

BULLETIN

Fall-Winter 2006

"American Institute of Hydrology, the Society for Registered/Certified Hydrologists"

Volume 24, Issue 3-4



CALL FOR PAPERS

Abstracts Wanted for 2007 Annual Conference

There is increasing recognition by governing agencies and industry, for the need of technical integration in water-resources planning and management. The AIH conference is intended to present an opportunity for scientists and managers in all water-related disciplines to gather and interact together. What kind of partnerships have been developed between hydrologists, engineers, geologists, chemists, biologists and other disciplines to develop current hydrology methods? What kinds of knowledge are required to make good hydrologic decisions and practice good science? What kinds of partnerships exist between the users of hydrologic information?

To participate in this conference and present a paper, please submit an abstract of no more than 200 words to AIH Headquarters. Abstracts for papers and posters are due **January 31, 2007**. Manuscripts are not mandatory, but will be due **April 30, 2007**. Abstracts will be printed and distributed as part of the Meeting Program. Authors are encouraged to submit their papers for publication in the Journal of the American Institute of Hydrology.

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STUDENT PAPER / POSTER COMPETITION

The 2007 Annual Meeting & International Conference will feature a student paper and poster competition. **A prize of \$1500 in scholarships** will be presented for the best paper or poster presentation, to be judged by a panel of certified Professional Hydrologists at the conference. Presentations will be judged on their content as well as the complexity of the material. Only full time students, currently seeking a degree in hydrology or related fields may enter this competition. **To enter the competition, please submit an abstract of no more than 200 words to AIH.**

Papers co-authored by professors or non-students are acceptable, but non-student co-authors cannot share the prize in any way and the student author must make the presentation. In the case of papers/posters with multiple student authors the presenter will receive the award; or the award may be split among the students or may be split by any other pre-arrangement, submitted in writing to AIH. In the case of a poster presentation where more than one student author presents, then the award will split between the student presenters.

Abstracts will be printed as part of the Meeting Program. Posters and papers accepted for presentation at the conference have an opportunity to be published after the meeting. Authors may submit their papers for publication in the Journal of the American Institute of Hydrology.

If you would like to make a presentation, please contact AIH at 1-800-970-4244 or email aihydro@aol.com.

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Editorial Board

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Material published in this newsletter may be reprinted with proper attribution. AIH is a professional organization providing certification of competent professionals, in all fields of the hydrologic sciences. The Institute is dedicated to the advancement of hydrology and hydrogeology as a science and profession, and to the professional education and advancement of its members. Contributions and articles of interest to the general membership of AIH are welcomed and should be submitted to the AIH office. Advertisements should also be submitted to the AIH office.

Advertisement Rates are as follows:

SPACE	RATE	SIZE
1 page	\$595	9½ x 7½"
1/2 page	\$349	9½ x 3½" (1 column)
1/2 page	\$349	4½ x 7½" (1 banner)
1/4 page	\$199	4½ x 3½" (1/2 column)
1/8 page	\$125	2¼ x 3½" (1/4 column)

Advertisers agreeing to publish an ad in three consecutive issues will receive FREE publication in the fourth issue.

Emails for the Executive Committee

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Email / Web Page Addresses of AIH

AIH Office	AIHydro@aol.com
AIH Web Page	www.aihydro.org
AIH Web Manager	bjesterstudio@aol.com

PRESIDENT'S MESSAGE

This is my last message to you as President, as my term ends on December 31, 2006. I want to thank you for your suggestions and comments so as to make AIH more robust. Also, I want to thank the members of our Executive Committee for their unselfish dedication and hard work during the past two years: Tony Laenen, Emmitt Witt, Bob Hordon, Rolando Bravo, Steve Nix, Doug Glysson, Mustafa Aral, Bill Fetter and Pat Leahy. In addition, many thanks to Jerry Seaburn, Cathy Seaburn, and BJ Seaburn for helping us navigate and keeping us on course.

In October the Executive Committee and office staff met in Smyrna, Georgia, to have a thorough discussion on issues focusing on strategic planning. Larry Neal, AIH member and Principal Consultant with MACTEC, facilitated a discussion addressing strengths, weaknesses, opportunities, threats, and challenges facing AIH. Our sincerest thanks to Larry for helping substantially with our strategic planning.

Our 2007 Annual Meeting and International Conference will be held in Sparks (Reno), Nevada, during April 22-25. The general theme of the conference is Integrated Watershed Management: Partnerships in Science, Technology, and Planning. I encourage all of you to submit abstracts (deadline: January 31, 2007) and participate in this important conference. For information on abstract submission, visit www.aihydro.org.

During the aforementioned conference, we will recognize colleagues who have made outstanding contributions to surface water hydrology, ground water hydrology, and water quality as well as outstanding contributions and dedicated service to AIH. Please submit nominations to Emmitt Witt for the Ray K. Linsley (surface water), Charles V. Theis (ground water), Robert Wetzel (water quality), and AIH Founders (service) awards.

As of January 1, 2007, Tony Laenen will serve as President for a two-year term, with Miguel Medina as President-Elect, Neven Kresic as Vice President for International Affairs, and Allen Gookin as Vice President for Institutional Development. Emmitt Witt will continue to serve as General Secretary, Bob Hordon as Treasurer, Steve Nix as Vice President for Academic Affairs, and Rolando Bravo and Doug Glysson as Chairman and Secretary of the Board of Registration, respectively. Please do not hesitate to contact any or all of the members of the Executive Committee with ideas and suggestions to help AIH grow and be of service to the membership and the hydrologic community in general.

Best wishes to all for a Merry Christmas and a Happy Holiday Season.

Miguel Marino
AIH President



AIH 2007 Annual Meeting & International Conference Integrated Watershed Management: Partnerships in Science, Technology, and Planning

CONFERENCE INTENT

The conference will give a chance to discuss the effects of urbanization, agriculture, industry, forestry, etc. and the research done and needed to better define these effects. It is also an opportunity for managerial viewpoints of cities, factories, farmers, fisheries, foresters, etc. to answer questions on how technical problems are brought

together and solved, and how management issues are decided between competing resources. What kind of partnerships have been developed between hydrologists, engineers, geologists, chemists, biologists and other disciplines to develop current hydrology methods? What kinds of knowledge are required to make good hydrologic decisions and practice good science? What kinds of partnerships exist between the users of hydrologic information?

PROPOSED TECHNICAL PROGRAM

The technical program for the 2007 Conference will cover all disciplines of hydrology with emphasis on the combined application of these disciplines to address complex water resource management issues. Integrated hydrology themes that should be considered by potential speakers include:

- Carbonate Aquifer System of Nevada/Utah
- Emerging Contaminants
- Hydrologic Effects Associated with Climate Change
- Lakes and Reservoirs
- Cooperative Conservation Efforts
- San Francisco Bay-Delta Program
- Klamath Basin Hydrologic Issues
- Integrating Modeling Concepts
- Adaptive Management
- Stream and Groundwater Interactions

WHO SHOULD ATTEND

This conference is recommended for scientists and engineers in all fields of the hydrologic sciences, government officials with environmental responsibilities, land-use planners, students of hydrology, hydrologists wishing to become registered, and ALL other persons dealing with water-related issues. This conference will provide a forum for discussion and exchange of information on a broad spectrum of areas in hydrology, hydrogeology, water-quality, water resources, planning and management, aquatic and marine biology, and climatology.

CONFERENCE VENUE

The conference will be held at:

John Ascuaga's Nugget
1100 Nugget Avenue
Sparks, Nevada 89432



The conference rate will be \$80 plus tax (USD) per night, for single or double occupancy. Rooms must be reserved before March 31, 2007 by directly calling:

800-648-1177 or 775-356-3300

Online at www.janugget.com (Code GAIH)

Please indicate that you are participating in the AIH Conference, Block Code GAIH.

PROPOSED FIELD TRIPS

Lake Tahoe Study: Tim Rowe, U.S. Geological Survey



Continued on Page 4

Conference Exhibitor Information

On behalf of the American Institute of Hydrology, the organizing committee, and the sponsoring organizations, we invite you to exhibit at the AIH 2007 Annual Meeting and International Conference; and to participate in discussions concerning one of the most important issues facing the world today -- Watershed Management.

GENERAL INFORMATION

Your booth at the 2007 AIH Annual Meeting & International Conference will guarantee you direct access to the professionals who are actively employed in the field of hydrology and hydrogeology. These professionals come from industry, academia, consulting firms, government agencies and commercial industries. The attendees have interests in many different products and services, instruments, scientific publications and technical supplies and come from many different countries throughout the world.

DATES

The 2007 AIH Annual Meeting & International Conference dates will be Sunday, April 22 through Wednesday, April 25, 2007. All technical and scientific sessions, short courses, general sessions, and exhibit area will be held at John Ascuaga's Nugget. There will be over 100 oral and poster presentations. Registration will be located near the exhibit area. All Reception and Break functions will be located in the Exhibit Area.

EXHIBITOR REGISTRATION

Exhibitor badges will be available at the registration booth. All exhibit representatives are required to wear badges while attending the meeting. Each commercial exhibitor is provided one complimentary conference registration. If more are needed, they will be available for an additional charge of \$50 for each day. Each additional staff/associate registration will include the luncheon, but the awards banquet ticket will be an additional cost. No additional personnel may be in the exhibit area without being registered. Please complete and return the enclosed forms to ensure that you receive preprinted badges.

SPACE ALLOCATION

To ensure that you get your preference on the location, send in your reservation forms with a 50% deposit today. Booths will be assigned on a first-come basis -- determined by the return date of reservation with deposit by the exhibitor. All fees must be paid in full prior to the meeting.

All Reception / Break functions will be in the Exhibit Area.

BOOTH RENTAL

The 8' x 10' booth rental rate is \$795.00 USD. Rental includes:

- 8' x 10' booth set-up
- Polished aluminum framework and bases with eight-foot high burgundy colored back drape and two 36" high side drapery dividers
- One 6 foot skirted table with two chairs
- One trash can
- One 40" x 6" sign
- One 110 electrical outlet
- Morning and afternoon breaks in the Exhibit Area
- Evening Receptions held in the Exhibit Area

HOURS OF OPERATION

Booths shall remain open during conference hours, including the Receptions.

- Sunday 6 p.m. to 8 p.m.
- Monday/Tuesday . . 10 a.m. to 8 p.m.
- Wednesday 10 a.m. to 1 p.m.

INSTALLATION

Exhibit set-up begins at 2:00 p.m. on Sunday, April 22, 2007 and must be completed prior to the Welcome Reception beginning at 6:00 p.m.

DISMANTLING AND REMOVAL

Exhibits shall be dismantled and removed after the official exhibit closing on Wednesday, April 25, 2007, at 1:00 p.m.

SECURITY

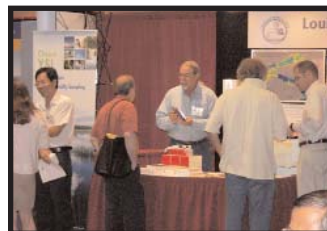
The exhibit area will be locked and all reasonable security precautions will be taken. However, exhibitors are responsible for their exhibit items and may want to remove items if they are concerned.

CANCELLATION

A full refund of all money paid to the AIH Conference will be returned to the exhibitor if written notice of cancellation is received at the AIH office 90 or more days prior to the meeting. If written cancellation is received at the AIH office between 45 and 90 days, 50% of all money paid to AIH will be returned to the exhibitor. There is no refund for cancellations received within 45 days of conference start date.

SERVICE INFORMATION

All confirmed exhibitors will receive shipping, furniture and electrical information. If you need additional information prior to sending in your Registration Form, please call the AIH Conference Headquarters at 800-970-4244.





Registration Form

**American Institute of Hydrology
2007 Annual Meeting
& International Conference
"Integrated Watershed Management:
Partnerships in Science,
Technology and Planning"
April 22-25, 2007
Reno, Nevada**

REGISTRATION INFORMATION

Name: _____
 Title: _____
 Company: _____
 Address: _____
 City: _____
 State _____ Zip: _____
 Country: _____
 Phone: _____
 Fax: _____
 Email: _____
 Please send information on Short Courses to me? _____ YES _____ NO

PLEASE CHECK ONE:

AIH Member-Certificate Number: _____ Non-Member

FULL REGISTRATION:

Includes admission to all conference sessions, final program, Awards Dinner, Proceedings copy, breaks, planned luncheons and receptions.

AIH Members	\$350 (by 2/16/07)	\$450 (after 2/16/07)	\$ _____
Non-Members	\$395 (by 2/16/07)	\$495 (after 2/16/07)	\$ _____

ONE DAY REGISTRATION:

Includes admission to all conference sessions, final program and breaks on the day for which the participant is registered.

_____ Sunday	_____ Monday	_____ Tuesday	_____ Wednesday
AIH Members	\$150 (by 2/16/07)	\$175 (after 2/16/07)	\$ _____
Non-Members	\$160 (by 2/16/07)	\$185 (after 2/16/07)	\$ _____

STUDENT REGISTRATION:

Includes admission to all conference sessions, final program, breaks and receptions.

AIH Members	\$25 (by 2/16/07)	\$30 (after 2/16/07)	\$ _____
Non-Members	\$25 (by 2/16/07)	\$30 (after 2/16/07)	\$ _____

ACCOMPANYING PARTNER:

Includes admissions to breaks and Awards Dinner (Does not include admission to the conference sessions.)

Name: _____

AIH Members	\$35 (by 2/16/07)	\$40 (after 2/16/07)	\$ _____
Non-Members	\$40 (by 2/16/07)	\$45 (after 2/16/07)	\$ _____

MEALS FOR ONE DAY, STUDENT, PARTNER/SPOUSE AND GUESTS:

Monday Luncheon	\$25 (by 2/16/07)	\$30 (after 2/16/07)	\$ _____
Monday Awards Dinner	\$40 (by 2/16/07)	\$50 (after 2/16/07)	\$ _____
Tuesday Luncheon	\$25 (by 2/16/07)	\$30 (after 2/16/07)	\$ _____
Wednesday Luncheon	\$25 (by 2/16/07)	\$30 (after 2/16/07)	\$ _____

PROCEEDINGS:

Additional Copies	\$60	\$ _____
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TOTAL AMOUNT DUE:

\$ _____

HOTEL DURING MEETING:

CANCELLATION POLICY:

- Before February 16, 2007 - Registration Fee, less \$50.00
- Between February 16, 2007 and March 16, 2007 - 50% of Registration Fee
- After March 16, 2007 - No refund allowed

Cancellation must be received in writing at AIH Offices by dates shown

★ SPECIAL OFFER TO NON-MEMBERS ★

AIH will waive your Membership Application Fee (a \$100 Savings!) For Non-members attending with a Full Registration. Your application must be received at AIH within 60 days from date of the conference. Applications available at Conference Registration desk or Online at www.aihydro.org.

PAYMENT METHOD

Full payment must accompany completed registration form.

Check:

Payment made by check (Only U. S. Dollars, drawn on a U.S. Bank) payable to AIH Conference.

Check No: _____

Purchase Order No: (if applicable) _____

Credit Card: (check one)

Visa MasterCard
 Amex Diner's

Card No: _____

V-Code No: _____

Expiration Date: _____

Cardholder Signature: _____

Date: _____

Please return this completed form with full payment to:



AIH Conference Headquarters
 300 Village Green Cir., Suite 201
 Smyrna, GA 30080, USA
 Tel: (770) 384-1634
 Fax: (770) 438-6172
 Email: AIHydro@aol.com

American Institute of Professional Geologists SCHOLARSHIP PROGRAM

Purpose

To assist students with college education costs and to promote student participation in the American Institute of Professional Geologists (AIPG). Up to four scholarships will be awarded to declared undergraduate geological sciences majors who are at least sophomores.

Scholarship Awards

Scholarship awards in the amount of \$1,000.00 each will be made to eligible students attending a college or university in the U.S. Scholarships are to be used to support tuition and/or room and board.

Eligibility Requirements

Any student who is majoring in geology (or earth science), is at least a sophomore, and is attending a four-year accredited college or university in the U.S. can apply. Also, the student must be either a student member of AIPG or must have applied for student membership at the time the application for the scholarship is submitted.

Each student who is awarded a scholarship agrees, by accepting the scholarship, to prepare a 600 to 800 word article for publication in *The Professional Geologist*. The subject of the article must be related to a timely professional issue.

Application Process

Applicants must submit: a letter of interest with name, mail and e-mail addresses, and telephone number; proof of enrollment in an eligible geological sciences program, transcripts; an original one-page essay on why the applicant wants to become a geologist; and a letter of support from a faculty member familiar with the applicant's academic work. The application packet should be submitted to:

American Institute of Professional Geologists
Attn: Education Committee Chr.
1400 W. 122nd Ave., Suite 250
Westminster, CO 80234

Basis of Awards

Awards will be based on the content and creativity of the essays as judged by the Education Committee. The decisions of the Education Committee are final.

For questions regarding the application process call (303) 412-6205 or e-mail: aipg@aipg.org. **Applications must be received by February 15th Awarded the month of September.**

Wendy J. Davidson Assistant Director wjd@aipg.org
American Institute of Professional Geologists
1400 W. 122nd Ave., Suite 250
Westminster, CO 80234
(303) 412-6205, Fax (303) 253-9220
www.aipg.org Email: aipg@aipg.org

AGI Announces Dr. Gail M. Ashley as New President

Alexandria, VA – The American Geological Institute (AGI) is pleased to announce Dr. Gail M. Ashley as its new President. She was inducted on October 24, 2006 at the Geological Society of America annual meeting in Philadelphia, Pennsylvania.

Ashley received both her B.S. and M.S. from the University of Massachusetts in geology and her Ph.D. in geology from the University of British Columbia. After receiving her Ph.D., she entered academia and has been a member of the faculty at Rutgers University since 1977 as both an educator and researcher in modern sedimentological studies.

During her career she has edited six books and been an author on over 70 publications. While at Rutgers she has mentored over 35 graduate students and served on the thesis communities of many more. Ashley has been a role model and advocate for women in the geosciences. Because of her education and advocacy leadership she was the recipient of the 2002 AWG Outstanding Geoscience Educator Award.

Dr. Ashley has been professionally active in numerous geoscience societies including the Geological Society of America (GSA), Society for Sedimentary Geologists (SEPM), Association for Woman Geoscientists (AWG), and the American Geophysical Union (AGU).

She has served as Editor-in-Chief of the *Journal of Sedimentary Research*, Associate Editor for both *Geomorphology* and the *GSA Bulletin*, and has served on the Editorial Boards of *Geology* and *Geotimes*. Ashley's leadership within the geoscience community has included being President of SEPM and GSA. Ashley has also served on numerous NSF, NASA and NRC panels. In addition, by governor's appointment, she was a part of the New Jersey Environmental Risk Assessment and Risk Management Study Commission.

The American Geological Institute is a nonprofit federation of 44 scientific and professional associations that represent more than 120,000 geologists, geophysicists, and other earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in mankind's use of resources and interaction with the environment. More information about AGI can be found at <http://www.agiweb.org>.

The Institute also provides a public-outreach website, <http://www.earthscienceworld.org>.

Contact: Andrea Martin asm@agiweb.org

Gilbert F. White, 94, Geographer, Environmentalist, and Pioneer in Flood Plain Management and Natural Disaster Research, Dies

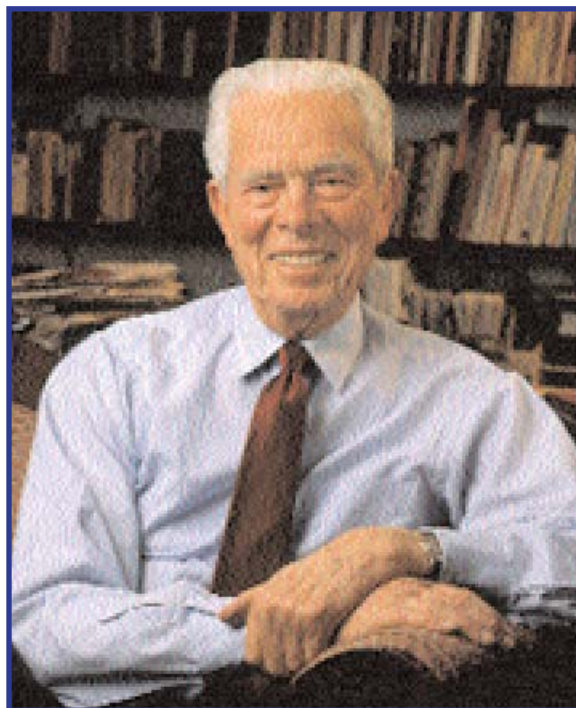
Gilbert F. White, a geographer known as the father of flood plain management and a leader in natural hazards research and the world environmental movement, died on October 5, 2006, at his home in Boulder, Colorado. He was 94. He had been in declining health for the past year.

White was a Gustavson Distinguished Professor Emeritus of Geography at the University of Colorado at Boulder, a position he held since 1980. Prior to that, from 1970 to 1978, he was Professor of Geography and the Director of the Institute of Behavioral Science at the university. He founded and directed the university's Natural Hazards Research and Applications Information Center from 1976 to 1984 and served as director again from 1992-1994. In May 2006 he received an honorary degree from CU.

White's landmark work, beginning with his 1942 University of Chicago doctoral dissertation "Human Adjustment to Floods," challenged the notion that natural hazards are best addressed by engineering solutions. Instead, he argued that the havoc wrought by floods and other natural disasters as earthquakes and hurricanes may be better avoided by modifying human behavior to reduce potential harm. "Floods are 'acts of god,' but flood losses are largely acts of man," he wrote in his thesis. He advocated, where feasible, adaptation to or accommodation of flood hazards rather than the "structural" solutions (dams and levees, for example) that dominated policy in the early 20th century.

After his first study of the Boulder Creek floodplain published in 1957, White was commissioned in 1969 by the Boulder City Council and County Commissioners to prepare a report on possible zoning of floodplains in Boulder. This led to enactment of the first floodplain zoning in 1970. White was twice the recipient of the Outstanding Achievement Award from Plan Boulder County, once jointly with his first wife Anne U. White. In 1994 Gilbert White created the Boulder Creek Flood Notebook, an on-line plan for studying the next great flood to strike Boulder, both the effects of such a catastrophe and the decisions that made it possible, contributing funds to support the research on a flood that he did not live to see. White continued to be active in local issues of urban growth, making his last presentation to City Council in 2002 and providing guidance on floodplain issues up until a few months of his death.

The underlying notion that humans should adjust to their environment, coupled with a deep commitment to improving human welfare through social policy, guided White's career. A quiet leader, his work encompassed not only floods and other natural hazards, but water management in developing countries, global environmental change, geographic education, and international cooperation on water systems, including in the Middle East and the Mekong and Nile river basins.



"No mere ivory tower geographer, he helped establish the fields of natural hazards research and resource management that become so crucial to modern environmental planning and policymaking" said Gilbert M. Grosvenor, Chairman of the

National Geographic Society, when he presented the Society's highest honor, the Hubbard Medal, to White in 1994.

While White's ideas were initially greeted with controversy, he was a persistent advocate. After six decades, his proposals for flood plan management and flood insurance reform have won widespread acceptance. "Every person who buys flood insurance, or is asked to relocate out of a floodplain... has been touched by Gilbert White's life in a very real way" said JoAnn Howard, former Administrator of the National Flood Insurance Program.

A key part of White's successes was his talent for working with people. In a recent biography of White, *Living with Nature's Extremes*, Robert Hinshaw writes "Gilbert White's long career in shepherding natural resources has involved not only the study of resource issues but also a distinctive ability to establish and strengthen communication and cooperation across contentious boundaries." A source of pleasure for White late in life was that in 2001, the U.S. Corps of Engineers established a special collection to house his papers.

A native of Hyde Park in Chicago, White received a BS in 1932, MS in 1934, and PhD in 1942 in geography from the University of Chicago. In 1934 he interrupted his doctoral studies to join the New Deal administration of Franklin Roosevelt. He planned a one year stint in Washington as a staffer on the Mississippi Valley Commission, but stayed eight years to work for the National Resources Commission and later the Bureau of the Budget.

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Strongly attracted by the tenants of the Society of Friends since his student days, White espoused pacifism and became a Quaker at the outbreak of World War II. In 1942 he went to France to do relief work with the American Friends Committee (AFSC). He was taken prisoner of war the following year and interned in Germany. After being exchanged in 1944, he returned to become Assistant Executive Secretary of the AFSC.

In 1944 he married Anne Elizabeth Underwood, who worked with him on many research projects, including a pioneering study of domestic water use in East Africa. The Whites were committed to preserving open space in Boulder County, Anne serving on the Boulder County Parks and Open Space Advisory Committee, and working with Gilbert to donate land that was integral to establishing the Anne U. White trail in upper Fourmile Creek Canyon shortly before she died in 1989.

In 1946, White accepted the presidency of Haverford College, where he became the youngest college president in the country. In 1955, he returned to the University of Chicago

to become a professor and chair of the geography department. He brought his family to spend the summers in Sunshine Canyon starting in 1957, first on the Wittemeyer Ranch and then later on property they purchased up Sunshine Canyon. Gilbert and Anne White moved permanently to Sunshine Canyon when he took a post at the University of Colorado in 1970, moving to a condominium building on Pearl Street which they planned jointly with several other retiring faculty in 1983.

Reflecting his commitment to national and international cooperation, White served on numerous professional and scientific committees and advisory groups for organizations such as the National Research Council, the UN and UNESCO. Among the many posts he held, White was President of the Association of American Geographers 1961-62, Chair of its High School Geography Project, Chairman of the Board of Resources for the Future 1974-79, and President of the International Council of Scientific Unions 1976-82. He served as Chairman of the American Friends Service Committee 1963-69.

White officially retired in 1980, but remained professionally active, serving as Executive Editor of Environment magazine from 1983 to 1992, Chair of the Committee on Sustainable Water Supplies for the Middle East, National Research Council, 1996-1999, and since 2001 as a member of the FEMA Steering Committee for Evaluation of the National Flood Program.

Among numerous awards, White won the Association of American Geographers' Lifetime Achievement Award in 2002 and in 2000 received the nation's highest scientific honor, the National Medal of Science, and the National Academy of Sciences' highest honor, the Public Welfare Medal. Other awards and honors included the 2006 UNESCO GARD leadership award in disaster reduction, the 1995 Volvo Environmental prize, the 1987 Tyler Prize for Environmental Achievement, and eight honorary degrees. He was member of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, the Russian Academy of Sciences, and the Cosmos Club.

White is survived by his second wife and long time friend, Claire Sheridan of Boulder, his children William White of Ithaca, New York, Mary White of Boulder, Colorado, and Frances Chapin of Edmonds, Washington, stepchildren Monika Proffitt of Seattle and Daniel Proffitt of Boulder, Colorado, and four grand children. A memorial service was held at 1:00 pm at Spice of Life Events Center 5706 Arapahoe Avenue, Boulder, Colorado on November 11. Donations may be made to the CU Foundation:

Gilbert F. White Graduate Fellowship Endowment
care of Diane Smith, Natural Hazards Center
482 UCB, University of Colorado
Boulder CO 80309-0482.

Alternatively, contributions can also be made to:

Gilbert White Fellowships
Resources for the Future
1616 - P Street NW
Washington, DC 20036.

Hydrological Technician Program Announcement

AIH would like to announce the creation of a new division of certification for hydrologic technicians. This certification is organized as follows:

LEVEL I HYDROLOGIC TECHNICIAN: GENERAL

This certification level is an all discipline focus to include general experience and education in the combined fields of surface water, ground water, and water quality data collection.

LEVEL II HYDROLOGIC TECHNICIAN: SURFACE WATER, GROUND WATER, OR WATER QUALITY

The Level II certification focuses on intermediate competence within each sub discipline of hydrology.

LEVEL III HYDROLOGIC TECHNICIAN: SURFACE WATER, GROUND WATER, OR WATER QUALITY

The Level III certification focuses on senior-level competence within each sub discipline of hydrology. A senior-level individual is characterized as having data publications, has decision-making authority within an organization, and generally has supervisory authority over a hydrologic technician workforce.

AIH is proposing a period of one year (calendar year 2007) when technicians could gain membership by being "grandfathered" into the Institute. During this period the examination process would be waived and a reduced fee schedule would be in effect.

A. M. Kennedy, Trans-Niño Index Research and Conference Summary

In early 2006 the **Oregon Section of the American Institute of Hydrology** awarded a \$510 grant to support **Adam Kennedy** present his graduate hydrologic research at the European Geosciences Union (EGU) 2006 General Assembly in April 2006 in Austria. At that time, he was a graduate student and an officer of the Student Water Resources Group at Portland State University (PSU) in Portland, Oregon. While Adam had secured other small awards and grants from PSU and related organizations, additional funds were necessary to cover the cost of room and board while he attended the conference. Without the Oregon Section's financial support and its strong involvement with the Student Water Research Group at Portland State, it would not have been possible for this student to afford the high costs of presenting research at an international conference.

The conference venue was located Vienna, Austria. Its scheduling layout was similar to other major scientific conferences or conventions with presentations and poster sessions occurring concurrently over five days. Adam Kennedy's paper was accepted in the cryospheric science session dealing with mountain hydrology and climate.

Adam learned while he was there that Austria doesn't typically receive a strong El Niño signal. This was ironic as his research focused on a region of southern Oregon that also does not receive a strong El Niño signal, the Upper Klamath Basin. Thus his EGU presentation in Vienna provided a portal to the international community to view local and regional results and apply them to other regions outside of the USA. Financial support from the Oregon Section allowed Adam to attend and present his paper at the EGU conference, which also led to an invitation by the session's co-conveners to have his paper be published in a special issue of Hydrologic Processes. A summary of Adam's research is provided below.

IMPROVED EARLY SEASON SEASONAL STREAMFLOW VOLUME PREDICTION MODELS CONSIDERING EQUATORIAL SEA SURFACE TEMPERATURE GRADIENTS: TRANS-NIÑO INDEX

Research Summary: This research investigates large-scale climate signals affecting inter-annual hydrologic variability of streams flowing into Upper Klamath Lake, Oregon, USA. Upper Klamath Lake is an arid, mountainous basin located in the rain shadow east of the crest of the Cascade Mountains in the northwestern United States. It is an important reservoir serving the 971 km² Klamath Irrigation Project, established in 1906 by the US Bureau of Reclamation. Upper Klamath Lake has two major tributaries that merge shortly before their entry into the Lake, the Williamson River and the Sprague River. These have no dams or other major hydrologic alterations and serve as the major input into Upper Klamath Lake.

Developing accurate early season streamflow prediction models for these tributaries is difficult because the basin has a high degree of topographic, geologic, and climatologic

variability. In an effort to reduce early season streamflow forecast uncertainty, six large-scale climate indices - the Pacific North American Pattern, Southern Oscillation Index, Pacific Decadal Oscillation (PDO), Multivariate El Niño Southern Oscillation Index, Niño 3.4, and a revised Trans-Niño Index (TNI) - were evaluated independently for their ability to explain inter-annual variation of the main hydrologic inputs into Upper Klamath Lake.

The TNI, which characterizes the equatorial sea surface temperature gradient between region Niño 1+2 and region Niño 4, was the only index to show significant correlations during the current warm phase of the PDO. During the warm PDO phase (1978-present), the averaged October through December TNI was strongly correlated ($a = 0.05$) with the subsequent April through September Williamson River discharge ($r = 0.73$), Sprague River discharge ($r = 0.65$), net inflow to Upper Klamath Lake ($r = 0.68$), and moderately correlated with observed Crater Lake 1 April snow water equivalent (SWE). Incorporating the TNI variable into optimized statistical streamflow prediction models reduces the uncertainty (as measured by the standard error) of forecasts issued on the first of January and February by 19% and 17%, respectively, for the Williamson River and by 24% and 15%, respectively, for the Sprague River.

These results suggest that warm PDO phase equatorial sea surface temperature gradients, as opposed to mean sea surface temperature or sea-level pressure patterns, explain a significant portion of hydrologic variability observed in the streams flowing into Upper Klamath Lake and are useful in real-time hydrologic applications. Furthermore, additional analysis indicates regional-scale correlations that may extend the usefulness of the TNI outside of the Upper Klamath basin. Thus, the TNI may prove useful for long-lead streamflow forecast operations, ecosystem scale modeling, and a variety of other environmental science applications.

Submitted by James D. Ruff, PH, Oregon Section AIH

Notice -- Application Fee to Increase

The Executive Committee met in full session on October 18- 20, 2006 at the headquarters offices in Smyrna, Georgia. One of the agenda items was consideration of any changes in our dues and fees to help generate the necessary funds to support the operations in 2007. The officers reviewed all of the revenue streams and decided that there will be **NO INCREASE** in dues or fees for the coming year, with one exception. For 2007, the application fee will increase from \$75 to \$100, effective January 1, 2007

If anyone is planning to apply for membership and wants to take advantage of the lower fees, AIH will accept the lower rate, if you notify us in writing before January 1, 2007 that you intend to submit an application by February 1, 2007. Your application must be submitted to AIH Headquarters during the month of January, along with your reduced fee of \$75. If your application is not received before the February deadline, the new application fee (\$100) is required with your application.

Dawdy Receives ASCE Award



David R. Dawdy, P.H., has been named the recipient of the Ven Te Chow Award for his pioneering contributions to engineering hydrology and water resources engineering, particularly with regard to the estimation of floods, to hydrologic modeling and predictability, and to the scaling of hydrologic variables. He is also honored for his research contributions, his mentoring of younger members, and his service to the profession.

Established in 1995, the **Ven Te Chow Award** recognizes individuals who in their careers in hydrologic engineering have made significant contributions through research, education, or practice. Dawdy's emphasis on a fundamental mathematical and physical approach in understanding and modeling complex hydrologic processes has had an abiding effect on the generation of hydrologists educated at U.S. universities in the 1960s and 1970s. The significant advances in hydrologic engineering attributable to Dawdy involve numerical modeling of watershed hydrologic processes, regional flood frequency analysis by means of scaling theory, stochastic modeling of "long-memory" hydrologic processes, and sediment transport. Dawdy spearheaded the effort to develop the first U.S. Geological Survey (USGS) distributed watershed hydrology model for the prediction of runoff and the estimation of flood characteristics from small watersheds. This model became the blueprint for later USGS watershed hydrology models and led to the development of the current USGS distributed watershed hydrology model, which is embodied in the program Precipitation-Runoff Modeling System (PRMS).

Newly Certified Professionals

NameCertificate No.

Thomas J. Osborne
Billings, MT06-HGW-1662

Matthew P. Wickham
Lakewood, CO06-HG-1663

Song-Kai Yan
Baton Rouge, LA06-H-1664

Morgan Ruark
Charlotte, NC06-H-1665

Justin Ferris
Palmer, AK06-H-1666

Steven Deverel
Davis, CA06-HGW-1667

David Burner
Eagen, MN06-HG-1668

Brian Watson
Atlanta, GA06-H-1669

Eric Berntson
Rancho Cordova, CA06-HWQ-1670

Richard Belt
Tucson, AZ06-H-1671

Brian Hackman
Madison, WI06-H-1672

Sheng Yue
New York City, NY06-H-1673

Scott Summerside
Lincoln, NE06-HG-1674

Arthur C. Miller
University Park, PA06-H-1675

Peter Cafferata
Sacramento, CA06-H-1676

NameCertificate No.

Todd Eller
Palatka, FL06-HGW-1677

George Herrmann
San Angelo, TX06-H-1679

John Eckhardt
Imperial, CA06-HGW-1680

Zhongwei Li
Jacksonville, FL06-HGW-1681

Joseph Bellini
Plymouth Meeting, PA06-H-1682

Kyle Flynn
Helena, MT06-H-1683

Christine Kirick
Reno, NV06-H-1684

Mark Reidel
Madison, WI06-H-1685

Jamil Ibrahim
Sacramento, CA06-H-1686

Jason Tidwell
Walkerton, IN06-H-1687

Jim Noren
St. Paul, MN06-HWQ-1688

Associate and HIT

Brennon Schaefer
St. Paul, MN06-HIT-045

Robert Thompson
Davis, CA06-HIT-046

Todd McDonnell
Corvallis, OR06-HIT-047

Congratulations and Best Wishes!

NEWS FROM THE EXAMINATION COMMITTEE

WATER QUALITY EXAM HAS BEEN DEVELOPED

On November 10, 2006, the American Institute of Hydrology administered the newly developed Water Quality Examination for the first time. The exam has been in development for several years, under the leadership of Herb Garn, Chairman of the Examination Committee. Our members developed exam questions, but we had so few Water Quality Hydrologist members, the task was delayed and prolonged until this past year when a minimum, yet sufficient number of questions were compiled and rated to compose the Bank of questions. There is a continuing need for members to send in questions that can be used to refresh the Bank of questions. That is true of the Surface Water and Ground Water question bank, as well. New questions are always needed. Please contact AIH Headquarters for more information and instructions for preparing questions.

JAMES NOREN - FIRST MEMBER TO PASS THE WQ EXAM

It is with great pleasure that AIH can announce that **James B. Noren**, Hydrologist with the US Army Corps of Engineers (USACE) in Saint Paul, Minnesota was **the first person to take the Water Quality Exam and the first person to pass the Water Quality Exam!**

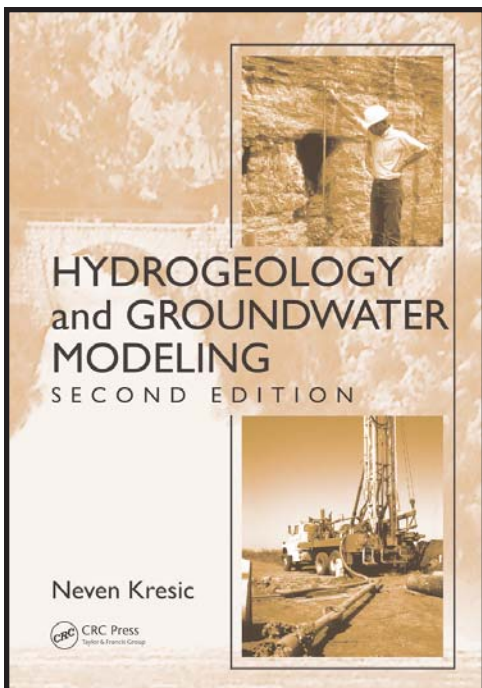
Please join us in congratulating Jim on this important achievement.

HERB GARN STEPPING DOWN, SEARCH FOR NEW CHAIRMAN OF THE EXAMINATION COMMITTEE BEGINS

Herb Garn, USGS has served as the chairman of the most important and active committee constituted by AIH. Herb has served for more than five years and has accomplished some very important milestones for AIH, including the development of three question banks - Surface Water, Ground Water and Water Quality, and development of policy and procedures for security, handling and processing of all test materials. Herb often worked as a committee of one. The nature of the work requires that members develop and submit questions to the Committee. The questions had to be evaluated, often reworked and then rated, before they become accepted into the question banks. More than 300 questions are needed for each question Bank. Moreover, these questions need to be refreshed and reviewed annually for any discernable ambiguities and trends.

With the departure of Herb Garn, AIH has undertaken a search of the membership of a new Chairperson for the Examination Committee. If you have any interest in Chairing or participating in this Committee, please contact Dr. Gerald Seaburn, Executive Director of AIH immediately at aihydro@aol.com or 800-970-4244.

Book Release



Hydrogeology and Groundwater Modeling, Second Edition

by Neven Kresic

From CRC Press/Taylor & Francis (<http://www.crcpress.co.uk>)

ISBN 0849333482

Publication date: October 26, 2006 (807 pages, hardcover)

“Coupling the basics of hydrogeology with analytical and numerical modeling methods, Hydrogeology and Groundwater Modeling, Second Edition provides detailed coverage of both theory and practice. Written by a leading hydrogeologist who has consulted for industry and environmental agencies and taught at major universities around the world, this unique book fills a gap in the groundwater hydrogeology literature.

With more than 40 real-world examples, the book is a source for clear, easy-to-understand, and step-by-step quantitative groundwater evaluation and contaminant fate and transport analysis, from basic laboratory determination to complex analytical calculations and computer modeling. It provides more than 400 drawings, graphs, and photographs, and a variety of useful tables of all key groundwater parameters, as well as lucid, straightforward answers to common hydrogeological problems.

Reflecting nearly ten years of new scholarship since the publication of the bestselling first edition, this second edition is wider in focus with added and updated examples, figures, and problems, yet still provides information in the author's trademark, user-friendly style. No other book offers such carefully selected examples and clear, elegantly explained solutions. The inclusion of step-by-step solutions to real problems builds a knowledge base for understanding and solving groundwater issues.”

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SEEKING VOLUNTEERS FOR 2007 RENO CONFERENCE

AIH is asking for volunteers to help with the 2007 Annual Meeting, April 22-25, 2007, in Reno, Nevada. We need volunteers to help as moderators for the technical sessions and judges for the poster and student papers.

INTERESTED?

Please call AIH at 1-800-970-4AIH , to volunteer your services.
We look forward to your participation in the meeting. Support AIH!

