VIEWPOINT: GET READY FOR TUCSON!

It really is true—when the times get tough, the tough get going. The only way you are going to keep moving is by putting your name out there in front of everyone. This works
for you on a professional level. When you want to make yourself known and advance your professional standing, the best way to do it is in front of an audience. A most excellent way to get noticed is to present a paper at a professional symposium. Do you have a topic in mind? Have you participated in a project of late that would be of interest to your colleagues?

For organizations too the best way to get noticed is to get out there in front of your desired audience. Firms that are smart don’t cut back on their advertising budgets when they need business; they figure out ways to advertise smarter. The smartest way to make known your professional capabilities is to exhibit at a recognized symposium. It is cheap and effective. Your target audience walks right by, and all you have to do is reach out.

The AHS Annual Symposium will be held in Tucson on September 1-4, 2010, at the Westin La Paloma. This is the same venue as the very successful 2007 Annual Symposium, but we have an even better deal. This year’s rooms will be going for $99 per night if you are registered for the Symposium, a real value. The Tucson Chapter is already working hard to assemble a memorable technical program based on the theme: Dryland Hydrology: Global Challenges, Local Solutions. “The symposium will focus on arid and semi-arid environments, not only because these are the conditions we face here in the southwestern United States, but because many parts of the world share our inherent challenges. Fostering collaboration between communities from drylands all over the world can help generate new solutions to water resource difficulties. This is a particularly important part of U.S. border relations with Mexico.” This comes straight off the Web site: https://www.eventinterface.com/hydrosymposium/index.cfm, and I think you ought to go there now and register as an attendee and/or exhibitor. It is the premier AHS event and the networking opportunities are excellent.

It’s time to get going!

Alan Dulaney,
AHS Corporate Board President, 2010

GOVERNMENT GOINGS-ON

The flood-gates opened and out poured all the stored water bills that folks had been contemplating. The Arizona Legislature has a multitude of water-related legislation that is currently being considered. Some bills are moving forward, other more controversial bills are on hold or under frank and honest discussion, and still others are dead, to the extent that term can hold true for any length of time in any legislative body (watch out for midnight resurrections). Perhaps the best tracking of various bills by any organization associated with water is that of the Arizona Municipal Water Users Association (AMWUA). You can find a public listing of current legislation at their Website at http://www.amwua.org/leg_sum_tracking.html and I advise you to check it out for bill summaries and status.

One of the interesting bills that is still moving forward is House Bill (HB) 2661, which would create a Statewide Water Augmentation Authority. This proposal would create a 15 member commission to study water needs in each county for the next 50 and 100
years and also look at obligations to deliver water by SRP, CAP, CAGRD, and the Water Bank. Legislation would be recommended, as well as changes in existing agencies and authorities. It is a sweeping suggestion with all sorts of potential unintended consequences, and several groups are concerned about it. Hydrologists would presumably have a major input via ADWR into this group’s activities.

Several bills dealing with the impending lack of funding for ADWR and ADEQ are causing those agencies to hold their noses and look the other way at additional provisions they find distasteful. Come July 1 there is a real possibility that ADWR and ADEQ will not have money enough to survive in their current form. No one knows what will happen, but it wouldn’t be good. One of the bills that I personally liked was HB 2744, which would have placed a surcharge (tax) on bottled water that would have gone to funding those agencies. But the bottlers quickly came out of the woodwork, and that bill is now dead, a stake through its heart.

Another bill I like was HB 2781, which would have required new owners of registered wells to record with the county recorder all the information that is supposed to go to ADWR when a well changes ownership but never does. The Wells55 database might start seeming up to date with accurate information. The bill would also have required the Groundwater Users Advisory Council in AMAs that were unlikely to meet the 2025 safe yield requirement to come up with an alternative plan by 2015. Unfortunately this bill made too much sense, and I think its longevity is limited.

Next time—what is going on at ADWR.

Alan Dulaney,
AHS Corporate Board President, 2010

**MEMBERSHIP RENEWAL NOTICE**

We remind our current and past members, that it is that time again to renew your membership.

If you attended the 2009 Symposium, or renewed your membership after the Symposium, your membership extends through the end of 2010. Otherwise, your membership expired at the end of December 2009.

To renew your membership you can either:

1) Renew Online: Regular Membership ($45)
   Student Membership ($15)

2) Download our Renewal Form, and either:
   a) Fax to (866) 931-3134
   b) Mail to : Arizona Hydrological Society
      3317 S. Higley Road
      Suite 114-120
      Gilbert, Arizona 85297
March Dinner Meeting
Please join us Tuesday, March 9th for a special interactive Student/Professional event at the ASU School of Earth and Space Exploration, in Tempe.

Location: Arizona State University  
School of Earth and Space Exploration  
Physical Sciences Building H and F wings  
525 E. University Dr.  
Tempe, AZ 85287

Event: ASU Student/Professional Meet and Greet hosted by Vicki Mills, ASU GeoClub President

Date: Tuesday, March 9, 2010

Reception: 5:30 PM, Physical Sciences (PS)F wing lobby

Introduction: 6:00 PM, PSF 166 (off lobby)

Discussions: 6:15 PM, PSH 4th floor class rooms

Cost: Free

RSVP to Vicki Mills at https://spreadsheets.google.com/viewform?formkey=dF9pdElzOElvWTd6UzRkYnpzdnBhX3c6MA.

Hope to see you there!

ASU Student/Professional Meet and Greet

The ASU GeoClub is hosting and sponsoring a Student/Professional Meet and Greet (informal), where students can ask professionals questions on a wide range of topics. Please come and help inform students on the requirements and in-and-outs of the hydrology and environmental consulting business. Food and beverages will be served.

Discussion topics will include:

- GIS
- GIT
- 40-hour 29 CFR 1910.120 (Hazwoper)
- summer internships
- equal opportunities for women
- other classes to take
- What's the future look like in your industry (5 yrs, 10yrs)
- What will make me employable

Vicki Mills, the Geoclub President, was awarded the Herman Bouwer Intern-scholarship in 2007.

**February Dinner Meeting Summary**

The Phoenix Chapter thanks Bruce Robinson, R.G., LEED AP, for his interesting and very timely presentation at the February 10, 2010 Phoenix Chapter meeting at El Peñasco in Tempe. Bruce’s presentation, “Marketing In A Changing World,” gave an overview of services marketing for hydrology and related business areas from a marketing professional’s viewpoint.

Bruce started with some brief answers to the question “Why is marketing important to me?” It’s important to each of us, in because we’re all faced with economic change, a shrinking market environment, competition that’s getting smarter (e.g., new graduates with recent exposure to the latest useful stuff), increasing client expectations, and decreasing profit margins. He discussed what branding is, and why it’s so important in marketing, across the entire range of business enterprises, from an independent consultant working alone to huge, multinational corporations – the principles are mostly the same at all levels. Branding is a way that an enterprise can set itself apart from its competition.

As broadly defined by Philip Kotler, Distinguished Professor of International Marketing at Northwestern University, “Marketing is not the art of finding clever ways to dispose of what you make. Marketing is the art of creating genuine customer value. It is the art of helping your customers become better off. The marketer’s watchwords are quality, service, and value.” Bruce presented the “Services Marketing Triangle” as an aid in conceptualizing the interactions among processes and participants in marketing professional services in today’s market. Bruce illustrated his discussion of marketing and branding with numerous examples of enterprises with successful marketing efforts, both service providers and manufacturers.

Bruce discussed in detail four ways firms compete strategically through service: exemplary, “out of the box” customer service; new, innovative, cutting-edge services; value-added, revenue-producing services; and a service culture that differentiates. Again, these strategies were illustrated with numerous examples of their successful application in the real world.

In conclusion, he reiterated the importance of being client-centric, of focusing on quality, value, service and trust, and of integrating the business development/marketing effort throughout the business. Be a good time manager, continually work on communication skills, and use utilities like Outlook and Constant Contact to improve the efficiency and productivity of your marketing efforts. Final thought: “There is no magic to magic. It’s all in the details.” (Walt Disney.)
Special note: Bruce Robison kindly made a PDF of his presentation for AHS to post on our web site and you can view it here.

2012 Symposium Planning Underway
Ted Lehman, Christie O’Day, and Mike Hulst have been scoping out possible venues for the 2012 AHS Symposium and hope to have a decision made by April. If you are interested in helping them with the early stages of the planning for 2012, please contact 2012 symposium planning chair, Ted Lehman, at ted@jefuller.com or 480-222-5709.

Future Event Calendar (see also calendar on www.azhydrosoc.org)
- March 22 – Bouwer Internship Application Deadline
- March 22-25 – Arizona Science & Engineering Fair, Phoenix Convention Center
- April 6th – AEG-AHS Student Night, ASU Memorial Union
- April 17th – Earth Fissure Tour sponsored and hosted by the ASU GeoClub, with members from AEG and ADWR leading the tour. Contact Vicki Mills, GeoClub president, for more information.
- April-July Dinner meetings – How ‘bout you? Contact Keith Ross if you’re interested in speaking!

HERMAN BOUWER INTERN SCHOLARSHIP
This year marks the 11th year the Phoenix Chapter will solicit applications for the Herman Bouwer Internship Program! The Herman Bouwer Intern Scholarship gives students enrolled in a hydrology-related discipline at any Arizona college or university the opportunity to gain practical experience in the multidisciplinary field of hydrology and water resources. This scholarship acknowledges the extensive contributions of Dr. Bouwer to the science of hydrology and to the AHS.

Recipients are chosen after a rigorous selection process and serve their internship with employers in the Phoenix area. The Intern is required to complete 200 hours of service with three organizations of his or her choice in government, private industry, and environmental, and water-resources consulting. The employer organizations provide a meaningful training experience that will better prepare the intern for employment in their chosen career goals. A $3,000 monetary scholarship is included as part of the award.

The application deadline for students is March 22, 2010.

Organizations interested in hosting the intern scholarship recipient should email Steve Acquafrredda at acqua@dswa.net by April 23, 2010.
Check out the AHS website for if you would like more information about the Herman Bouwer Intern Scholarship Program and to download an application form.

**WSP BROWN BAG WATER SPEAKER SERIES: MARCH 2010**

**Topic:** Listening Session on Water Resources in Maricopa County

**Speaker:** Channah Rock, Water Quality Specialist/Assistant Professor, The University of Arizona Soil Water and Environmental Science Dept., Maricopa Agricultural Center

**Location:** University of Arizona Cooperative Extension, Maricopa County
Palo Verde Room
4341 E. Broadway
Phoenix, AZ

**Date:** March 23, 2010

**Time:** Noon to 1:30

Two listening sessions will be offered, one during the regularly scheduled Brown Bag Lunch Speaker Series and another in the evening. You can choose the one that works best for your schedule. The purpose is to gather feedback on the interests and concerns of people living in Maricopa County so that we can better address their needs. You have heard our speakers, now it is your turn to be heard!

*Free and open to the public. Bring your lunch. There will be time for questions and answers. Please RSVP to Nancy Crocker at 602-827-8200 ext. 335 or NCrocker@cals.arizona.edu.*

*Information for additional seminars can be found on the WRRC web site: www.cals.arizona.edu/azwater*

**TUCSON CHAPTER NEWS**

**March Meeting Announcement**

This meeting is part of the University of Arizona’s Department of Hydrology & Water Resources Spring 2010 Seminar Series. Please note that the meeting is on *Wednesday.*

**Location:** University of Arizona
Harshbarger Building
February 2010 Meeting Summary
- Shane T Clark, Tucson Chapter Secretary (2010): U.A Watershed Hydrology

Engineers Without Borders–Terra Michaels, 2010

On February 9th, the Tucson Chapter hosted a meeting at the offices of Montgomery & Associates. Only six people were in attendance. The meeting presenter was Terra Michaels, President for the Student University of Arizona Chapter of Engineers without borders.

She presented a talk titled “Engineers Without Borders”.

Terra’s presentation entailed the vision and overlying current and past activities of the Engineers Without Borders (EWB) UA Student Chapter. The UA Chapter is active in volunteering locally both for the notable organizations Habitat for Humanity and Agua Prieta Family Shelters. The Student Chapter has fostered many international water projects.

EWB’s past activities including a recently completed upgrade to a wastewater treatment plant in Ghana. The Ghana Project took 5 years to complete and services 10,000 people in 26 villages. Pictures of what the water was like displayed clearly that it was not suitable for use.

Engineers Without Borders converted the communities existing roughing filter and sand filter, the system was too small for that many people and kept clogging up, with a much larger roughing filter with 3 sizes of media for particle removal and minimal biological treatment.

In addition to designing and constructing the actual filter EWB’s mission statement is that everything be made sustainable. Therefore, the local people were taught how to lay rebar and concrete most efficiently, as well as read plans, etc.

EWB’s current activities include developing and implementing a rainwater harvesting program in Mali. The water in Mali all arrives during 3 months of the year and a few wells and a spring are the only sources through the dry season. Right now the major problem within the community is that there is no real separation between livestock water, washing water and drinking water. Henceforth, EWB has come up with some example designs
and educational documents to assist. Their first priority is fixing the pump, because it’s relatively cheap, and making the path to the spring safer. All other ideas need to be assessed more and further designed.

EWB is always looking for professional support for their projects, and would appreciate any support from interested AHS members.

Contact info: ewb.arizona@gmail.com
Website: http://www.engineering.arizona.edu/templates/step/index.php?ID=208

The AHS Tucson Chapter extends a very warm thanks to Terra Michaels for her informative presentation!

2010 SYMPOSIUM PLANNING COMMITTEE

The AHS Symposium Planning Committee met on February 10th, 2010 at the offices of Montgomery & Associates. Items discussed included:

- Call for abstracts on schedule for mid February: AIPG call will go out in March
- Sponsorship or exhibitors materials: need to get moving on making calls/contact
- Technical sessions: Talked about the format of how to organize
  - List of potential speakers
  - Speaker Ideas are welcome from AHS members
- Plenary Session: Potentials Dave Krammer and Ben Grumbel
- Need additional volunteers and field trip ideas

The next AHS Symposium Planning Committee meeting will be held on **Wednesday March 3, 2010 at 6:00 pm** at the USGS Arizona Water Science Center located on the U of A campus, 520 North Park Avenue, Tucson, AZ.

LEONARD HALPENNY INTERN SCHOLARSHIP

Deadline for Application (Students): **5:00 PM, March 31, 2010**

Information for Interested Students

The Leonard Halpenny Intern Scholarship is open to graduate and undergraduate students in the fields of hydrology, geology, civil, environmental and geologic engineering, renewable natural resources, wastewater management, soil and water science, and other hydrology-related studies. Students from the U of A, ASU, NAU, Pima College, and other Arizona colleges can apply to participate in the program. The scholarship provides an opportunity to gain practical experience at multiple hydrological work environments in Tucson. The scholar will be required to complete 200 hours of work
in 2010. The scholarship carries a stipend in the amount of $3,000. The student will be required to keep and submit a record of hours worked. Upon completion of the intern scholarship, the candidate will be required to submit an article summarizing his or her own experience that will be published in the AHS newsletter.

Those who wish to apply should obtain an application form from our web site: http://www.azhydrosoc.org/internship_Halpenny.html.

E-mail modom@elmontgomery.com for more information about the Leonard Halpenny Intern Scholarship Program.

Information for Interested Employers

The Tucson Chapter is seeking employers from government, private industry, non-profit agencies and environmental consulting firms to host the Leonard Halpenny Intern Scholar and provide practical hydrological experience to a student pursuing a degree in hydrology, geology, environmental science, civil and environmental engineering, or other hydrology related fields. The Halpenny selection committee will interview qualified candidates the week of April 12th, 2010, and will announce the selection of the Intern Scholar by April 30, 2010. The Intern must complete 200 hours of service by December 31, 2010 with at least 40 hours service at each participating organization.

Candidates must be willing to sign liability and confidentiality waivers for participating organizations prior to commencing their intern scholarship

Interested organizations who wish to apply should obtain an application form from our web site: www.azhydrosoc.org, and send it to the committee by April 12, 2010.

Leonard Halpenny Intern Scholarship Committee
Marla Odom (modom@elmontgomery.com)
Montgomery & Associates
1550 E. Prince Road
Tucson, AZ 85711
Telephone: (520) 881-4912
Fax: (520) 881-1609

WRRC BROWN BAG SEMINARS: MARCH 2010

WRRC Event: March 12 Brown Bag - Private Water Company Water Policy

Speaker: Kristin Mayes, Chairman, Arizona Corporation Commission and Trevor Hill, President, Global Water Resources Inc.

Location: Sol Resnick Conference Room
Private water companies are subject to regulation by the Arizona Corporation Commission. The Brown Bag will feature discussion of issues relating to private water company regulation and policy.

Information for additional seminars can be found on the WRRC web site: [www.cals.arizona.edu/azwater](http://www.cals.arizona.edu/azwater)

**FLAGSTAFF CHAPTER NEWS**

**March Meeting Announcement:**

**Location:** Flagstaff City Hall  
211 West Aspen Ave

**Speaker:** Charlie Ester, SRP

**Date:** Wednesday, March 24, 2010

**Time:** 6:00 PM  
Food and beverages provided

Mark your calendars for the following presentation at NAU!

**Speaker:** Paul Marinos, 2010 Jahns Distinguished Lecturer of the Association of Environmental & Engineering Geologists and the Engineering Geology Division of the Geological Society of America

**Date:** March 5 at 12:30, location TBD

**Topic:** Geology of Athens, Greece: A case of urban geology for land use, construction of major engineering structures, hazard assessment and sustainable development.

**February 2010 Meeting Summary- Flagstaff**

The Flagstaff Chapter has started brainstorming and planning for the 2011 Symposium. We had a very productive meeting, discussing the plusses and minuses of venues and
came up with some ideas for a theme. If you would like to share ideas, please contact Brad Hill!

The Flagstaff Chapter is also planning a summer field trip! We can’t yet let the cat out of the bag regarding our planning, however, suffice to say, this is one you won’t want to miss. The field trip is tentatively scheduled for the weekend of July 10-11. The trip will be based in an area of northern Arizona that the entire family can enjoy! This is going to be a fantastic day trip with a focus that integrates forest restoration with hydrology. Also included in your AHS weekend escape to northern Arizona is the AHS Corporate Board meeting!

**FLAGSTAFF CHAPTER 2010 INTERN SCHOLARSHIP**

The Flagstaff Chapter of the Arizona Hydrological Society (AHS) will be offering a 2010 AHS Intern Scholarship Program. This program provides an opportunity for one student (undergraduate or graduate) to gain experience with from one to several water resources and environmental organizations in the Flagstaff and Northern Arizona area between June 2010 and December 31, 2010. The Intern is required to complete 200 hours of service with three organizations of his or her choice in government, private industry, and environmental, and water-resources consulting. The hosting organizations will provide a meaningful training experience for the intern that will better prepare them for employment upon graduating. A $3,000 monetary scholarship is included as part of the award. The deadline for applications is Wednesday March 31, 2010. Please visit the AHS Flagstaff Chapter website for details or contact Erin Young.

Employers! Please visit the AHS Flagstaff Chapter website contact Erin Young, or any other Chapter members, if you are interested in hosting an intern.

**AHS Flagstaff Intern Scholarship Program**

Erin Young  
Phone: (928) 606-8422  
E-mail: eyoung@flusol.com

**HYDRO-NEWS**

**SRP STRIKES DEAL OVER PRESCOTT AREA WATER**

*Cities can tap aquifer if Verde River isn’t hurt*

by Shaun McKinnon - Feb. 12, 2010 12:00 AM

*The Arizona Republic*

A fight over the rights to a huge pool of groundwater in Yavapai County ended Thursday with a truce between a Phoenix water provider trying to guard existing supplies and two communities desperate to secure future resources.

The deal will let Prescott and Prescott Valley draw as much as 2.6 billion gallons of water...
a year from the aquifer but will require the cities to ensure their wells do not siphon water away from the Verde River, an important source of drinking water for metropolitan Phoenix.


**CAP CANAL BOARD SUES STATE AGAIN OVER FUNDS**

*Cities can tap aquifer if Verde River isn’t hurt*

by Mary Jo Pitzl - Feb. 10, 2010 12:00 AM

*The Arizona Republic*

The operators of the Central Arizona Project Canal are going to court - again - to prevent the state Legislature from taking money from water accounts they claim the state has no right to touch.

The Central Arizona Water Conservation District argues that the Legislature acted unconstitutionally in January 2009 when it tapped $12.6 million from the Arizona Water Banking Fund to help balance the state budget. In July, lawmakers swept $5.4 million in interest earnings from that water account into the general fund.

http://www.azcentral.com/arizonarepublic/local/articles/2010/02/10/20100210politics-watersuit0210.html

**COUNTY MUST MEET ITS WASTEWATER DEADLINE**

**OUR VIEW: UPGRADES MUST BE COMPLETED AT BOTH TREATMENT PLANTS PER CLEAN WATER ACT**

Posted: Friday, February 5, 2010 12:00 am

It's an expensive bullet that we're all going to have to bite: The federal government has given Pima County a deadline for replacing its Roger Road wastewater-treatment plant and for upgrading its plant at Ina Road.

In order to comply with the mandate and stay on the right side of the federal Clean Water Act, the upgrades must be completed at Ina Road by 2014 and at Roger Road by 2015.


**EPA ANNOUNCES GRANT COMPETITION FOR COMMUNITIES WANTING TO REDUCE POLLUTION AT LOCAL LEVEL**

Release date: 02/04/2010

PHILADELPHIA - - (February 4, 2010) The U.S. Environmental Protection Agency is making nearly $2 million available in 2010 to reduce pollution at the local level through the Community Action for a Renewed Environment (CARE) program.
MINE DUST NOT DANGEROUS, RESIDENTS TOLD

By Philip Franchine, Green Valley News

Published: Saturday, January 30, 2010 4:24 PM MST

Asarco officials told Rancho Resort residents Friday that an analysis of tailings from their community and a nearby tailings dam showed the dust is not much different from soil samples taken nearby and contain no dangerous levels of metals.

That didn’t seem to satisfy many among the 150 people who attended a meeting that included Asarco and several environmental agencies and experts.

University of Arizona Soil Water and Environmental Science professor Raina M. Maier tried to reassure residents that the dust that blew into their yards and homes is not dangerous based on the results of a laboratory analysis that Asarco handed out at the meeting. However, Maier did say the small size of the minute dust particles represent a health problem when inhaled.

http://www.gvnews.com/articles/2010/01/30/news/10asarcomain0131.txt

WATERBLOGGED

by Shaun McKinnon - February 17, 2010

The Arizona Republic

Still little drought relief on the Colorado While parts of Arizona slosh when the earth moves these days (watch a video here featuring Salt River Project's intrepid snow surveyors, who have much to survey), the news farther north isn't quite as soggy.

The Colorado River has not benefitted from this winter's El Nino-fueled series of storms. In its latest report, the Colorado Basin River Forecast Center has adjusted its runoff projections downward slightly. The center predicts 5.8 million acre-feet of water will flow into Lake Powell from April through July, about 73 percent of the long-term average.

Find the rest of the story, associated links, and other timely water blogs on Shaun McKinnon's Arizona Republic site – Waterblogged – http://www.azcentral.com/members/Blog/ShaunMcKinnon

ADDITIONAL INFORMATION

For more information about the Arizona Hydrological Society, or to view current job listings and announcements, please visit our web site at:

http://www.azhydrosoc.org/
Your membership may be renewed for 2010 by credit card through the AHS website or by mailing a check to the Arizona Hydrological Society, c/o Christie O'Day, 3317 S. Higley Road, Suite #114, Box 120, Gilbert, Arizona 85297. Dues remain at $45.00 year for regular membership and $15.00 for students. Looking forward to a great 2010 with your continuing support. For those who attended the 2009 Water Symposium, be reminded that membership dues for 2010 were included in the registration fee.