

## Viewpoint: The Need for Continuing Education

By now, many people across Arizona have heard of the release of TCE into the water system serving Paradise Valley that occurred in January, and how upset the public became upon learning about it. Basically, a pump at the air-stripping facility stopped and wasn't caught for about 16 hours, and some amount of water containing TCE in excess of the MCL entered the water system. The provider followed protocols, alerted the public, provided bottled water, and set about fixing the situation.

I was listening to KTAR radio on my long commute home that evening, and the TCE release was the subject of the talk show host. I already knew that the incident had been widely reported in the Phoenix-area media, but what took me totally by surprise was the nature of the questions being asked by the public. "How does this stuff get down to the water anyway?" and "Is my dog going to die tomorrow?" were among the comments. Uncomprehending, often angry comments.

Thirty years of high-priced contaminant hydrology, and the public still doesn't get it.

Now I grant you that the audience of a typical talk radio show is not a representative sample of the public (hey, I was only listening for the traffic reports!), and those who call in to rant are filtered through station personnel interested in putting the most volatile comments on the air. Still, decades after CERCLA, RCRA, and Arizona's own Environmental Quality Act, one might hope that people would know a bit more about groundwater, water quality, and why it is a bad thing to pour wastes out on the ground.

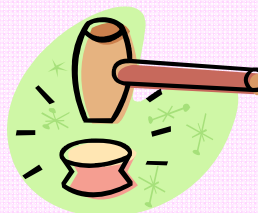
The point it drove home to me was the need for hydrologists to continually try to educate the public on issues of groundwater, surface water, contamination, and supply. Part of the mission of the Arizona Hydrological Society is to support education and public understanding in water resources and hydrology. We have internship and scholarship programs to advance that mission, and offer Annual Symposia, presentations at chapter meetings, field trips, and special seminars to disseminate information. Our Society is open to the pub-

lic. But we need to do more.

This year AHS will work towards public education. We will come up with ways of public outreach that can be handled by volunteers. We will cooperate with other entities to tell people how the hydrologic cycle works, what groundwater is (and isn't), what surface water is, why drought and conservation are important, and what happens with contaminants.

We each, as hydrologists and water professionals, need to communicate to the public what water is all about, what needs to be done to insure clean and reliable supplies of water, and what risks are associated with various kinds of contaminants. It is our responsibility as professionals to counter the mis-information so common in the public with the light of science. We know the public is interested in water; they wouldn't be calling talk radio in such large numbers if they weren't concerned. They just need the facts.

Alan Dulaney  
AHS Corporate Board President 2008



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## Member information

### 2008 MEMBERSHIP DUES

If you did not attend the AHS Annual Symposium you were recently emailed an invitation to renew your AHS Membership dues for 2008. Your membership is very important to us and we hope you will consider renewing promptly.

Dues, payable to AHS (\$45.00, \$15.00 for students) should be sent to:  
Arizona Hydrological Society  
Jeanie Merideth, Association Manager  
PMB 139; 3305 N. Swan Road #109  
Tucson, AZ 85712  
Phone: (520) 299-6787

*Dues may also be paid using our "Online Payment" system.*

*Go to*

*[www.azhydrosoc.org](http://www.azhydrosoc.org)*

*And click on "Join or Renew Online" and have your credit card ready. AHS accepts Visa, MasterCard and American Express.*

**PLEASE NOTE: MEMBERSHIP DUES NOT PAID BY 2/29/08 WILL BE REMOVED FROM THE WEB SITE AND EMAIL SYSTEM!**

***DON'T DELAY-DO IT TODAY!***

### **How to visit the AHS Members Only area:**

- Go to: [www.azhydrosoc.org](http://www.azhydrosoc.org)
- Located on the far right side of your screen click on Members Only
- Type in your username and password: Your username is the first initial of your first name and then your last name (ie Flo Waters would be FWaters).  
Your password is your zip code (that we have on file for you).

Once there you have access to documents that are not available on the public site.

REMEMBER you must be a currently paid member of AHS to have access.

# TUCSON CHAPTER NEWS

## AHS Tucson Chapter Meeting

February 12, 2008

7:00 social half-hour

7:30 speaker

Offices of Errol L. Montgomery & Associates,  
Inc.

1550 E. Prince Road

Sharon B. Megdal is Director of The University of Arizona Water Resources Research Center and Professor in the Department of Agricultural and Resource Economics and the Department of Soil, Water, and Environmental Science. She also serves as Director of The University of Arizona Water Sustainability Program, which is funded by the Technology Research Initiative Fund (TRIF). Her work focuses on state and regional water resources management and policy, on which she writes and frequently speaks. She authors a water policy column for the WRRC's bi-monthly newsletter. Current projects include study of artificial recharge and municipal water use in growing, arid regions. Dr. Megdal teaches the

multi-disciplinary graduate course Arizona Water Policy. She has served on numerous state boards and commissions, including the Arizona Corporation Commission and the Arizona State Transportation Board. Sharon B. Megdal holds a Ph.D. degree in Economics from Princeton University.



## Tucson Chapter Officers

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Chapter            Dan Guido  
Director            Errol L. Montgomery & Associates  
(Chapter            (520) 881-4912  
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## PHOENIX CHAPTER NEWS

### January Kickoff Meeting Summary

On January 8, 2008 the Phoenix Chapter held its annual kickoff meeting. The purpose of the meeting was to introduce new officers and discuss chapter activities and goals for 2008. Ted Lehman, 2008 Chapter President, welcomed two new members to the board, Kirk Creswick and Keith Ross, and gave thanks and appreciation to outgoing board members Christie O'Day, Lee-Anna Walker, and Matt Beversdorf. But don't worry, Christie, Lee-Anna, and Matt aren't running for the hills. Rather, they've handed off their chapter board duties to focus on some important chapter and society efforts. Specifically, Christie will focus her attention on the 2009 Symposium planning (see later item in newsletter) while Lee-Anna is spearheading a spring seminar on Surface Water Issues (also see later item in newsletter). Matt meanwhile is helping the society with its website. All three have already made significant contributions on each of these critical AHS activities. Ted's pleas for help at the Secretary position were also graciously answered by Ms. Jessica Jensen thanks to some prodding from the audience and her boss, Keith Scoular, a long-time supporter of AHS and the Phoenix Chapter. Ted and the rest of the chapter board are delighted to welcome Jessica to the board and look forward to working with her this year.

The remainder of the meeting was spent discussing upcoming chapter activities, planned, desired, and imagined. Steve Acquafredda gave a nice overview of the Herman Bouwer Internship program. Doug Wolfe volunteered to investigate the possibilities of a fossil field trip to the Zuni Basin and chapter involvement in a student Earth Day event. Other planned activities for the year are described later in the newsletter.

We'd like to thank the 20+ folks who attended and look forward to another successful year in the Phoenix Chapter. We look forward to your help and participation in our events this year.

### February Meeting Announcement

Our speaker will be Paul Westerhoff from Arizona State University. He will be discussing nanoparticles as an emerging contaminant. Please join us to hear from Paul about this interesting new area of research and potential environmental concern.

The meeting will be held February 12<sup>th</sup> at El Penasco at Mill & Broadway in Tempe. Hope to see you there!

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

Speaker: Paul Westerhoff, Arizona State University

Chapter Board Meeting: 4:30 PM – 5:40 PM  
Happy Hour & Dinner: 5:45 PM – 7:00 PM  
Dinner Speaker: 7:00 PM – 8:00 PM

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

All chapter members (and non-members) are welcome to attend the board meeting too!

### Venue Selected for 2009 AHS Annual Symposium & Dates Confirmed

The 2009 Annual Symposium will be held at The Westin Kierland Resort & Spa August 30 through September 2, 2009 in Scottsdale. For those of you who enjoyed the 2007 Symposium at the La Paloma Resort, that too was a Westin property. We are planning to meet and hopefully exceed that excellent experience. Yes, the dates are slightly different than previously reported, but hopefully you haven't made your travel reservations yet! The event will be a joint symposium with the 2009 national conference of the American Institute of Hydrology (AIH). We have also selected a theme – "Managing Hydrologic Extremes".

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## Phoenix Chapter continued

*(Continued from page 4)*

With the help of AIH and all our AHS volunteers and participating sponsors, we hope to put on a fabulous, successful event at a super venue. We are also planning to organize a published volume of the proceedings papers. AIH normally produces published proceedings and we are looking to continue their tradition for 2009. So if you or someone you know is interested in seeing their paper in print, here's your chance. Start thinking of those paper ideas now!

### Planning for 2009 Symposium continues

Planning for the 2009 AHS Symposium also continues and we will be meeting regularly to hammer out details of program, speakers, sponsorship, marketing, proceedings, workshops, field trips, etc. Our next meeting is scheduled for 5 pm Jan. 31<sup>st</sup> at the offices of JE Fuller in Tempe. If you are interested in helping with the planning process or just listening in, please contact Ted Lehman at [ted@jefuller.com](mailto:ted@jefuller.com) or 480-222-5709, Lee-Anna Walker at [LeeAnna.Walker@arcadis-us.com](mailto:LeeAnna.Walker@arcadis-us.com) or Christie O'Day at [coday@acstempe.com](mailto:coday@acstempe.com) or 480-894-5477.

### Bouwer Intern Scholars & Hosts Sought

The Phoenix Chapter is seeking student intern applicants for the Herman Bouwer Internship. Marketing has just begun. Student applications are due March 17<sup>th</sup>. An application form can be found online at [www.azhydrosoc.org](http://www.azhydrosoc.org). We also need corporate or agency hosts to provide a place for the 2008 Herman Bouwer Intern winner to work, learn, and experience the business and vocation of hydrology. Past years' recipients have evolved into excellent future employees! Here's your chance to test drive a prospective new employee and have AHS foot the bill! How can you resist? Hosts receive the service of the intern for 2 to 3 weeks. If you are interested in becoming either a Bouwer Intern Winner or host don't pass up this great opportunity. Please contact Steve Acquafredda at [sacquafredda@dswa.net](mailto:sacquafredda@dswa.net) or (602) 217-1038 for more

information.

### AZSEF – Judges Needed

March 18-21 will be the Arizona Science & Engineering Fair at the Phoenix Convention Center. The Phoenix Chapter has provided awards to outstanding projects in water related sciences. With the help of the Central Arizona Project we have given out \$800 over the past two years. We are looking for assistance to review and select award winners in for three grade levels. The judging will require about a half day's time on the March 20<sup>th</sup>. Last year's volunteer judges confessed to an unexpectedly good time interviewing students and talking with them about their projects. If you are interested, please contact Paul Plato at [pplato@clearcreekassociates.com](mailto:pplato@clearcreekassociates.com) or 480-659-7131.

### Third Annual AHS-AEG Student Night

AHS plans to jointly host the 3rd Annual Student Night with the Arizona Chapter of the Association of Engineering Geologists. Though a date has not yet been set, it will probably be in April and take place at the University of Arizona Memorial Union. The event will bring together students and professionals to share interests, network, and discuss employment opportunities. The event will feature a social networking hour followed by dinner and then the main event, presentations by students of their work. The best presenter(s) will receive cash in recognition of their efforts! Last year the event attracted over 20 students, 4 presentation teams, and 14 corporate sponsors. Awards totaling \$350 were given to the speakers. Thanks to our sponsors we even made a few dollars after expenses and awards. We are looking forward to another successful event this year with AEG.

### Surface Water Issues Workshop

The Phoenix AHS Chapter will be hosting its second Technical Session in two years on

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## Phoenix cont.

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May 15, 2008 at the Arizona Department of Water Resources in Phoenix. The session will focus on Surface Water Issues. The specific speakers and topics are still being planned, but the technical session will be a full day event, including lunch and lots of informative talks. The proceeds from the session will all go to support the Herman Bouwer Internship program. Last year we raised over \$2,000 on behalf of the Internship program. Lee-Anna Walker is spearheading this effort and would be delighted to have your help and input. Lee-Anna can be reached at [LeeAnna.Walker@arcadis-us.com](mailto:LeeAnna.Walker@arcadis-us.com) or (602) 659-3230. Be looking for more info on the Surface Water Issues Workshop soon.

### 2008 Event Calendar

February 12 – Paul Westerhoff – ASU, nanoparticles – an emerging contaminant  
 March 11 – Global Water Resources  
 March 18 – 21 – Arizona Science & Engineering Fair, judging Mar. 20<sup>th</sup>  
 April - AHS-AEG Student Night  
 April 8<sup>th</sup> - Lee-Anna Walker, Kirk Creswick, and Gavin Fielding. Site Characteristics using Geophysical Technology  
 May 13 - Doug Wolfe – Dinosaur Fossils in the Zuni Basin  
 May 15 – Surface Water Issues Workshop, ADWR

#### Phoenix Chapter Officers

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### ARIZONA ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS

*An affiliated chapter of the National Association of Environmental Professionals (NAEP)*

#### AZAEP FUTURE ENVIRONMENTAL PROFESSIONAL 2008 SCHOLARSHIP APPLICATION

The Arizona Association of Environmental Professionals (AZAEP) seeks outstanding students for the Future Environmental Professionals Scholarship. Four (4) scholarships of \$1,000.00 each, plus a one year student membership in AZAEP and NAEP will be awarded. The objective of the scholarship is to assist undergraduate and graduate students currently enrolled full-time in an accredited Arizona college or university to complete a degree program in preparation for a career as an environmental professional. Students must be enrolled full-time as stipulated by their program requirements. Students graduating in Spring or Summer 2008 are not eligible. All application materials must be postmarked by March 15, 2008.

Please direct any questions to Marcie Martin, Scholarship Selection Committee Chairperson, at 480-940-2320 ext 129 or [marcie.martin@amec.com](mailto:marcie.martin@amec.com).

## FLAGSTAFF CHAPTER

What's new with the Flagstaff Chapter? Some of us are counting the snowflakes...others are counting cracks in the ice of local lakes and ponds. It's been a good, cold, wet winter so far. NOAA reports that the Flagstaff area rounded out 2007 slightly below the 30-year normal for precipitation with 17.46 inches for the year, which is 5.45 inches below normal. In terms of snowfall, 25.4 inches fell during the month of December, which is quite higher than the 30-year normal of 13.4 inches for the month. So far for January the Bellemont Weather Station has recorded 21.6 inches of snow, which is just shy of the 22.4 inch normal snowfall for the month, and still short the latest snowstorm we are getting during the last week of January. Overall it's been a colder year, with much of January below the 30-year normal temperature and many single digit nights.

Skaters have enjoyed the smooth and clean

ice on Upper Lake Mary for a month now. Photo from [denisegarro.blogspot.com](http://denisegarro.blogspot.com).

The Flagstaff Chapter hosted a Holiday Party in December. It was at this meeting, and after maybe too many hot cocoas, that Margot Truini was voted the chapter President. Aregai Tecele will take over as Vice President, and Dana Downs-Heimes and Erin Young will retain their positions as Treasurer and Secretary, respectively.

The 2008 Darcy Lecturer, Michael Celia of Princeton University, is coming to Northern Arizona University on Friday, February 1, 2008 after making a stop at the University of Arizona on January 30<sup>th</sup>. His talk is titled: "Geological Storage as a Carbon Mitigation Option". The talk is at 11:45 am in the NAU Geology Building, Room 111. Email [mary.reid@nau.edu](mailto:mary.reid@nau.edu) for further information.



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## Flagstaff cont.

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### **AHS Flagstaff Chapter would like to welcome Brad Hill back to Flagstaff.**

Word got around that the City of Flagstaff hired their new Water Resources Manager. After 10 years of working for the City of Peoria, Brad Hill has returned to Flagstaff and the place he started his education in Geology. AHS was anxious to learn more about Brad and to share his repertoire.

AHS: Where did you grow up and were you influenced by geology/hydrology in that setting?

BH: I was born & raised in Southern California prior to moving to Flagstaff after high school to attend NAU. Clearly growing up next to the San Andreas fault experiencing many earthquakes makes one realize the power of mother earth. That motivated me to learn more about geology.

AHS: From which institutions did you earn your B.S. in Geology and M.S. in Hydrology? What was the focus of your undergraduate studies? How did you end up choosing hydrogeology as a focus for your M.S. studies?

BH: I obtained my B.S. in Geology from Northern Arizona University in 1982 and my M.S. in Hydrology from the University of Idaho in 1988. After the oil industry bottomed out in 1982, I thought "water" had a great future so I pursued a graduate degree that would compliment my background in geology.

AHS: Tell us about your past experience in water resources: where have you worked and what disciplines of water resources have you been involved with (consulting/water company/municipal/government)?

BH: I started my professional career in 1987 with CH2M Hill in Boise Idaho working on Superfund & RCRA clean-up sites. From

1989 to 1994 I worked for ADWR - Hydrology developing groundwater flow computer models for the Yuma, Salt River Valley & Pinal areas of Arizona. From 1994-1997 I worked at the USEPA's Kerr Environmental Research National Laboratory in Oklahoma managing their Center for Subsurface Modeling group which provided technical support to all regions of the USA. The most unique opportunity with the USEPA was a field trip onto the highly restricted Nevada Test Site to visit Yucca Flats, which was "ground zero" for the 1960s above ground nuclear weapons testing. Its now actually on the National Historic Registry, however, few people get to see it and everything that remains. The visit was in support of computer modeling of radio-nuclide subsurface migration off site. I then switched from technical work over to the water policy & resource management arena for the City of Peoria from 1997 - 2007 managing their water resources, water conservation & departmental GIS programs. Which takes me to the last 2 months bringing these experiences to the City of Flagstaff and creating their new water resources program.

AHS: Do you have goals/ideas that you would like to see carried out as the Water Resources Manager for the City of Flagstaff? What are your main duties as the Water Resources Manager?

BH: While I'm still a little new, my first thoughts are to help the City quantify its long-term sustainable groundwater resources, help identify a vision toward their water resource future and continue to build upon their great work in collaborating with other professionals/agencies in the local water resource arena.

AHS: What is your favorite part about living in Flagstaff so far?

BH: It's a complete deja vu' as I lived here for 8 years between 1977-1985. I met with wife (Julie) here in 1984 so its wonderful to be



## Flagstaff cont.

(Continued from page 8)

back "home" in the high country of Northern Arizona and a great place to raise my two children (9 & 11 years). Oh yeah, I like the Peaks, pine trees and snow too!

AHS: Thank you Brad for answering our questions. The Flagstaff Chapter would like to welcome you to your professional career in Flagstaff. We look forward to working with you!

### Flagstaff Chapter Officers

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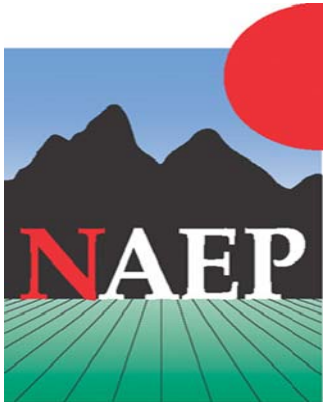
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[ddownshe@ch2m.com](mailto:ddownshe@ch2m.com)

The City of Peoria is now seeking applicants for the position of Water Resources Manager. Closing date is February 15. Visit <http://www.peoriaaz.com/index1.htm> and click on "Human Resources" under Departments for the job description and application forms.

## Announcements



**CHANGING CLIMATES™**  
**NAEP/AEP Annual Conference**  
 The Omni Hotel/Downtown San Diego  
 March 25 - 28, 2008

Hot off the press! The NAEP and CAEP 2008 joint pre-conference agenda and conference registration are now available on-line at [www.naep.org](http://www.naep.org). The 2008 NAEP/CAEP Joint Conference will be held March 25-28, 2008 at the beautiful Omni San Diego.

The joint conference committee has produced an informative educational conference agenda with the theme, "Changing Climates" featuring over 40 sessions, 25 exhibitors, 2 informative Special Sessions, 5 mobile workshops and top keynote speakers- Huell Howser – Host of "California Green", and Julia Eirperin with the Washington Post.

Please go to [www.naep.org](http://www.naep.org) for the most up-to-date Pre-Conference Agenda, Conference Registration and Hotel Reservations and Things to Do in San Diego.

Only 1 Exhibit booth and 2 tablespots remain. Sponsorships are still available. Please contact Donna Carter at [naepfl@verizon.net](mailto:naepfl@verizon.net) for availability. For additional questions regarding the conference, please contact Donna Carter at the NAEP Conference office, [naepfl@verizon.net](mailto:naepfl@verizon.net) or Lynne Bynder at the AEP Conference office, [lbynder@meetingsxceptional.com](mailto:lbynder@meetingsxceptional.com).

Please register today and join us in beautiful San Diego for this "Not to be Missed Conference!"

Sincerely,

NAEP/CAEP 2008 Conference Committee  
 P.S. We will be holding a golf outing the day as well and have attached the information to this email. Please plan to extend your stay in San Diego for a fun filled day of golf, lunch, and excitement!!

## Announcements

**Donations to AHS Foundation are considered charitable 501(c)(3) for tax purposes.**

**Donations of any amount may be sent to the AHSF Treasurer or the AHSF President.  
AHS Foundation  
A. Michael Geddis,  
Treasurer  
2253 E Mitchell St.  
Tucson, AZ 85719**

The AHS web site has a new document posted for your information. "A Strategy for Federal Science and Technology to Support Water Availability and Quality in the United States". The document was prepared by the Executive Office of the President of the United States.

Did you know that AHS has a

# JOBS

page on our web site? Visit:

Www.azhydrosoc.org and then click on JOBS to view the most recent postings. If you would like to post an opening just email it to jgmerideth@aol.com and Jeanie will post it for you.

Call for Papers - CAP Award for Water Research

**First Place Award: \$1,000  
Second Place Award: \$500**

Papers are now being accepted for the CAP Award for Water Research. Papers should focus on water issues that affect central and southern Arizona and the Colorado River, including legal, economic, political, environmental, or water management issues, as well as any other issue that might be of interest to CAP or Arizona water users. Winners will present their research at the Arizona Hydrological Society's annual symposium.

The CAP Award is available to students at any college or university in the State of Arizona. To apply, submit your complete paper online at [www.cap-az.com](http://www.cap-az.com).

**Deadline: June 1**

Get more information on the web at [www.cap-az.com](http://www.cap-az.com)



## Announcements



### GROUNDWATER RESOURCES ASSOCIATION of California

*Site Closure Strategies*  
February 20-21, 2008  
Hilton Hotel, Concord, CA

#### Co-Sponsors:

CH2M HILL | Locus Technologies | Thermal Remediation Services

**Registration Forms** - <http://www.grac.org/closurereg.htm>  
**Program Agenda** - <http://www.grac.org/closureagenda.pdf>  
**Hotel Information** - <http://www.grac.org/closurehotel.pdf>  
**Sponsor Exhibitor Opportunities** - <http://www.grac.org/se.pdf>

With featured speakers from EPA Headquarters, EPA Region IX, the RWQCB, DTSC, private industry (e.g., Honeywell) and the environmental consulting community, GRA is pleased to announce this comprehensive symposium on Site Closure Strategies.

A large number of the technical abstracts submitted to GRA will be presented in platform and poster sessions. Topics presented will cover a wide range of closure strategies including EPA's Technical Impracticability (TI) Waivers, the RWQCB's Containment Zone, an industry insurance-based approach and Triad methodologies. In addition, the San Francisco RWQCB will be introducing its recommended closure criteria for low threat solvents and other non-fuel cases. Several cases studies will be featured throughout the symposium.

This symposium is timely and the topics covered important in light of the large number of contaminated sites that seem to be mired in never-ending remediation costs with little improvement in recovery results. The long-term environmental commitments require precious resources that are always limited. In the absence of appropriate closure strategies, it is not possible to reach agreements among the stakeholders as to when to stop active remediation or monitoring. Instead, operations are extended, especially when cleanup goals are difficult to achieve using current technologies.

Site closure strategies define the boundaries of the remediation program. They are used to establish the standards used to evaluate if the performance of the remedial project has achieved the objectives and if the activities, passive or active, can be terminated. Closure strategies, therefore, are vital because they determine the data needed to demonstrate that the performance objectives have been met.

Site strategies to achieve expedited site characterization/remediation and regulatory closure to facilitate Brownfield development will also be the interest of this seminar. The sky-rocket property value and the shortage of land for development have become a real challenge in California and demand for redevelopment of Brownfield properties has become not only a political drive but also a business drive.

> **View Program Agenda** - <http://www.grac.org/closureagenda.pdf>

#### Sponsor Exhibitor Opportunities

If you are interested in exhibiting your organization's services or products, or being an event sponsor, please contact Mary Megarry ([mmegarry@nossaman.com](mailto:mmegarry@nossaman.com); 916-446-3626) or visit GRA's website for details (<http://www.grac.org/se.pdf>). GRA welcomes co-sponsors as well as lunch, break and reception sponsors.

## 2008 Annual Symposium

AIPG Annual Meeting  
 Arizona Hydrological Society  
 3<sup>rd</sup> International Professional Geologic Conference  
 September 20-24, 2008

*Changing Waterscapes and Water Ethics for the 21st Century and  
 Global Geoscience Practice, Standards, Ethics, and Accountability*

Flagstaff, Arizona--Radisson Hotel and Convention Center

You are invited to participate in the symposium on Changing Waterscapes and Water Ethics for the 21st Century. This milestone event is organized by a committee of the American Institute of Professional Geologists (AIPG), the Arizona Hydrological Society (AHS), and the 3rd International Professional Geology Conference (3rd IPGC). Sponsors include: AAPG-DPA, AHS, AIPG, ASBOG, CCPG, EFG, IYPE, NAU, and USGS.

The symposium will be held in Flagstaff, Arizona from September 20-24, 2008. Presentations and Poster Sessions will be held September 22 and 23, 2008.

The symposium Steering Committee is lead by General Chairperson Barbara Murphy, RG, CPG and Vice Chairman Dr. Aregai Teclé, Professor of Hydrology, School of Forestry, NAU and Dr. David Best, Professor of Geology, College of Engineering and Natural Sciences, NAU.

### Location

The symposium itself will take place at the convention center at the Northern Arizona University campus in picturesque Flagstaff. Field trips will be offered to the Grand Canyon, the San Francisco volcanic field, the Jerome mining district, to the red rocks of Sedona, Walnut Canyon Anasazi cliff dwellings, and many more exceptional geological and cultural sites.

### Symposium Highlights

The symposium includes technical sessions, poster sessions, workshops, welcome reception, technical tours, and field trips.

#### Workshops:

- Uranium
- Technical Writing Course
- Additional workshops will be announced soon.

- Verde Valley Geology
- Guest Trip to Sedona
- Grand Canyon Geology and Raft Trip
- Sunset Crater, San Francisco Peak, other volcanics.
- Day trip to the Jerome Mining district. Mine visit and mineral collecting.
- Water Resources related field trips.

#### Field Trips:

- Hiking trip down Bright Angel Trail to Colorado River
- One day field trip to South Rim Grand Canyon
- Meteor Crater

**In conjunction with the Association of Earth Science Editors Annual Meeting**  
***Sponsored by: AIPG, AHS, CCPG, EFG, ASBOG, NAU, AAPG-DPA, USGS, and IYPE.***

## 2008 Annual Symposium Cont.

### How to Submit an Abstract

To have your abstract considered for a presentation or poster session, please submit a one-page abstract and the Abstract Submittal form by April 15, 2008. Abstracts must be typed, in WORD, single-spaced, 12-point type and should not exceed one page. Please include the presentation title and primary speaker/author at the top of the abstract and submit with the Abstract Submittal Form (form will be sent out shortly via e-mail). Select two abstract subject areas under which you would like to have your abstract considered. Authors will be notified of abstract acceptance by May 15, 2008.

### Abstract Subject Areas

- **ARR** - Artificial Recharge
- **AQR** - Aquifer Restoration
- **CRB** - Colorado River Basin Climate, Hydrology and Ethics: Past, Present and Future
- **EWE** - Energy/Water/Ethics: Moderated Discussion
- **EWM** - Ethics of Water Use in Mining: Case Studies
- **EWP** - Ethics vs. Water Policies
- **FWM** - Forest Watershed Management
- **GIS** - GIS and Water Resources
- **GIE** - Groundwater Issues and Ethics
- **GR** - Groundwater Restoration
- **HEN** - Human vs. Ecosystem Needs
- **ICP** - International Cooperative Programs and Practice Issues
- **MDE** - Models, Data and Ethics
- **PE** - Professional Ethics
- **PUW** - Politics of Urban Water Management
- **QLE** - Quality of Life vs. Ethics of Water
- **RTA** - Re-use Technologies and Approaches
- **REC** - Riparian Ecosystems in Changing Waterscapes
- **SWP** - Southwest Water Policy Issues
- **SWG** - Surface Water – Groundwater: A Shared Resource
- **TWP** - Tribal Water Practices, Policies, and Ethics
- **URW** - Urban and Rural Water Policies and Practices
- **WEC** - Water Ethics in a Changing Global Climate
- **WEM** - Water Ethics in the 21<sup>st</sup> Century: Moderated Discussion
- **WKN** - Water Knows No Boundary: Border Conflicts
- **WL** - Water Law
- **WOP** - Water Ownership: Public vs. Private
- **WQM** - Water Quality of Mining Operations: Old Problems - New Solutions
- **WQS** - Water Quality: Science, Policy, and Ethics
- **WSP** - Water Supply vs. Public Policy: Ethics Under Pressure

Please visit the web site for many sponsor opportunities:  
<http://www.aipg.org/2008/AIPG-AHS-3IPGC.htm>

## Announcements

### A Call for a Presidential Debate on Science and Technology

Before we vote in the elections, we need to know where the candidates stand on the far-reaching scientific issues and their plans for the future of the U.S. in science. These issues affect us all (water shortages, global warming, peak oil, etc). If you agree please go to this web site [www.sciencedebate2008.com](http://www.sciencedebate2008.com) and sign a petition urging a debate of science issues for the 2008 Presidential candidates.

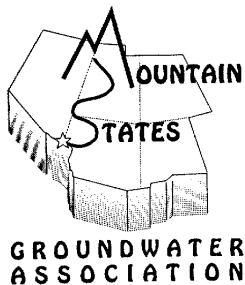
The Arizona Hydrological Society does not take a position on any current or future political party, political issue or candidate. This information is being presented to you as a note to those who would be interested.

### AHS Newsletter Articles

**Anyone wishing to submit articles of interest to AHS members may do so by emailing your article to [jgmerideth@aol.com](mailto:jgmerideth@aol.com).**

**Deadline is the 15th of the month prior to publication.**

**The AHS Editorial team reserves the right to publish or not publish your article.**



### **Mountain States Ground Water Expo February 14 – February 16, 2008**

**The Mountain States Ground Water Expo is hosted by the Water Well and Ground Water Associations of Arizona, Colorado, Nevada, New Mexico and Utah**

**For further information call: (480) 609-3999**

**Fax: (480) 609-3939 or email:**

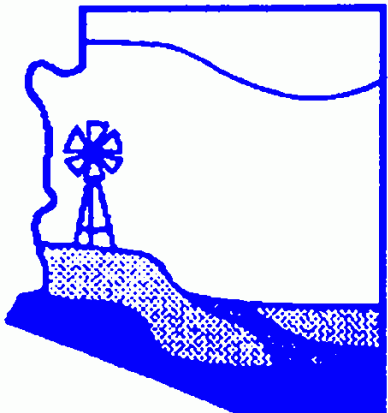
**[msgwa@assocmgrs.com](mailto:msgwa@assocmgrs.com)**

**[www.mountainstatesgroundwater.com](http://www.mountainstatesgroundwater.com)**

### NOTE TO MEMBERSHIP:

In this newsletter you may find several web addresses that appear to be links to web sites. When you open this document please keep in mind this is a pdf file and many if not all of the links will not connect you directly to these web sites. If you wish to visit these sites (and we encourage you to do so) please type in the web address to your web browser and click go. These addresses are being published for your convenience and AHS assumes no responsibility for their content.

# MEMBERSHIP APPLICATION



## Arizona Hydrological Society

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[azhydro@comcast.net](mailto:azhydro@comcast.net)

[www.azhydrosoc.org](http://www.azhydrosoc.org)

ARIZONA HYDROLOGICAL SOCIETY c/o Jeanie Merideth Association Manager  
PMB #139; 3305 N. Swan Rd #109, Tucson, AZ 85712  
Membership Application (Dues: 1 year \$45, \$15 for students)

Name: \_\_\_\_\_ Position: \_\_\_\_\_

Company: \_\_\_\_\_ Email: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Work Phone: \_\_\_\_\_ Home Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

*In addition to my dues, I am enclosing*

\$ \_\_\_\_\_ Herman Bouwer Intern Scholarship fund (Phoenix),  
\$ \_\_\_\_\_ Leonard C. Halpenny Intern Scholarship fund (Tucson),  
\$ \_\_\_\_\_ for the SARSEF Scholarship fund,  
and/or \$ \_\_\_\_\_ for the state-wide AHS General Scholarship fund.

Total amount enclosed: \$ \_\_\_\_\_

Chapter Affiliation:

\_\_\_\_\_ Tucson

\_\_\_\_\_ Phoenix

\_\_\_\_\_ Flagstaff