



May 2009 Newsletter

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Viewpoint: Chapter and Verse

At the April Corporate Board meeting, Matt Beversdorf was selected to fulfill the role of interim Executive Director for the Society, after the untimely passing of Nick Melcher. A long-time member, Matt is already our Webmaster, and thus familiar with much of what has to be done. Matt will now be getting out this Newsletter, updating the membership lists, sending out dues invoices, and doing the other administrative functions that we need as a Society. Matt volunteered for this role, and we appreciate his willingness to step forward. Certainly no one anticipated the need.

Tucson Chapter is selecting a new member for the Corporate Board to replace Nick Melcher, and dinner meetings have been well attended in recent months. Phoenix Chapter put on the PEST Short Course, which was totally booked. Flagstaff Chapter just put on a field trip to Springerville. It came off great, continuing a long line of field trip successes for Flagstaff (kudos to Erin Young for her organizing skills).

As I was standing on the various Cretaceous outcrops during the field trip, the sharply cool wind whipping around me, it struck me just how active our Chapters are in this year when the tough economy would seem to have left so many people subdued. The strength of our Society lies in the many people who step forward to be active participants in their Chapters. The more energy you put into your Chapter, by attending meetings and hearing talks and taking part, the more energy you generate for yourself and your career.

The upcoming AHS Annual Symposium, a joint meeting with the American Institute of Hydrology, is a great chance to participate in a major Society activity. This year's theme of "Managing Hydrologic Extremes" encompasses a broad spectrum of topics, and we already have some fascinating abstracts in. The Symposium Website is now up and running at www.hydrosymposium.org. The fantastic room rate of \$99 per night at the Westin Kierland Resort runs out on May 31. Your Society wants you to participate in this event, to generate energy for you, your career, and your profession. Don't wait—register now!

Alan Dulaney,

AHS Corporate Board President, 2009

IN MEMORIAM



Nick Melcher was only 60 years old when he passed away in April, 2009. Nick spent 34 years with the U.S. Geological Survey, starting as a staff hydrologist in Montana. Later he became a subdistrict office chief in Kentucky, and district chief in Iowa. He became the Director of the Arizona Water Science Center in 1994. In Arizona, Nick was lauded for having one of the strongest Data Programs in the country and for having developed one of the broadest and most innovative ground-water programs in the USGS. Nick managed his office as effectively and efficiently as any Water Science Center in the country. He took an Arizona office in deep financial trouble and turned it into a highly performing organization with soaring morale.

When Nick retired from the USGS in 2007, he knew he didn't want to disengage from hydrology. As Secretary of the AHS Corporate Board from the Tucson Chapter, Nick participated in the many discussions about how best to handle the administrative needs of the Society. And when the need arose, Nick stepped forward with a proposal to act as Executive Director. He excelled in his new role, and brought order to the membership records, invoicing, and editing of the Newsletter. Nick was planning to ramp up his AHS activities by increasing representation of the Society and its goals and activities before the many decision-makers and influential professionals that he knew well, when he unexpectedly passed away.

Nick Melcher was the consummate professional, and an important member of AHS. His many friends at USGS knew Nick as one of the most generous, thoughtful and compassionate individuals in the Survey. Our profession is now diminished with his passing. He will not be forgotten.

Nick is survived by his wife, Paula, his two sons, Clifton and Henry, their wives, Barbara and Katherine, and four grand children.

AHS Lifetime Achievement Award Nominations Sought

The Corporate Board of the Arizona Hydrological Society (AHS) is seeking nominations from AHS members for the AHS Lifetime Achievement Award. Any AHS member or a non-member can be nominated for the award. The award consists of a personal recognition plaque, a rotating plaque listing all past recipients and a \$500 check to an Arizona educational organization of choice by the award recipient. The award is presented at the Annual Symposium to honor an individual who has contributed to AHS, the science of hydrology within Arizona and/or has received national fame for their contributions in the hydrology field.

Note: Lifetime Achievement Award nominations can only be made by current AHS members.

Please submit the name of the AHS member or non-member you would like to nominate, as well as details why this person deserves recognition based on the following criteria: contribution to Arizona hydrology; national reputation and experience; and contribution to the further development and education in the hydrologic field (i.e., mentoring, involvement in AHS...)

Forms, and more information about this award can be found on the AHS website:

[AHS Lifetime Achievement Award](#)

Forms may be either e-mailed to Matt Beversdorf at azhydrosoc.web@gmail.com or mailed to:

Arizona Hydrological Society
c/o Matthew Beversdorf
1753 East Broadway Road
Suite #101, Box 106
Tempe, Arizona 85282



\$99 hotel rate through May 31, 2009

Book online at Hydrosymposium.org

Symposium Program is now available online!

Now that you have submitted your Abstracts,
don't forget to keep working on your papers.

Submissions will be accepted June 1 through July 17, 2009.
More Info...



Your Logo
Could Go Here
[More info...](#)



Phoenix Chapter

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May Dinner Meeting

Our next dinner meeting will be held back on our regular Tuesday, May 12th, when we will have an evening honoring Dr. Herman Bouwer for his many contributions to AHS and the AHS Foundation. AHS Foundation board members will be there along with some of the previous Herman Bouwer Internship winners.

Please join us Tuesday, May 12th at El Penasco at Mill & Broadway in Tempe to share your memories and experiences of Dr. Bouwer with him, Jessie, and a gaggle of AHS members.

Hope to see you there!

Location: El Penasco Mexican Kitchen
19 E. Broadway Road
Tempe, AZ 85282

Event: Dr. Herman Bouwer Appreciation Night

Happy Hour & Dinner: 5:30 PM – 8:00 PM

Cost: \$15 member, \$20 non-member, \$5 student

RSVP with Kirk Creswick at kcreswick@eecphx.com or 602-248-7702.

April Meeting Summary

The April dinner speaker was Stan Leake from the Tucson USGS office. Stan repeated a talk he'd previously given at a recent Tucson Chapter meeting.

In 1940, C.V. Theis pointed out that all ground water pumped is balanced by removal of water somewhere, initially from storage in the aquifer and later from capture in the form of increase in recharge and decrease in discharge. Capture that results in a loss of water in streams, rivers, and wetlands now is a concern throughout the United States. Hydrologists commonly use analytical and numerical approaches to study temporal variations in sources of water to wells for select points of interest. Much can be learned about coupled surface-/ground-water systems, however, by looking at the spatial distribution of theoretical capture for a select time of interest. Development of maps of capture requires 1) a reasonably well-constructed transient model of an aquifer with head-dependent boundaries representing surface-water features or evapotranspiration; and 2) an automated procedure to run the model repeatedly and extract results, each time with a well in a different location. Stan addressed procedures and considerations for mapping capture. He also presented results from case studies in Arizona, Nevada, Oregon, and Michigan.

USGS publications covering Stan's work can be found at the following websites:

<http://pubs.usgs.gov/sir/2008/5189/>

<http://pubs.usgs.gov/sir/2008/5207/>

The Phoenix Chapter would like to thank Stan for sharing his talk again for the Phoenix Chapter. We know it was an especially challenging week with the passing of Nick.

Dinner Meeting Sponsor Thank You!

A great big Thank You goes out to [Yellow Jacket Drilling](#) for sponsorship of happy hour at the April

meeting. Paul McAlpine and Beau Burgess came and shared not only beverages, but participated in the chapter board meeting and numerous discussions on the relative benefits of various drilling techniques and the wisdom of cutting funding to ADWR. The Phoenix Chapter and all April's meeting attendees greatly appreciate Paul and Beau picking up the tab! Thanks Yellow Jacket!

If your firm is interested in sponsoring a future Phoenix Chapter dinner meeting, please contact Ted Lehman at 480-222-5709 or ted@jefuller.com.

2009 AHS Annual Symposium Sponsors Sought

The 2009 Symposium, "Managing Hydrologic Extremes", will be held at The Westin Kierland Resort & Spa August 30 through September 2, 2009 in Scottsdale. The event will be a joint symposium with the 2009 national conference of the American Institute of Hydrology (AIH). Thanks to our volunteers we already have several pledged sponsors! Our thanks to:



- Gold Sponsor
 - Freeport McMoRan Copper & Gold



- Silver Sponsors
 - Clear Creek Associates
 - Columbia Analytical Services
 - Golder & Associates
 - Montgomery & Associates
 - Southwest Hydrology



- Event Sponsor
 - Central Arizona Project

We look forward to helping you help us promote your firms and the 2009 Symposium. Please contact Mike Hulst, EEC, at 602-248-7702 or mhulst@eecphx.com or Keith Ross, Hydro Geo Chem, at 480-421-1501 or keithr@hgcinc.com and ask for a sponsorship package.

More information is also available at our Symposium website, <http://www.hydrosymposium.org> . Check it out! I think you'll be impressed.

Planning for 2009 Symposium continues, May 11 and 19, at Hydro Geo Chem

Planning for the 2009 AHS Symposium continues and we will be meeting regularly to hammer out details of program, speakers, sponsorship, marketing, proceedings, workshops, field trips, etc. The next planning meetings are scheduled for Monday, May 11th at 4 pm, and Tuesday, May 19th at 5 PM at the offices of Hydro Geo Chem (6370 E. Thomas Rd, Ste 200, Scottsdale, AZ).

May 11th meeting: We plan to go through the abstracts and set up a draft program.

May 19th meeting: We will have a more general meeting going over all of the various elements of the planning committee from the program to sponsors and marketing.

We have a great group already, but we can definitely use more help. If you are interested in helping with the planning process or just listening in, please contact Keith Ross at keithr@hgcinc.com or 480-421-1501.

We'd love to have you and we can really use your help.

Herman Bouwer Internship Winner!

The Phoenix Chapter is delighted to announce the 2009 Herman Bouwer Internship winner! Brad L. Vance, a senior in Geological Sciences at ASU, is this years recipient. Brad is another in a line of non-traditional student winners of the Bouwer internship. Brad had a previous life as an English major and a medical clinic administrator before defecting to geology. Congratulations Brad! You're one of us now!

Brad is also the 10th Bouwer intern awardee. Congratulations and thanks go out to all those who have made this program a reality for one full decade. Special thanks to the selection committee chaired by Steve Acquafredda, DSWA, and his committee members, Barry Halterman, Clear Creek, Emily Stevenson, AMEC, Josh Coyan, ASU, Jason Sutter, ADEQ, Laura Fritsky, City of Mesa, David Christiana, ADWR, and Calvin Mills for all their hard work!

PEST Workshop a grand success!

The AHS partnered with the ADWR to host the Parameter Estimation (PEST) Course during the week of April 27 – May 1 at the ADWR in Phoenix. The course, taught by Australian Dr. John Doherty, integrated lectures and workshops related to groundwater modeling. The week, while mathematically intensive, provided attendees with a better understanding of model calibration concepts. The [PEST software \(freeware\)](#) can be used to assist groundwater modelers in autocalibration, sensitivity, and uncertainty analysis. The workshop also helped raise funds for future ADWR / AHS collaborative efforts to benefit Arizona's Hydrology community.

Event Calendar (you may also see AHS calendar events at <http://www.azhydrosoc.org>)

- May 15 - Dave White, associate professor, ASU's School of Community Resources and Development; Troy Benn, Ph.D. candidate, ASU's Ira A. Fulton School of Engineering. Science Cafe - Center for Nanotechnology in Society, 600 E. Washington Street, Phoenix.
Topic: To Drink or Not to Drink: What Should We Do to Have Good-Tasting, Safe and Sustainable Water into the Future. [View/Download PDF](#)
- June - Greg Zekoff, Boart Longyear, "New Developments in Sonic Technology"
- July - Maybe You?
- Aug. 30- Sept. 2, 2009 - *Managing Hydrologic Extremes*, Joint Symposium of AHS & AIH, Westin Kierland Resort & Spa, Scottsdale, AZ

Tucson Chapter

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May Meeting Announcement

Location: Offices of Errol L. Montgomery and Associates, Inc
1550 E Prince Rd

Tucson, AZ 85719

Tuesday, May 12th 2009, 6:00 pm

Social half-hour begins at 6:00 pm; Talk begins at 6:30

Food and beverages provided

Speaker: Dr. Margaret Wilder, Assistant Professor, Center for Latin American Studies

Abstract:

Dr. Margaret Wilder, heading a \$300,000 multi-faceted study that is being funded by the National Oceanic and Atmospheric Administration (NOAA) will be talking to the Tucson chapter in May. "The aim of the study is to help water managers and emergency-preparedness planners use climate information in order to improve long range planning for droughts, floods, and the provision of adequate water supplies."

The project will draw a range of researchers who will hone in on four urbanized hotspots: Tucson, Nogales (AZ), Nogales (MX), Hermosillo, MX, and Puerto Penasco, MX.

Dr. Wilder is the deputy principal investigator of the project and an assistant professor of Latin American studies and geography and regional development at the University of Arizona.

Biography:

Margaret joined the Latin American Studies faculty in 2001 with an interdisciplinary background in Geography, Political Science and Latin American Studies and previous work as an associate dean and a city planner. Her research interests include environment, agriculture, water and public policy with a particular regional focus on the U.S.-Mexico border and Mexico. Her 2001 dissertation examines the restructuring of water management in Mexico and the impacts on farmers in Sonora. She helps to coordinate border studies activities and teaches courses that include an introduction to Latin America and the Geography of Middle America.

2009 Halpenny Intern Selection

Terra Michaels, an Engineering Management junior with a minor in Hydrology has been selected as the 2009 Leonard C. Halpenny Intern. Congratulations, Terra! Thanks to all that applied!

2010 Symposium Planning Committee

Planning for the 2010 symposium is underway. If you would like to get involved with planning, please contact Kate Duke of Montgomery and Associates (kduke@elmontgomery.com) or Jeff Gawad of Montgomery and Associates (jgawad@elmontgomery.com). Any help is greatly appreciated! Thanks!

Hydrology and Water Resources May 2009 Seminar Schedule

No Seminars are scheduled for May, 2009

All seminars are held from 4 - 5 pm

For more information: [Seminar Webpage](#)

WRRC Brown Bag Seminars: May 2009 Schedule

No Seminar has been scheduled for May, 2009

All seminars and events are held at the Sol Resnick Conference Room, Water Resources Research Center, 350 N. Campbell Ave.

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

Tucson HydroNews

New UA lab researches medicines in water supply

By Evan Pellegrino
Arizona Daily Star
Tucson, Arizona | Published: 04.13.2009

A new laboratory at the University of Arizona is giving researchers a better understanding of an emerging concern to health officials — traces of pharmaceutical drugs and other pollutants found in our water supply.

Investigations from The Associated Press and the U.S. Geological Survey have discovered that many types of trace compounds have infiltrated the water supplies across the country, including in Tucson.

The consequences and effects of these contaminants aren't known, but UA researchers say the Arizona Laboratory for Emerging Contaminants will provide valuable tools that will help address growing concerns associated with the pollutants.

"The lab gives us a ticket into the game," said Robert Arnold, a professor with the UA's department of chemical and environmental engineering who uses the lab to measure and detect trace pollutants in wastewater.

<http://www.azstarnet.com/allheadlines/288452.php>

Moving up

Tucson Water picks interim info officer

Arizona Daily Star
Tucson, Arizona | Published: 04.12.2009

Fernando Molina has been named interim public information officer for Tucson Water.

Molina replaces Mitch Basefsky, who left to join the Central Arizona Water Conservation District.

Molina has been Tucson Water's conservation program manager since 1991 and also served as the primary Spanish-language contact and alternate public information officer.

Prior to joining Tucson Water, he worked on water-management issues for the Arizona Department of Water Resources.

Tucson Water plans to recruit a permanent public information officer in the next few months.

<http://www.azstarnet.com/allheadlines/288298.php>

Study: Shortages likely on Colorado River by 2050

The Associated Press
April 20, 2009, 5:33 p.m.

SALT LAKE CITY — If the West continues to heat up and dry out, odds increase that the mighty Colorado River won't be able to deliver all the water that's been promised to millions who rely on it for their homes, farms and businesses, according to a new study.

Less runoff — the snow and rain that fortify the 1,400-mile river — caused by human-induced climate change could mean that by 2050 the Colorado won't be able to provide all of its allocated water 60 percent to 90 percent of the time, according to two climate researchers at the Scripps Institution of Oceanography at the University of California at San Diego.

<http://www.tucsoncitizen.com/daily/frontpage/114806.php>

UA event highlights water issues

Arizona Daily Star
Tucson, Arizona | Published: 05.04.2009

Kristin Brandt wasn't entirely looking forward to identifying with developing-world residents, predominantly women, who often must walk for miles to get water.

She was preparing Sunday to carry five gallons on a 5K walk, the equivalent of 3.1 miles, to raise awareness about the lack of water availability in many countries around the world.

"That's about 40 pounds of water, so I'm pretty sure it will be rough," said the 24-year-old University of Arizona student, who is studying hydrology.

About 50 people participated in Tucson's first annual Carry 5 walk, spearheaded by UA hydrology students.

Organizer Michael Barnes, a hydrology student graduating in May, traveled to Honduras in August to see what some communities are dealing with.

<http://www.azstarnet.com/allheadlines/291399.php>

Flagstaff Chapter

May Meeting Announcement

Date: May 12, 2009
Location: Peabody Investments Corporation 3001 W. Shamrell Blvd., Suite 110 Flagstaff, AZ 86001
Time: 6-8 pm

Speaker: John Cochran, Manager Environmental Hydrology with Peabody Investments Corporation

Topic: John plans to give an overview of our well field, distribution system, and historic pumping. In addition, he plans to summarize the 3-D numerical model and the predictions made using it. He will also summarize our permitting status as it pertains to the N-Aquifer. Finally, he will present current pumping and monitoring information related to our well field, including well recovery information within our leasehold and at the USGS monitoring wells.

Zuni Field Trip Summary:

The Zuni Basin field trip put together by the Flagstaff Chapter was a great success! A total of 14 AHS members and non-members arrived in Springerville Saturday morning, May 1, for a field trip led by

paleontologist/geologist Doug Wolfe. Among those in attendance: Wes and Carol Shur of the Strawberry/Pine area; Abe Springer, Peter Evtimov, Paul Whitefield, Richard and Rhonda Brose, Emi Gregg, and Erin Young from Flagstaff; Alan Dulaney (AHS President), Jack Edmonds, and Jessica Jensen from Phoenix; and Jessica's father, Jens Jensen. Jens Jensen is a local of Nutrioso and hosted a number of those camping on their property.



The Flagstaff Chapter would like to thank Doug for leading such an informative and interesting trip, as well as all those that attended. The group toured unique terrestrial deposits from the Turonian period of the Cretaceous, a greenhouse period accompanied by high sea levels. A more detailed summary of the field trip will be sent out shortly.

Arizona News: ADWR Requires Professional Geologist or Engineer Seals

Source: Arizona Department of Water Resources

Effective, 04/17/2009, the Arizona Department of Water Resources (ADWR) requires hydrologic, geologic and engineering reports, studies, drawings and maps, specifications, analyses or related data submitted to support the evaluation of applications for various types of Department permits or approvals provided under [Arizona Revised Statutes \(A.R.S.\) Title 45](#) that qualify as the practice of geology or engineering to be signed and sealed by a professional geologist or qualified professional engineer who is registered in the State of Arizona under the authority of [A.R.S. Title 32, Chapter 1](#).

For more information, please follow the link to get the online notice from ADWR: [Notification Of Professional Registration Requirements](#) . This can also be downloaded from the Hot Topics section of ADWR's newly redesigned website www.azwater.gov/AZdwr.

National News: President Obama Seeking Recommendations for Science Integrity in Government

Source: ScienceDebate.Org

On March 9, the president formally asked the White House Office of Science and Technology Policy (OSTP) to make recommendations on how the executive branch can meet this pledge.

The OSTP has opened a public comment period regarding this directive, giving you the opportunity to share your thoughts on what the next steps should be. Comments are due by Wednesday, May 13.

The OSTP is looking for recommendations on the six issues President Obama identified in his memo:

- hiring and keeping qualified scientists
- defining new policies to ensure integrity
- using "well-established scientific processes" like peer review
- disclosing scientific findings
- ensuring that principles of scientific integrity are being adhered to
- adopting additional policies like whistleblower protections

The OSTP is accepting comments via email and through their blog, ([OSTP Blog](#)).

Their original request for input can be found here ([pdf](#)).

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 2009 by credit card through the AHS website or by mailing a check to the Arizona Hydrological Society, c/o Matthew Beversdorf, 1753 East Broadway Road, Suite #101, Box 106 Tempe, Arizona 85282. Dues remain at \$45.00 year for regular membership and \$15.00 for students. Thank you all for a great 2008 and for your continuing support in 2009. For those who attended the 2008 Flagstaff Symposium, be reminded that membership dues for 2009 were included in the registration fee.