



Capital Branch



Central Valley Branch



Feather River Branch



Shasta Branch

October 2010

The Engineerogram

Volume 72, No. 10

President's Message

by Oscar Serrano, PE, President



I am very excited to be the new ASCE Sacramento Section President. I have been involved with ASCE for many years now: first as a student in college, then as President of the Younger Member Forum in Sacramento and then on the executive board of the Sacramento Section. Over this

next year I see us doing a lot of great things, and I would like us to focus our resources on the following four objectives:

Maintain a Strong Workforce: The economy is definitely down, and hopefully in the next year or two we will start to see an improvement. In the meantime, we have to continue to work hard and get the training we need to stay at the top of our fields. We also have to encourage our employees and promote a positive work environment. All these things will help us to maintain a strong and happy workforce.

Increase Member Involvement: Attendance at the branch level and Younger Member Forum functions has significantly decreased, and our weak economy may be a factor. We need to hear from our members to find out what type of speakers, luncheons, functions, socials, etc. they would like to attend, and thus increase attendance.

Increase ASCE Legislative Presence: This past year I had the opportunity to visit my assembly member and senator through ASCE's Legislative Day at the Capitol. Considering the proximity to the Capitol, the Sacramento Section needs to have a stronger presence at the Capitol. We need to meet with and contact our assembly members and senators to encourage them to support infrastructure projects throughout the state.

Increase Interaction with Students and Younger Members: Think back to when you were a college student, or were starting out as a young engineer. Things were not always easy. Now imagine if you were in college right now with higher tuition fees, or an entry-level engineer right now trying to find a job. Clearly, the career path has gotten a bit rougher lately, especially for our younger members. We need to reach out to our younger members and students and help them on their path. Throughout the year there will be many opportunities for everyone to reach out to our younger members and students.

In closing, I would like to thank all of our Section, Branch, Institute, Younger Member Forum and Student Chapter officers for all their work. I would also like to congratulate Larry Smith for a great year as Section President. Special thanks also go to outgoing Section officers Natalie Calderone, Joyce Copelan and Jeremy Zorne for all their years of leadership and hard work at the Section. You all deserve a short rest.

I look forward to meeting you all and working with you this year. Please let us know what you think at:

sacramentosectiongsd@ermail.asce.org

Thank you,
Oscar

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Is Your Membership Information Current?

by Fareed Pittalwala, Past-President

Please ensure that your membership information is up to date with ASCE's national database, as our local system is dependent on your information being current. It's a quick and easy fix that you can accomplish in less than five minutes by going to: <http://tinyurl.com/yhl6pvd>.



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The Engineerogram is the official publication of the Sacramento Section of the American Society of Civil Engineers and distributed to ASCE members paying local dues to the Section. It is published regularly at the beginning of the month. **To contribute articles, mail, fax, or e-mail to ASCE/Sacramento Section Executive Secretary, Vivian Mevorah, at asce@asce-sacto.org. Deadline for articles is on the 20th of the month prior to the issue. Advertising rates upon request. (To our contributing writers: The Engineerogram reserves the right to make revisions, correct spelling and grammatical errors, to prioritize information and to summarize content. Articles may be shortened as editorial requirements dictate. Questions regarding this policy may be directed to the President of the Sacramento Section. Thank you for your understanding. Editors.)**

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President-Elect: Jon Balzer 916-855-4400 jon.balzer@gcinc.com	President-Elect: Alfred Mangus	Vice-President:	Vice-President:	Universities
Senior Director: Greg Young, P.E. 916-368-9181 gregy@quincyeng.com	Vice-President:	Secretary:	Secretary: Tammie Watkins 530-893-4640 tammie.watkins@gmail.com	California State University, Chico Samantha Moose, President 530-898-4436 chicoasce@gmail.com
Junior Director: Kimberly Brown 916-476-6790 kimberlyb@hdrinc.com	Secretary:	Treasurer:	Treasurer: Radley Ott rott@townofparadise.com	California State University, Chico Faculty Advisor Steffan Mehl smehl@csuchico.edu
Secretary: Mark Quito 916-567-2500 Quito@pbworld.com	Treasurer: Richard Weitzenberg 916-849-1666 weitz@calis.com	Past-President:	Past-President, 2006-2007: Shane Cummings 530-894-2487 sdcummings@handk.net	California State University, Chico Practitioner Advisor (PA) Robert Edward Clark 530-342-0302 bob@rga-chico.com and J Ed Anderson 530-570-3996 edandersn@sbcglobal.net
Treasurer: Joshua Wagner 530-227-7937 Joshua.A.Wagner@usace.army.mil	Past-President: Jennifer Wheelis jennifer.l.wheelis@usace.army.mil 916-616-5987	Younger Member Forum Officers	Standing Committee Chairs	California State University, Sacramento Jesse Ogren, President president@sacstateasce.org
Past President, 2009 -2010 Larry J. Smith, PE, F.ASCE 916-261-1545 lsmith@calweb.com	Institute Chairs	President: Kristy Chapman 916-375-8706 kristyo@blackburnconsulting.com	College Accreditation: Joan Al-Kazily, Ph.D, PE, M.ASCE 530-756-9530 jalkazily@sbcglobal.net	CSU, Sacramento Faculty Advisor Ben Fell 916-278-8139 fellb@ecs.csus.edu
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Additional Section Staff	Transportation & Development Institute Nader Tamannaie 916-448-1980 ntamannaie@califstructure.com		Webmaster:	Univeristy of California, Davis Faculty Advisor, Jeannie L. Darby 530-754-9471 jdarby@ucdavis.edu
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Branch Officers who are not Section Voting Officers				
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Conference Chairs				
Institutes			Publications Martin A. Farber, P.E., D.WRE kowsol@juno.com 707-253-9606	

For more ASCE activities if you wish to be active in a committee, career opportunities, complete text for the legislative activities, go to the Sacramento Section web site at www.asce-sacto.org, or contact a current officer. To MAKE CHANGES OR RENEW YOUR MEMBERSHIP, go to website: www.asce.org. For MEMBERSHIP APPLICATIONS, please e-mail to memapp@asce.org.

MASTER CALENDAR

Date(s) (Times)	Event	Location	Information
2010			
October			
Contact Jasmine Noriega for info	Central Valley Branch Meeting, Page 5	Marie Calendar's, 2628 W. March Lane, Stockton	Jasmine Noriega, jasmine_noriega@dof.ca.gov , 209-406-8982
Contact Shane Cummings	Feather River Branch Meeting, Page 5		Shane Cummings, 530-894-2487 adcummings@handl.net
2nd	Rebuilding Dreams Workday	Sacramento	Rebuilding Together Sacramento, 916-455-1880 http://tinyurl.com/27ufe4e
6th 5:30 pm	YMF Quarterly Business Meeting	Jacobs Engineering Group, 180 Promenade Circle, Sacramento	www.sacymf.org
Wednesday, 13 6:00 pm	Engineers Without Borders Meeting	TBD	Mark Quito, 916-567-2500, quito@pbworld.com
Monday, 18th	Sacramento Section Board Meeting	HDR, 2365 Iron Point Road, #300 Folsom, CA 95630	Kimberly Brown, 916-817-4700
21st - 23rd	ASCE 140th Annual Civil Engineering Conference and Hoover Dam Symp.	Bally's Hotel and Casino Las Vegas	Leikny Johnson, 703-295-6413 ljohnson@asce.org
Tuesday, 26th	Capital Branch Meeting, Page 5	Radisson Hotel - Crocodiles Lounge, 500 Leisure Lane, Sacramento	Thor Larsen, 916-973-0356 thor.larsen@edcagov.us
November			
3rd 5:30 pm	YMF Mixer	Malabar American Cooking, 2960 Del Paso Road, Sacramento	www.sacymf.org
6th TBD	YMF Officers Retreat	Malabar American Cooking, 2960 Del Paso Road, Sacramento	www.sacymf.org
December			
9th - 10th	Pipe Selection for Municipal Facilities	Doubletree Hotel, 2001 Point West Way, Sacramento	1-800-548-2723, www.asce.org/conted/seminars
2011 February			
Tuesday, 15th	Sacramento Chapter of EWRI Hosting the Second Annual Symposium	Hyatt Regency, Downtown Sacramento	
Conferences	Section Officer Meetings	Seminars	YMF Events
Section Meetings	Branch Meetings	Outreach Events	Student Events
Region 9 Events			

Water Board Delayed

by Richard Markuson

Anticipating that Californian voters would reject Proposition 18, the \$11-billion water bond measure, the Legislature approved AB 1265 to postpone the vote until 2012. Gov. Arnold Schwarzenegger immediately signed the bill and its companion – AB 1260. The two houses passed the delay with no votes to spare – garnering the 2/3 votes necessary. Some backers of the water plan opposed the delay, saying the need to fix the state’s water system is immediate. AB 1260 extends the terms of the present State Water Commission. The water bond delegates authority

to the Commission to recommend how the roughly \$3 billion allocated to new storage will be spent.

The bond measure will eventually authorize the state to pay for expanding underground and surface water storage, restoring the Sacramento Delta ecosystem and efforts to clean up existing groundwater, among other things.

The bond was opposed by some environmental groups and lawmakers who argued that it is too costly for taxpayers and loaded down with pork-barrel projects. They called for defeating the bond and opposed putting the same measure on the ballot in two years. Some observed that the measure favors building new surface reservoirs and does not provide enough emphasis on water recycling and conservation.



NCEES PE EXAM IS AROUND THE CORNER!

Good luck to all of the students enrolled in YMF's Fall 2010 PE Exam Review Course! The test is at the end of October, and we know you've studied hard – best of luck in your upcoming exam! Remember to get plenty of rest before the test! Good luck!

OCTOBER BUSINESS MEETING

It's mostly fun and games, but YMF does conduct business too! On Wednesday, October 6, 2010, at 5:30 PM, the YMF group will host its Quarterly Business Meeting at the Jacobs offices, 180 Promenade Circle, Suite 300, Sacramento, 95834. We will be discussing upcoming events, YMF and ASCE news, and most importantly, holding elections for the next year. Come out and get involved! Be part of the decision making process for your club for the upcoming year. Want to voice your opinion? Make a suggestion? We're all ears! Contact Elias Karam for more information, elias.karam@jacobs.com!

ELECTIONS - LAST CALL

It's your last chance to be an officer or committee chair for the year! We are holding officer and committee chair elections for the upcoming year in YMF at October's Business Meeting. If you or someone you know would like to be part of the YMF Officers or Chair groups, please let our current president, Kevin Gilton, know (email him at giltonkm@bv.com) – he'll let you know what Officer or Committee Chair positions are available. Join the fun ~ being an officer or committee chair is the best way to be more involved with YMF, as well as to get to know your fellow younger engineers. A retreat will be held in November to orient new officers and committee chairs to the duties and schedule. Sorry, positions of Executive Director and President are not eligible for nominations and voting.

ASCE SACRAMENTO SECTION ANNUAL AWARDS BANQUET

ASCE Sacramento Section is making great things happen in our community, and YMF is here to help! On Thursday, September 9, 2010, ASCE held its annual awards dinner. YMF members Kimberly Brown and many other YMFers attended the event and lent a hand. Congratulations to YMF member Kimberly Brown for winning the Outstanding ASCE Younger Member Officer award, and to Shauna England for winning the Outstanding Younger Civil Engineer award.

OFFICER'S RETREAT

Mark your calendars! Those who are running for and are elected to officer or committee chair positions in October will be invited to attend the annual Officer's Retreat on Saturday, November 6, tentatively scheduled at Malabar. This is the club's most important planning event, a place to discuss where we've been, where we want to go, and how we're going to get there. Be sure to save the date!

PUB NIGHT

Last month's social was held at Streets of London Pub in downtown Sacramento. The social gathering was held on Wednesday, September 1, 2010 and was attended by YMF Officers, Committee Chairs, and members at large, and boasted an opportunity for Sacramento's younger engineers to relax, unwind, and catch up at this popular spot. Conversation flowed well into the evening and a great time was had by all!



UPCOMING EVENTS

- * Quarterly Business Meeting, Wednesday, October 6, 5:30 PM, Jacobs Engineering Group, 180 Promenade Circle, Sacramento, CA
- * Mixer, Wednesday, November 3, 5:30 PM, Malabar American Cooking, 2960 Del Paso Road, Sacramento, CA
- * Officers Retreat, Saturday, November 6, Time TBD, Malabar American Cooking, 2960 Del Paso Road, Sacramento, CA

For more information, visit www.sacymf.org

Capital Branch

The next luncheon meeting of the Capital Branch is scheduled for **Tuesday, October 26th** at the Radisson Hotel - Crocodiles Lounge, 500 Leisure Lane, Sacramento. (Take Cal Expo exit off highway 160) For more information about the Capital Branch meetings, please contact Thor Larsen at 916-973-0356, thor.larsen@edcgov.us.

Central Valley Branch

For more information about the Central Valley Branch meetings, please contact Jasmine Noriega at 209-406-8982, or jasmine_noriega@dot.ca.gov.

Feather River Branch

If you have suggestions or recommendations for a meeting topic or location, please contact Amie McAllister at amie.steel@gmail.com or Shane Cummings at sdcummings@handk.net. We are looking to increase our membership participation in our monthly meetings and regular community outreach activities, so please drop us some suggestions.

Shasta Branch

The Shasta Branch is currently inactive.



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The Law and Civil Engineering

by Eugene L. Bass, Esq.

Mechanic's Liens and the Notice of Cessation

In prior articles I discussed the issues of completion of a project and the notice of completion as they relate to mechanic's liens. It was shown that cut-off times apply for recording a mechanic's lien and that the cut-off times are tied to the date of completion of the project and to the date that a valid notice of completion is recorded.

The general rule is that mechanic's liens can be recorded up until 90 days after the completion of the project. This cut-off date applies to any lien claimant who worked on the project regardless of when the claimant completed work. A properly recorded notice of completion, however, will shorten the time for recording the lien to 30 days after the date of recording the notice of completion for subcontractors and suppliers and 60 days for the general contractor.

Sometimes a project will not be completed. A lien claimant may be watching for completion and filing of the notice of completion to know when the time is running out to record a lien. A claimant can be lulled into a sense of security believing that there is plenty of time to record the lien if the project hasn't been completed. Be aware of this situation. The lien period can run out even if a project is not completed if there has been a cessation of labor on the project.

After a work of improvement has commenced, a cessation of labor on the project for a continuous period of 60 days is deemed equivalent to completion. Recall that a lien claimant has 90 days after completion to record a mechanic's lien if no notice of completion has been recorded. This provides 150 days from the start of the cessation of labor within which to record a lien.

A notice of cessation can be recorded where labor on a project has ceased for a continuous period of 30 days. The effect of the notice of cessation is the same as the notice of completion in that it shortens the time within which lien claimants may record liens. The time for recording liens will be shortened from 90 days to 30 days after recording the notice of cessation for subcontractors and suppliers and 60 days for the general contractor.

Subcontractors must be particularly aware of the date of completion of a project to protect their mechanic's lien rights. There are cut-off dates for recording mechanic's liens as well as for filing lawsuits to foreclose mechanic's liens that are tied to the date of completion. Failure to take action within the prescribed time limits can result in complete loss of the valuable mechanic's lien right.

The law sets forth the information that must be included in a notice of completion. Failure to include the required information can invalidate the notice. In addition, strict time limits are set for the recording of the notice of cessation. A notice of cessation must be recorded after there has been a continuous period of cessation of labor on the project of 30 days. As with the notice of completion, a failure to comply with the timing requirements can result in an invalid notice.

As with the notice of completion, any lien claimant who finds that a notice of cessation has been recorded and that the 30 or 60

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day time period has passed should immediately seek legal counsel to determine if, in fact, it is too late to record a lien. There could be uncertainty as to the date when cessation of labor actually commenced and the notice of cessation could have been recorded less than 30 days after the actual date of cessation. All of these factors could affect the validity of the notice of cessation and provide additional time for recording of your lien.

The author's discussion of legal ramifications of the particular case(s) are provided only for educational purposes and should not be relied on as legal advice. If you have a specific legal problem, please consult with your attorney.



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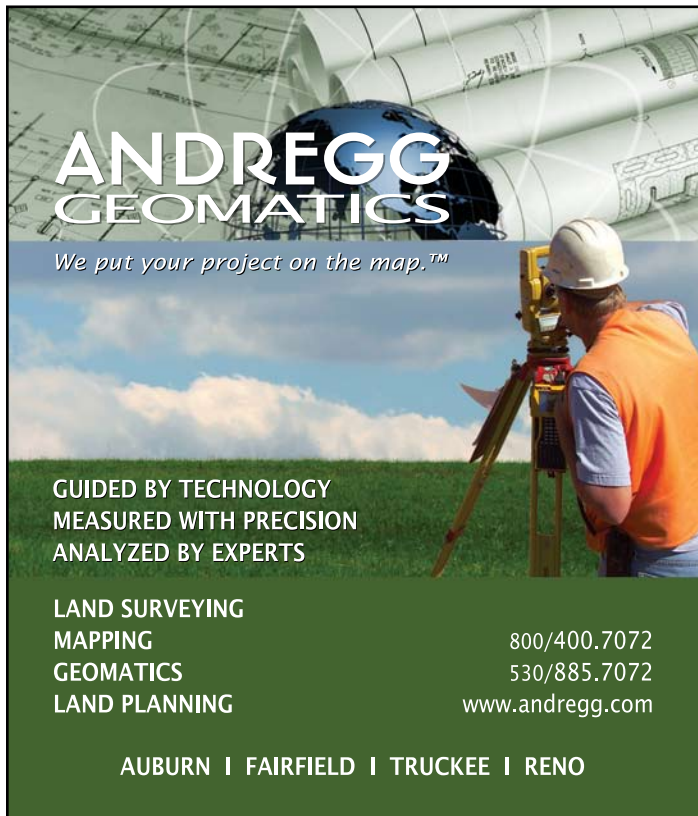
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Region 9 Section News

*by Jay Higgins, P.E.
President, Los Angeles Section*

ASCE Student Chapter Established at California Baptist University



At their July 11th board meeting, the Region 9 Board of Governors voted to approve the establishment of an ASCE Student Chapter at California Baptist University (CBU). In accordance with Article 9, Paragraph 9.4.5.2, of the Society's Bylaws (May 2010), the vote was taken after receiving a recommendation from the Society's Educational Activities Committee to form the chapter.

Founded in 1950, CBU believes each person has been created for a purpose. CBU strives to help students understand and engage this purpose by providing a Christ-centered educational experience that integrates academics with spiritual and social development opportunities. The beautiful 105-acre main campus of CBU is situated in the heart of Riverside's historic Magnolia Avenue district. In addition to the main campus, CBU has established extension sites throughout Riverside and San Bernardino counties with more being planned in response to the growing demand for CBU's distinctive faith-based, working-adult degree programs. School districts, law enforcement agencies, hospitals, churches and businesses seek out and hold CBU graduates in high regard for their unique combination of competence, confidence, and compassion. All engineering students are required to do an internship with industry or a non-profit organization and will also have a cross cultural experience through the semester abroad program.

In the summer of 2006, under the guidance of Dean Anthony Donaldson, Ph.D., the School of Engineering was founded and held its first classes in the fall of 2007. The engineering program is a hands-on, team-oriented program with design projects during all four years. Starting in the fall of their freshman year, and culminating with a year long, cross disciplinary, industry supervised capstone design project their senior year, all of CBU engineering students are able to practice their passion to work with things and not just ideas. There is an emphasis on team projects which, in order to be successful, require students to learn how to communicate and to draw out the abilities of each person on the team.

The civil engineering (CE) program currently has 55 students enrolled, and the first class of 14 students will be graduating in May 2011. The CE students began the process of becoming an ASCE Student Chapter in March 2009 with an invitation to Bill Flores of the San Bernardino/Riverside (SB/R) Branch to speak at their first meeting. Bill, a current Practioner Advisor, provided them with a history of the American Society of Civil Engineers and an organizational overview. He explained how the SB/R Branch works with the Cal Poly Pomona student chapter, and how excited he and the branch members were to have another student chapter

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to support. Others helped contribute to the formation of the student chapter. Don Sepulveda, then President of the Los Angeles Section, met with Dean Donaldson to help established the contacts at the Society level. Karen Sepulveda, L.A. Section Vice President for Student Activities, helped with the application process. Thank you to Bill, Don, and Karen for all their efforts in making the CBU Student Chapter a reality. I would also like to give a special thank you to Dean Donaldson for his encouragement and support of the students as they took on the task of establishing a student chapter, and also for taking the time recently to make a presentation to the Los Angeles Section Board of Directors highlighting CBU's engineering program.

I am pleased that we have added the CBU Student Chapter as a member of our family of Section Student Chapters. We look forward to supporting the activities of CBU along with the ten other student chapters in the Los Angeles Section. Based on my review of the events highlighted in their application, and meeting the students first hand at various ASCE events, I am confident that they will make valuable contributions to the success of the upcoming student events. Their participation in these ASCE events will be invaluable experience, preparing them for successful careers in civil engineering and in serving their community. CBU Student Chapter members, welcome aboard.

History and Heritage

by *Martin A. Farber, PE, D.WRE*

On September 9, 2010, officers, members, and guests of the Sacramento Section of ASCE gathered at the Holiday Inn, Capitol Plaza, for our annual Installation and Awards Dinner. Many of the Sacramento Section's awards are named after civil engineers from this area's history, now deceased, that the Section has chosen to honor for their notable contributions to the profession, this Society, our community, the country, and the world. Each month, in this column, we will profile one of these remarkable engineers.



This month's historic engineer:
Thomas E. Stanton

Thomas Elwood Stanton was born and raised in Los Angeles. His grandfather had crossed the plains to California during the gold rush in 1849. After the usual hardships attendant upon the long trip across the plains by wagon train, the fam-

ily finally settled in Santa Barbara, in the area now known as Miramar. His father moved to Los Angeles, where he became one of the leading photographers of the era.

Stanton graduated from Saint Vincent's College in 1899 with an A.B. degree. He then attended the University of California at Berkeley entering in 1899 with the class of 1903.

Because it was necessary to work during a portion of his college years, he did not graduate until 1904, receiving a B.S. degree in mining.

He began his professional career in the City Engineer's Office in Los Angeles in 1905, where he served successively as instrument man, chief of party and as assistant engineer in charge of sewer and paving design and construction. In 1912, he accepted the position of Principal Assistant Division Engineer in Fresno under J. B. Woodson, the new Division Engineer of the California Division of Highways. The first pay roll shows that he received a starting salary of \$150 per month.

In 1914 he advanced to the position of Principal Assistant Division Engineer in Sacramento. In 1920 he was made Assistant Highway Engineer in charge of general inspection throughout the southerly portion of the State. In 1921, when the Department of Public Works was formed, Mr. Stanton was appointed Assistant State Highway Engineer until his appointment as Materials and Research Engineer in 1928, which position he occupied for the succeeding 23 years until his retirement in 1951.

Stanton was probably best known for work on the durability of Portland cement concrete. Mr. Stanton was the first to discover that one of the most marked forms of deterioration in Portland cement concrete was attributable to an internal reaction between constituents in the cement and in the aggregate. In other words, certain brands of Portland cement may contain small percentages of alkalis which cause no trouble unless the sand used contains certain minerals such as opal or similar forms of silica which will react with the alkalis in the cement.

His interest in the welfare of civil engineers and public employees in general is illustrated by his activities in community affairs such as the Red Cross, Community Chest, Boy Scouts, etc., and most noteworthy of all, of course, were his outstanding efforts and achievements in organizing the State Employees' Association and supervising the development and form of the Employees' Retirement System through its early days. Stanton also served as the system's first president.

During his professional career, Stanton was an active member of virtually all American technical societies. He was a director of the American Society of Civil Engineers, 1937-39, and vice president in 1942-43. He served on the Board of Directors of the American Concrete Institute in 1943-44 and was elected an honorary member in 1955. Together with other honors for notable contribution, he was awarded the Wason Medal by the American Concrete Institute in 1934, and the Norman Medal by the American Society of Civil Engineers in 1943, both for outstanding work in Portland cement concrete, especially for the discovery of the alkali-aggregate reaction.

Thomas E. Stanton served as the 9th President of the Sacramento Section in 1930. During his term as President, the Sacramento Section hosted the ASCE National Annual Conference. The Sacramento Section's Thomas E. Stanton Award is presented annually to recognize its volunteers who organize or supervise an outstanding ASCE event.

Sources: California Highways and Public Works, , V30, May-Jun 1951, p8; California Highways and Public Works, V41, May-Jun 1962, p61.

ASCE Sacramento Section 2010 Outstanding Engineering Project Award Entry Criteria

The Sacramento Section Outstanding Civil Engineering Project Award is presented by the Sacramento Section of ASCE to a project that demonstrates the greatest engineering skills and represents the greatest contribution to civil engineering progress and to society. In addition to the Outstanding Project of the Year award, additional subcategory awards will be given to projects of significance for their particular category of civil engineering. The sub-categories are listed on the Entry Form and below. Given to the project rather than to an individual, the Award(s) honor the outstanding work of the many engineers who have contributed to the project.

Rules:

1. The project must be predominantly civil engineering work.
2. The project must be located in the Sacramento Section area.
3. The project must meet one of the following eligibility criteria:
 - Bridges, tunnels, waterways, structures, roads: eligible when carrying traffic.
 - Water supply, flood control facilities: eligible when ready to take the full design head of water.
 - Power dams: eligible when the major civil-engineered construction is completed.
 - Fuel power plants, heating or cooling facilities: eligible when power goes on-line.
 - Buildings and structures: eligible when ready for use.
 - Airports and other similar large developments: eligible when initial phase is 75% operational.
 - Water supply, waste disposal: the entire project is eligible when its initial phase is 50% operational.
 - Military projects (such as bases, launching units and harbor facilities): eligible for their engineering aspects.
 - Urban development or recreation facilities: When open for public use.
 - Natural resources restorations: When restoration is complete

The judging committee will determine the eligibility of projects not categorized above.

Judging Criteria:

1. Contribution to the well-being of people and communities.
2. Resourcefulness in planning and solving design challenges.
3. Pioneering in use of materials and methods.
4. Innovations in construction.
5. Impact on physical environment.
6. Beneficial as well as adverse effects of the project, including aesthetic value.

Entry Format:

The award entry should be in the form of a newsletter article, similar to the Outstanding Projects and Leaders column in The Engineerogram. The entry should inform the reader about the project and emphasize the appropriate items listed in the judging criteria above as well as any significant features of the project. Photos, images, and/or drawings of significance should be included with appropriate and informative captions.

Nominations:

1. Nominations may be submitted by any ASCE - Sacramento Section member.
2. Nomination materials must be received by January 7, 2011, for projects meeting eligibility in 2010.
3. Five (5) copies of the nomination must be submitted and accompanied by the Entry Form.
4. A non-winning project from an earlier year may be renominated if it meets the eligibility rules.
5. Send Project Award to Fareed Pittalwala, 4540 Duckhorn Drive, Suite 202, Sacramento, CA 95834-2597.
6. e-mail of electronic files can also be sent to: fpittalwala@rbf.com

Nominations will be judged by a panel comprised of Awards Committee (made up of past presidents or other section officers) of the Sacramento Section. A plaque for permanent display will be given to the project owner and a certificate to the designer by the Section in an award presentation ceremony as part of Engineers Week in February. For further information, contact the ASCE office at 916-961-2723 or ascesac@asce-sacto.org.

Additional Categories:	Small Project (under \$5.0 million)	Structural	Water/Wastewater
	Environmental	Geotechnical	Architectural
	Transportation and Development	Sustainability	Bridge

**2010 ASCE Outstanding Engineering Project Award
Entry Form**

General Information:

Please complete the following information *and submit 5 copies with a letter explaining the project and stating why you feel this project should receive this award.*

Entries Due: January 7, 2011

Please send this information to:

Fareed Pittalwala
ASCE Sacramento Section
4540 Duckhorn Drive, Suite 202
Sacramento, CA 95834-2597
e-mail: fpittalwala@rbf.com

Entries should meet the entry criteria stated for this award, will not be returned, and will become the property of ASCE, Sacramento Section.

Project Information:

Project name (exactly as it should appear on a plaque):

Project location (city, state):

Completion date:

Enter up to three (3) categories to be considered for in addition to Project of the Year:

Small Project ___ Structural ___ Water/Wastewater ___ Environmental ___

Geotechnical ___ Architectural ___ Transportation ___ Sustainability ___ Bridge ___

Entrant Information:

ASCE Member: ___ Yes ___ No

Sacramento Section Member: ___ Yes ___ No

Submitted by: _____

Title: _____

Employer: _____

Address: _____

City: _____ State _____ Zip _____

Phone _____ Fax _____

Signature _____ Date _____

Project Owner Information:

Project owner (attach addendum for more names) _____

Contact Person: _____

Address _____

City: _____ State _____ Zip _____

Phone _____ Fax _____



FEATHER RIVER BRANCH NEWS September 2010

It has been several months since the last meeting. Hope everyone had a nice summer and is looking forward to fall.

Over the summer, the branch awarded two (2), \$500 scholarships to graduating high school students. Each student plans to pursue a degree in Civil Engineering. The award recipients: Alessandro Folchi from Loyaltan High who plans to attend Santa Clara University and Shane Strick from Durham High, enrolled at California State University, Chico.

It's that time again for officer elections. The Feather River Branch, which includes California State University, Chico students, covers Butte, Colusa, Glenn, Nevada, Plumas, Sierra, Sutter, and Yuba Counties. The majority of the meetings and officers have typically been within Butte County. We are encouraging members from other areas to run for office. The goal is to reach all members and have meetings in other cities of our region. Please refer below to the September 27th meeting for additional information. For any suggestions, please feel free to contact any of the branch officers listed below.

Feather River Branch meetings are open to all civil engineers, architects, geologists, and anyone interested in learning more about the subject matter scheduled to be discussed. Here is a list upcoming branch events:

September 27, 2010 at 6:00 pm (social hour) and 7:00 pm (order dinner and meeting)

Presenter - Clay Guzi, Project Manager with ENPLAN

Clay Guzi is a Certified Professional in Erosion and Sediment Control, Storm Water Quality, and a Trainer of Record for the California Storm Water Quality Association's Qualified SWPPP Developer/Practitioner (QSD/QSP) training program. By September 2, 2011, training and certification as a QSD/QSP will be mandatory for individuals preparing storm water plans, performing site inspections, implementing Best Management Practices (BMPs), and obtaining storm water samples. Mr. Guzi is a project manager for ENPLAN, a consulting firm based in Redding specializing in providing comprehensive environmental compliance services to the construction industry. His presentation will be focused on important fundamental changes brought about by the adoption of the State of California's new General Permit for Discharges of Storm Water Associated with Construction Activities, which became effective July 1, 2010.

Location - Tortilla Flats Restaurant, 2601 Esplanade in Chico

Dinner cost is \$15/person. Student Discount Rate is \$5/person. (Additional cost for alcoholic beverage)

***Please note that branch elections for the upcoming year will also take place at this meeting. If you are interested, or know someone that is, please come to the meeting or contact one of the current officers listed below.**

October 6, 2010 at 11:30 am to 1:30 pm **WASTEWATER WORKSHOP WITH BUTTE COUNTY**

Presentation - BUTTE COUNTY ONSITE WASTEWATER SYSTEM DESIGNER CERTIFICATION with Butte County Environmental Health and the Wastewater Advisory Committee Representatives: Nick Weigel, PE (Chair), and Bill Dinsmore, PE (Building Industry Representative).

A major component of the new Butte County wastewater ordinance is to require certification of wastewater system designers in Butte County. The purpose of the certification is to make sure designers are familiar with the County's wastewater ordinance and manual as well as the plan submittal expectations for the County. Mr. Brad Banner, Director of Environmental Health, with the Wastewater Advisory Committee and his staff, has graciously volunteered to provide A FREE work session to go over the new manual, certification process, and new design exam. For those members wishing to take the test at the end of the workshop, please bring in copies of two designs for supplemental to pressure distribution systems. Again, this work session and exam with certification will be offered with no fee!! (Please note that this will not be the case in the near future).

Location - Butte County Tahoe Room at 202 Mira Loma Drive in Oroville.

Lunch will be catered and provided by Lots-a-Java. Cost will be \$6/person for lunch and drink

****If you plan to attend, please send RSVP to amie.steel@gmail.com**

October 20, 2010 at 6:00 pm (social hour) and 7:00 pm (order dinner and meeting)

Jody Jones, Director of Caltrans District 3 scheduled to provide update on current Caltrans Projects in the region.

2009-2010 Branch Officers:

President, Shane Cummings - 894-2487; sdcumings@handk.net

Vice President, Amie McAllister - amie.steel@gmail.com

Secretary, Tammie Watkins - 893-4640; tammie_watkins@URSCorp.com

Treasurer, Radley Ott - rott@townofparadise.com

Outstanding Projects and Leaders

by Emily MacDonald, Wagner & Bonsignore, Consulting Civil Engineers, Sacramento; photos by David Lounsbury, Wagner & Bonsignore

This month's outstanding project: Sherman Island Setback Levee Habitat Project

The Setback Levee Habitat Project is located on Sherman Island, the westernmost island in the Sacramento-San Joaquin Delta. The Delta provides two-thirds of Californians—an estimated 25 million people—with some of their water, and provides a home to more than 750 plants and animals, some unique to the Delta. As a result of the State's increasing population, demand for water and changing environmental conditions, the Delta is in jeopardy of collapse. The State of California has devoted significant resources to maintaining the Delta, and has identified levee stability and habitat enhancement goals for all projects within the Delta.



Installation of the riprap slope protection buried beneath the soil cover and native vegetation.

The Setback Levee Habitat Project is a functional demonstration of how levee improvement projects can incorporate ecosystem restoration. The project consisted of constructing a landside setback levee, and excavating and planting a waterside intertidal habitat bench with buried riprap slope protection

along approximately 6,100 feet (about 1.2 miles) of levee on the western end of Sherman Island, along the San Joaquin River. The purpose of the setback levee was to increase levee stability along the high energy channel by moving the functioning levee cross-section landward away from the active channel. Excavating and planting the habitat bench created an intertidal bench of marsh habitat benefiting native aquatic species while minimizing colonization by non-native, invasive species. Additionally, the native vegetation functions as an erosion control component. Excavating the waterside edge of the former levee to create the intertidal bench also reduces the driving forces on the steep waterside slope of the levee to further increase levee stability.

The concept of using a combination of the setback levee and habitat bench methods to increase levee stability while increasing habitat is a new approach which has not been widely implemented in the Delta. More common methods of levee improvement include placing additional fill material on the levee, then covering the wa-



Construction of the landside setback levee.

terside levee slope with riprap to reduce erosion. Accordingly, constructing a setback levee, excavating a habitat bench and encouraging vegetation to minimize erosion and reduce water velocities represents innovation in use of methods and materials. Construction of the project occurred in phases over a number of years.

Construction of the landside setback portion of the project was completed over an eight-year period. The lengthy construction time was necessary to allow consolidation and strengthening of the unstable peat soils on Sherman Island to enable the new levee foundation to withstand the weight of the compacted embankment placed on the landside slopes and levee toe without shifting, moving, or otherwise compromising levee stability. The final setback levee installation occurred in 2008, and joined existing portions of previously constructed levee sections to create a continuous setback which encompassed approximately 6,100 feet. Levee stability during construction was monitored using inclinometers and settlement plates. Once completed, the landside levee slope was hydro-seeded with native vegetation to minimize erosion damage. As the final landside setback section was completed, construction of the waterside habitat bench was initiated along a stretch of levee which had been previously set back.

Construction of the waterside habitat bench was phased over 2008 and 2009 respectively. Construction during 2008 was completed by Wood Bros. as the prime contractor, with Hanford ARC subcontracting to install and maintain native plants in the waterside bench. Construction during 2009 was completed by Teichert Construction as the prime, with Watkin & Bortolussi, Inc. subcontracting to install and maintain native plants in the waterside bench.



Erosion control mat installed on the newly constructed setback levee habitat bench.

Prior to construction, the waterside levee slope area consisted of native grasses and shrubs intermingled with riprap, which had been previously placed to maintain levee integrity. The Contractor cleared, grubbed and stripped existing vegetation from the project area prior to excavation.

When clearing was complete, the existing riprap was excavated and stockpiled for later use as salvaged riprap. A total of 65,000 cubic yards of material was excavated from the waterside levee slopes. A geotextile fabric was installed on the waterside slope from the crown hinge point to the toe grade break. Imported and salvaged riprap was then placed over the



Setback levee habitat bench immediately after installation of erosion control mat and native plants.

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Outstanding Projects and Leaders - Continued from Page 11



Setback levee habitat bench approximately 6 months after installation.

fabric as protection for the waterside levee slope. A soil cover was placed over the riprap slope protection using bulldozers and excavators. To reduce erosion of the newly placed soil cover and excavated area, an erosion control mat was installed extending from the waterside levee

crown hinge point to the end of the excavated habitat bench. The landscaping subcontractor then installed an irrigation system and planted native species along the levee slope and bench.

One challenge encountered during design of the project included incorporating the riprap necessary for the safety of the levee while still allowing habitat and plant growth on the waterside of the levee. This was overcome by designing a layer of riprap along the waterside levee slope, and covering the riprap with 1.5 to 2 feet of soil



Setback levee habitat bench approximately one year after construction, showing lush vegetative growth on the intertidal bench and waterside levee slopes.

to allow for tree and plant growth. Another challenge included constructing the setback levee which placed additional weight on unconsolidated peat and organic soils. By placing compacted embankment material in lifts during each construction season, and phasing completion of the setback levee over several years the project allowed time for consolidation and settlement, and levee movement was minimized. In addition to design challenges, colonies of Mason's lilaepsis, a California species of special concern, were identified within the project area. To avoid impacts, the plant colonies were removed prior to excavation of the waterside slope, and cared for in a nearby nursery. After installation of the erosion control mat, the Mason's lilaepsis were transplanted onto the newly constructed waterside bench.

By increasing levee stability on Sherman Island, the project contributes significantly to the well-being of people and communities. The leveed tracts and islands help to protect water-export facilities in the southern Delta from saltwater intrusion by displacing water and maintaining favorable freshwater gradients. However, ongoing subsidence behind the levees reduces levee stability and, thus, threatens to degrade water quality in the massive north-to-south water-transfer system. Diversions directly from the Delta include the State Water Project, the Federal Central Valley Project, the Contra Costa Canal, the North Bay Aqueduct, the City of Vallejo, the Western Delta Industry, and 1,800+ Agricultural Users. As

Sherman Island is located in the western Bay-Delta at a position that is near the mixing zone between fresh and saltwater, failure of Sherman Island levees would compromise water quality to such an extent that water deliveries to southern California and a portion of the Bay Area would be interrupted.

The Sherman Island Setback levee habitat project represents an improvement in the physical environment as the setback levee and habitat bench provides new tidal wetland and riparian habitat, increases tidal wetland acreage and associated aquatic habitat, benefits primary food web productivity of the Bay-Delta and restores corridors of shaded riverine aquatic habitat. Altogether, the project created about 8.5 acres of habitat.

Honors and Awards

by Martin A. Farber, PE, D.WRE

Every year in September, officers, members, and guests of the Sacramento Section of ASCE gather for our annual Installation and Awards Dinner. An important part of the festivities is the presentation of awards offered by our Section for outstanding individual achievement. Each month, in this column, we will profile one of these award-winning engineers.



This month's outstanding professional: **Robert Shibatani**, winner of the Thomas E. Stanton Award for Organizing an Outstanding ASCE Event.

Robert Shibatani is an empirical snowmelt hydrologist and CEO of The Shibatani Group, Inc. A native of Toronto, Canada, he has almost 30 years of collective experience in physical hydrology, watershed resource management, and operational water consulting. He has worked on a range of field hydro-

logical studies for diverse groups such as the United Nations (UNESCO), Atomic Energy of Canada Ltd. (AECL), Chalk River Nuclear Laboratories (now CRL), and various international universities and government ministries. Mr. Shibatani's graduate work focused on an early transboundary pollutant, sulfur dioxide, and its potential effects on watershed chemistry, acidic snowmelt shock in lakes, and runoff pathways in the Precambrian Canadian Shield and Adirondacks. Interestingly, this collaborative work between the U.S./Canada governments preceded the current interest in another transboundary pollutant, GHGs (climate change), by several decades. Mr. Shibatani, however, never lost his life-long curiosity in empirical hydrology and, today, is an acknowledged international practitioner in snowmelt empirical hydrology and hydrological regime shifts due to long-term climate forcings.

Mr. Shibatani's international posts currently include the Specialist Group for Climate Change and Adaptation for the International Water Association (Netherlands), Task Force for

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Honors and Awards - Continued from Page 12

Retreating Snowpacks and Glaciers (Belgium), Task Force for Arid Landscapes (Australia), Editorial Board for the Journal of Water and Climate Change (London, UK), Editorial Reviewer for the IWA Environmental & Risk Management Program (UK), Climate Change Editorial Reviewer for the 2010 IWA World Water Congress (Montreal), and Program Committee Member for the Joint Specialist Group Conference on Water Management and Climate, 2011 (Brisbane).

Following graduate school, Mr. Shibatani spent 5-years in the Environmental Law Practice Group of Fasken & Calvin, Toronto (Fasken Martineau, internationally) where his work included representing over 120 international pulp & paper companies in what was then the largest and longest Environmental Assessment Hearing ever adjudicated in Canada. Pulled by the urge to return to hydrology, he left the corporate towers of the Big East and settled in California in 1993; California had water supply issues, the Great Lakes did not. By 1996, and now ensconced in the California consulting industry, he and several colleagues formed Surface Water Resources Inc. (SWRI), one of the leading water resource specialty firms in the region. Mr. Shibatani's inherent entrepreneurial spirit, however, inevitably led him to form his own firm, The Shibatani Group, Inc. by early 2008. His current work focuses on future water supply options/development, new reservoir development, watershed operation, CVP/SWP, COA, OCAP and Delta operations and,

of course, climate change hydrology.

Mr. Shibatani is an accomplished public spokesperson and community issues facilitator appearing regularly on the speaker circuit for ACWA, CALAFCO, FMA and various other organizations. He devotes considerable time in fostering inter-regional agreements, international water resources research (IUGG/IAHS, IAEH, IWRA, IWA), and in supporting various associations and NGOs including as Programming and Technology Committee Member for NPR/Capital Public Radio and, as the current Vice Chair for the Sacramento Chapter of the EWRI. One of Mr. Shibatani's most satisfying achievements, however, continues to be in working with today's youth, students, and in mentoring tomorrow's leaders; from Little League coach, to Volunteer with the Sacramento Crisis Nursery/Sacramento Children's Home, to being a long-time adjunct industry instructor in the UC Davis - Graduate and Post-Doctoral Studies Program. The Shibatani Group Hydrology Scholarship, offered annually to UC Davis students majoring in hydrology and having financial need, in one small way, hopefully makes it easier for some students to complete their studies.

The Thomas E. Stanton Award for Outstanding Achievement in Organizing ASCE Events is presented annually by the Sacramento Section of ASCE. The outstanding engineers who have received this award are:

2008 Natalie E. Calderone

2009 Louay Owaidat and Larry J. Smith

2010 Pal Hegedus, Robert Shibatani, and Pamela Creedon

In His Own Words

"Canada, at least Ontario/Quebec has more lakes, rivers, and waterfalls than anywhere, save and except perhaps Finland and the Karelian Peninsula. Growing up there, most kids are exposed to this. This led to an overwhelming interest (and fear) of water. I just had to study it. The Canadian college system is (or at least was) strongly tied to the old British system; process hydrology was an independent field of study (as opposed to the U.S. system where it is more typically embedded into an engineering program). There were also three levels, a specialist's degree, a major, and a minor. For specialist's, there were virtually no electives, it was pure process hydrology for four years and intense scientific writing. The British system stressed that scientists had to know how to write and they were relentless.

"All of my professors were from the old British system; their eloquence, vernacular, and demeanor hooked me from day one. The rest, as they say, is history. My undergraduate supervisor was from Wales, a fiery Welshman but what a great hydrologist. He's the one who got me really hooked on hydrology. My graduate supervisor and committee included a gentlemanly New Zealander, a fiery Brit from Bristol (one of the first to discover edge waves in coastal zone hydrodynamics), and a regal sort from Reading, he was the one who actually nominated me for the NSERC scholarship that positioned me for the research posting with the United Nations. There was an international archaeological team and our hydrological team. Two graduate hydrologists, myself, representing Canada and a young lass from the University of Liverpool, representing the UK. It's because of all them, that I still retain the process knowledge and interest in empirical hydrology today. BTW - it was on that UN study that I saw my first physical flood wave wall migrating down the watershed - we were in the Badlands. I'll never forget that sight (or sound)." – *Robert Shibatani*