



## Upcoming Events

### Joint ASCE/ APWA Meeting

#### USACE Update:

Lake Isabella Dam  
Thursday, April 17  
@ Hodels 12 pm

### SSJV YMF hosts

BSK Open House  
Friday, April 18  
@ 700 22nd St. 5:30 pm  
For more information, contact  
Michael Collins at  
mcollins@bskinc.com or  
(661) 327-0671 ext. 182

### May Monthly Meeting

Nominations for Branch Officers  
**Presentation by Dana Munn,**  
**General Manager**  
Shafter-Wasco Irrigation  
Thursday, May 15  
@ Hodels 12 pm

**Awarding Scholarships to**  
High School/College students  
*The month of May*

## Kick-Off of the Southern San Joaquin Branch Quarterly Newsletter

In an effort to keep our local branch members better informed of upcoming events and volunteer opportunities, we are trying out a quarterly newsletter. The purpose of the newsletter will be to highlight ways to get involved in our local community to further promote civil engineering and to provide opportunities to become an active branch member. We welcome articles from other local engineers that highlight some of the current issues that our local civil engineers are facing. We promise to make this newsletter informative and we will limit the number of stale photos of people holding awards.

Michael McGovern, PE, MASCE

*Editor and 2013-14 Vice President.*

## Inside this Edition...

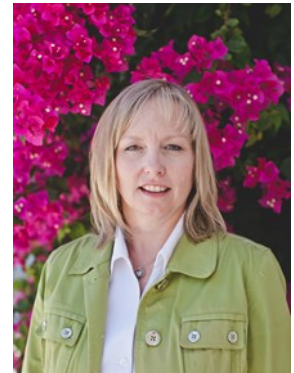
- Message from the President
- Get Involved: Project Lead the Way
- ASCE Names Mark Evans Volunteer of the Year
- Upcoming Events
- Our Role in the Current Drought (LA Section Newsletter)

*If there are any comments, questions, or concerns regarding the content in the ASCE Southern San Joaquin Branch Quarterly Newsletter, please contact Michael McGovern at [mmgovern@kcwa.com](mailto:mmgovern@kcwa.com)*

# Message from the President

*Project Lead The Way at Frontier High School*

**Sandy Bergam, PE, PLS, MASCE**  
Dewalt Corporation (2013-14 Branch President)



In my continued focus on Education Outreach this year, we were presented with an opportunity to provide support to a local high school. On March 13th, I attended the kickoff meeting of Frontier High School's Project Lead the Way Advisory committee established to support a STEM (Science Technology Engineering and Math) program beginning this fall. Project Lead the Way (PLTW) "prepares students for the global economy and is the Nation's leading provider of STEM education" ([www.pltw.org](http://www.pltw.org)). The roll out of Frontier's program is unique, in that, the high school was selected to be a part of a national i3 (Investing in Innovation) study to answer the question, "To what extent does the 4-year PLTW Engineering Experience increase the intentions of students to pursue engineering or STEM related career?". This Department of Education grant to validate Frontier's PLTW program, provides tools needed for the program's success (computer labs and engineering supplies, teacher and professional development and resources and a structure for student engagement and retention).

The execution of Frontier High's PLTW pathway to engineering program is in its formative stages. They are determining the level of community support available for a curriculum specialty which will focus on one of 5 disciplines (Aerospace, Civil Engineering and Architecture, Computer integrated manufacturing, digital electronics and computer science and software engineering). To date no other Kern High School has a STEM program with an emphasis on Civil Engineering. I'm working with the advisory team to change that at Frontier HS and in our community. I've already invited the lead teacher to the office to shadow my team members and have offered to visit his classes or help with the initial outreach to incoming freshmen. I'll be working alongside Liz Rozell from BC, two engineering professors from CSUB, and industry representatives all committed to seeing the Pathway to Engineering realized in our local high schools. I'm looking for other partners to communicate the message.

We are using this newsletter and branch activities to inform you about ways you can join in the efforts like these to raise up the next generation of civil engineers. We hope that you will let us know about what you are doing to encourage students, both formally and informally, to consider a career in STEM related fields. And as you do, we want to support you with ASCE resources (fun tools and give a ways for students) to Discover Engineering. Below are the PLTW key contacts for the local high school and middle participating schools, if you'd like to engage in current or upcoming programs in your neighborhood:

**Steve Wedel, Kern High School District** ([swedel@khsd.k12.ca.us](mailto:swedel@khsd.k12.ca.us))

**Jason Hutchison, Shafter High School** ([jrhutchison@richland.k12.ca.us](mailto:jrhutchison@richland.k12.ca.us))

**Glynda Martin, Standard Middle School** ([gmartin@standard.k12.ca.us](mailto:gmartin@standard.k12.ca.us))

**Mary Westendorf, Fruitvale Junior High** ([mawestendorf@fruitvale.k12.ca.us](mailto:mawestendorf@fruitvale.k12.ca.us))



**Mark Evans, PE, MASCE**  
Kern County Roads Department



## **Local ASCE Branch Names Mark Evans Volunteer of the Year**

Mark Evans has been named volunteer of the year by our local branch of the American Society of Civil Engineers (ASCE). Mark was also one of 18 engineers in the nation honored by ASCE this year for volunteerism.

The award recognizes Mark Evans, a civil engineer, for his dedication to the engineering profession. A past branch president, Evans chairs the scholarship committee that provides funding for local high school graduates and college students pursuing degrees in civil engineering. Evans started the branch's scholarship program and to date has awarded more than \$10,000 to deserving Kern County students.

"The Civil Engineering profession has given me the opportunity be a part of some incredible civic projects that will have lasting, positive benefit to this Community," Evans said. "I am also proud to be a part of ASCE, an organization that supports outreach to our community and is committed to providing support and opportunities for our youth."

Current Branch President, Sandy Bergam said "Mark has been instrumental to our profession's outreach to young people in the community ... mentoring students, advising engineering clubs and founding the local ASCE Branch scholarship program. We honor Mark for his commitment to advancing our profession. "

Evans has been an engineer with the Kern County Roads Department for the past 28 years and currently leads the Maintenance Division. Some of his key projects include the 7th Standard Road Widening (1st Phase) from Hwy 99 to Meadows Field Airport (Wings Way), Meadows Field Airport Runway Extension, Oildale Streetscape Project (between Norris Rd and China Grade Loop), and the Calloway Drive Underpass (south of Rosedale Hwy).

# Making a Difference in our Community

By Dolores Salgado

*IEC corporation, 2013-2014 Branch Secretary*

When I first heard about Project Lead the Way, I was living in San Diego and I immediately knew that I wanted to participate because I wish someone had told me about engineering career opportunities in high school. I attended McFarland High School and I honestly didn't see myself attending college after graduation. Perhaps if I had heard stories or seen professionals in this field, I would have been more excited when I graduated high school. Long story short, I've been in the engineering industry for 15 years now and I feel compelled to give back the gift that I was given to me, an amazing career as a civil engineer!

As a volunteer for Project Lead the Way, I prepared classroom presentations to give students an idea of the projects I was working on. I also gave students an idea of the soft skills needed to communicate with the public and their engineering teams. The students were always very grateful and appreciative of learning about my career; the teachers also expressed their sincere gratitude. So, although I volunteered because I felt a need to give back to my community, it was great to see them smile and send me thank you cards!

Project Lead the Way (PLTW) is coming to Frontier High School! PLTW Engineering is more than just another high school engineering program. It is about applying engineering, science, math, and technology to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the "right" answer. They learn how to apply STEM knowledge, skills, and habits of mind to make the world a better place through innovation.

If you're excited to help and mentor high school students, here are some ways you and your organization can participate:

## Bring teachers and students to the workplace

- Organize facility tours for PLTW classes.
- Host on-site student competitions.
- Host Gateway Academy summer camps.
- Provide job shadowing or internship opportunities for students.
- Provide externship opportunities for teachers.



## Bring industry into the classroom

- Mentor student project team.
- Judge student projects.
- Host virtual student competitions.
- Participate in career exploration interviews.
- Develop customized PLTW activities.

## Below are some additional schools that are looking for YOUR participation; get connected today:

- Bakersfield High School
- North High School
- Highland High School
- Liberty High School
- Golden Valley High School
- Centennial High School CA
- Richland Junior High School



# Our Role In the Current Drought

As civil engineers, we are entrusted by society to create sustainable conditions and enhance our quality of life. It is our role to be that advocate for water infrastructure but also to serve as a voice for the need to use water wisely. The public does not typically understand where their water comes from, how it is used - indoors and outdoors, and what happens after they use it. A greater awareness of this water use cycle needs to occur. We, as civil engineers, can be advocates of not just new water infrastructure but also for increased water demand reduction and water use efficiency which studies have shown as the most cost efficient and effective means to stretch the available water supplies. By working together through collaborative approaches, developing multi-beneficial and multi-jurisdictional water solutions that leverage available resources and maintaining the infrastructure that we currently use, we can be well on the path for sufficient water in dealing with our needs for today and tomorrow.

Excerpt from “Responding to California’s Drought and Beyond”

By Mark R. Norton, P.E., F.ASCE Chair, ASCE Region 9 (California) Water Committee

April 2014 Los Angeles Section Newsletter

<http://www.ascelasection.org/index.php/main/pages/newsletter>