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### Upcoming Events

#### October 5-9, 2008

2008 Joint Annual Meeting - GSA-SSSA-ASA-CSSA-GCAGS-GCSSEPM, Houston, TX

#### December 15-19, 2008

AGU Fall Meeting 2008, San Francisco, CA

#### April 19-23, 2009

NGWA 2009 Ground Water Summit Tucson, Arizona

#### May 13-16, 2009

NovCare 2009 Conference, Helmholtz Center for Environmental Research - UFZ, Leipzig, Germany

#### July 12-17, 2009

Gordon Research Conference on Catchment Science, Proctor Academy - Andover, NH

#### August 11-14, 2009

33<sup>rd</sup> IAHR Congress; Vancouver, BC

[Abstracts Due](#) Dec 1, '08

### For Your Information

#### CUAHSI at GSA in Houston -

October 5-9 - Please visit our double-wide exhibit booth (#146) where, among other things, we will be discussing and demonstrating the new and improved HIS version 1.1 hydrologic analysis software tools on 10/6 and 10/7. [[more information about CUAHSI-HIS](#)]

We all rely on the water cycle, but how does it actually work?

## Mark Your Calendars! CUAHSI's Fall 2008 Cyberseminar Schedule

### Fall 2008 Schedule

**October 10, 2008;** 3:00pm ET

- **Scott Collins**, University of New Mexico and Sevilleta LTER  
**Title:** Integrated Science for Society and the Environment: an integrated research plan

**October 17, 2008;** 3:00pm ET

- **Cecelia DeLuca**, Head, Earth System Modeling Infrastructure Section National Center for Atmospheric Research

**November 7, 2008;** 3:00pm ET

- **Edward Rutherford**, University of Michigan Natural Resources and Environment

**November 14, 2008;** 3:00pm ET

- **Aris Georgakakos**, Director of the Georgia Water Resource Institute School of Civil and Environmental Engineering Georgia Tech

For additional information, please see CUAHSI's [Cyberseminars Web page](#).

### Podcast of the [Reds Wolman lecture](#) Now Available

Bob Hirsch, past Associate Director for Water at the USGS, gave a riveting talk at the [CUAHSI Biennial Colloquium](#), which served as the Inaugural Reds Wolman Lecture on Humans and Water. This talk is now available through a USGS [podcast](#) and as a [transcript](#). Bob shared his perspectives on the challenges and prospects for hydrologic science. Those who attended the Colloquium found this to be a thought-provoking and cogent survey of the state of our science. You may wish to share this talk with your students.

**Links:** Podcast Web page at [water.usgs.gov/dispatch/2008/podcast/](http://water.usgs.gov/dispatch/2008/podcast/) | Direct link to the lecture at [water.usgs.gov/dispatch/2008/podcast/wolman-lecture-transcript.html](http://water.usgs.gov/dispatch/2008/podcast/wolman-lecture-transcript.html)

### Managing the Australian Water Crisis through investment in water information research - presentation by David Lemon and Peter Fitch, CSIRO, Australia

Large areas of Australia's food production zones are now entering their 8th straight year of drought. This has led to unprecedented lows in water storage inflows and river flows and continued lack of water for irrigated agriculture. Worse still, the water scarcity is now threatening the water supply to a number of towns along the Murray Darling system and many environmental assets are reaching points beyond which there is no

**Scientists at UC Berkeley are embarking on a new project** to understand how global warming is affecting our fresh water supply. And they're doing it by tracking individual raindrops in Mendocino and north of Lake Tahoe. [[view the movie](#)]

**Florida International University, University of Miami and Princeton University Team** Awarded a University Research Center (URC) Program grant by NASA—*WaterSCAPES: Science of Coupled Aquatic Processes in Ecosystems from Space*—under a FY2008 Cooperative Agreement Notice. This URC focuses on an integrated set of research and education activities centered on the coupled interaction between the hydrologic cycle and vegetation dynamics. [[read more](#)]

## Contact CUAHSI

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hope for recovery. This crisis has led to a \$12B investment by the Australian government to tackle many of the issues presented by this situation.

The Government also believes that management of the water crisis requires a new generation of water information system to underpin regular water accounting and assessment programs which will inform management and policy. This responsibility has been assigned to the Bureau of Meteorology which will be supported by a research alliance (known as WIRADA) with Australia's peak research organisation, CSIRO. WIRADA focuses on the innovation required for the Bureau to meet its newly gained role as the nation's water information manager and assessment provider.

WIRADA has four main areas of research: Water Information Systems, Foundation Data Sets, Water Accounting and Assessment and Water Resource Forecasting. Early projects are concentrating on Water Data Transfer Standards, Management of framework data sets and development of next generation hydrological workbenches.

This talk provided additional context on the water crisis, elaborated on the WIRADA research program, discussed some of the early results of this work as well as described plans for the next year. [[view the presentation](#)]

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## Nominations Open for CUAHSI Board of Directors

All representatives from CUAHSI member institutions are eligible to run for the CUAHSI Board. (Note that representatives from affiliate members and from international affiliates are not eligible, however.). Claire Welty is chairing the nominations committee this year which also includes George Hornberger, Eric Wood, and Juan Valdes. If you are interested in running for the CUAHSI Board or wish to nominate another representative, please contact any member of the nominating committee by **October 9**. To read more about the formal process, please refer to the [CUAHSI By-Laws](#), Articles [III, Section 4](#) and [VIII, Section 4](#).

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## It's FREE: StarHydro distributed hydrological analysis application software

We would like to bring to your attention a free software package, called StarHydro, that was just released by Rafael L. Bras and Dara Entekhabi. You may find this educational package useful in your classes. StarHydro covers concepts of fluvial geomorphology and watershed hydrology. StarHydro was developed as an aid in the teaching of hydrology and fluvial geomorphology. It was first used in an MIT undergraduate Hydrology course during fall 2007. The package will evolve in time but at the moment it teaches hydrologic concepts around ideas of fluvial geomorphology. The present capabilities are built around ideas appearing in *Hydrology: An Introduction to Hydrologic Science*, by R.L. Bras. It operates on digital elevation data and helps teach students concepts like Horton ratios, hypsometric curves, link concentrations functions, slope area-relationships, width functions and hillslope-channel routing of effective precipitation. It explores the response of basins as a function of geomorphology; presents the idea of instantaneous unit hydrographs (IUH) and their derivation as a function of geomorphologic measures; and allows the student to obtain basin response using the convolution of inputs and the IUH. Furthermore StarHydro allows the student to explore concepts of hydrologic similarity and regionalization using a catalog of hydrologic/geomorphologic indices. StarHydro operates digital, gridded representations of basins that are readily available. It processes DEMs, produces drainage systems and corrects for pits. StarHydro is designed as an open-ended and user friendly tool. It permits various levels of integration with the curriculum, from single problem sets to use as a comprehensive teaching aid. [[more information](#)]

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## [American Institute of Biological Sciences](#) **Public Policy Office Highlights**

**House Passes No Child Left Inside:** In an effort to prepare students for the workforce of the 21st century and combat "nature-deficit disorder," the House passed the No Child Left Inside Act of 2008 (H.R. 3036) on 18 September by a vote of 293-109. No Child Left Inside would establish a "national capacity environmental education grant program" to encourage the development of programs which "help the field of environmental education become more effective and widely practiced." If passed by the Senate and signed by the President, these environmental education grants could be used for the development of state environmental literacy plans, implementing academic standards and curricula, evaluating the effectiveness of environmental education programs in improving student's scores in other academic areas, and increasing the number of environmental educators in elementary and secondary schools. [[more information](#)]

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