

ILLINOIS GROUNDWATER ASSOCIATION

FALL 2000 NEWSLETTER

Volume 16, Number 2

September 2000

FROM THE CHAIR

Well, this is my official chance to say farewell to IGA as an officer. My time as Chair runs out on December 31st at which time I return to the rank of member. Until then I will remain vigilant in my position so feel free to contact me. I've had a great time the past three years serving IGA as a Board member and I encourage all of you to think about taking the time to support this fine organization at some point in your professional career. The benefits far outweigh the commitment of time and effort.

I'd like to also thank the other Board members for their work during the past year. Getting IGA through the year is truly a team effort. Special thanks go to Terry Dixon for his hard work and support. He provided extra effort during this past year not only in his position as treasurer, but also as alternate delegate for the Conservation Congress. Also, thanks to Erik Spande for his unending dedication to IGA and outstanding job as newsletter editor.

Despite the terrible weather and low attendance I think our Spring meeting at Argonne went well. There were some good presentations and a lot of good discussion in between. I hope our Fall meeting at EIU proves to be as stimulating.

A couple of things going on between now and our October meeting include co-sponsorship and participation in the Midwest GeoScience Group's workshop in Minneapolis (October 5-7th) and Environmental Resources' short courses in Milwaukee (October 9-13th). At the Minneapolis workshop we will have our display set up (thanks to Steve Bennett for putting it together) for viewing by those attending. As a cosponsor organization to the workshop, members can register at a reduced price. For the Milwaukee short courses, we were awarded the opportunity to send a student member with a scholarship that paid for registration and housing. For her dedicated work during the past year as our Student Board Representative, Sara Williams was awarded the scholarship.

We are still working out the bugs of providing timely information through electronic formats (website and email). I hope the membership will be patient as the transformation to this important cost-saving process occurs. You can assist us by making sure to include your email address on your membership renewal and conference registration and by visiting our website regularly (<http://www.iga.uiuc.edu/>). Please feel free to offer any comments you may have to one of the Board members. All of us are accessible by phone or email (see our website for numbers and addresses) and will be happy to talk to you.

Again, thank you all for allowing me to serve your organization.

FALL MEETING

The Fall 2000 IGA Meeting will be held at the Physical Science Building, Eastern Illinois University, Charleston, Illinois on Friday, October 20, 2000. The PS Building is located south of Route 16 on 4th Street. Registration for the meeting will be on the 2nd floor and will begin at 8:00am with the meeting starting at 9:00 and concluding about 4:00pm. The program will include a luncheon. Our business meeting will be held following lunch before getting back to additional interesting presentations.

Eastern Illinois University is conveniently located off of Lincoln Highway, (Route 16) just east of Route 57 (see maps). Overnight facilities are available in Comfort Suites in Mattoon, a short ride west of campus and Route 57. Reservations can be made by phone at (217) 235-6745.

For more information on registration, please call Terry Dixon, IGA Treasurer, at (309) 693-5697 or twdixon@eweworld.com. To pre-register, please mail the form along with your registration fee to Terry Dixon, Illinois Groundwater Association, c/o Environmental Science & Engineering at 8901 North Industrial Road, Peoria, Illinois 61615. Those with special dietary needs for the luncheon should make sure to contact Susie Dodd-Casey at (217) 333-9043 in advance.

Workshop Co-sponsorship

IGA is cosponsoring the 3-day short course/workshop "Advances in Site Characterization for Environmental and Engineering Projects at Glaciated Sites" along with the Association of Engineering Geologist and University of Minnesota. The Midwest GeoSciences Group is holding the short course/workshop in the Minneapolis/St. Paul area on October 5-7, 2000. As cosponsors there will be a substantially discounted rate for IGA members as well as a chance for us to set-up our display and familiarize workshop participants with the various programs and educational activities that IGA offers.

The 3-day course is subdivided into short course segments, field workshops, and technology demonstrations. The short course sessions are designed to educate scientists and engineers on state-of-the-art hydrogeologic and geotechnical site characterization methods at glaciated sites with an emphasis on the application for environmental and engineering projects. The field sessions will cover Rotosonic core examination for conceptualization and mapping of glacial stratigraphic sequences, description of key features for recognizing and differentiating stratigraphic units for improved field descriptions of glacial sediments, and field development of cross-sections, lithologic analysis and mapping. The field sessions will also cover new hydraulic conductivity testing procedures for direct push boreholes, Cone Penetrometer Testing, downhole video and geophysical survey procedures and demonstrations of new directional sampling technology and MiniSonic drilling methods.

For more information contact Dan Kelleher at (612) 551-2435 or email info@midwestgeo.com. Information on the course is also available on the Midwest GeoScience Group web page at <http://www.midwestgeo.com/>.

Teacher Workshops on Groundwater

By Harry Hendrickson, Illinois Department of Natural Resources

H2O Below in Iroquois and Kankakee Counties

Kankakee and Iroquois middle school teachers will have an opportunity to learn and teach about groundwater through a cooperative effort of educational, natural resource, health, and water businesses and agencies. In this program, six teacher-mentors will be trained at several workshops this fall and winter. They will use H2O Below materials developed by the Illinois Middle School Groundwater Project as supported by the W.K. Kellogg Foundation. The teacher-mentors will then lead middle school teachers from every school in the counties in a workshop on March 6, 2001. Each sponsored teacher will build a groundwater flow model which represents the hydrogeology near their school. They will also work through the six chapters of H2O Below, learn teaching methods from mentors, and learn about community water resources. Similar programs have been conducted in fifteen other priority counties with the sponsorship of regional groundwater planning committees.

For more information, contact Cathy Carter of the Iroquois-Kankakee Regional Office of Education (815-936-4637 or ccarter@roe32.k12.il.us), Rich Howell of the Kankakee SWCD (815-937-3233), or Thad Eshleman of the Iroquois SWCD (815-432-6055).

Near and Far Science II – Groundwater

Starting October 13-14, a select group of up to 72 grade 4-12 school teachers will start the pilot year of a five-graduate-credit course on groundwater and its scientific protection, sponsored by the Illinois State Board of Education, three regional offices of education, the Illinois State Water and Geological Surveys, and the Illinois Department of Natural Resources. The first meeting will include an introduction to karst, caves, and groundwater at Illinois Caverns in southwestern Illinois.

Three additional Friday-Saturday sessions will be held in each of three northern, central, and southern Illinois locations between November and March. At these sessions, teachers will learn and use H2O Below, Buried Treasure, and Project WET learning activities. In the second meeting the organizers aim to have teachers participate in the creation of a monitoring well, and well log perhaps on school grounds. They will also build groundwater flow models, tour local water utilities, conduct community projects, and job-shadow water professionals for a day. Teacher-paid costs will be minimal and the coursework is designed to help teachers meet ISBE teacher recertification requirements. The final meeting will be a showcase of community projects, to be conducted at the Illinois State Capitol in May--Groundwater Protection Month.

For more information check the following web site:

http://www.explorespace.com/NFSI/NFSI_II/index.htm

Groundwater and environmental health professionals will be sought to help with local demonstrations and tours. Meeting locations will be announced after the teacher signup. For more information, contact Harry Hendrickson (217-785-8577 or hhendrickson@dnrmail.state.il.us)

A Successful Effort to Seal Abandoned Wells

By Sarah Maynerich, Illinois Department of Natural Resources

Because of the hazards of abandoned wells, the Illinois Water Well Construction Code (Section 920.120) states that a well must be sealed within 30 days of its abandonment or when it is in a state of disrepair that may pose a hazard. An abandoned well acts like a direct route for surface contaminants to enter an aquifer. When a contaminant enters one part of the aquifer, it may spread to the rest of the aquifer due to the movement of water through permeable geologic materials. If this happens, water supplies over a large area can be contaminated. One way to prevent contamination of a public water supply is to identify and seal abandoned wells.

Lockport Township had previously been served mainly by private wells. In the early 1970's, two main wells were built to serve as the source of water for Lockport Township. The main wells serve an unincorporated area with about 900 customers. When the two main wells were built, a large number of private wells remained that were no longer used, particularly in the area of Fairmont Subdivision.

In order to get as many abandoned wells sealed as possible, Lockport Township applied for and secured two Community Development Block Grants. The grants totaling \$200,000 came from the Will County Community Development Department and the US Department of Housing and Urban Development. The grants allowed the wells to be sealed at no cost to the homeowner. In Phase I of the effort, licensed water well contractors bid to seal abandoned wells for 56 homeowners who had already signed up to participate. Martin Craven, Jr. of M & C Well & Pump, Inc. of Lockport was selected for the work. Phase II of the effort was to let Craven encourage more homeowners to seal their abandoned wells. Craven said, "I talked with homeowners about why the abandoned wells needed to be sealed." As a result, many homeowners were eager to seal them. Once enough homeowners had agreed to seal their wells, M & C Well & Pump, Inc. performed the sealing work. Brian Scanlon of the Will County Health Department said, "The health department inspected the wells at the time of sealing, sometimes inspecting as many as 8 in one day." Around 160 abandoned wells were sealed with the majority sealed in Phase II.

Increasing awareness about the hazards of abandoned wells was important to the success of this effort. The Will County Health Department recognized Craven with an "Outstanding Contribution to the Promotion of Public Health" award for his efforts to increase awareness and encourage homeowners to seal their abandoned wells. The success of the project was also due to the collaborative effort of the Will County Community Development Department, Lockport Township, and the Will County Health Department. Judy Batusich, Township Supervisor, said, "Because homeowners were willing to seal their abandoned wells, it made the effort easier." Lockport Township is seeking additional funds to seal several more wells.

For more information on sealing abandoned wells, contact a licensed water well contractor or your local health department.

For more information or for help in arranging additional groundwater model workshops, contact Harry Hendrickson, 217-785-8577, or e-mail at hhendrickson@dnrmail.state.il.us.

Earth Science Week 2000

October 8-14, 2000 is Earth Science Week! During this annual week-long celebration, activities will be held in communities throughout America - and in a growing number of countries - to recognize the contributions that geoscientists and the Earth sciences make to our daily lives.

The American Geological Institute (<http://www.earthscienceworld.org/week/>) Earth Science Week 2000 Information Kit contains new and exciting materials to assist geoscientists, teachers, librarians and youth leaders in preparing for Earth Science Week. The kit includes several colorful, educational posters and bookmarks, a helpful ideas and activities booklet, and a CD-ROM to take you along on a scientific research cruise!

To receive a FREE Earth Science Week Information Kit, please complete the online [Earth Science Week Request Form](#). Additional kits are available for \$3.00 each. To order multiple kits or place a bulk order, contact Julie Jackson at jjackson@agiweb.org or 703-379-2480 ext. 221.

IGA Awards Student Grant

Colin Booth, IGA Student Grant Coordinator

The 2000-2001 IGA Student Research Grant in the amount of \$200 was awarded to Allen Oertel to help with the his project "Evaluation of subsurface denitrification potential at a biosolids disposal site." Allen has a B.S. in Geology from Eastern Illinois University and several years of experience in the environmental industry. He is currently employed by Crawford, Murphy and Tilly Consulting Engineers, Springfield, Illinois, while simultaneously studying for his M.S. in Civil Engineering (Environmental Engineering Specialization) at Southern Illinois University at Carbondale, working under Dr. John Nicklow. Congratulations and good luck with the research!

IGA Student Research Grants Program

Applications are invited for IGA student research grants for the coming year. The Illinois Groundwater Association annually awards one to several small grants (typically \$150 - \$300) to help support student research in groundwater in Illinois. Any undergraduate or graduate student registered for full- or part-time study at an accredited college or university in Illinois is eligible to apply. Application forms and guidelines can be obtained from:

Dr. Colin Booth
IGA Grants Coordinator
Department of Geology and Environmental Geosciences
Northern Illinois University
DeKalb, IL 60115
Phone: 815-753-7933 e-mail: colin@geol.niu.edu fax: (815) 753-1945

The deadline for submitting an IGA Student Research Grant application is typically one week after the Spring IGA meeting.

Geological Science Field Trips 2000-2001

The Illinois State Geological Survey is sponsoring four field trips in 2000 and 2001 in the Zion and Garden of the Gods recreation areas. For more information contact:

<http://www.isgs.uiuc.edu/field-trips/ft00-01.html>

- Trips 1 and 2 - [Illinois Beach State Park](#) - Zion Area
September 23 and October 28, 2000, Lake County
- Trips 3 and 4 - [Shawnee National Forest](#) - Garden of the Gods Recreation Area
April 14 and May 12, 2001, Saline, Gallatin, Pope, and Hardin Counties

More information about the field trips can be found at the ISGS link, and a link to the parks is provided.

Want Instant Service?

The IGA Newsletter is available on the IGA web site at <http://www.iga.uiuc.edu/>. If you would like to have a link e-mailed to you when the newsletter is complete then please send your request to the IGA editor at: espande@ch2m.com.

IGA Awards Scholarship

The IGA Board of Directors has awarded a student scholarship to Sara Williams, an IGA member in good standing and the current IGA Student Director. This scholarship is offered by Environmental Resources for the two training courses being offered in Milwaukee; Low-Cost Remediation Strategies for Contaminated Soil and Ground Water, October 9 & 10, 2000 and Natural Attenuation for Remediation of Contaminated Sites, October 11-13, 2000.

We understand this scholarship will waive the 5-day training fee of \$1500, travel will be the responsibility of the student, ER will provide free accommodations for the student at the "company lodge" which is near the training facilities and that transportation from the company lodge to the training facilities will also be provided.

Congratulations Sara!

CONSERVATION CONGRESS IV UPDATE

By Paul M. Kesich, IGA Chair and Conservation Congress IV Delegate

On September 8-10, 2000 the fourth meeting of the Conservation Congress took place in Springfield. The 118 representatives that made up the Assembly of Delegates met first to address modifications to the Bylaws before getting down to the work of sorting through the recommendations developed through the regional caucuses.

As statewide delegate representing IGA, I served as a member of the Land and Water Management Committee. We met as a committee the afternoon of the 8th and all day on the 9th discussing the recommendations that had come to us from the regional caucuses and then combined north and south task groups. On Saturday the list of recommendations were prioritized and the top 6 prepared for presentation to the Congress on Sunday.

The list of recommendations presented to the Congress from the Land and Water Management Committee were:

1. Enhancing Incentives for Private Land Stewardship
2. Providing More Technical Assistance for Conservation on Private Land
3. Stewardship to Protect Water Quality and Quantity
4. Enhancing Multi-Agency Coordination of Watershed Partnerships
5. Sowing Native Seeds for Our Future, and
6. Movement Towards Informed Land Use Decisions.

The Congress adopted all of the recommendations.

Unfortunately, the recommendation that I presented early in the caucus process and that made it all the way through to being carried as a recommendation for prioritization, was not voted in the top 6 priorities for presentation to the Congress. This recommendation requested support for important groundwater issues including the Central Midwest Geologic Mapping Coalition and Well Abandonment Programs.

The Conservation Congress is a very important means for getting issues of concern, to IGA and its membership, statewide attention. As an organization we should continue our participation in the congress. I recommend that IGA form a committee this year to begin gathering and addressing issues that can be presented during the next congress and to prepare its delegates for the general process of the Congress.

THE MAHOMET AQUIFER CONSORTIUM

By Edward Mehnert (mehnert@isgs.uiuc.edu), Illinois State Geological Survey; Manoutch Heidari, (mheidari@uiuc.edu), Illinois State Water Survey; and Kelly Warner (klwarner@usgs.gov), U.S. Geological Survey

Stakeholders along the Mahomet aquifer recently organized into the Mahomet Aquifer Consortium (MAC) to serve as a forum for discussing diverse concerns about the aquifer and developing possible solutions for those concerns. The Consortium expressed its concerns in the following list of reasons to study the aquifer: 1) informed decisions could be made about managing the Mahomet aquifer to meet future water demands, 2) water quality issues could be identified and resolved, 3) water supply for the future could be ensured, 4) water supply costs could be optimized, and 5) economic development could be planned and promoted. Membership in the MAC is open to all and members currently represent the private sector; county, state, and federal agencies; agriculture; water authorities; municipalities; and professional organizations.

The Mahomet aquifer occurs in a broad arc that sweeps east-west across 15 counties in east-central Illinois from the Illinois/Indiana state line to the Illinois River. This confined aquifer consists of sand and gravel from the pre-Illinois Episode glaciation (Banner Formation) that fills the lower one-third to one-half of the Mahomet Bedrock Valley, the westernmost portion of a major drainageway of the pre-glacial landscape of Illinois and the Midwest. Aquifer width ranges between 4 and 14 miles in width. Aquifer thickness averages 100 feet, but ranges from less than 50 feet to about 200 feet locally. Deposits of the Glasford Formation (Illinois Episode) and Wedron and Mason Groups (Wisconsin Episode) overlie the Banner Formation. Sand and gravel within these deposits also form aquifers, although they are not as widespread or prolific as the Mahomet aquifer.

The demand for water in the counties overlying the Mahomet aquifer is about 80 million gallons per day. Demand for water from the Mahomet aquifer will grow as a result of factors such as increasing municipal needs, new industrial uses such as ethanol fuel production, new large-scale livestock facilities, and additional irrigated acreage. At one time, only land over the western end of the Mahomet aquifer was irrigated. Irrigation wells can now be found in locations scattered over the aquifer. Several large communities located near the edges of the Mahomet aquifer are supplied from surface water sources. For these communities, the Mahomet aquifer represents a source of supplemental water to improve drinking water quality, or to meet future water demand.

In the past, competition for groundwater sometimes resulted in political conflicts over real or perceived adverse effects. The MAC has developed a plan to study the entire aquifer and is seeking long-term funding for this proposed study. The knowledge that is developed during this study will be used to educate a wide variety of audiences that rely on the Mahomet aquifer and serve as the basis to develop a management plan by a consensus of the stakeholders. This water-resource management plan should be successful because it will be developed by stakeholders who have invested time and built trust through a long-term process of open, active, and cooperative study of their water resources.

For more information, see the MAC web page at <http://www.mahometaquiferconsortium.org/>.

IEPA PROPOSES MTBE STANDARD TO IPCB

By Richard Cobb, Illinois Environmental Protection Agency

The Illinois Environmental Protection Agency (EPA) submitted a proposed amendment on August 31, 2000 to the Illinois Pollution Control Board's (IPCB's) groundwater quality standards regulation to include a standard (35 IAC 620) for methyl tertiary butyl ether (MTBE). This proposal was proposed in response to the growing number of detections of MTBE in community water supplies using groundwater.

The contaminant, MTBE, is of a particular concern to groundwater resources due to its chemical and physical properties. MTBE has been more widely used as an octane-enhancing additive to gasoline, since tetraethyl lead was phased out. According to the United States Environmental Protection Agency (US EPA) in a document entitled "Cleanup of Releases from Petroleum UST's: Selected Technologies" published in April 1988, although MTBE has been produced commercially since 1979, it is now among the top 50 chemicals produced in the United States. MTBE is extremely soluble in water. It is approximately 24 times more soluble than benzene. That is 43,000 milligrams per liter ("mg/l") for MTBE versus 1,780 mg/l for benzene. Because of its high solubility, MTBE is easily transported by groundwater away from a spill or a release and will often have a plume larger than gasoline components such as benzene. Where there is a release or spill of gasoline or other petroleum products containing MTBE, the MTBE will generate a plume that encompasses the benzene plume. Recent research also indicates that MTBE does not readily adsorb to soil particles and it does not biodegrade easily. In fact the United States Geological Survey research has shown the biodegradation rate for MTBE to be two orders of magnitude below BETX (benzene, ethylbenzene, toluene and xylene). In addition, MTBE has a co-solvent effect, which enhances the mobility of other compounds in gasoline including benzene in a water medium.

The treatment of MTBE is also a concern because it is very difficult to remove using conventional technologies once MTBE is dissolved in groundwater. Air stripping, one of the most common remedial measure for removal of organic contaminants, requires significantly large amounts of air to be brought in contact with dissolved MTBE for removal of the contaminant from groundwater. The Henry's law constant for MTBE is very low making removal of MTBE very difficult. In addition, granular activated carbon (GAC) is also not effective because MTBE does not readily adsorb.

The purpose of the Illinois EPA's MTBE proposal is to persuade the IPCB to adopt the groundwater quality standards for MTBE of 0.070 mg/l for both the Class I: Potable Resource Groundwater and Class II: General Resource Groundwater Standards. The proposed MTBE standards will serve as the basis for the amendments to the rules for Petroleum Underground Storage Tanks, 35 Ill. Adm. Code 732, will be proposed to include MTBE as an indicator parameter. In addition, adoption of the proposed MTBE groundwater quality standards will support revision of the Appendix A Target Compound List in 35 Ill. Adm. Code 740, and the development of the health-based standard proposed for inclusion in the rules for the Tiered Approach to Corrective Action, 35 Ill. Adm. Code 742. The proposed MTBE amendments to Groundwater Quality rules, 35 Ill. Adm. Code 620, in this proceeding are intended to assist with the prevention and risk-based restoration of groundwater resources.

COMMUNITY WATER SUPPLIES WITH MtBE DETECTIONS

CWS NAME	County
T&C MOBILE ESTATES	ADAMS
BELVIDERE	BOONE
HARDIN	CALHOUN
GERMANTOWN	CLINTON
GRAFTON	JERSEY
SOUTH ELGIN	KANE
MANTENO	KANKAKEE
OAKDALE ACRES SBDV.	KANKAKEE
BETHALTO	MADISON
EAST ALTON	MADISON
MCHENRY	MCHENRY
MARENGO	MCHENRY
ISLAND LAKE	MCHENRY
CRYSTAL LAKE	MCHENRY
CRYSTAL HEIGHTS	MCHENRY
SAYBROOK	MCLEAN
NOKOMIS	MONTGOMERY
PRAIRIE DU ROCHER	RANDOLPH
RUSHVILLE	SCHUYLER
CREVE COEUR	TAZEWELL
NORTH PEKIN	TAZEWELL
MARQUETTE HEIGHTS	TAZEWELL
ROCK FALLS	WHITESIDE
CLEARVIEW SBDV	WILL
LOVES PARK	WINNEBAGO
ROANOKE	WOODFORD



LEGEND

- s CWS Wells with MtBE Detections
- T Closed Facility With MtBE Detections
- u Active CWS Facility With Decommissioned Wells Due To MtBE
- County Boundaries



ILLINOIS EPA
2000

Source Information
County boundaries obtained from IDNR.
MtBE detection data obtained by Illinois EPA Compliance Assurance Section.
CWS wells obtained by and map created by Illinois EPA Groundwater Section.

GROUNDWATER SCIENCE AWARDS

The **Groundwater Science Awards Program** recognizes outstanding science-based achievements in the management, protection, and utilization of groundwater. Any individual or organization, including private and government sectors, involved in the research, education, consulting service, water well construction, or public service is eligible.

The IGA Awards Committee chooses award recipients. The committee is composed of current membership representing state agencies, academia, the water well industry, and the consulting industry. Awards are presented during the Spring or Fall Meeting. The program is co-sponsored by the Illinois Groundwater Protection Education Program developed under the **Illinois Groundwater Protection Act**.

2000 Groundwater Science Award Recipients

The Illinois Groundwater Association is proud to present the recipients of the Groundwater Science Awards for 2000.

Dr. Steven P. Esling, Southern Illinois University

Dr. Esling received his B.S. in Geology from Illinois State University, graduating with high honors. He went to the University of Iowa for his graduate studies, first earning a M.S. in Mathematics and then returning to the field of geology for his Ph.D. Since 1982 Dr. Esling has been at Southern Illinois University, where he is now an Associate Professor in the Department of Geology. He has helped train numerous students in the field of hydrogeology as the academic advisor for approximately twenty-eight M.S. theses and as a member of many more M.S. and Ph.D. committees. He is active in numerous geologic and hydrogeology organizations and is a past-chair of the Illinois Groundwater Association. Dr. Esling has published numerous journal articles, scientific reports, and abstracts but has also contributed to the field of hydrogeology through both educational and modeling software packages. Among his other contributions to groundwater studies, he has served on groundwater-related panels, lead field trips, and taught short courses. For both his past and his continuing contributions to the study of groundwater the IGA is pleased to award Dr. Steven P. Esling its Groundwater Science Award.

Dr. Colin J. Booth, Northern Illinois University

Dr. Booth received his B.S. in Environmental Sciences from the University of East Anglia, Norwich, UK. Before returning for graduate studies he gained valuable experience on oilrigs in the North Sea and the USA, as a geologist/mud logger with Exploration Logging International, and as a hydrogeological assistant with the Anglian Water Authority. After earning his Ph.D. in geology from Penn State University he was hired at Northern Illinois University where he holds the rank of Associate Professor. Dr. Booth teaches hydrogeology at both the graduate and undergraduate levels and has directed more than twenty completed and ongoing theses and dissertations. His long record of research in the field of hydrogeology includes approximately thirty journal articles and over thirty conference presentations. Since 1995 he has been a member of the Illinois Low-Level Radioactive Waste Task Group, a position to which the office of the Governor appointed him. Dr. Booth is a member of a number of hydrogeological professional organizations and currently serves as Co-Vice Chair of the U.S. Chapter of the International Association of Hydrogeologists and as a Director for the Illinois Groundwater Association. For both his past and his continuing contributions to the study of groundwater the IGA is pleased to award Dr. Colin J. Booth its Groundwater Science Award.

Fall 2000 Illinois Groundwater Association Conference

The Fall IGA Meeting to be held on October 20, 2000 at Eastern Illinois University, Charleston, Illinois and will involve a diverse range of topics of interest to professionals in the groundwater industry in Illinois. Further information on the directions to EIU and the agenda are available on the IGA web site or contact IGA Chair Paul Kesich. Registration includes a continental breakfast, mid-morning and mid-afternoon snacks, and a deli style lunch. For early registration, send in the form by October 13, 2000 to the address listed below. **Make checks payable to the Illinois Groundwater Association.**

COST		NAME
	<u>Early</u>	<u>Late</u>
Member	\$35	\$50
Non-Member	\$50	\$65
Student	\$15	\$15

Position: _____
Employer: _____
Address: _____

Phone: _____
Fax: _____ E-mail: _____

Clip & Send registration to:
Terence W. Dixon
Environ. Sci. & Eng.
8901 North Industrial Road
Peoria, Illinois 61615

2000 Illinois Groundwater Association Membership

IGA membership dues are \$15. Student membership is \$5. Membership renewal for each calendar year is payable at the time of the Spring Meeting (although last year was slightly irregular due to joint GSA Meeting). Please fill out form below and mail to address listed below. **Make checks payable to the Illinois Groundwater Association.** Membership is available to anyone interested in groundwater resources in Illinois.

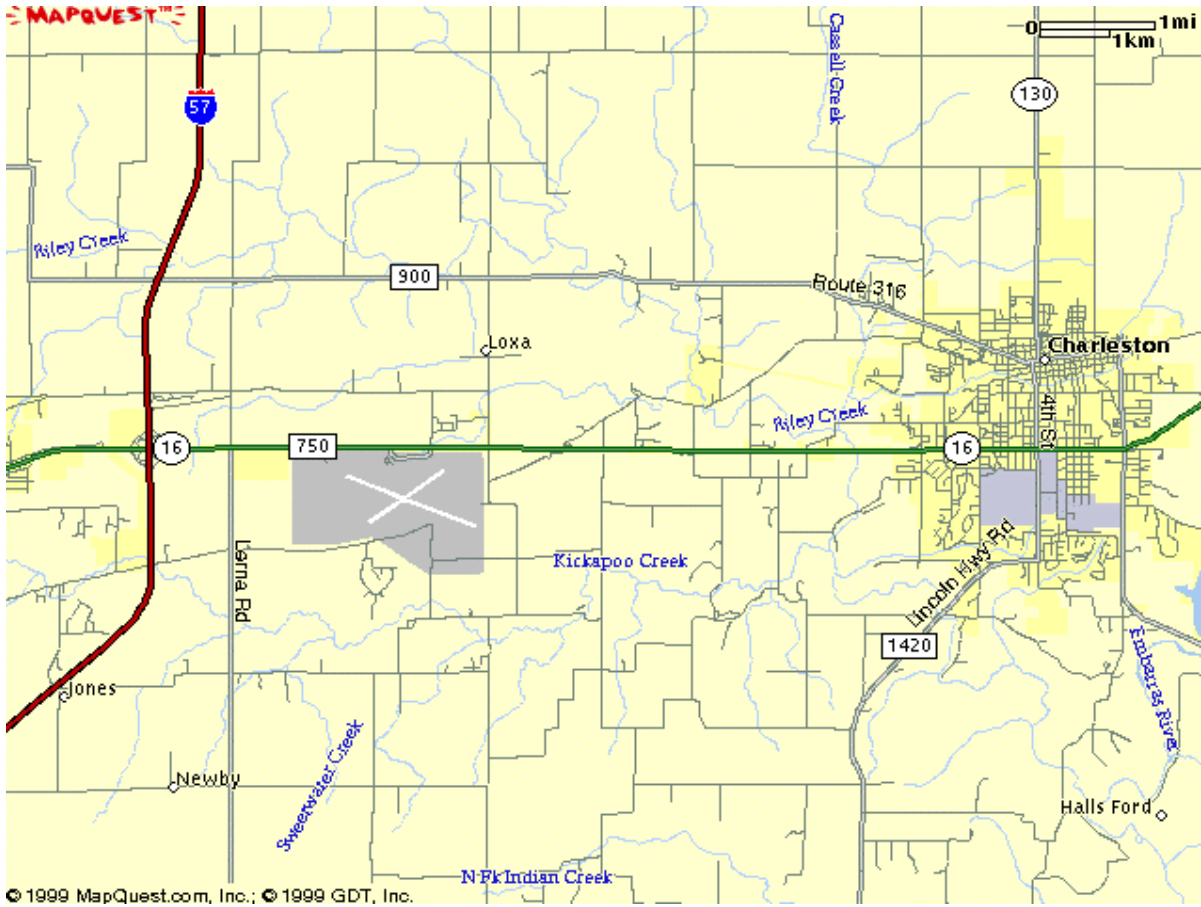
COST		NAME
Renew Membership	\$15	
New Membership	\$15	
Student	\$5	

Position: _____
Employer: _____
Address: _____

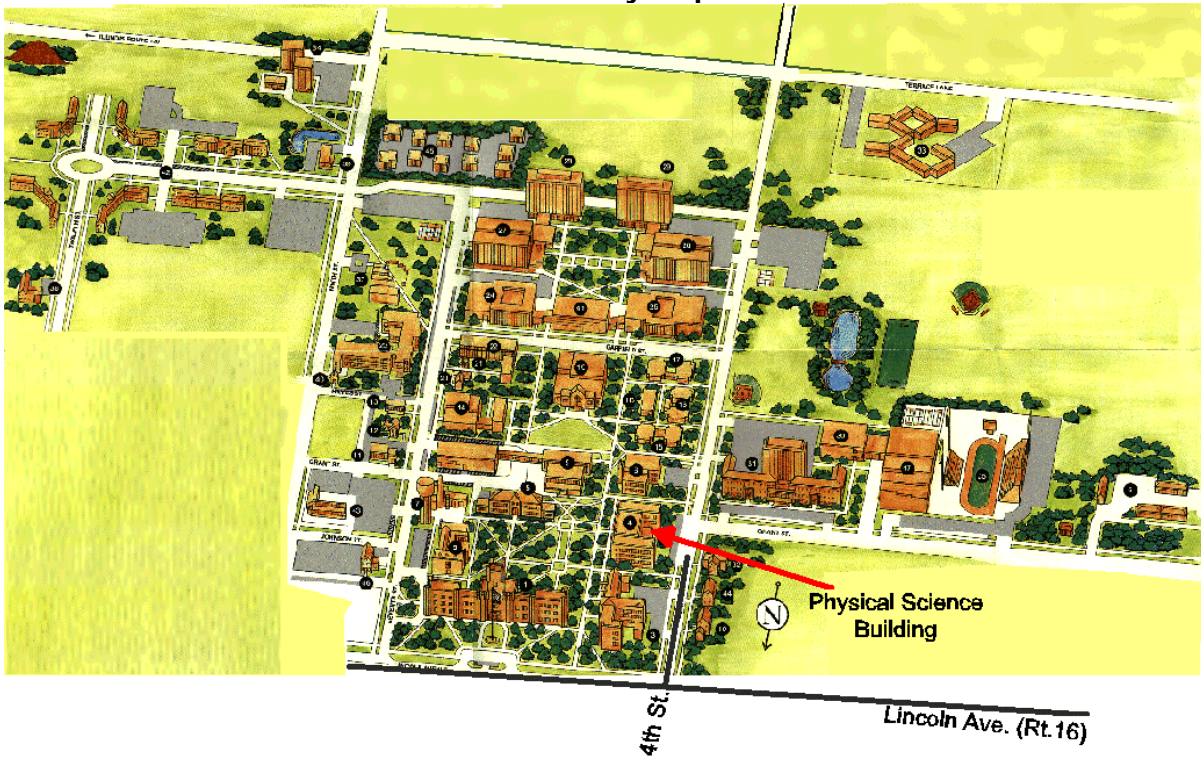
Phone: _____ Fax: _____
E-mail: _____

Clip form & mail to:
Terence W. Dixon
Environ. Sci. & Eng.
8901 North Industrial Road
Peoria, Illinois 61615

Location of the Fall IGA Meeting



University Map



PROVISIONAL AGENDA

ILLINOIS GROUNDWATER ASSOCIATION

Fall Meeting, 2000

- 8:00 – 9:00 Registration
- 9:00 – 9:15 Opening Remarks
Paul Kesich, Chair, Fermi National Laboratory
- 9:15 – 9:45 Near and Far Science II
Harry Hendrickson, IDNR
- 9:45 - 10:15 Industry Initiatives to Change Groundwater Monitoring Regulations in Illinois
Bill Shubert, Waste Management
- 10:15 – 10:30 Break
- 10:30 – 11:00 Radioactivity and the Regulations
Gordan Appel, IDNS
- 11:00 – 11:30 The Latest News on Low-level Radioactive Waste Storage in Illinois
Mike Klebe, IDNS
- 11:30 – 12:30 Lunch
- 12:30 – 1:30 Business Meeting**
All are invited
- 1:30 – 2:00 Institutional Controls Guidelines
Dan Patulski and Tami Ohl, EPA Region 5
- 2:00 – 2:30 Proposed MTBE Regulations
Rick Cobb, IEPA
- 2:30 – 2:45 Break
- 2:45 – 3:15 TBA
- 3:15 – 3:45 TBA

CONFERENCES

October 4-5, 2000. Focus Conference on Eastern Regional Ground Water Issues, Sponsored by the National Ground Water Association, Holiday Inn, Newburgh, New York. For more information contact (800) 551-7379 or (614) 898-7791 or www.ngwa.org/education.

October 6-7, 2000, Invasive Plants and Animals in Iowa Symposium, sponsored by Iowa Academy of Science and several other groups, at the Scheman Center, Iowa State University, Iowa City, Iowa. Contact Jane Vander Linden at (319) 273-2021 or www.iren/net/ias/ for more information.

October 10-14, 2000, American Institute of Professional Geologists (Wisconsin Section) 37th Annual National Convention: Learning from the Past – Directions for the Future, Pfister Hotel, Milwaukee, Wisconsin. Use this link for more information: [AIPG Annual Meeting - Milwaukee, Wisconsin](#) . Or contact aipg@aipg.org, or www.aipg.org .

October 11-12, 2000, Drought 2000 Conference: Impacts, Policy and Technology, Sponsored by the National Ground Water Association, Des Moines, IA, Contact (800)551-7379 or www.NGWAorg/education/educmenu.html for more information

October 11-13, 2000. Brownfield Conference 2000, sponsored by the [The Engineers' Society of Western Pennsylvania](#), held at Atlantic City, New Jersey. For more information contact, www.brownfields2000.org or (877) 343-5374

October 12-13, 2000, American Institute of Professional Geologists Annual Meeting - Learning from the Past, Directions for the Future, Milwaukee, Wisconsin, Contact: bernd.rehm@rmtinc.com or www.aipgwis.org for more information

October 17-19, 2000, 45th Annual Midwest Ground Water Conference, Columbus, Ohio Contact: Kristy Hunt, Ohio EPA kristy.hunt@epa.state.oh.us, or www.epa.state.oh.us/ddagw/mwgwc.html

October 20, 2000, Illinois Groundwater Association Fall Meeting, Eastern Illinois University, Charleston, Illinois, Contact Terance Dixon, see page 12 of this newsletter.

November 3, 2000, Minnesota's Emerging Ground Water Quality Issues-Tuning Up the 1989 Ground Water Protection Act, Minnesota Ground Water Association Fall Conference, Earle Brown Center, University of Minnesota (St. Paul Campus), see <http://www.mgwa.org/calendar.html> for more information

November 3-5, 2000, Third Annual Water Information Summit – Water Web Consortium, sponsored by the American Water Resources Association, Miami Florida. Contact <http://www.awra.org/meetings/conferenceindex.html> for more information.

November 5-8, 2000, AIH Annual Meeting and International Conference - Atmospheric, Surface and Subsurface Hydrology and Interactions, sponsored by the American Institute of Hydrology, Sheraton Imperial Hotel & Convention Center, Research Triangle Park, North Carolina. Contact the American Institute for Hydrology (AIH) at www.aihydro.org, www.aihydro.org/fallmeeting.htm or (651) 484-8357.

November 6-9, 2000. Third Water Resources Summit, 2000 Annual Water Resources Conference, Sponsored by the American Water Resources Association, held at the Hyatt

Regency Hotel in Miami, Florida. Contact <https://ssl.awra.org/miamiregistration.html> for more information.

November 9-18, 2000, Geological Society of America (GSA) 2000 Annual Meeting, Reno, Nevada - Summit 2000. For more information contact: [GSA Meetings Department](#) (303) 447-2020 or (800) 472-1988, fax (303) 447-0648, or www.geosociety.org/meetings/2000/index.htm

Future GSA Meetings

- 2001 Boston, Massachusetts November 5–8
- 2002 Denver, Colorado October 27–30

November 13-14, 2000, Illinois Water 2000. Hosted by the Water Resources Center, University of Illinois at Urbana-Champaign, Holiday Inn Conference Center, Urbana, Champaign. Contact Fannie Lambert at (217) 333-0536 or flambert@uiuc.edu for more information.

November 15-17, 2000, 2000 Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, and Remediation Conference and Exposition, Anaheim, CA, sponsored by the AIPG and NGWA, contact www.ngwa.org or <http://www.ngwa.org/education/pertol00.html> for more information.

December 13-15, 2000, Exploring New Possibilities: The National Ground Water Association's 2000 National Convention and Exposition, Las Vegas, NV. Sponsored by Association of Ground Water Scientists & Engineers (AGWSE) of the National Ground Water Association (NGWA). Contact: Dawn Guth at dguth@NGWAorg or the NGWA at <http://www.ngwa.org/convention/00vegas.html>, www.ngwa.org or questions@ngwa.org, (800) 551-7379 or (614) 898-7791, or FAX (614) 898-7786, for details

January 16-18, 2001, Wisconsin Water Well Association, DNR Continuing Education & Exhibits, Groundwater Conference and Exhibits. Middleton Marriott (Madison – West Side). Call Dennis Crow (608) 592-2610 for more information.

February 22, 2001, The Practice of Restoring Native Ecosystems, A one-day Regional Seminar, Sponsored by the National Arbor Day Foundation, Des Moines, Iowa at the Botanical Center. Contact Steven Pearson at spearson@arborday.org for more information.

March 19-22, 2001, 11th Annual West Coast Conference on Contaminated Soils, Sediments and Water, San Diego, California, Sponsored by the Association for the Environmental Health of Soils (AEHS). Contact Heather McCreary, 413-549-5561 or www.aehs.com for more information

April 18-20, 2001, [4th National Mitigation Banking Conference](#): The 2001 Update on Wetlands, Habitat and Conservation Banking. Sponsored by the American Water Resources Association. Radisson Bahia Mar, Fort Lauderdale, Florida. **Call for Papers** (Deadline: October 27, 2000). For more information contact (540) 687-8390, fax: (540) 687-8395, E-mail: info@awra.org, or go to <http://www.awra.org/meetings/conferenceindex.html>

April 23-24, 2001, 35th Annual Meeting, North Central Section of the Geological Society of America, Bloomington-Normal, IL. For more information: www.geosociety.org/sectdiv/Northc/01ncmtg.htm

April 30-May 2, 2001, Spring Specialty Conference: Water Quality Monitoring and Modeling, sponsored by the American Water Resources Association, at San Antonio, Texas. Contact <https://ssl.awra.org/miamiregistration.html> for more information.

May 8-11, 2001, Changing Water Environments: Research and Practice. Sponsored by [Canadian Water Resources Association - BC Branch Conference](#) and the American Water Resources Association. In Whistler, B.C. Canada. [Call For Papers](#) (Deadline: September 15th), or <http://www.awra.org/meetings/conferenceindex.html>

June 4-5, 2001, MTBE Conference, Sponsored by the National Ground Water Association, in Baltimore, MD. Contact www.NGWAorg/education/educmenu.html for more information.

June 26-30, 2001, Summer Specialty Conference: Decision Support Systems for Water Resources Management, Sponsored by the American Water Resources Association, at Snowbird, Utah. Contact <https://ssl.awra.org/miamiregistration.html> for more information

September 10-14, 2001, 31st Congress of the IAH (International Association of Hydrologists): New Approaches to Characterizing Groundwater Flow, in Munich, Germany. More information: agh.iaag.geo.uni-muenchen.de

November 5-8, 2001. National Geological Society of America Annual Meeting, Boston, Massachusetts. Contact meetings@geosociety.org or <http://www.geosociety.org/meetings/2001/index.htm> for more information. 2002 GSA meeting to be held at Denver, Colorado and 2003 at Seattle Washington

November 12-15, 2001, Annual Water Resources Conference, Sponsored by the American Water Resources Association at Albuquerque, New Mexico. Contact <https://ssl.awra.org/miamiregistration.html> for more information

Darcy Lecturer Schedule Complete For 2000: Dr. James Hendry is presenting: "Transport and Geochemical Controls on Solutes in Clay Aquitards". For a complete schedule go to: <http://www.ngwa.org/membership/febupd.html#darcy>. Remaining lectures for 2000 are overseas, so if you happen to be in Ireland, Britain, France, or Germany check it out!

- The Darcy lecturer for 2001 is Dr. Mary C. Hill of the USGS. Check the above link for more information

First McEllhiney Lecturer Announced: Dr. Hans-Olaf Pfannkuch has been selected as the inaugural William McEllhiney Lecturer. His presentation "Pump Tests for Practical People" will debut at the 2000 NGWA national Convention and Exposition in December. For more information go to: <http://www.ngwa.org/membership/febupd.html#mcellhiney>

EDUCATION AND TRAINING

These course listings are provided for our reader's information and inclusion in this Newsletter does not constitute an endorsement by the IGA.

Sponsored by **ASTM**. For more information call Eileen Finn at (610) 832-9686 or efomm@astm.org.

- October 10-11, 2000, Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites, Lansing, Michigan
- October 10-11, 2000, Risk-Based Corrective Action (RBCA) for Chemical Sites, Baltimore, Maryland
- October 24-25, 2000, Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites, Atlanta, Georgia
- October 24-25, 2000, Risk-Based Corrective Action (RBCA) for Chemical Sites, Phoenix, Arizona
- November 7-8, 2000, Risk-Based Corrective Action (RBCA) for Chemical Sites, Tampa, Florida
- November 14-15, 2000, Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites, Ft. Lauderdale, Florida

Sponsored by **Environmental Resources** (formally Environmental Graphics, Inc.) Training Programs. For more information, visit www.mo-raine.com <<http://www.mo-raine.com>> or contact Steve Scott at (262) 691-7413.

- October 9-10, 2000. Low-Cost Remediation Strategies for Contaminated Soil and Ground Water. Held in Milwaukee, Wisconsin
- October 11-13. Natural Attenuation for Remediation of Contaminated Sites, October 11-13, 2000. Held in Milwaukee, Wisconsin
- Various dates and locations. The ESA Market: Problems and Opportunities

Sponsored by the **National Ground Water Association**. More information contact the NGWA at questions@ngwa.org, or www.ngwa.org/education/educmenu.html (800) 551-7379 or (614) 898-7791, or FAX (614) 898-7786 for details.

- **October 2-3, 2000**, Fundamentals of Ground Water Geochemistry, Charlotte, NC
- **October 3-5, 2000**, GIS and Data Management for Ground Water Modeling, Charlotte, NC
- **October 4-6, 2000**, Applications of Ground Water Geochemistry, Charlotte, NC
- **October 23-25, 2000**, Natural Attenuation for Remediation of Contaminated Sites, Hartford, CT
- **October 24-25, 2000**, Assessment and Management of MTBE Impacted Sites, Hartford, CT
- **October 24-26, 2000**, 3-D Ground Water Flow and Contaminant Modeling for Natural Attenuation, Remediation Design, and Water Resource Management (held in conjunction with PEST), Orlando, FL
- **October 26-27, 2000**, Screening Modeling for Natural Attenuation with Bioscreen, Biochlor, and the NA Tool Kit, Hartford, CT
- **October 27, 2000**, PEST (Parameter Estimation), Orlando, FL

- **November 6-8, 2000**, Natural Attenuation for Remediation of Contaminated Sites, Denver, CO
- **November 9-10, 2000**, Ground Water Management, Denver, CO
- **November 14-17, 2000**, Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection and Remediation with Special Focus on Natural Attenuation and Gasoline Oxygenates, Anaheim, CA
- **December 11-12, 2000**, Monitoring and Evaluating Wetlands for Ground Water and Lake Impacts, Las Vegas, NV
- **December 11-14, 2000**, Computer Modeling of Natural Attenuation and Bioremediation Systems, San Francisco, CA
- **December 13-14, 2000**, Watershed Management: from Theory to Implementation, Las Vegas, NV
- **January 8-12, 2001**, Natural Attenuation, Risk Assessment and Risk Based Corrective Action: Analysis and Decision Making Through Applied Ground Water Modeling Orlando, FL
- **January 22-23, 2001**, Comprehensive Ground Water Management Using Microsoft Access, San Diego, CA
- **January 23-25, 2001**, An Introduction To Ground Water, San Diego, CA
- **January 25-26, 2001**, MTBE Treatment Technology: Design and Implementation San Diego, CA
- **February 8-9, 2001**, Application of Health Risk Assessment for Environmental Decision Making, Tampa, FL
- **March 5-6, 2001**, Fundamentals of Ground Water Geochemistry, Las Vegas, NV
- **March 7-9, 2001**, Applications of Ground Water Geochemistry, Las Vegas, NV
- **March 6-8, 2001**, Water Well Rehabilitation, Las Vegas, NV
- **March 12-14, 2001**, Understanding Migration, Assessment, and Remediation of Non-Aqueous Phase Liquids (LNAPLs and DNAPLs), Denver, CO
- **March 15, 2001**, PEST, Denver, CO
- **March 19-21, 2001**, Principles of Ground Water: Flow, Transport, and Remediation Columbus, OH
- **April 2-4, 2001**, Natural Attenuation of Metals, Location TBA
- **April 24-27, 2001**, Fracture Trace and Lineament Analysis: Application to Ground Water Resources Characterization and Protection, State College, PA
- **June 4-5, 2001**, Comprehensive Ground Water Management Using Microsoft Access Pittsburgh, PA
- **June 11-13, 2001**, Analysis and Design of Aquifer Tests Including Slug Tests Columbus, OH

Sponsored by the **Midwest Geosciences Group**. For more information contact Dan Kelleher (763) 551-2435 or dan@midwestgeo.com

- **October 5-7, 2000**. Advances in Site Characterization for Environmental and Engineering Projects at Glaciated Sites, Holiday Inn, Minneapolis West, Minneapolis, Minnesota

Sponsored by **Nielsen Environmental Field School**, contact (888) 965-5026 or Nielsenfieldschool@juno.com for more information

Sponsored by Princeton, contact (813) 964-0800, www.princeton-groundwater.com, or info@princeton-groundwater.com

- **December 4-8, 2000**, Princeton Groundwater Remediation Course. Orlando, FL
- **February 12-16, 2001**. Princeton Groundwater Pollution and Hydrology Course
San Francisco, CA
- **February 26-March 2, 2001**. Princeton Groundwater Pollution and Hydrology Course
Orlando, FL
- **April 9-13, 2001**. Princeton Ground Water Remediation Course
Las Vegas, NV
- **July 9-13, 2001**. Princeton Groundwater Pollution and Hydrology Course
Orlando, FL
- **July 23-27, 2001**. Princeton Groundwater Pollution and Hydrology Course
San Francisco, CA

Sponsored by American Institute of Hydrology, contact (612) 484-8169, www.aihydro.org, or aihydro@aol.com for more information