



THE ARIZONA CIVIL ENGINEER

President's Message

Sheila M. Bowen, P.E., M.ASCE



After my article about ASCE and the benefits of networking appeared in last month's issue, I received numerous e-mails from members looking at increasing their networking opportunities. A common theme among those who contacted me was that they had lost a job as a result of the downturn in the economy. Oh how I can relate. Like many others, I found myself out of work late last year. While the thought of looking for a job in an economy that was tightening its belt was overwhelming, the support I received from fellow ASCE members was encouraging.

The day after the company where I worked closed its doors, I received some sound advice from our own Mick Mathieu – thank you Mick. During his call, one of the suggestions he made was to set a schedule for my job search. Treat it as if it were a job, spend my workday focused on the job search and then put it away at the end of my shift. That turned out to be some of the best advice I received. For anyone who has experienced a similar situation, it is easy to become overwhelmed with the task of finding a job. If you aren't careful, it can consume every moment your day.

Others shared their experiences with the numerous feelings they encountered when they lost their own job. Feelings? Absolutely. According to the May 31, 2009 Articlesbase post *When You Lose Your Job-How to Be Successful at Unemployment!*, "Losing your job is one of the most stressful events that can happen in your lifetime...and at times you may feel like you're on an emotional roller coaster." The author describes the feelings that often surface and provides tips on redirecting them into positive action. For example, individuals often blame themselves for the job ending. However, rather than focusing on regret, the author suggests acknowledging the role of the economy and focusing on who you are, what you'd like to accomplish and your specific interests. Of particular note, the author suggests recognizing that, "...you're much more than your job. As important as it might have been to you, your job was not the sum total of who you are." Further, the author notes, "It's not uncommon for people who have lost a job to later say it opened up other possibilities they might never have explored, otherwise. It woke them up and made them focus on how they really wanted to spend their life." Here's to new possibilities!

The article noted above can be found at <http://www.articlesbase.com/self-help-articles/when-you-lose-your-job-how-to-be-successful-at-unemployment-946411.html>.

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PHOENIX BRANCH YMF

*By Julian Dresang, P.E.
President, Phoenix Branch YMF*

May was a very busy month! June and July should be a little more laid back. Check out what's happening with the Phoenix Branch YMF in the coming months...

UPCOMING EVENTS:

Broomball: ITE has challenged ASCE to a friendly game of broomball! The game will be held on **Friday, June 12th from 2:00 to 4:00pm** at Ozzie Ice (10436 N. 32nd Street) in Phoenix. What is broomball? Broomball is a game similar to ice hockey (played on an ice rink), but players do NOT wear skates, do NOT use hockey sticks, and do NOT hit a puck. Instead, players wear sneakers, use "modified" brooms, and hit a rubber ball (all equipment is provided). So dig through the closet for that old Gretzky jersey and join us for this "cool" event. RSVP to Julian Dresang at julian_dresang@tempe.gov.

June PBYMF Meeting: Next month's meeting will be held on **Tuesday, June 23rd** at 5:30pm at Half Moon Grill located at 2121 E. Highland Avenue in central Phoenix. Is your boss a baby-boomer? Are you generation X or Y? Shauna Stacy of Alpha Geotechnical & Materials, Inc. will be giving a short presentation on "Generational Differences in the Workplace." This presentation is sure to help us "younger" engineers get a better understanding of what those "older" engineers are up to. Please plan on attending!

Annual Camping Trip: This event will be held from **Friday, July 24th to Sunday, July 26th at Showers Point** campsite on Mt. Lemon. If you have never been to Mt. Lemmon you are missing out on one of Arizona's great outdoor hiking and camping venues. At just over 9,000 feet in elevation, Mt. Lemmon is one of only a few "sky islands" in southern Arizona where temperatures are significantly cooler than the hot desert floor. If you need a break from the city and the heat, please plan on joining the Phoenix Branch and Southern Arizona Branch YMF's for another memorable camping experience. Please RSVP to Chad Drago at cdrago@woodpatel.com.

PAST EVENTS:

YMF/ASU ASCE BBQ: Thank you to all the YMF members and students that showed up for this annual event. This was a great opportunity for networking, eating, volleyball, and fun. If you missed it this year, we will be at it again next May. Congratulations graduating Sun Devils!

Technical Tour of Palo Verde Nuclear Power Plant: Another successful technical tour for the Phoenix Branch YMF. Twenty YMF members and coworkers made the 60-mile trek out to the nuclear power plant for an informative presentation and "drive-around" tour. Next time we will try to get into the reactor! Thank you to all that took time out of their busy Thursday to attend.

Educational Outreach Event: Thank you to Chris Milner for another great year of educational outreach with the students and staff of Most Holy Trinity School! Chris continues to be an asset to our organization and we really appreciate all his hard work and dedication! Please give Chris a "high-five" the next time you see him.

Ronald McDonald House Dinner: Through the culinary expertise of the YMF and the ITE AMG, families staying at the Ronald McDonald house were treated to a delicious (and nutritious) meal of lasagna, garlic bread, salad (both fruit and grass), and chocolate chip cookies. The families and the RMH staff were all very thankful for the food and kindness.

Wine Tasting Event w/SWE: Jessica Dresang of the Society of Women Engineers (SWE) organized another great wine tasting event. This year, members of both groups joined up at Grazie Pizza and Wine Bar for wine, food, and good company. Thank you Jessica!

SOUTHERN ARIZONA BRANCH YMF

*By David Tapia, P.E.
President, Southern Arizona Branch YMF*

Greetings Southern Arizona ASCE Members and Friends,

The Southern Arizona Branch YMF invites all AzSCE Members, family and friends to join us for an outing to see the Tucson Toros. Come on out and join us for some BBQ and baseball.

Date: Thursday, June 11, 2009. Game time currently scheduled for 7 p.m.

Location: Hi Corbett Field

Cost: \$18 adults, \$12 kids (Price includes game ticket and grand slam BBQ)

Please see attached flyer for more information.

For reservations or questions contact David Tapia at dltapia@transystems.com

Please submit payment by Thursday, June 4th. Thank you

Other News:

There will no regular scheduled YMF membership meeting for the month of June.

The 13th Annual YMF Sunstroke Golf Tournament will be held September 19th at The Golf Club at Vistoso. Proceeds benefit U of A Civil Engineering Student Scholarship Fund.

**SPECIAL - FREE
CLASSIFIED
ADVERTISING!**

AzSCE is offering free classified advertising through July 2009! Ads must post current job opening(s) for a civil engineering or related position and be no more than 75 words in length. Ads should be in Word format and are due by the 10th of the month prior to the month of publication. If you are interested in placing a classified ad announcing a civil engineering position with your firm, please contact editor@azsce.org.

INTERSECTIONS: CIVIL ENGINEERING AND THE LAW

By Roger Owers, Ph.D., P.E., J.D.

Power Company and the EPA Survive Challenge by Environmental Group

Cyrus sat down across the small café table from his lawyer, Angie. “Good morning, Cyrus,” Angie said. “Did you hear about the recent case from the U.S. Supreme Court regarding the Environmental Protection Agency?”

“You mean the case discussing the EPA’s rule regarding power plant cooling systems?” Cyrus replied.

“Yes,” said Angie. On the surface, it sounds like a narrow issue, but I think it will impact your civil engineering work.”

“Really? In what regard?” Cyrus asked as he took a bite of his coffee crumb cake.

“An environmental group challenged an EPA rule aimed at protecting fish and other aquatic organisms from being sucked into or pressed against screens for underwater intake systems used to water-cool existing power plants,” Angie started.

“Instead of requiring existing power plants to use the ‘best technology available’ (as the EPA requires for new power plants), the rule used a performance-based standard for reducing those negative effects on aquatic organisms.”

“I assume that the EPA was concerned with the cost impacts on power companies if they were required to retrofit

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their existing power plants up to the standard of 'best technology available?'" Cyrus asked.

"Exactly, Cyrus," said Angie. "And the U.S. Supreme Court appreciated the EPA's concern for those cost-benefit effects when the EPA issued the rule. The Court upheld the EPA rule, allowing the performance-based standard and not forcing the EPA to require the 'best technology available' standard."

"I get it," Cyrus replied. After another bite of his crumb cake he asked, "But this certainly is a narrow issue. How do you think it will impact my civil engineering work?"

"It may not affect you immediately, but I see two big upshots from this opinion," Angie replied. "First, this opinion enables the EPA to use its discretion in rulemaking. The EPA does not necessarily have to require project owners to implement costly measures. The EPA can weigh costs and benefits in making future rules on a variety of environmental issues."

Cyrus responded, "But in some cases, the EPA's discretion could just as easily go against the project owner team, couldn't it?"

"Yes indeed, Cyrus. The EPA's discretion in rule-making could certainly cut both ways."

"The second impact from this opinion is that the U.S. Supreme Court underscored the ability of the EPA to implement a performance-based approach in rule making."

Cyrus replied. "I myself have noticed a trend toward performance-based projects coming out of some project owners. For example, best-value procurement, value-based proposals, etc. I like these projects because they allow me to showcase my talents and the value I bring to the project."

"Well," said Angie, "this U.S. Supreme Court opinion certainly doesn't hurt the project owners who want to implement performance-based projects."

"I'm glad to hear that, Angie."

Cyrus finished his coffee crumb cake, looked at Angie and said, "I can't think of a better topic for conversation while enjoying my coffee crumb cake than saving fish from getting sucked into power plant cooling systems."

"Would you rather talk about the law?"

The U.S. Supreme Court opinion referred to in this article is *Entergy Corp. v. Riverkeeper, Inc., et al.*, 556 U.S. ____ , (2009).

This article is intended for general information only. It should not be construed as legal advice with respect to any particular situation. Readers should not act upon information contained in this article without first consulting their lawyer.

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NORTHERN ARIZONA UNIVERSITY NEWS

PSWRC 2009 AZ Style

*By Kimberly Cook, BS Environmental Engineering
NAU PSWRC Coordinator*

The annual racing of the concrete canoes is an event every new ASCE member should attend. The canoe races, which have been going on for years internationally, are part of a larger conference here in the southwest. This conference is known as the Pacific Southwest Regional Conference or PSWRC. This year PSWRC 2009 was hosted by the University of Hawaii at Manoa on the beautiful island of Oahu. All three state schools, Northern Arizona University (NAU), Arizona State University (ASU) and the University of Arizona (UofA), participated in the conference this year. The conference consists of the steel bridge and concrete canoe designs along with several others such as an impromptu design, an environmental design and tug of war. These two projects particularly are judged on everything from aesthetics to a paper presentation of the design. One of FAQ is always, "How does a concrete canoe float?" It's important to note that these canoes are actually raced in a body of water with up to four people in them. The bridges are actually loaded with 2500 pounds and deflection in all directions is measured. The students spend countless hours designing and building their prized projects to fit within the design constraints. It all leads up to a few short days against 16 other schools from all over southern California, Arizona, Hawaii and Nevada. One of the real challenges for the Arizona state schools is going up against the Cal Polytechnic Universities of San Luis Obispo and Pomona. These schools are large, technical based colleges often with 5 times the number of students at the conference. What makes the Arizona schools special is the students' dedication. You can see it in their eyes when it comes to the wire they have worked very hard to get to where they are. Some important aspects of this student competition are the valuable lessons in teamwork and design the students learn. I just graduated from NAU may 8th and I have participated in this conference for the last four years. From personal experience I can say the students work on this day in and day out from summertime until their precious projects must be packed and ready to go. This year the students had to work together to get the 20 foot long concrete canoes and all the other supplies to the island of Hawaii. As NAU's conference coordinator this year I searched aimlessly for shipping help. We (NAU) had randomly picked the same hotel in Hawaii to stay at for PSWRC and we attempted to coordinate with the other schools make shipping go smoothly. This was a very daunting task to handle alone. One day amongst, all the bustle of everything else ASCE, meetings, projects, leadership issues, my faculty advisor Joshua Hewes said, "Hey did you ever get a hold of the other two state schools? I heard they were shipping together". This was around November. I began searching for the right individuals in each college. Finally, I found Andrew Shroads, a senior at ASU, and Melanie Sykes working with ASU. Together we and our students got all our supplies together and shipped them in a 45ft container to Hawaii. All three schools lifted each other's canoes, etc. It was a sight to see Wildcats and Sun Devils working together! Now once the supplies were in Hawaii it was downhill from there, but competition is so intense it didn't seem like it. All three schools performed well, some results are as follows:

ASU received 1st place in Surveying, 2nd place in Volleyball, 2nd place for Impromptu, and 1st place for Bridge Display. Good job!

UofA received 3rd place in Quiz Bowl, 3rd place in Scavenger Hunt, 2nd place for Bridge Lightness, 2nd place for Bridge Efficiency and 3rd place for Bridge Display, and 3rd place for Bridge Stiffness

NAU received 1st place in the Environmental Design (for the third year in a row!), 2nd place in Tug of War, 3rd place in Bridge Lightness, and 4th place overall for the Canoe.

If you are curious about the detailed results of this competition you can visit <http://pswrc2009.asce-uhmanoa.org/>

One thing I would like to note as an exiting senior and successful participant in PSWRC 2009, ASCE's student chapters are priceless. The drive to be an engineer was instilled in me from my very first conference. I believe the students need this conference to give them something to work towards. They get to practice their newfound skills,

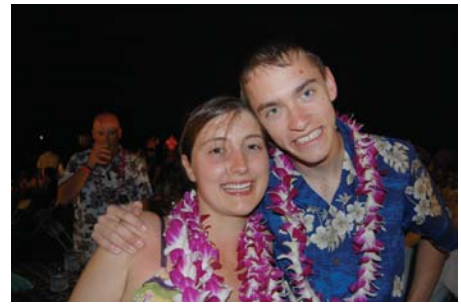
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apply things they learn in the classroom and network with each other and professionals. I believe every active student member of our chapter will be a better civil engineer because of their ability to work together. Below are some photos of our lovely luau banquet.



From left Danny Harris, Steven Rowson, Steffi Lindstrom and Sean Strain.



Kimberly Cook and Thomas Nelson.



Dinner



More Dinner



Dolphins



NAU



Take Me Out To The Ball Game!

WHEN

THURSDAY JUNE 11, 2009

TIME

6:00 P.M. (Dinner Starts) and
7:00 P.M. (First Pitch)

WHERE

AT
HI CORBETT FIELD
Sports Park — First Base Line

**Kids receive
Tuffy's Bull Pen
Wristbands!**

THIRSTY THURS- DAY!

\$1 Beers, Lemonade

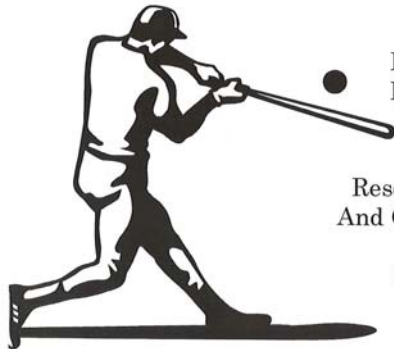


COST

Adults — \$18.00
Kids (3 — 12) — \$12.00
Kids Under 3 — **FREE!!!**

Includes

Reserved Seating, BBQ Brisket
And Chicken Buffet, Beans, Rolls,
Chips and Cookies
Soda and Bottled Water



Send your checks, by Thursday June 4th,
Payable to AzSCE SAB — YMF

Questions?
Call David Tapia at 820-4626

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