



Volume 21, No. 1  
Spring 2005

### Contents

- IGA News
- Feature Article:  
LPG Sunset?
- Feature Article:  
Great Lakes  
Protection
- Water and the  
World
- Agency and  
Regulatory Update
- Focus on Illinois  
Groundwater  
Education
- Spring 2005 IGA  
Meeting at ISU in  
Normal, Illinois

### 2005 Officers

*Chair:* Erik Spande,  
CH2M Hill

*Vice Chair:* Steve Van der  
Hoven, Illinois State  
University

*Director:* Dan Horvath,  
Resource Consulting

*Director:* Don Keefer,  
Illinois State Geological  
Survey

*Secretary:* Danielle Wallin,  
Farnsworth Group, Inc.

*Treasurer:* Steve Bennett,  
Western Illinois University

*Editor:* Erik Spande,  
CH2M Hill

*Student Director:* John Keller,  
Southern Illinois University

## ILLINOIS GROUNDWATER ASSOCIATION NEWSLETTER

### **FROM THE CHAIR**

One of the constant struggles for a professional society like the Illinois Groundwater Association is to define how we are relevant, or (to put it in business terms) how we provide value to our members. There are always Mission Statements – which in the IGA's case is to 'advance knowledge of groundwater resources in Illinois' - but that tends to be a tad vague. When examining this question it is more useful to look at what we do and how we do so we can put our 'value' in perspective.

For the last 22 years the IGA has devoted almost all of our funds to grants given to students studying groundwater-related issues at Illinois universities. Every year we actively solicit proposals from Illinois students and, after a careful review, select the best of these to offer the two or three IGA Student Research Grants. All we ask in return for these grants is that the students present their work to the IGA at one of our biannual meetings. We figure that everyone wins – the student gets a little help with their studies and a chance to make a professional presentation, and IGA meeting attendees gain from hearing about the research project. So, remember that when you write your \$15 budget-busting check for the IGA's annual dues or attend an IGA meeting that you are helping deserving future groundwater professionals in their research as they begin their careers.

The IGA meetings themselves also are an excellent chance to keep up with ongoing Illinois groundwater research, regulatory updates, technology, and project summaries. Sometimes the IGA meetings have a theme, but in general the presentation topics at the IGA meetings are timely and certainly varied. There is generally a presentation for everyone's tastes.

Beyond the nuts and bolts of the IGA meetings there are also the advantages of the informal professional network that develop over time. That presentation from three years ago may very well be the germ for new approach to a problem, and of course the abstract is still available at the [IGA Web Site](#) to refresh your memory. Professional networks can be problematic, however, since it is often very difficult to corral meeting attendees after breaks since they are so busy catching up with old friends or are involved in an animated conversation with a recent presenter.

The benefit that motivates me the most is the knowledge that I am giving something back to the groundwater community, and helping build the fabric (in a small way) of society. There have been so many people that have lent an encouraging word or have given me sage advice that being involved in the IGA is the least I can do to return the favor. Who knows – maybe I might help someone in return, and for me that is the ultimate 'value'.

Erik Spande, Illinois LPG 786  
Illinois Groundwater Association 2005 Chair

## *IGA NEWS*

### **SPRING 2005 IGA MEETING AT ISU**

The Spring 2005 IGA meeting is going to be at a venue we haven't been to for a long time – Illinois State University. We will be hosted at the Bone Student Center, which is roughly in the center of the ISU campus. Directions to ISU and an interactive map are available at the [ISU](#) web site.

We have a varied program this spring with presentations ranging from the new advanced water treatment system in West Chicago to the Illinois Basin Hydrologic initiative. With topics that range from applied to research to theoretical there will be a presentation that will pique any interest. Full details on the program are on [page 13](#) of this newsletter.

The Bloomington-Normal web site also has a useful list of [accommodations](#) for those that have to travel a greater distance to attend the meeting. Luckily ISU's location in Bloomington-Normal makes it fairly central to most IGA meeting attendees.

Come enjoy a great technical session, the fresh April spring air, and the company of your colleagues!

### **FALL 2004 IGA MEETING A ROUSING SUCCESS**

The Fall 2004 IGA Meeting was held at one of our favorite venues – [Fermi National Accelerator](#) in Batavia, Illinois. This facility conducts high-energy physics on a huge tract of land now surrounded by the ever-expanding Chicago suburbs. The natural environment of wetlands and preserves is a welcome break from the nearby sprawling residential and commercial developments, and the view from on top of its signature research complex is simply [beautiful](#). Fermi is such a great facility and the hosts so gracious that the IGA will definitely return in the future.

The program at Fermi had a few regulatory updates from the Illinois Environmental Protection Agency and the Illinois Department of Public Health. In addition, there were technical presentations on a phytoremediation project at Argonne National Laboratory, a vapor migration site in Hartford, Illinois, and agricultural nitrate transport near Bloomington, Illinois - all in all an excellent program. If you were unable to attend, you can find the abstracts from past meetings at the [IGA meetings web page](#).

## *IGA NEWS (CONTINUED)*

### **IGA STUDENT RESEARCH GRANTS PROGRAM**

A primary goal of the Illinois Groundwater Association is to foster scholarship in the science of groundwater. One way we support this effort is through our IGA Student Research Grant Program. Applications are invited for IGA student research grants for the year 2004-2005. The IGA annually awards one or more grants (typically \$150 - \$500) 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. **This year, completed applications must be postmarked by Monday, May 2, 2005 to be considered.** Application forms and guidelines can be obtained at the [IGA's](#) web site or from:

[Edward Mehnert](#)

**IGA Grants Coordinator**

Illinois State Geological Survey

615 East Peabody Drive

Champaign, IL 61820

217/244-2765 Fax 217/244-2785

### **2005 IGA DUES REMINDER**

It is time to renew your membership for 2005. Please print, complete, and mail this information along with your registration fee to [Danielle Wallin](#) at the address below. IGA membership dues are \$15, and the student membership is \$5. Membership renewal for each calendar year is payable at the time of the Spring Meeting and is available to anyone interested in groundwater resources in Illinois. **Please make checks payable to the Illinois Groundwater Association.**

*COST*

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

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

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

Employer: \_\_\_\_\_

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

\_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Clip form & mail to:

[Danielle Wallin](#)

Farnsworth Group, Inc.

2709 McGraw Drive

Bloomington, IL 61701

(309) 663-8435 Fax (309) 663-1571

## ***SUNSET FOR THE ILLINOIS PROFESSIONAL GEOLOGIST LICENSING ACT?***

*Submitted by Jonathan H. Goodwin, Assistant to the Chief of the ISGS, and William G. Dixon, Jr., Chairperson, Board of Licensing for Professional Geologists*

The Professional Geologist Licensing Act (225 ILCS 745) is scheduled to sunset on January 1, 2006, and The Department of Financial and Professional Regulation does not advocate for the renewal of acts due to sunset, which just became known this week. Through some hasty action, a bill for renewal has been put forward in the House Committee on Regulation, House Bill 3158. This bill will be identical to the current Act except the sunset date will be January 1, 2016.

While the number of licensed geologists in Illinois is not large (a little less than a thousand), failure to renew the licensing act would deal a severe blow to recognition of the profession in Illinois and elsewhere in the nation. Before passage of the Illinois Professional Geologist Licensing Act, laws such as the environmental protection act, the groundwater protection act, and other acts dealing with earth materials and resources commonly required that engineers certify that a geological study had been completed correctly. In many instances, the engineers who performed the certification lacked the training necessary to determine that work done by a geologist, or another engineer, really had been done correctly. The licensing act ensures that those who "hang up their shingle" as professional geologists are truly qualified to perform the professional services for which they are hired.

Please write a letter, place a phone call or send an e-mail to your senator and to your representative urging them to support House Bill 3158 to renew our Act. This link will help you find the name and address of your [Illinois elected officials](#) so you can contact them directly. If you know other licensed professional geologists in Illinois, please spread the word to them and urge them to also write to their senator and representative.

## **Governors and Premiers: Protecting the Great Lakes Annex 2001 Implementation**

*Submitted by: Lisa Wojnarowski, Council of Great Lakes Governors*

The Great Lakes are a national resource and a global treasure. They represent 95 percent of the world's fresh surface water. Forty million citizens live within reach of their shores. It is critical that we protect this valuable resource to ensure our region's economic vitality and environmental health.

Through the Council of Great Lakes Governors, the Governors of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin, along with the Premiers of Ontario and Québec, are taking the lead in protecting the Great Lakes. To that end, the Governors have developed nine priorities for Great Lakes restoration and protection. The first of these priorities is ensuring the sustainable use of the region's water resources. This priority is being met through the Council's Water Management Initiative and the implementation of the Great Lakes Charter Annex.

On June 18, 2001, the Great Lakes Governors and Premiers signed the Great Lakes Charter Annex. This historic document updated the Great Lakes Charter of 1985 and provided a framework for better managing the water resources of the Great Lakes Basin. The Annex also included a three-year timetable to develop an action plan to put this new framework into law.

The Annex explicitly recognized the inter-connectedness of the water resources of the Great Lakes Basin. Its scope includes Great Lakes surface water, tributaries and groundwater. It also would address all proposed uses of Great Lakes Basin water, whether intended for in-Basin or out-of-Basin use.

Since its signing, the Great Lakes Governors and Premiers have worked aggressively to develop this action plan to implement the Annex. Draft Annex 2001 Implementing Agreements were developed with public input, including the assistance of an Advisory Committee of experts from various fields. Council of Great Lakes Governors Co-Chair Bob Taft, Governor of Ohio, said "This process has involved government experts, the environmental community, business, agriculture and other interests. However, the voice of the people is a critical component. Public input ensures the final product is reflective of everyone that uses and depends on this critical resource."

The Great Lakes Tribes and First Nations have also provided important input throughout the process. Staff from the States and Provinces has been meeting

## **Governors and Premiers: Protecting the Great Lakes Annex 2001 Implementation (cont.)**

with representatives from the Tribes and First Nations. Building on this dialogue, the Council of Great Lakes Governors held a regional meeting in February 2005 that included the Governors' and Premiers' staffs and over 30 representatives from Tribes and First Nations. Discussions are ongoing regarding opportunities for future cooperation with Tribes and First Nations.

Draft Annex Implementing Agreements were released for public comment in July 2004. During the comment period, more than 30 public meetings were held throughout the region. The Council of Great Lakes Governors received an outpouring of more than 10,000 comments from people of all walks of life. Council of Great Lakes Governors' Co-Chair Jim Doyle, Governor of Wisconsin, said, "Renewed interest has been generated in our quest to update the way the Great Lakes are managed."

Once implemented, the agreements will help improve the health of the Great Lakes ecosystem through the following protective steps:

- A uniform, science-based decision-making standard will be used in evaluating future proposals for new and increased water uses;
- Conservation and information programs will be put in place and maintained in all the Great Lakes States, Ontario and Québec;
- A collective review process for future proposals for new or increased water uses that are regionally significant will be used; and
- Sustainable economic development will be encouraged while ensuring that water withdrawals do not damage the Great Lakes Basin.

The Governors and Premiers continue to work toward putting the Annex Implementing Agreements into action. Public involvement will continue to be critical to this effort. The Governors' and Premiers' goal is to sign final agreements this fall.

The Council of Great Lakes Governors appreciates your interest. Your input, particularly regarding scientific information related to groundwater, is also appreciated. More information about the Governors' and Premiers' efforts, including information about the draft Annex 2001 Implementing Agreements, can be found at the Council's Web site at [www.cglg.org](http://www.cglg.org).

## *WATER AND THE WORLD*

### **WORLD WATER DAY**

*Summarized from: [UNESCO](#)*

The [United Nations](#) says more than 1.1 billion people around the world lack safe water and 2.4 billion have no access to sanitation, leading to over 3 million deaths every year. "People who can turn on a tap and have safe and clean water to drink, to cook with and to bathe in often take it for granted, and yet more than 1 billion of our fellow human beings have little choice but to use potentially harmful sources of water," said Dr. Lee Jong-Wook, head of the World Health Organization. The UN's development goals are to halve by the year 2015 the proportion of people who are unable to reach or to afford safe drinking water and who are without access to basic sanitation.

Water is critical for sustainable development, including environmental integrity and the eradication of poverty and hunger, and is indispensable for human health and well-being. With these sentiments in mind the United Nations General Assembly has pronounced March 22, 2005 as World Water Day (WWD). Moreover, the period 2005 to 2015 is designated as the International Decade for Action, "Water for Life", to commence on World Water Day, 22 March 2005. The goal of the Decade of Action is a greater focus on water-related issues at all levels.

## *AGENCY AND REGULATORY UPDATE*

### **ILLINOIS STATE GEOLOGICAL SURVEY CELEBRATES A CENTURY OF SERVICE**

*Summarized from [ISGS](#)*

On May 12, 1905, the Illinois General Assembly established the current Illinois State Geological Survey by legislative act. In recognition of the importance of geological research to the economic development and environmental health of the state, this act re-established the state geological survey, which first existed from 1851 to 1875.

For nearly a century, the ISGS has provided the citizens and institutions of Illinois with earth science information that is accurate, objective, and relevant to the state's environmental quality, economic vitality, educational awareness, and public health and safety.

The Survey continues to carry out its original charge to study and map the state's geology. Survey programs, initially related mainly to the exploration and use of mineral resources, now encompass the diverse fields of study related to gathering and disseminating the earth science information and technology that Illinois citizens need.

## ***AGENCY AND REGULATORY UPDATE (CONTINUED)***

### **USGS WATER INITIATIVES**

*Summarized from: [USGS](#)*

As the primary Federal science agency for water-resource information, the [USGS monitors the quantity and quality of water](#) in the Nation's aquifers and rivers and provides data and scientific analyses to support water-management decisions. Reliable and impartial information about our water resources is vital as the Nation seeks to maintain a safe and reliable water supply and to make wise decisions about allocating limited water resources among many possible, and often competing, human and environmental uses. Ground water is plentiful in many areas of our Nation, but it needs to be used wisely to meet the demands of domestic, agricultural, commercial, industrial, and ecological uses. These competing demands are making water-management decisions increasingly complex.

This year at the request of the Congress, the USGS began a new program known as the [National Assessment of Water Availability and Use](#). This program is intended to help citizens, communities, and natural-resource managers have a clearer knowledge of the status of the Nation's water resources and consider the answers to questions such as how much water do we have? The National Assessment of Water Availability and Use program will look at trends over recent decades to look at how water availability might be changing. Ultimately, the program will yield an improved ability to forecast the availability of water for future economic and ecological uses. While this new program is currently in a pilot phase focusing on the Great Lakes Region, other major water-resources regions will be added in the future as funding permits.

### **DRINKING WATER DATA AT IEPA'S WWW PORTAL**

*Summarized from: [IEPA](#)*

The Illinois Environmental Protection Agency's (IEPA's) Drinking Water Watch Web Portal allows citizens to directly access drinking water monitoring data and other information for community water systems in Illinois. The information is of interest not only to consumers of the water supply but nearby private well owners can also quickly check on potential contamination threats.

Citizens and officials can click on a county map or enter the name of a community and pull up all the compliance monitoring data for the supply and any violation information. An administrative contact for the supply that citizens can call for further information is also included. Although water supplies are required to directly notify customers of any violations of federal drinking water standards and provide an annual Consumer Confidence Report, the web site increases the accessibility of information to the public.

## ***AGENCY AND REGULATORY UPDATE (CONTINUED)***

### **IEPA REQUESTS WATERSHED GRANT APPLICATIONS**

*Summarized from: [IEPA Watershed Grant Program](#)*

The Targeted Watersheds Grant Program is designed to further protect and restore the country's waterways through community-based approaches and activities specifically to help local water resources. Nationwide, funds are going toward restoration and protection projects such as stream stabilization and habitat enhancement, implementing agricultural and stormwater best management practices, and working with local municipalities and homeowners to promote sustainable practices and strategies. U.S. EPA funded projects that were most likely to achieve environmental results quickly.

Interested watershed groups need to submit completed Targeted Watershed Grant Program applications to Illinois EPA by April 15. Governor Blagojevich and the Illinois EPA will review them and make recommendations to the U.S. EPA. According to the program guidelines, Governor Rod R. Blagojevich can submit two state projects and multiple interstate projects for funding consideration by U.S. EPA.

This is the third round of U.S. EPA watershed grants. The Targeted Watersheds Grant Program was first proposed by the president in 2002 to protect America's waterways. The program was originally known as the Watershed Initiative. In its first two years, U.S. EPA awarded nearly \$30 million in grants to 34 watershed organizations across the country. The Agriculture Watershed Institute based in Decatur received a grant for almost \$1.3 million through this program in 2004. Funds are being used in the Sangamon River Watershed for three interrelated projects to improve water quality locally, regionally, and in the Gulf of Mexico by reducing unnecessary nutrient discharges from agricultural areas.

### **ILLINOIS AND IEPA BROWNFIELD GRANTS**

*Summarized from: [IEPA Brownfields](#)*

The State of Illinois and the Illinois Environmental Protection Agency (IEPA) have been providing dozens of Brownfield Redevelopment grants to communities across Illinois. Brownfield Redevelopment grants are awarded to Illinois municipalities for environmental assessments and cleanup of abandoned or underutilized properties in preparation for redevelopment. The funding is being provided through the Illinois Environmental Protection Agency as part of *Opportunity Returns*, the Governor's comprehensive, pro-active economic development plan for the state. Some of the grants issued in the last few months are:

Collinsville - \$119,258	Palatine - \$16,940
Dixon - \$96,723	Park City - \$77,622
Downers Grove - \$14,000	Park Forest - \$120,000
East St. Louis - \$24,150	Plano - \$100,570
Minooka - \$39,529	Princeton - \$27,506
Mt. Carmel - \$59,857	Rock Falls - \$120,000
New Athens - \$12,782	Rossville - \$69,956

## ***AGENCY AND REGULATORY UPDATE (CONTINUED)***

### **ILLINOIS LOANS FOR COMMUNITY DRINKING AND WASTEWATER UPGRADES**

Summarized from: [IEPA Loans](#)

Two programs administered by the Illinois Environmental Protection Agency (IEPA), that have provided low-interest loans to assist hundreds of communities across the state in upgrading or expanding their drinking water and wastewater treatment facilities, have now passed the \$2 billion mark.

“Safe and reliable drinking water supplies and meeting all standards for sewage treatment are essential to the quality of life across our state and the loan programs continue to be a popular and vital tool,” said IEPA Director Renee Cipriano.

Governor Blagojevich’s *Opportunity Returns* regional economic development initiative recognizes the importance of these loan programs for building the infrastructure that underlies future economic growth and quality of life for our citizens and we anticipate continued strong demand, added Director Cipriano.

Communities have used the loan money to significantly reduce the costs of complying with new regulations to protect the environment and public health, such as removing radium from drinking water. In addition, the loans have been used for new or expanded treatment, distribution and storage facilities to serve more customers.

Among the communities receiving substantial loans in 2004 were the Metropolitan Water Reclamation District of Greater Chicago, Batavia, Oswego, Kankakee, Galena, Peoria, Urbana-Champaign, Bloomington-Normal, Lake of Egypt, Breese and Forsyth.

The wastewater revolving loan program began in 1989 and has provided 409 loans for wastewater facilities, totaling \$1.69 billion. The drinking water loan program began in 1997 has provided 187 loans for infrastructure, totaling \$312 million.

During 2004, a total of \$139.2 million in new loan awards were made in the two programs. That included \$87.8 million in the wastewater revolving fund program, with seven new awards and 22 amendments to previous loans. The drinking water loan program provided \$51.4 million in 2004, with 27 new loans and 28 amendments.

The loan programs are funded by 80 percent federal and 20 percent state match funding. The loans are provided to communities at half the market interest rate and the repayments over a 20-year period are returned to the funds to support other loans. Director Cipriano has urged Illinois congressional delegation to ensure there is adequate federal funding for the loan programs.

## ***FOCUS ON ILLINOIS GROUNDWATER EDUCATION***

### **ISGS SPONSORS FIELD TRIP TO KICKAPOO STATE PARK**

*Summarized from: [ISGS Field Trips](#)*

The Illinois State Geological Survey is hosting field trips to Kickapoo State Park in Vermilion County on April 16 and May 7, 2005. The trips start at Kickapoo State Park, located along the Middle Fork of the Vermilion River along the eastern portion of central Illinois. The geologic history of the glacial activity and the underlying Pennsylvanian age bedrock is revealed in the field trip area. Bedrock belonging to the Carbondale Formation of mid-Pennsylvanian age is exposed within Kickapoo State Park along many of the lakes that were formed during surface mining of the area in the early part of the last century.

Participants will tour Kickapoo State Park and the surrounding area, explore outcrops of coal-bearing Pennsylvanian age strata, walk along the banks of the wild and scenic Middle Fork of the Vermilion River, visit a limestone quarry, and examine exposures of Pleistocene glacial deposits. This central Illinois scenic area provides a good opportunity to collect a variety of good specimens, including fossils and a variety of igneous and metamorphic erratics.

### **MARCH 13-19 IS NATIONAL GROUND WATER AWARENESS WEEK**

*Summarized from: [NGWA](#)*

Ground Water Awareness Week is sponsored by the National Ground Water Association (NGWA) and this year's theme is "Time to Schedule Your Annual Water Well Checkup."

Ground water is one of our Nation's most important and precious natural resources. About half the U.S. population receives its drinking water from wells! And more than 90 percent of the fresh water in the United States and around the world is ground water. Ground Water Awareness Week spotlights ground water as a valuable and renewable resource.

For additional information about National Ground Water Awareness Week visit the [NGWA](#).

**MEETING REGISTRATION**

Please return a form for each person attending. Registration includes a continental breakfast and afternoon refreshments. **If you aren't a member yet, become one for only \$15 and save \$40 on meeting registration this year!** To qualify for early registration, send this information to Danielle Wallin by Friday, April 15, 2005, by mail, e-mail, or fax (see information below). Make checks payable to the Illinois Groundwater Association if registering by mail, or pay at the conference if registering by email or fax.

<b>Early Registration</b> <i>(received by 4/15/2005)</i>	
Member:	\$40.00
Non-Member:	\$60.00
Student:	\$20.00
<b>Late Registration</b>	
Late Member	\$55.00
Late Non-Member	\$75.00
Late-Student	\$25.00

**Contact Information**

Name: \_\_\_\_\_  
 Position: \_\_\_\_\_  
 Employer: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

**IGA MEMBERSHIP**

Annual dues are \$15.00 and membership is available to anyone interested in the groundwater resources of Illinois. Dues for each calendar year are payable at the time of the spring meeting. Send this information to Danielle Wallin (see information below). Make checks payable to the Illinois Groundwater Association.

<b>Membership Dues</b>	
Renewal or	\$15.00
New Member:	
Student:	\$5.00
Send registrations and memberships to:  Danielle Wallin, IGA Secretary Farnsworth Group, Inc. 2709 McGraw Drive Bloomington, IL 61701 (309) 663-8435 Fax (309) 663-1571 <a href="mailto:dwallin@f-w.com">dwallin@f-w.com</a>	

**Contact Information**

(if same as above, check here )

Name: \_\_\_\_\_  
 Position: \_\_\_\_\_  
 Employer: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

## PROVISIONAL AGENDA

### ILLINOIS GROUNDWATER ASSOCIATION 2005 SPRING MEETING APRIL 26, 2005

**BONE STUDENT CENTER, ILLINOIS STATE UNIVERSITY, NORMAL, ILLINOIS**

- 8:15-9:00 Registration with refreshments
- 9:00-9:15 Opening Remarks: **Erik Spande**, IGA Chair
- Morning Session**
- 9:15-9:35 **Robert Finley**, Illinois State Geological Survey, *The Illinois Carbon Sequestration Project*
- 9:35-9:55 **Patrick McNulty**, McHenry County Health Administration, *McHenryCounty Groundwater Resource Plan*
- 9:55-10:15 **David English**, City of West Chicago, *Upgrades to the West Chicago Water Treatment Plant to Address Radium and Arsenic in Groundwater*
- 10:15-10:30 **Break**
- 10:30-10:50 **Business meeting and time for announcements**
- 10:50-11:10 **Dan Injerd**, Illinois Department of Natural Resources, *Great Lakes Water Management Initiative*
- 11:10-11:30 **Philip J. Carpenter**, Northern Illinois University, *Karst Conduit Detection Using Seismic Refraction Tomography and Ground-penetrating Radar Surveys*
- 11:30-12:00 **Ben Ruddell**, University of Illinois at Urbana-Champaign, *Illinois River Basin Hydrologic Study*
- 12:00-1:00 **Lunch**
- Afternoon Session**
- 1:00-1:20 **Becky A. Ciske**, Northeastern Illinois University, *A Study of the Effects of Precipitation on Methane Production and its Relationship with the Chemical Composition of Leachate at a Landfill Site*
- 1:20-1:40 **Eric Peterson**, Illinois State University, *Fluid and Solute Transport from a Conduit to the Matrix in a Carbonate Aquifer System*
- 1:40-2:00 **Wade Boring**, Illinois Environmental Protection Agency, *Illinois EPA Source Water Assessment Program and Internet Mapserver*
- 2:00-2:20 **Break**
- 2:20-2:50 Illinois Brownfields Program, TBD
- 2:50-3:10 Downhole video camera technology and applications, TBD
- 3:10-3:30 **Don Keefer**, Illinois State Geological Survey, *Making Sense of Pesticide Detections Obtained from a Dedicated Statewide Monitoring Well Network*
- 3:30 **Adjourn and IGA Executive Committee Meeting**