Dear Membership,

As the new Branch President, I would like to first thank all of you for your continued support of the ASCE San Bernardino & Riverside Counties Branch. Without the exemplary work provided by the volunteers on the Branch Board, Younger Member Forum (YMF) Board and the Committees, none of this would be possible. With the fast paced economy we live in and the constant demand for results, being a Board member for ASCE has its challenges. At times, it can be difficult to find the time necessary to complete the obligations required, but the advantages of being involved with ASCE far surpass the time requirements. ASCE develops attributes like leadership, team work, and delegation which, are required to succeed in the engineering field. In addition to strengthening personal skills, ASCE develops networking contacts and provides technical programs to draw upon during your career. ASCE has provided an invaluable experience throughout my early career and I would urge each of you to consider volunteering for ASCE in the future.

For the year ahead, the Branch has set some new goals. We would like to get the public agencies and their employees more involved. ASCE is dependent on the public agencies involvement on many levels. The San Bernardino & Riverside Counties Branch Report Card is due for updating and no one knows the existing infrastructure better than the public employees who work with it on a daily basis. In addition, ASCE is continuing its emphasis on the need for more infrastructure funding for California, which directly impacts the Cities.

...CONTINUED ON PAGE 4
A collaboration between Stanford scientists and the Orange County Water District (OCWD) recently diagnosed the cause of transient spikes in trace arsenic levels seen in a Southern Californian groundwater basin - the introduction of highly purified water. The study was published in the journal Environmental Science and Technology, and OCWD has modified post-treatment operations in light of its findings. Arsenic levels in OCWD’s aquifers occasionally exceeded the drinking limit of 10 micrograms per liter. OCWD Director of Health and Regulatory Affairs Jason Dadakis reported that public water supplies were at no time affected by the spikes, which were transient in nature. The fact that highly purified water can instigate the release of naturally occurring subterranean contaminants was previously unknown. The study’s findings are particularly relevant for drought-stricken California, where groundwater basins have emerged as attractive alternatives to evaporation-vulnerable surface reservoirs. OCWD built and operationalized its groundwater replenishment system in 2008. The world’s largest treatment system for potable reuse, it recharges a subterranean basin with local surface water, imported water and thoroughly treated recycled water. Water is piped into surface ponds, from which it percolates and infiltrates the basin below.

A network of wells provides over 1,400 points and enables OCWD to conduct over 350,000 analyses per year, and it was with this monitoring infrastructure that OCWD sampling observed arsenic traces. The spikes, which were first seen in 2009, were difficult to understand — blending of different water types and their aggregate flow through the basin, for example, complicated analyses. And so, three years later, OCWD enlisted the help of Stanford’s earth system science professor Scott Fendorf.

“It was very difficult to understand exactly what was going on all the time in this uncontrolled field [setting],” Dadakis said. “That led us to contact Stanford... to do work in [Fendorf’s] laboratory where we could control some of these factors.”

Fendorf’s laboratory received samples of sediment from underneath Anaheim’s Miraloma Basin. The scientists packed the sediment — which itself had naturally occurring arsenic — into small vials, flowing differing water samples through them and measuring the extent to which arsenic bled into the water. They found that OCWD’s recycled water was particularly effective in coaxing arsenic to unbind from sediment, precisely because it was poor in calcium and magnesium cations.

“What we discovered is that, essentially, their water is too pure,” said Sarah Fakhreddine, co-author of the study and a third-year graduate student advised by Fendorf. “Some of the arsenic is bound on the clay particles in the aquifer, and it’s bound by calcium and magnesium.... As you introduce high purity water that has low concentrations of ions, you start to lose the calcium and magnesium in the system and you release the arsenic.”

Dadakis said that OCWD has responded to these findings by increasing the amount of calcium added to the recycled water post-treatment. Preliminary results do not show any negative consequences of doing so, though it is too early to tell whether the attempted solution will be effective.

This work was not the first collaboration between Stanford and OCWD (Stanford began consulting for OCWD as early as the late 1970s), nor will it be the last. Fendorf and company have already taken up a second project: OCWD is evaluating the feasibility of injecting water directly into the groundwater basin, and the Stanford scientists have come on board to study the geochemistry of that particular system.
October 7, 2015 Presentation
Seismic Remediation of Perris Dam

Mike Driller, P.E., G.E.
Senior Engineer, California Department of Water Resources

Located in Riverside County, California at the terminus of the East Branch of the State Water Project, Perris Dam is a 2.2-mile-long, 128-foot-high zoned earthfill dam with a capacity of 131,450 acre-ft. Due to deficiencies identified in a seismic stability study prepared by DWR in 2005, remediation for Perris Dam is currently underway. The remediation is designed primarily to limit deformation of the dam due to the presence of potentially liquefiable soil lenses within the dam foundation. After a comparative evaluation of nineteen remediation methods, foundation strengthening by cement deep soil mixing (CDSM) and construction of a downstream berm to stabilize the dam were the selected alternatives. The remediation will cover over 5,000 linear feet of the downstream toe of the dam and involve over 300,000 cubic yards of CDSM. Project construction started in Fall 2014 and is anticipated to take approximately 3 years. Mr. Driller’s presentation will describe design and construction aspects of the remediation.

Mr. Driller earned both his BS in Civil Engineering (1985) and MS in Civil/Geotechnical Engineering (1990) from California State University at Sacramento. He has worked for the Department of Water Resources since 1981, where he has performed or supervised numerous dam and foundation investigations. For the last several years, he has supervised the seismic remediation of Perris Dam, the southernmost State Water Project Facility and the southern terminus of the California Aqueduct.

Technical Presentation:
Date: Wednesday, October 7, 2015
Time: 6:00 - 6:45 PM Registration and socializing
       6:45 - 7:30 PM Dinner
       7:30 – 8:30 PM Technical presentation – Mike Driller, California DWR
Location: Zendejas Mexican Grill, 8106 Milliken Avenue, Rancho Cucamonga
Cost: $30 members w/ RSVP, $35 non-members or no RSVP, $10 students
Registration and Additional Info: RSVP by October 2, 2015 to Robbie Warner at: rwarner@geo-logic.com
President’s Message

...CONTINUED from PAGE 1

Case in point, on October 2nd ASCE Los Angeles Section hosted an Infrastructure Advocacy seminar aimed at providing guidance to engineers on the legislative process, advocacy protocols, and recent infrastructure related initiatives. Further, the Branch will be visiting the State Capitol again this year to speak with the Legislators about infrastructure funding. In addition to visiting the capitol, we would like to get our members to visit their Legislators at their home offices and make their voice heard. With the state of the State’s water resources being critically low, it is important to do our part in educating both the public and the Legislators on water resources. The future of the states infrastructure is dependent upon more individuals in the civil engineering profession to become increasingly involved with City and State Boards, Councils, Commissions, and Legislation.

We look forward to the new year at ASCE to make our presence felt at the local, regional, state, and federal level. Please reach out to our Board members and get involved; we are here to advance the profession of civil engineering, which benefits us all.

Sincerely,
Steven W. Ledbetter, P.E.
San Bernardino and Riverside Counties Branch President

To Get Involved

Contact your Board Members...
ASCE coordinates tours of projects that may help you to enhance your civil engineering knowledge as it applies to projects all around you.

Lighter Side

A professor asks his class. "How do you write four between five?"

Anyone?

A science major exclaims. "That’s impossible. There is no logical answer."

An information technology student quickly responses. "I looked it up on the Internet and there is no answer."

A medical student pronounces. "What is this a joke?" Suddenly...

And civil engineering student stands up. Walks up to the blackboard and writes;

F(IV)E
VOLUNTEERS NEEDED

Friday, November 6th

Heritage High School
26001 Briggs Road
Menifee, CA 92585

7:30 am - 2:30 pm

Presentations are approximately 40 minutes each.
Shifts will be arranged.

The year will soon be coming to an end, but before we wrap up the year, help us motivate high school students to pursue civil engineering. In this upcoming outreach event, we have the opportunity to inspire over 500 students! We need your help to make this event possible.

To volunteer, contact:
Xochitl Lozano xochitl.lozano@mbakerintl.com
Glenn Wilson, born to William Claud and Lata May Wilson on August 13, 1922, died at the age of 93 at his home on Sunday, September 20, 2015 at 1:55 am. He grew up in Ardmore, Oklahoma. He graduated from Ardmore High School in 1940 and later graduated from Murray State College in Tishomingo, Oklahoma in 1942. He was accepted to the University of Oklahoma (Norman) as World War 2 broke out. Attending the University that summer and early fall, the President of the university assured all students if they volunteered to serve their country, a place would be reserved and available to them at the close of war. Glenn and many of his colleagues volunteered for artillery. Glenn became a “90-day wonder” as he had terrific math skills and chemistry knowledge and soon was sailing across the Atlantic in preparation for D-Day as a 2nd LT in the 87th Infantry, 334th Field Artillery, Battery C. When his artillery 105 mm Howitzer guns broke loose in the LST crossing the English Channel, the captain of the ship was forced to return (many others simply sunk). Glenn's Battery C caught up with Patton's 3rd Army at Le Harve, France, and soon engaged in heavy battle at St. Lo to Paris before pushing north into the Battle of the Bulge. Glenn typically spent two weeks on the front lines in field observation and two weeks commanding the guns for Battery C throughout the war. He saw plenty of action and earned a Bronze Star. Glenn was promoted to Captain as battery commander by the end of the war and chose to stay with the Army Reserve after the war. He was transferred from the Patton's 3rd Army to the 5th Army and was stationed at Ft. Campbell, Kentucky. There he commanded a 21 gun salute for President Harry Truman at Soldiers’ Field in Chicago that summer, which was a proud moment for him. That Fall, he returned to the University of Oklahoma to complete a degree in Civil Engineering. One of his battery officers was a University of Oklahoma graduate, who convinced him that civil, rather than chemical engineering would be a perfect field for him so he declared civil instead. Glenn earned a bachelor's in civil engineering, obtained professional engineer and surveyor's licenses in the states of Oklahoma, Texas, New Mexico, Arizona and California and later earned a masters in Public Administration from the University of Southern California.

Having survived the war, Glenn chose to love others and sought peace and understanding. He was guided by the love of God and a personal relationship with Jesus Christ. Glenn married his true love, Mary Ann (McLeod) Wilson, in 1948 as he finished his degree from the University of Oklahoma. Mary Ann accepted a job in Ardmore, OK upon graduating with a bachelor degree in music and christian education from Westminster Choir College, Princeton, NJ. They met briefly at the train station. She was coming into town and he was leaving on a reserve assignment for the summer. They met again at a Christmas party that December and were married on August 15th the following summer. They moved to Riverside, California in 1960 after living 11 years in Ardmore, OK and Ft. Worth, TX. An excellent opportunity was presented to him at Colton, CA where Glenn was the City Engineer, Public Works Director and later, City Manager for 8 years, in the 1960s and 70s. They moved to Redlands, CA as he began the final phase of public service with the City of San Bernardino as the Public Works Director. During this time the city was recognized as an All American City, which made him very proud. He worked for Neste, Brudin and Stone for a few years in between and started up GTS Associates, Inc., in 1983, an engineering consulting services company, that closed upon his retirement after 25 years in business. Sons Tim and Scott were engineers with him during much of the business and daughter Salli ran the office while Mary Ann served as Treasurer.

Glenn was active in the community with ASCE and Kiwanis International, a lifetime member of the San Bernardino Chapter. He always felt that the best way to be happy was by serving others. He enjoyed the Boy Scouts of America, and served in many leadership roles in churches throughout the Inland Empire where his wife played the organ and directed choirs. Glenn loved to tell jokes and made choir rehearsals fun. Although Mary Ann may have thought his jokes distracting at rehearsals from time to time, she was his number one fan and laughed with him and offered her support of his career, his interests and the raising of their children. Glenn also served on the boards of the San Bernardino Community Hospital, National Society of Professional Engineers, California Society of Professional Engineers, American Society of Civil Engineers, Society of Civil Engineers of the Inland Empire, City Managers Association of the Inland Empire, American Public Works Association, and participated in Math Counts for many years, promoting math skills in youth and encouraging many in an engineering career. Early in his life Glenn was a Rotary Club member and loved to quote the four-way test when dealing with people: 1) is it the truth? 2) is it fair? 3) will it build goodwill and better friendships? And 4) will it be beneficial to all? He said any people problem could be solved by using the four-way Rotarian test and his Christian belief of loving his neighbor as himself.

Glenn was a devoted family man and proud grandfather of twelve grandchildren: Laura Wilson and Ashley Thompson of Hemet, CA; Lisa Gregg of Brooklyn, NY; Lynn Thompson of Oviedo, FL; Katherine Vosahlo of Kennewick, WA; Keith, Katherine, Karley and Kenton Wilson of Tustin, CA; and Glenni and Jamie Rankin and Dale Wilson of Redlands, CA. He also has four great-grandchildren: Devin Burr and Addison Hubbard of Kennewick, WA and Kylee and Liam Thompson of Hemet, CA. Glenn is survived by his four children: Timothy Wilson and wife, Robin, of Hemet, CA; Claudia Burr and husband, John, of Sun City West, AZ; Scott Wilson and wife, Susan, of Tustin, CA; and Salli Wilson and husband, Todd, of Redlands, CA. He was proud to be the grandson and great grandson of Methodist preachers and had the scripture on his desk of John 13:35, “By this all men will know that you are my disciples, if you have love for one another.” He loved, laughed and lived. He served God, his community, and his family with grace and honor.

Services will be tentatively held at Redlands First United Methodist Church on Saturday, October 10, 2015. In lieu of flowers, donations can be made in his honor to Redlands First United Methodist Church, 1 Olive Street, Redlands, CA 92373 or the Boy Scouts of America, 1230 Indiana Street, Redlands, CA 92374.
WHEN IT’S OVER, IT’S OVER! DON’T WORRY. ASCE YMF STILL LOVES YOU.

PE BOOTH, HAPPY HOUR & SOCIAL EVENT

WHEN: FRIDAY, OCTOBER 30, 2015
MEMBERSHIP BOOTH (PICK UP YOUR FREE ASCE GIFT)
WHERE: POMONA FAIRPLEX
TIME: 6AM TILL EXAM & LUNCH 12-1PM
POST PE EXAM SOCIAL EVENT
WHERE: INNOVATION BREW WORKS
3650 W. TEMPLE AVE
POMONA, CA 91768
TIME: AFTER THE PE EXAM (5-8PM)
COST: FREE
WHO: EVERYONE IS INVITED . . . ESPECIALLY TEST TAKERS

FOR MORE INFO, CONTACT MELISSA BARBOSA, SB/R YMF TREASURE
AT MBARBOSA@CL.AZUSA.CA.US OR (626) 812-5173

FOR MORE INFO ON HOW TO BECOME AN ASCE MEMBER & TO LEARN MORE ABOUT WHAT YOUNGER MEMBERS (YMF) HAS TO OFFER IN YOUR LOCAL AREA CONTACT:

REMI CANDAELE, PE
LA SECTION YMF CHAIR
RCANDAELE@HUITT-ZOLLARS.COM
(949) 988.5815, EXT. 11193

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2015-2016
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Want to advertise an employment opportunity?
Contact the Newsletter Editor
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at mbarbosa@ci.azusa.ca.us
ASCE San Bernardino/Riverside Branch & YMF hosted their third annual scholarship golf tournament this past September 18th at the Morongo Golf Club at Tukwet Canyon in Beaumont, CA. The golf tournament aims to raise money to provide scholarships to exemplary civil engineering students at Cal Poly Pomona and Cal Baptist Universities, as well as promote events to the ASCE Student Chapters to help develop and enrich their civil engineering careers.

Brandon Reyes, our Branch President, along with several volunteers from ASCE SB/RIV Branch, ASCE AB/RIV YMF, and Cal Poly and Cal Baptist ASCE student chapter welcomed all 60 players representing various engineering firms and public agencies. This year, the weather couldn’t have been better at a sunny and cool 80°. Mission Springs Water District was kind enough to donate water bottles to help keep the players refreshed, Fehr & Peers donated retro sunglasses, and RKA Consulting donated media sleeves and canvas tote bags for all participants!

Golfers were delighted at the pristine conditions and beautiful setting at Morongo Golf Club. Eager golfers arrived early in order to warm up at the range and enjoy some coffee and pastries before the tournament teed off. Branch, YMF, and Student volunteers helped greet all participants in the morning, selling raffle tickets and mulligan’s, and distributing goody bags. Thank you to all our hard working volunteers who help make this event successful! This year as a special treat we set up a station at the turn where we handed out waters, took group photos, and invited attendees to participate in marshmallow golf for a chance at additional raffle tickets! The intriguing game was a hit, offering comic relief and friendly competition between teams during the stop. Photos of all the teams and the raffle prize winners can be found on the ASCE SB/RIV Facebook page by clicking LINK.

Be sure to give us a while you’re there.

As players completed their round of golf they began filling up the clubhouse, where they settled in for a banquet lunch that featured fresh made tacos and a Mexican buffet. At the banquet lunch, we recognized all the tournament sponsors, winning teams and players, and ran the highly anticipated raffle. Lucky raffle winners had a chance at 50-inch LED smart television, new golf equipment, Angels and Dodgers jerseys, various gift baskets and gift cards among other prizes. New for this year is the ASCE Cup! The tournament winners get their names added to the cup each year and get to hold onto the trophy for bragging rights!

ASCE SB/RIV Branch & YMF would like to thank all the golf tournament sponsors, especially our Gold Sponsors: TKE Engineering. Also, many thanks to our Silver Sponsors: Michael Baker International, Hall & Foreman, CLE Engineering, and Leighton Group; Tee and Prize Sponsors: RKA Consulting Group, Valued Engineering, CValdo Corporation, and LOR Geotechnical; and Donations from: Mission Springs Water District, City of Azusa Light and Water, and Valued Engineering. Last but not least, I would again like to extend a very special thank you to all the hard working individuals that volunteered their time to ensure this was a successful event. We look forward to seeing everyone again at next year’s golf tournament!
ASCE San Bernardino Riverside Branch and Younger Member Forum (YMF) hosted our 3rd Annual Scholarship Golf Tournament on September 18, 2015 at Morongo Golf Club at Tukwet Canyon in Beaumont, CA. The golf tournament aims to raise money to provide scholarships to outstanding civil engineer students at Cal Poly Pomona and Cal Baptist University, as well as provide events to the ASCE Student Chapters to help develop and enrich their civil engineering careers.

ASCE would like to thank all the sponsors, attendees and volunteers!

Hope to see you at our 4th Annual Tournament in September 2016.
Group Leader/Project Manager

Reports to: Regional Manager
Salary Range: $90 – 125k
Location: Riverside County Office
Date: 9/24/15

JOB SUMMARY:

Under limited supervision of the Regional Manager, this candidate will perform project management of transportation design services including marketing, operations and technical oversight.

ESSENTIAL FUNCTIONS:

This position requires the possession of a valid registration as a Professional Civil Engineer in the State of California, 12+ years of experience and a proven track record of winning and delivering transportation projects.

1. Responsible for Client Management and Business Development. Lead the development and preparation of proposals.
2. Provide management of staff, assist in staff training and mentoring.
3. Review project financials and prepare progress reports; ensure completion of work in accordance with contract provisions and perform other related contract administration duties.
4. Responsible for leading the planning and design effort of transportation-related projects, including preliminary engineering studies, development of plans, specifications and estimate (PS&E), and construction administration. Candidate must have demonstrated experience using the Caltrans Project Development Procedures Manual and Regional Local Agency Design Standards.

If you feel you meet these qualifications, please submit your resume to jobssd@dokkenengineering.com

Want to advertise an employment opportunity?

Contact the Newsletter Editor
Melissa Barbosa, PE
at mbarbosa@ci.azusa.ca.us
Calendar of Upcoming ASCE Events

October 2, 2015  - ASCE Legislative Day at MTA, LA - Need for Infrastructure
October 2, 2015  - ASCE SBR Branch Board Meeting at TKE in Riverside
October 3, 2015  - ASCE Officer Installation at Proud Bird, LAX
October 7, 2015  - ASCE SBR YMF Board Meeting at Panera in Rancho Cucamonga
October 12, 2015  - Columbus Day
October 7, 2015  - ASCE SBR Geotechnical Committee - Seismic Remediation of Perris Dam Dinner Presentation
October 30, 2015  - ASCE Membership Booth at PE Exam & ASCE Happy Hour at Innovation Brew Works Pomona
October 31, 2015  - Happy Halloween
November 6, 2015  - Volunteers Needed - Student Outreach at Heritage High School, Menifee

Membership Information

Types of Membership and Annual Dues (National)

Students: FREE
Associate Member: $50 per year of Baccalaureate degree and first year after, then incremental increases to $225 over five years.
Member: $225
Affiliate: $225
Section (Branch) Dues: $55

National ASCE student membership is now FREE! Those who have chapters or clubs still must be a member of them before joining National. Log onto https://www.asce.org/online, fill out the short application or call 1-800-548-ASCE (2723) and instantly become a member of ASCE.

Online membership renewal is available! Go to https://www.asce.org/renewal/inforrenewal.cfm. You will need your membership number. All payments must be made with a major credit card. An e-receipt is transmitted to the member upon completion of the transaction.

Newsletter Information

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