct plans when we issue final drawings and reports which bear our stamp. Otherwise, the stamp quickly becomes devalued. Another challenge that we face is that throughout our careers, and even just over the course of projects, we are receiving continual feedback from many directions including clients, other engineers, and third parties that all need to be factored into the service we provide. If we truly reach to meet the "standards of the profession", we must continually be learning, teaching and making greater efforts to be organized in our work and communicative with those we serve. It is difficult to absorb all of this information and process it well when we are constantly in a frenzied state of mind. I hope we can all take the time to be more professional in the way we approach our work, the way we represent the Civil Engineering profession and the way we address the many challenges we face. They are not slowing down, but picking up steam. And in order to keep up, sometimes we have to do the counter-intuitive thing, slow down. I am proud to be part of our profession and the industry that we support. I look forward to seeing many of you in June at our Annual Meeting. Have a great month.

#### HISTORY AND HERITAGE COMMITTEE

History and Heritage Committee - Cody Palmer

"Engineering is the closest thing to magic that exists in the world." – Elon Musk Notable Engineer of the Month

The ASCE History and Heritage Committee's notable engineer this month is Panama Canal engineer, George Washington Goethals. He was appointed by Theodore Roosevelt to the canal project in 1907 which was finished in 1914. "The atmosphere of cooperation generated by Goethals allowed his team to succeed where others had failed, and the project reached completion six months ahead of schedule."

https://www.asce.org/about-civil-engineering/history-and-heritage/notable-civil-engineers/george-washington-goethals

#### Landmark Individual Nominatinons

The Utah Section recognizes a landmark individual at our annual society meeting coming up this year (please note, this is a separate nomination than the engineer of the year type awards). This can be an engineer living or historical (George Washington for example). As ideas come to mind, please feel free to reach out to me at cody@mcneileng.com. Sample criteria of a landmark individual - a person of significance who:

- 1. An engineer
- 2. Was first to accomplish something new or noteworthy in engineering
- 3. Received an auspicious award, (Nobel peace prize, any notable award)
- 4. Created an engineering organization
- 5. Set, instituted or created a new precedent that changed or significantly influenced modern design practices (moment distribution, first to invent or create an engineering technique or method)
- 6. Championed the cause of the civil engineering industry (Eisenhower creating the highway network)



#### **CENTRAL UTAH BRANCH UPDATE**

By: Mitchell Smith, EIT

Our previous luncheon was on Thursday, March 24th. I presented on the past and future of ASCE and engineering. President-Elect Josh Reidhead presented on a proposed mentorship program. We had a quality discussion about both topics with the members present.

This month's luncheon will be a site tour of the Provo River Delta Restoration Project on Thursday, April 28th at 12pm. We encourage all our members to attend.

The Provo River Delta Restoration Project is intended to help recover the threatened June sucker and restore the area's natural ecosystem. When completed in 2024, the project will divert a majority of the flow from the lower Provo River into a newly constructed system of braided channels and wetlands adjacent to Utah Lake. The tour of the delta site will cover the latest construction, monitoring and management activities. In addition to viewing active construction and recently-constructed habitat features, participants will also visit the existing river channel and the portion of Skipper Bay Dike that will be lowered to restore the river's connection to Utah Lake.

For future luncheons, if any members of the branch would like the opportunity to present one of their projects, would like to recommend a friend to present, or have a topic you'd like to have us find a speaker for, please reach out to me at mitsmith@provo.org. Thanks.



### **WASATCH FRONT BRANCH UPDATE**

By Britton Tveten, PE

With the warmer weather our participation from the Wasatch Front Branch has been picking up. In March, Mark Chandler and LeRoy Palmer came to speak to us on well rehabilitation and Aquifer Protection. Coming Soon in April We have teamed up with the University for Utah Student Chapter where the Students have taken the lead to prepare and schedule a tour of the nuclear reactor that is on their campus. In addition to the tour they will be speaking about the nuclear program that the University has to offer and the an update on the student chapter. As suggested by our members we have raised the prices of our luncheons and since then we have been able to raise enough money this past year to offer two \$500 Scholarships to students. These scholarships will be presented at the section meeting in June.

#### NOMINATING AND ELECTION COMMITTEE

Are you a member of the Utah Section? Would you like to expand your leadership and service skills? Have you ever considered lending a hand in ASCE (and perhaps thought, "oh, those are positions for others, I am just a member?")

We need you! The boards of ASCE are comprised of "just members" who simply have a desire and willingness to serve.

You will have the chance to gain some additional leadership skills and extend your professional network

Nominations are being accepted now!

Here is a short list of section and branch officers that will generally need to be nominated for the election

#### Utah Section Positions

- Section President-Elect (generally this is at least a 3 year commitment President Elect, then President, then Past President)
- Section Secretary/Treasurer-Elect (generally this a 2-year commitment Secretary/Treasurer Elect, then Secretary/Treasurer)

Branch Positions (for each branch: Northern Utah, Wasatch Front, Central Utah, Southern Utah)

- Branch Secretary/Treasurer and/or
- Branch President-Elect (sometimes the current Branch Secretary/Treasurer transitions into this position in the past this has depended on how each branch has conducted their own board member succession)

Younger Member Forum

- YMF President-Elect
- YMF Secretary
- YMF Treasurer

For questions and nominations forms, please feel free to reach out to your respective branch/forum leadership. You can also send in comments or request for nomination forms at cody@mcneileng.com.