As Civil Engineers we belong to a profession that prizes a well-organized mind, a sense of precision and attention to detail. As Engineering students we learned primarily the application of Logic and Physics. As professionals we find the practice of engineering can be far more governed by the rules of human behavior and common language that can be understood by all people. It’s not enough to arrive at the correct solution mathematically; we find a need to convince an increasingly less technically savvy public that the laws of physics don’t bend as well as the laws of man.

As ASCE Members, much of the benefit from our professional association is that exchange of ideas and the Mentorship of our younger (and older) Professionals. Enhancing that aspect of professionalism is Neil Nilchian M.ASCE, who led the creation of the local "Mentorship Committee" funded by a special grant from ASCE – and is maintaining that effort. Please read his article on the latest meeting of the committee in Ontario, and the efforts being made to enhance the Education of our members.

At the June Membership Meeting in Riverside, we honor just a few Civil Engineering Professionals, and in doing so we hope to honor you all. We are fortunate to have many tireless and talented Civil Engineering Professionals who bring a better quality of life to all in the Inland Empire. My thanks, to all who work toward the betterment of mankind and improving our symbiosis with the environment.

Timothy R. Wilson PE, RA, M. ASCE President, San Bernardino/Riverside Counties Branch of the LA Section of ASCE

Volunteers

For the upcoming year starting in October we are looking for eager members who have initiative to serve on a committee and to serve on the board as Assistant Newsletter Editor.
James Buchanan Eads - (1820-1887)

James B. Eads was born in Lawrenceburg, Ind., on May 23, 1820. His father moved his family often, and James attended various public schools until the age of 13. After 5 years as a dry-goods clerk in St. Louis, he became a purser on a Mississippi River steamboat and a self-taught expert in river navigation and hydrography.

Eads patented a diving bell in 1841 and used it on specially designed craft to salvage wrecked riverboats. After a brief, debt-ridden interval, he returned to salvaging, which proved very lucrative after 1848. He amassed a fortune and lived in semiretirement from 1857 to 1861.

In 1861 President Abraham Lincoln summoned Eads for advice on how to use western rivers for military purposes. Eads proposed a fleet of armor-plated, steam-driven gunboats and contracted to build seven 600-ton vessels. Ironclads became the mainstays of the Army's Western Flotilla and from Oct. 1, 1862, the nucleus of the Navy's Mississippi Squadron.

During the Civil War, Eads built 14 armored gunboats, 6 of them turreted; their 11- and 15-inch guns, worked by steam, could fire every 45 seconds. He converted and armed at least 11 others. These boats were indispensable in defeating the Confederacy.

In 1865 Congress authorized construction of the first bridge across the Mississippi at St. Louis, although it was declared impractical by leading civil engineers. Eads was selected to build it. The bridge, with three arches, each over 500 feet, and a roadway 50 feet above the water, was the world's first steel-arch railroad bridge. Finished in 1874 after 6 years of building, it brought Eads international fame. For many years the only bridge spanning the Mississippi, it was vital in opening the transcontinental railroad system.

Among engineers Eads received even greater recognition for his work on the lower Mississippi channel. Congress approved his proposal to open the river's mouth and maintain the channel at his own risk, and the job was completed in 1879. Eads's ingenious jetties redirected and accelerated the current; sediment was deposited at sea, and the channel, deepened to 30 feet, made New Orleans an ocean port.

Eads became a technical adviser on river control for many American and foreign port cities. His plan for deepening the Mississippi northward to the mouth of the Ohio later proved practicable. In 1884 he became the first American to receive England's coveted Albert Medal of the Society of Arts. Later he was the first engineer to be voted into America's Hall of Fame. He died on March 8, 1887, in Nassau, Bahamas.
The June meeting brought a great turn out to see who won the annual Branch Civil Engineering Awards.

**ASCE SAN BERNARDINO/RIVERSIDE COUNTIES BRANCH 2008-2009 ANNUAL AWARDS**

**Civil Engineer of the Year (Public)**
(No Nominations)

**Civil Engineer of the Year (Government)**

**Winner**—Ryan Gross, PE, District Engineer, Lake Arrowhead Community Service District

**Young Civil Engineer of the Year Award**
(No Nominations)

**Outstanding Civil Engineering Project Award**

**Winner**—San Bernardino Avenue Lift Station and Ancillary System, IEUA and City of Fontana, CA

- A. Huge—26,480 lf of sewer main
- B. Increase use of recycled wastewater
- C. Cost of construction = $19 M
- D. Acquired SRF funding
- E. Design and construction challenges—limited space

(Continued on page 4)
Honorable mention—Linnel Lane at I-215, City of Murrieta CA

A. Large—4000 lf of roadway
B. Fast—tracked Caltrans project—14 mos from inception to PS&E approval
C. Benefit to community—traffic and water quality
D. Future thinking—future 10-lane freeway

Civil Engineering Project Improvement Award
Winner—Foothill Boulevard Street Improvements, City of Fontana, CA

A. 8000 lf of street, sewer, and storm drain
B. Construction challenges—kept min. 4 lanes open during const.
C. Cost of Constr. = $8.4M
D. R/w acquisitions w/o use of condemnation

Honorable mention—City of Loma Linda Branch Library Expansion, City of Loma Linda, CA

A. Large expansion—from 6000 sf. to 15,000 sf.; vert. Expansion up 11ft.
B. Energy conservation—rebates and energy savings by SCE
C. Technology—F/O lines throughout, self serve kiosk for research and check out
D. Benefit to community—double amount of materials, triples number of visitors

(Continued on page 7)
**Lighter Side**

**Four Engineers and a Broken Car**

There are four engineers travelling in a car; a mechanical engineer, a chemical engineer, an electrical engineer and a computer engineer. The car breaks down. "Sounds to me as if the pistons have seized. We'll have to strip down the engine before we can get the car working again", says the mechanical engineer. "Well", says the chemical engineer, "it sounded to me as if the fuel might be contaminated. I think we should clear out the fuel system." "I thought it might be an grounding problem", says the electrical engineer, "or maybe a faulty plug lead." They all turn to the computer engineer who has said nothing and say: "Well, what do you think?" "Ummm - perhaps if we all get out of the car and get back in again?"

---

**Volunteer For Mentorship Committee**

The Committee is actively pursuing a replacement for our Secretary who has accepted the position of Historian for the Committee. Please contact: Alfred Pedroza at Alfred.Pedroza@aecom.com for additional information.

---

**CIVIL ENGINEERING JOBS**

During these challenging economic times, our branch is looking for sources for employment for Civil Engineers. Please use the attached link for some possible openings in our field: [http://www.getcivilengineeringjobs.com](http://www.getcivilengineeringjobs.com)

"Calling all Inland Empire Civil Engineering Companies: California Baptist University (CBU), Riverside, CA is looking for internship positions for their civil engineering students. If you have any positions available, please contact Dr. Jim Covey at (951) 343-4973 or jcovey@calbaptist.edu. Any employment opportunities would be much appreciated by CBU."

---

**Membership Information**

**Type of Membership and Annual Dues (National)**

- **Students:** Free
- **Associate Member:** $50 year of baccalaureate degree and first year after, then incremental increases to $205 over five years
- **Member:** $205 annually
- **Affiliate:** $205 annually
- **Section (Branch) Dues:** $45/year

1. 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 and instantly become a member of ASCE or call 1-800-548-ASCE (2723)
2. Online Membership renewal available, go to https://www.asce.org/renewal/inforenewal.cfm. You 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.

---

**Company Spotlights/Projects**

If you paid for a monthly business ad and you would like your company or one of your projects spotlighted in the monthly newsletter please contact the Newsletter Editor, Matthew Addington at matthew.addington@cityofrc.us

We will be happy to place your spotlight in an upcoming issue.

---

**Advertising Rates**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Directory</td>
<td>Per Card (10 issues)</td>
<td>$250</td>
</tr>
<tr>
<td></td>
<td>(Business Card Ads)</td>
<td></td>
</tr>
<tr>
<td>Display Ads</td>
<td>Full Page (per issue)</td>
<td>$235</td>
</tr>
<tr>
<td></td>
<td>One Half Page (per issue)</td>
<td>$125</td>
</tr>
<tr>
<td></td>
<td>Quarter Page (per issue)</td>
<td>$75</td>
</tr>
</tbody>
</table>

Advertising Information: To place ads, contact the editor. Payments are due 30 days from the date of publication. Copies must be received by the Editor by the 3rd Thursday of the month prior to publishing.

---

**Identification Statement:**

ASCE San Bernardino & Riverside Counties Branch News is published periodically by the San Bernardino & Riverside Counties Branch, American Society of Civil Engineers. Annual subscription rate: $45 San Bernardino & Riverside Counties Branch of ASCE members (included in dues). POSTMASTER: Address Correction Requested. Return Postage Guaranteed. Send Mail to Editor at address shown on back cover.
2009—2010 BOARD MEMBERS

Brian Wolfe, PE - President

Brian Wolf is a Registered Civil Engineer for the Westland Group, Inc. in Rancho Cucamonga. His typical engineering duties include the design, project management, and construction support of water, sewer, and grading plans throughout the Inland Empire. Brian earned his Bachelor of Science in Civil Engineering from California State Polytechnic University, Pomona where he also works as part-time faculty.

Scott Petersen—President Elect

Scott Petersen is a Registered Civil Engineer and Project Manager with TKE Engineering, Inc. He is currently managing the design of several street, water system, sewer and storm drain facility improvements and is responsible for marketing and business development. He obtained a Bachelors of Science degree from California State Polytechnic University, Pomona and a Certificate in Land Use and Environmental Planning from University of California, Riverside Extension Center.

Mr. Petersen is very active in professional and community based organizations, and is currently serving the American Society of Civil Engineers Riverside and San Bernardino Counties Branch as Vice President, Younger Member Forum as President Elect, and is an active member of the Inland Empire Chapter of Engineers Without Borders. He also serves the Arlington Division of the Greater Riverside Chambers of Commerce as Vice President of Community Development and is a voting member of the Economic Development Council.

Lauren Popescu—Vice President

Lauren Popescu is a Registered Civil Engineer with the City of Fontana, Department of Engineering Traffic Section. The Traffic Section is responsible for the analysis of traffic congestion, delays and collision records, throughout the City. Lauren received his Bachelors of Science degree in Civil Engineering from California State University, Los Angeles in 2002. In 2004, he helped start the San Bernardino & Riverside Counties Branch Younger Member Forum (YMF), where he served as the first YMF President.

Rita Escobar, EIT - Treasure

Rita Escobar is an engineer in training (EIT) and obtained her Bachelors of Science degree in Civil Engineering from California State Polytechnic University, Pomona. She is a design engineer for a variety of public works projects including storm drain plans, street plans, bike trail plans, and drainage reports.
Matthew Addington—Secretary

Matthew Addington is a Professional Engineer and Professional Land Surveyor with the City of Rancho Cucamonga. Mr. Addington leads the Grading Division in the Building and Safety Department. In addition, Mr. Addington reviews survey maps for the Engineering Department. Prior to joining the City of Rancho Cucamonga, Mr. Addington worked over 25 years in private practice. He earned his Bachelor of Science in Civil Engineering from California Polytechnic State University, Pomona and a Certificate in Project Management from University California Riverside Extension.

Francis Gbondo—Newsletter Editor

Francis Gbondo is a Registered Civil Engineer and a Leadership in Environmental and Energy Design Accredited Professional with RBF Consulting. He obtained a Bachelor of Science degree from California State Polytechnic University, Pomona. Mr. Gbondo has many years of design experience on various transportation and public works projects as a project engineer. He has worked on multi-agency projects that have included CALTRANS, the Port of Los Angeles (POLA), and many other Local Cities and Counties.

Tim Wilson, PE—Past President

Mr. Wilson is a Registered Civil Engineer and Licensed Architect in the State of California and graduate of Cal Poly, San Luis Obispo in 1976. He has worked in Public Works for several local Municipal Agencies, Private Engineers and Architects until going into private practice with GTS Associates Inc., now for more than 30 years. He currently is employed by the City of Redlands. He is Past President of Riverside/San Bernardino Branch APWA in 2001 and President of Chapter 21 of CSPE in 1999 and 1993.

Honorable mention—Grass Valley Road Recycled Water Pipeline, Lake Arrowhead Community Service District, CA

A. Large pipeline = 14’ diameter for 3.5 mi (18,500 feet)
B. Complex = winding road (for design and constr.)
C. Water conservation—greater recycle water use, increase potable water quantity for potable water use
D. Road improvements—resurfacing and widening

Vacant—Assistant Newsletter Editor

For the upcoming year starting in October we are looking for an eager member who has initiative to serve on a committee and to serve on the board as Assistant Newsletter Editor.
Camping and Whitewater Rafting
By: Edwin Quinonez, P.E.

Many say there is always a first time for everything and this time it was white water rafting. On the weekend of May 31st YMF members from the entire LA Section gathered for one of the most exciting adventures this year. We began our 3-hour drive towards Kern River in central California early on Saturday morning. By noon we arrived at the site eager to set up camp and to fire up the grill. We could have not asked for more: grilled hot dogs, cold drinks, good company and excellent weather. By 3 pm MLAB members arrived and we played a quick game of football at a park nearby. It sure was a good work out! Later in the evening other Younger Members began to arrive from OC, Santa Barbara, and even as far as San Diego. That night about 70 younger members had set up camp next to the rushing waters of the Kern River.
The second and extremely breathtaking part of the trip began early on Sunday morning. We were divided into three groups of about 20, headed to the rafting sites, and as soon as we listened to safety rules, we were on our way down the river. That day, after all the splashing and screaming, we had completed several runs of intermediate/advanced level rafting. For those of you unable to attend this time around be prepared for next year!

Copernikids: Families for Success Expo
By Edwin Quinonez, P.E.

On the evening of Monday, June 1st, several members of the San Bernardino/Riverside ASCE Younger Member Forum in cooperation with the Riverside County Flood Control and Water Conservation District volunteered to hold a booth at the annual Families for Success Expo. The event, organized by UC Riverside, was held at the Cesar Chavez Community Center in Riverside, California.

The Expo provided hands-on science activities to over 200 community participants, ranging from elementary school kids, all the way up to high school students and parents. ASCE YMF displayed a buoyancy experiment, a puzzle, and gave away several “pollution prevention” awareness items, in-
Loma Linda City Engineer Promoted to City Manager

LOMA LINDA - City Public Works Director T. Jarb Thaipiej, a 20-year Loma Linda resident who has spearheaded a library expansion, a new senior center and a bridge connecting the north and south sides of town, will be the new city manager.

Mayor Stan Brauer announced the appointment Tuesday night after a 90-minute closed session in which council members decided to promote from within and save money by having the new manager double as public works director.

Thaipiej, 46, agreed to a three-year contract that will pay him $175,000 a year, $30,000 more than he makes as public works director, but $27,500 less than the outgoing city manager.

He replaces Dennis Halloway, who is retiring July 2 after 8½ years as city manager of the town of 22,000 people.

"We're extremely pleased and confident that we have the capable and outstanding leadership that will provide us a way to continue to have the city prosperous," Brauer said in the brief announcement.

Councilman Ovidiu Popescu said by phone Wednesday that the council considered Thaipiej the most qualified of an unspecified number of candidates.

"His experience as public works director, which gets most of the (city's) funding, and his experience in San Bernardino" were key factors in the decision, Popescu said.

Thaipiej, a native of Thailand, worked as a civil engineer for the city of San Bernardino for 7½ years before coming to Loma Linda as public works director eight years ago.

He worked in private engineering businesses after graduating with a bachelor's degree in civil engineering from Iowa State University in 1986 and before earning a master's degree in business administration from the University of Redlands in 1991.

He has been married 19 years and has a son, 17, and daughter, 15.

During Thaipiej's tenure as Loma Linda's public works director, the city constructed a long-sought senior citizens center, expanded its public library, installed solar power panels at city facilities and is widening a bridge across railroad tracks on Mountain View Avenue to improve traffic flow between the north and south sides of town.

He helped shepherd the construction of a new fire station on Loma Linda's north side, replaced aging sewer lines and supervised the repaving of 80 percent of the city's streets.

"The economy will be the big challenge ahead," he said by phone Wednesday. "The capital improvement projects budget for the next fiscal year has been cut in half."

He said he expects the council to approve a new budget before he takes over on July 3.
The San Bernardino/Riverside YMF hosted a social event. The event was a hike to the famous Bridge To Nowhere in the Los Angeles National Forest. This event consisted of hiking along the East Fork of the San Gabriel River until reaching the famous giant bridge in the middle of nowhere. The length of the hike was 9 miles long and it included river-hopping and some rock climbing along an abandoned, flooded out roadway which is considered one of Southern California’s best hikes.

On the day of the hike the weather couldn’t have been any better. It was a bright and sunny day. The hike started around 7:30 and we reached the Bridge to Nowhere near noon time at which point we stopped for lunch and to rest. While some of the hikers enjoyed a nice nap under the sun, others enjoyed watching another group bungee jump off the bridge. Overall this was an excellent social event because not only did it include good exercise while enjoying nature but also allowed new members to mingle with old ones. It was a very good turnout, about 20 people attended, and a few members seemed interested in making this a continuous yearly event.
Mark Your Calendar
Don’t miss July’s Presentation by BMLA Landscape Architecture on Fontana Park Project.

We’re on the web: http://www.asce-sbriv.org/

General Meeting

Date: July 22, 2009
Time: 12:00 pm
Location: Fontana Park

Cost: $30/person, $35 w/o membership and $15 for students
Deadline: July 18, 2009

Additional Info: See ASCE website for more information http://www.asce-sbriv.org/

REMINDER:
The newsletter will not be published in August.
See you at our September meeting