



Winter 2008-2009 Newsletter

Illinois Chapter and Illinois-Indiana Section of the AIPG

American Institute of Professional Geologists

Winter 2008-2009

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Message from the President

David Pyles, PG, CPG-7364, KPRG and Associates, Inc.

As a new component of our Section's bi-annual newsletters, I'd like to share several thoughts on some of the initiatives and issues that our Section Board has been working on.

Ramona Cornea has been a stalwart figure in our Section and I'm pleased to announce her nomination for the position of AIPG's National Secretary. As many already know, she has been a hard-working board member for many years and is dedicated to the geological community and AIPG. This is an elected position and I request your support in helping her with getting elected to this position. So, when the AIPG vote solicitation arrives, please be sure to vote.

I wish to welcome Harvey Pokorny, our newest Section Board member. As many may already know, Harvey is a Certified/Licensed Professional Geologist with over 30 years of experience and is currently a Senior Project Manager at the Versar Inc. Midwest Regional Office. Harvey brings a wealth of experience to the Board and will be a valuable member in the years to come.

Another stalwart leader in our Section has been nominated for the AIPG Ben Parker award. Martin Hamper has been a driving force in our Section since its founding and he has lent his energy as an advocate for geologists in Springfield and has helped influence legislation for many years. His leadership in our Section and the geologic community is remarkable and our Section is pleased to nominate him for one of AIPG's highest honors.

I'm pleased to report that our Section is undergoing something of a Renaissance. As many may recall, not too long ago, our section was limited by participants and resources. That has changed and we now have a Board consisting of nine hard-working members. We look to grow the board by several more members who want to get involved and serve their professional organization.

Having regular, quality meetings is vital to provide a sense of community and a forum for the issues-of-the-day for Illinois and Indiana professional geologists. Collectively as your Board, we are committed to hosting two meetings per year: one in the spring (**our next meeting is on April 22, 2009**) and the other in the Fall. Our meetings are free to AIPG members and will have featured speakers that highlight key topics and initiatives to the geologic community. Further, the meetings are held in the evenings to make them accessible to as many as possible. It is our hope that the combination of free, valuable content and convenient access will convince you to join us!

Another critical communication tool is our newsletter. Our objective is to publish bi-annual (spring and fall) newsletters so that information is fresh and relevant to the geological community of Illinois and Indiana. As such, we are issuing an open invitation to the geologic community to contact us if there are issues of concern or if there are hot topics we may have overlooked. And of course, if you have a technical article we will be pleased to accept it!

Message from the President (continued)

We wish to reach out to existing members and ask that you get involved with your profession beyond going to work and expecting someone else to sustain and manage the commission of our profession. Our objective is to increase participation in our meetings and to publish our meeting highlights within the *The Professional Geologist* (TPG) published by AIPG National and our Section newsletter. We will open a consistent dialogue and forum for the governmental agencies to share their progress and science with us. Our Section activities will also serve as a conduit for both Indiana and Illinois State Geological Surveys and will provide support for their initiatives. These efforts will benefit everyone who practices geology in our section.

And now, the big news... **AIPG National has taken notice of our activities and our re-invigorated Section and has selected us to host the Annual Meeting in 2011 here in Chicago.** This will mark the first time our section has ever hosted this event. I might add that this will be the 47th Annual Meeting of AIPG. This will be a collective effort between AIPG and several other professional organizations. Typically this event brings over 500 geologists together for workshops, technical presentations, field trips, and other development related programs, as well as a wide-variety social events. In addition, the Annual Meeting is an occasion where AIPG can conduct its business in one place with its sections all pulled together for face-to-face meetings, elections, and related business. No doubt, we will need as many Section members as possible to step up and facilitate this effort so we can showcase our geological community and make this meeting successful.

Spring 2009 Illinois-Indiana Section Meeting

The Spring 2009 Illinois-Indiana Section meeting features IEPA regulatory updates as well as the latest on vapor intrusion and the LUST program.

The Illinois-Indiana Section of AIPG is pleased to announce that the Spring 2009 meeting will be held at the Morton Arboretum on April 22, 2009. The Morton Arboretum is not only a terrific venue, it also has the advantage of being centrally located within the Chicago area. Moreover, it is convenient to have our meetings in a well-known location. Our meeting will be in the new Visitor's Center which has a wonderful view of the lake and the majestic surroundings.

This will be an evening meeting to accommodate everyone's busy schedules with a start time of 6 PM and wrapping up at about 9 PM. As with our previous meetings, there will be no charge for AIPG members (non-members are asked for a donation). Snacks will be provided, along with a cash bar for refreshments.

We are featuring two extraordinary speakers:

- **Mr. Gregory Dunn**, Program Manager, IEPA Voluntary Site Remediation
Presentation: IEPA Regulatory Update
- **Mr. Hernando Albarracin**, IEPA Leaking Underground Storage Tank Section Manager
Presentation: The Future of LUST Program and Vapor Intrusion Regulations Update

Location: The Morton Arboretum, 4100 IL Rt. 53, Lisle, Illinois. Visit www.mortonarb.org for directions.

Date and time: April 22, 2009; 6:00 to 9:00 PM

Send your R.S.V.P to David Pyles at 630/325-1300 or davidP@KPRGinc.com.

"The (Fall 2008) Section meeting was successful, well organized, and attended by 65 Geologists and Engineers."



Illinois/Indiana Section Board Members and Guest Speakers – 2008 Fall Meeting: from left to right: David Pyles (KPRG and Associates, Inc.), Craig McCammack (V3 Companies), Jeff Groncki (Malcolm Pirnie, Inc.), Erik Spande (CH2M HILL), Marzi Sharfaei (Malcolm Pirnie, Inc.), Jessica Wallace (KPRG and Associates, Inc.), Martin Hamper (Arcadis), Dan St. Germain (Malcolm Pirnie, Inc & AIPG President), Neil Sturchio (University of Illinois at Chicago), and Ramona Cornea (LandTech, Inc.).

The Fall 2008 Annual Meeting: A Huge Success

Marzi Sharfaei, PG, CPG-10892, Malcolm Pirnie, Inc

The Illinois and Indiana Section held its Annual Meeting on October 15, 2008 from 6:00 to 9:00 PM at The Morton Arboretum, in Lisle, Illinois. The keynote speaker was Mr. Dan St. Germain, International President of AIPG. Mr. St. Germain gave a presentation on his perspective of the future

of AIPG and the importance of a having a strong section. The second guest speaker was Dr. Neil Sturchio, Head of the Department of Earth and Environmental Sciences, University of Illinois at Chicago. Dr. Sturchio gave a presentation on Environmental Isotope Forensics of Perchlorate.

In addition to the guest speakers, 13 vendors (laboratories, remediation contractors, drillers, and equipment suppliers) participated in an evening of networking where they showcased their areas of expertise.

The meeting was successful, well organized, and attended by 65 Geologists and Engineers.

Martin Hamper Nominated for Ben H. Parker Award



Martin Hamper Nominated for AIPG Ben H. Parker Award

The executive board of the Illinois-Indiana Section of AIPG was pleased to nominate Martin Hamper (CPG-10250) (past Section President, past Chapter President, and current board member) for the 2009 AIPG Ben H. Parker Memorial Metal. The medal is AIPG's highest honor and is awarded to individuals who have long records of distinguished and outstanding service to the profession. As described in the nomination, Martin has been a leader in the geological profession for nearly 30 years, leading his profession through tireless work as a Principal Hydrogeologist at ARCADIS, Inc., work with our Chapter and Section, education and mentoring, and advocacy for geologists in the State of Illinois. He also made a significant contribution to the passing of Senate Bill 1968 that included *Geologists* in the laws for the Site Remediation Program and the Underground Storage Tank Program for the Illinois Environmental Protection Agency, and House Bill 3158 that extended the sunset for the Professional Geologist Licensing Act through 2016.

Harvey Pokorny Elected to Section Board



Harvey Pokorny,
New Section Board
Member

The Illinois-Indiana Section of AIPG is pleased to announce that Harvey Pokorny (CPG-7919) has been elected by the current Section board to be a board member for 2009. Harvey brings a wealth of experience to this Section and we are thrilled he will be able to contribute to AIPG and the geological community of Illinois!

Harvey received his B.S. (1970) and his M.S. (1972) from Northern Illinois University and worked in the oil and geologic consulting industry until 1989. After getting his hazardous waste management and project management education at the Colorado School of Mines in 1989, he started his career in the environmental field where he has managed a full range of projects from Phase I assessments through remedial investigation, feasibility studies, remedial action, and closures. Mr. Pokorny is currently a Senior Project Manager for Versar, Inc.

Please join us in welcoming Harvey to the Illinois-Indiana Section board!

Section Treasurer Report for 2008

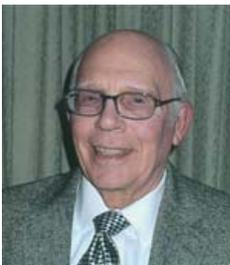
Ramona Cornea, CPG-8983, Indiana-Illinois AIPG Section Treasurer

The Illinois-Indiana Section of AIPG has to submit a summary of income and expenses to AIPG National each year. A summary of this Section's financial report is provided below.

- Funds available on January 1, 2008: \$1,988.77
- Income from dues, meetings, and donations for 2008: \$6,551.00
- Total revenue for 2008: \$ 8,539.77
- Total expenses for 2008: \$4,752.57
- Funds available as of December 31, 2008: \$3,787.26

Geologist Intern Amendment Reintroduced

Bill Dixon, CPG-3659, Practical Environmental Consultants, Inc.



Bill Dixon

Last year, the Geologist Intern amendment to the Geologist Licensing Act HB 4762 passed unanimously in the house but never came to a vote in the senate. This year it has just been reintroduced as HB 0880, and as of February 26th the amendment to the Act had a hearing in the Business/Occupational Licensing Committee, and they sent the bill to the house with a do pass recommendation. It could come up for a vote in early March if the Democratic leadership moves it along.

You can track the progress of the bill on the Illinois State Web site: on the left menu, click on Government; then on the right menu, click on Legislature; then click on the link "Bill and Resolution Search".

The purpose of the bill is to allow candidates for licensure to take the Fundamentals of Geology (FG) portion of the examination right after graduation or in the final semester immediately before graduation. Now, candidates must wait until they have completed the required four years of professional experience before they can take the FG and Practice of Geology (PG) examinations.

The bill will also allow Illinois schools, if they choose, to utilize the FG examination as an exit exam as is done in Mississippi and Kentucky. Currently, there is no system of accreditation for geology departments, but the exit exam method allows them to self evaluate their programs by seeing how their students perform on the several domains, or broad topics, within the FG examination. The students are required to take the exam to obtain their degree, but they do not have to pass the exam. If they do pass the exam, they are one step closer to being licensed.

2008 AIPG National Meeting Review

David Pyles, PG, CPG-7364, KPRG and Associates, Inc.

The Arizona Section of the American Institute of Professional Geologists hosted the 45th Annual Meeting in Flagstaff, Arizona. The meeting was co-sponsored by the Arizona Hydrological Society, their 21st Annual Symposium, and the International Professional Geology Conference (IPGC), an international collaborative group of geologists from the international community. This was their 3rd conference with other professional organizations.



The overall conference held two themes: Changing Waterscapes and Water Ethics for the 21st century and IPGC's: Global Geoscience Practice, Standards, Ethics and Accountability. The participation at this annual meeting and conference included two days of administrative meetings followed by the three day technical conference.

The administrative work was held over the weekend in advance of the conference. This included the Advisory Board meeting where all

of AIPG's Sections gather to discuss the status of their Section and review its activities. Each Section was requested to have representation. As your Section President, I was the representative and delegate. Out of the 35 sections, 18 representatives were present which represented 52 delegate votes, a majority. Each Section was required to present a written Section report summarizing their 2008 activities, plans for 2009, and any identified problems/issues for the upcoming year. In review of these presentations, most sections are hosting at least two meetings or more per year with some form of Section specific newsletters. A majority of the Sections have been active in the license issues and trying to collectively represent their Geologist members within the regulatory framework. Some Section reports included issues dealing with trying to develop membership participation and improving the quality of the Section meetings.

Following the Section presentations, the 2009 nominations of Advisory Board Representatives were presented. The delegates elected Bob Gaddis of Oklahoma, Adam Heft of Michigan, Mark Rogers of Hawaii and Ron Wallace of Georgia as our 2009 Advisory Board Representatives.

The conference hosted a wide variety of workshops that were held at Northern Arizona University's Applied Research and Development Center.

Course work included hands-on training with ArcGIS and ArcHydro software applications, and Project WET Education training to technical writing workshops. In addition, numerous field trips were available including the Grand Canyon, Fossil Creek, Sedona Mining District and Sunset Crater, to name a few.



The main conference hosted 18 technical sessions consisting of 5 presentations per session. Being that the theme of the conference was "Changing Waterscapes and Water Ethics for the 21st Century", a great number of the presentations focused on the water crisis in the southwestern U.S. A good blend of surface water hydrology and groundwater geology related issues were presented. The conference also coupled a large number of specialty vendors for equipment demonstrations, and applications of new and innovative technology entering our profession.

Approximately 400 professionals participated in this event. I highly recommend that members of our Section attend a National Conference. Next year's conference will be hosted by the Colorado Section in Grand Junction which is located on the west slope.

The Value of AIPG

Ramona Cornea, CPG-8983, LandTech, Inc.

I graduated from the Institute of Oil, Gas and Geology in Bucharest, Romania in 1970, with a MS degree in Geophysical Prospecting. This was a technical institute preparing, among others, professionals for geological and geophysical engineering. For the next 22 years I worked full time as geophysical engineer in Romania with various geological enterprises. I also obtained a PhD degree from the University of Bucharest, Romania in 1986.

After my immigration to the USA in 1992, I was determined to meet American geologists and, if possible, to continue working in the geological field. Thus I contacted the American Institute of Professional Geologists (AIPG), the only national organization at that time that could officially certify my credentials in the geological sciences. AIPG had given me the names of its members residing in Aurora, Illinois area, and in this way I had the chance to meet Dr. William Lang. Despite my heavy accent, Bill kindly took the time to listen to my geological expertise and invited me to the AIPG Illinois Section, AEG meetings and ISGS workshops. I got immediately accepted by fellow geologists as we discovered many professional affinities. I felt like I was back home among my Romanian geologist friends when in American geologists' company. I realized that before belonging to a nation or nationality we, geologists, belong to a large geological family. It was so comforting!

Dr. Lang offered me not only a job at his environmental geology business, Strata Power, but a recommendation to become a Certified Professional Geologist (CPG). I presented my application, proof of studies and experience to the AIPG and I was granted the CPG certification in no time. I cannot express how happy and proud I was to belong to the largest American association dedicated to promoting geology as a profession.

As a CPG member, I participated to the Illinois-Indiana Section and got to know other brilliant geologists like Dick Berg, Myrna Killey, Bill Dixon, and Beverly Herzog. We have gotten to know each other during field trips and had lots of fun sharing our professional experiences.

Then I started participating to the AIPG national annual meetings and met geologists from other states. I immediately had the same feeling of coming home. These annual meetings provided me with the chance to take field trips led by prominent geologists of the host state, and learn the applied geology specific to each state. So far, I have learned about the geology of Wisconsin, New York, Kentucky, Minnesota, and Michigan. During these trips I also felt as if I was traveling back in time because I felt like a geology college student again. I was most impressed by the quaternary geology that is not well represented in Romania, but also with the crystalline structures of Minnesota and Michigan, the caves and sinkholes of Kentucky, and basement rocks of the Big Apple were also quite impressive. And I'm not even mentioning the beauty of the nature in fall colors and the fun.

The AIPG annual meetings have given me the chance to continue my professional activity by holding presentations at the technical sections and being informed on the geological advancements in other geological fields.

Also, I met the people in the headquarters and the Board of AIPG which inspired me to join the section board where I have held the position of treasurer for the last two years. I'm proud that our section has become active again, having so many participants to our semiannual meetings.

Thus, each year at the time of renewing the membership application, I'm doing it without asking myself what AIPG doing for me. I renew without any hesitation, but with pride and confidence that I belong to the right group of geology professionals.



Ramona at Saratoga Springs, NY

Why AIPG?

Jeff Groncki, CPG-11118, Malcolm Pirnie, Inc.

“Why AIPG?” is a question that each of us have had to answer at some point in our career. The short answer is **Value**. Providing value to members is possibly the biggest challenge AIPG faces. It is important to understand the resources and benefits available to you as member of AIPG or as a Certified Professional Geologist (CPG); this will allow you to help promote AIPG as a group and encourage professionals and students to get more involved in AIPG activities. As an organization, one of AIPG’s missions is to promote high standards of ethical conduct within the geological profession. AIPG National provides value to members by offering the following core services:



- Certifying professional geologists based on their competence, integrity, and ethics. Earning the title of CPG enhances your credibility with clients, regulators, legal counsel, and your employer and demonstrates your personal commitment to achievement and continuing development.
- Providing a collective voice for geologists to the state and federal government on issues that affect geologists.
- Publishing and distributing a bi-monthly magazine to all members that presents a wide range of articles that deal with real issues routinely faced by geologists and a thought provoking ethics column that consistently offers guidance to young professionals and is paramount to maintaining an organization that promotes integrity and ethical behavior.
- Providing liability insurance and a full line of health, life, and accident insurance.
- Hosting annual meetings where industry leaders present publications to keep you on the leading edge of the industry.
- Offering an online job board where you can post a resume or new employment opportunity.
- Offering discounts on AIPG publications.
- Providing access to resources that will keep you on the forefront of emerging legislation and policies that will help you serve your clients by being able to foresee their problems and correct them before they realize.
- Offering award recognition for outstanding professionals and scholarship opportunities for students.
- Providing individuals opportunities for networking with other geologists that have similar professional and ethical standards.

In addition, the Illinois/Indiana Section provides value by offering the following additional value:

- Hosting biannual meetings that feature technical presentations, legal issues, and regulatory updates. At one of the biannual meetings we also invite contractors, including drillers, remediation vendors, laboratories, waste disposal companies, and others to attend and participate in an evening of networking. By making the meetings free to AIPG members we continue to provide an incredible opportunity for professionals to network and learn.
- Publishing a biannual newsletter to keep members informed about Section business and upcoming events. We invite you to submit any recently published articles to the AIPG Section board for inclusion in a future newsletter.

Our Section is here to serve its membership, so please feel free to contact any board member regarding any issues of concern or any hot topics that you would like to see featured at one of our meetings or in one of our newsletters.

Increasing your involvement in AIPG will open up many doors and increase your visibility in the professional arena. In addition, obtaining CPG status will, by association, include yourself in a group of professionals known for competence, integrity, and ethics that will make you more marketable in the geologic community. I encourage you to get involved and make an effort to take advantage of the value that AIPG offers.

AIPG Illinois-Indiana Section Officers

Executive Committee

President: David Pyles, KPRG and Associates, Inc., CPG-7364, davidp@KPRGinc.com

Vice President: Open

Treasurer: Ramona Cornea, LandTech, Inc., CPG-8983, r.cornea@comcast.net

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Harvey Pokorny, Versar, Inc, CPG-7919, HPokorny@Versar.com

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Indiana Professional Geologist Licensure

Craig McCammack, MEM-1295, V3 Companies

I suspect there are many Illinois licensed professional geologists who are also licensed in Indiana that take advantage of overlapping markets and opportunities in both states. If you are an Illinois PG and are considering dual licensure, or an individual who simply wants to learn more about the Indiana licensing program, the following overview and informational links will help you get started.

First of all, Indiana is a member of the National Association of State Boards of Geology (ASBOG), as is Illinois and most other states. ASBOG is not a licensing organization; its purpose is to provide state-approved standardized written examinations specific to each member state.

According to ASBOG, only three of the 50 states do not have a comity/reciprocity policy. Unfortunately for those already holding a PG license from another state, Indiana is one of the three that does not have a comity provision (Missouri and New Hampshire are the other two). So to become an Indiana licensed professional geologist, you must pass the state examinations.

ASBOG holds two separate examinations: the first to test an individual on the Fundamentals of Geology (the FG exam), and the second to one's knowledge



on the Practice of Geology (the PG exam). An individual must pass both exams to be eligible for licensure. The ASBOG examinations are next offered at Indiana University in Bloomington, Indiana on October 2, 2009. The exam application and fees must be submitted to the Indiana Geological Survey by August 11, 2009 in order to take the exams this Fall. The examination fees are \$150 for the FG and \$200 for the PG test. To learn more about the exams and to download the application form, go to <http://www.asbog.org/>.

In addition to meeting the exam requirements, an individual must also submit an application for licensure, for an additional fee of \$70. For more information on Indiana Professional Geologist licensure requirements, and to obtain the related forms, go to <http://igs.indiana.edu/Licensing/index.cfm>.

Legislative Advances in Compressed Natural Gas

James Adamson, MEM-1532, V3 Companies

There are many developments occurring in state and federal legislation that are encouraging for geosciences in Illinois and Indiana. One of the most prominent developments is compressed natural gas (CNG) as a substitute for gasoline, specifically its use in automobiles. CNG is made by compressing natural gas to less than 1 percent of its volume and storing it in a tank. There is already state and federal legislation that encourages the use of CNG and automobile conversion to CNG; some governmental organizations, municipalities and corporations are already starting to convert their fleets. The new Obama administration considers CNG a significant component of energy independence and a part of future global warming policy. It is anticipated that CNG development will be supported with large tax credits and incentives under developing legislation. The new Chief of Staff, Rahm Emanuel, previously led stalled legislative efforts for CNG, including goals for the U.S. automakers to produce 10 percent of their vehicles to run on CNG. The natural gas industry is certain that Emanuel's legislation will return and be passed.



The benefits of CNG seem to outweigh the disadvantages; nearly all of the natural gas consumed in the United States is produced in the United States; the combustion of natural gas emits 25 percent less greenhouse gas than gasoline; and technology has also been developed that allows vehicles to be refueled anywhere there is natural gas service. However, the primary disadvantages of CNG are related to natural gas being a limited non-renewable resource, the environmental impacts of new drilling programs, the availability of filling stations and the larger tank size required for storing the compressed gas.

So what does this mean for geosciences in Illinois and Indiana, two states that produce only 0.01 percent of the natural gas in the United States? Natural gas demand is expected to increase with approved legislation and the rollout of a CNG program. There are many natural gas reserves in Illinois and Indiana (exploited and unexploited) that had little or no profit potential in the past. New well technologies combined with a decrease in easily accessible gas across the US and an expected increase in national demand make those reserves more attractive. Gas companies are already gearing up; the Illinois State Geological Survey has reported a significant increase in gas company visits to their geologic samples library in Champaign over the last several months. Chesapeake Energy also expects to have up to 30 to 40 additional drilling rigs ready to operate in the southern states upon confidence of federal CNG legislation approval. Landowners in known or potential natural gas areas are hiring consulting geologists to quantify their potential gas reserves and review their old grim reserve reports to evaluate whether new extraction technologies can be applied and yield better returns.

Illinois and Indiana also have geologic conditions that favor large scale natural gas storage, which is currently utilized by several natural gas companies. Illinois is one of the leading states in natural gas storage potential. The demand for these subsurface storage reservoirs is increasing, prompting significant geologic studies and ongoing monitoring. The state of Illinois is characterizing subsurface natural gas storage potential in areas of the state and encouraging the establishment of new storage facilities.

The application of any CNG legislation will have its effects throughout the United States as it has already in many other countries. Illinois and Indiana are well positioned from a natural resources perspective to economically benefit from a CNG program and the developments are something to keep an eye on.

Great Lakes Geologic Mapping Coalition

John C. Steinmetz, CPG, Indiana Geological Survey

The Central Great Lakes Geologic Mapping Coalition was established in 1997 by the state geological surveys of Illinois, Indiana, Michigan, and Ohio working in partnership with the U.S. Geological Survey (USGS). In January 2008, the Coalition dropped the prefix "Central" from its name, and it expanded to include the other four states bordering the Great Lakes: Minnesota, New York, Pennsylvania, and Wisconsin.



The Coalition states are unique within the U.S. for a number of reasons: they have (1) thick, complex, multiple layers of sediments deposited by several glacial episodes, which contain groundwater resources used by a large percentage of their residents, (2) high population (~80 million), (3) a long history of light and heavy industry and manufacturing, (4) serious brownfield redevelopment issues, (5) high agricultural productivity, and (6) considerable demands on water resources from the energy sector.

Unfortunately, only a small percentage of the surface deposits of these states has been mapped to the standards set by the National Cooperative Geologic Mapping Act to address critical land-and-water-use decisions that state and local officials must make to cope with these unique and interrelated regional geological and cultural characteristics.

The Coalition's primary mission is to make three-dimensional (3-D) geologic maps characterizing the region's surface and near-surface deposits to depths of several hundred feet, all at a scale usable for decision-makers. A secondary mission is for Coalition scientists to create techniques and tools to exchange with each other, thereby leveraging their often-limited resources.



The maps created provide the scientific and objective facts required to help developers and planners make cost-effective economic development decisions, such as enhancing groundwater availability for residential, municipal, industrial, and energy consumption. Additionally, they provide a means for these groups to avoid areas where groundwater is susceptible to contamination and where natural hazards may be prevalent. The maps are also essential for accurate inventories of sand and gravel for infrastructure development, wetlands preservation and restoration, and safe redevelopment of abandoned industrial lands, commercial and manufacturing enterprises, and new or expanded waste disposal facilities.

In each of the Coalition states, mapping is being done where it is most needed in urban/suburban areas, regions with known environmental and homeland security risks, and areas of high water demand from population and energy production. Despite the prevalence of geologic maps in many of these areas, more often than not, the maps were compiled decades ago, often when the focus was on the geology of the bedrock. Often the surficial deposits were merely characterized as Qal for Quaternary alluvium. Additionally the mapping was often at a reconnaissance survey scale of 1:50,000 or greater. Coalition mapping focuses on usable scales of 1:24,000 or finer.

Three-dimensional mapping is expensive. Because of the complexity of the glacial geology with its rapidly changing character, shallow geophysics and water-well drilling is employed. No single institution among the Coalition partners has the financial, technical, or physical resources to

Great Lakes Geologic Mapping Coalition (continued)

conduct a massive geological mapping effort at the national standard scale of 1:24,000 (1 inch on the map = 2000 feet on the ground). Therefore, the Mapping Coalition relies on the combined physical and intellectual resources of all agencies, in concert with Federal funding. This combination allows 3-D geological mapping to be conducted in the most cost-efficient manner.

As an example of what the Coalition scientists are undertaking in northeastern Indiana, 3-D geologic mapping and reconstruction of the glacial sediments have been initiated to develop models of how these materials were deposited. The materials enclose a major aquifer system that has experienced a long-term decline in groundwater levels. The 3-D geologic interpretation is the first step in developing a model for the aquifer system, which will help in understanding groundwater flow and recharge. In addition, the Coalition completed an educational and outreach effort focused on Allen County where Fort Wayne, Indiana's second largest city is located. A website was created to disseminate much-needed geologic information about accessing and protecting groundwater and mineral resources. This website, written for the general public and water-and-mineral-resource,

environmental, planning, and public health professionals, includes an internet map server where online maps can be constructed that provide educational summaries and discussions of geologic maps. It also offers databases that can be downloaded by any user.

Federal funding of the Coalition has been a modest half-million dollars annually since 2000. With eight states and the USGS in the partnership, Coalition members are seeking an increase to the appropriation to \$5 million for FY2010. They feel that to expand the program and provide this societally important geological information in a more timely fashion, additional Federal funds are needed. Presently, the Coalition is approaching the House and Senate Appropriations Committees to seek these funds.

For more information on-line about the GLGMC:

- Coalition Web site:
<http://GreatLakesGeology.org>
- USGS Open-File Report 99-349:
<http://pubs.usgs.gov/pdf/of/ofr99349/>
- USGS Circular 1190:
<http://pubs.usgs.gov/circ/c1190/>

Illinois Groundwater Supply Planning

David Larson, Illinois PG-196-000896, Illinois State Geological Survey

Illinois was affected by a severe drought in 2005 which provided the impetus for Governor Blagojevich's Executive Order 2006-01 on water planning. The Order cited the need for sound planning in the management of the state's water resources and called for the development of a strategy for comprehensive, statewide water supply planning and management. As part of developing the strategy, at least two locally based, regional water-supply planning committees were to be organized in order to participate in the development and approval of regional plans. The regional planning committees were to receive three years of financial and technical support from the state through Illinois Department of Natural Resources, Office of Water Resources. The committees would help collect the information needed for the planning process.



Using the Texas Water Development Board as an example of a grass-roots, bottom-up approach to water-resources planning, two committees were organized with representatives from a wide range of

Illinois Groundwater Supply Planning (continued)

stakeholder groups to test the suitability of this approach to water-resources planning in Illinois, and assess the feasibility of applying it statewide. The Northeastern Illinois Regional Water Supply Planning Group includes the 11 counties within the greater Chicago region. The East-Central Illinois Regional Water Supply Planning Committee includes 15 counties located in east-central Illinois.

The Northeastern Illinois Regional Water Supply Planning Group is comprised of 32 members selected by caucuses of nine stakeholder groups. Organization of the group was facilitated by the Chicago Metropolitan Agency for Planning (CMAP). The nine stakeholder groups represent county government; municipal government; environmental advocacy, conservation, and resource management; agriculture, wastewater treatment and non-municipal public water supply; business, industry and power; real estate and development; and academia and public interest in regional planning. An analysis of water demand for the northeastern Illinois region to the year 2050 was recently completed under the auspices of the Planning Group and CMAP. Three scenarios were used in the analysis of water demand—current trends, less resource intensive, and more resource intensive—in four broad water-use segments with an analysis of sensitivity to climate change. The report and more information about the Northeastern Illinois Regional Water-Supply Planning Group are available at CMAP's web site <http://www.cmap.illinois.gov/watersupply/default.aspx>.

The East-Central Illinois Regional Water Supply Planning Committee has 12 members selected from twelve stakeholder groups. Organization of the Committee was facilitated by the Mahomet Aquifer Consortium (MAC). The twelve stakeholder groups represent agriculture, counties, environment, electric generating utilities, industries, municipalities, public, rural-water districts, small business, soil and water

conservation districts, water authorities, and water utilities. An analysis of water demand for the east-central Illinois region to the year 2050 was recently completed under the auspices of the Planning Group and the MAC. Three scenarios were used in the analysis of water demand—current trends, less resource intensive, and more resource intensive—in four broad water-use segments with an analysis of sensitivity to climate change. The report and more information about the East-Central Illinois Regional Water-Supply Planning Committee are available at the Committee's web site <http://www.rwspc.org/>.

The Illinois State Geological Survey (ISGS) is compiling existing information about the hydrogeology of northeastern and east-central Illinois to make it available to the two planning groups. Additional data have been gathered by scientific test drilling and limited geophysical exploration within the Fox River Basin in northeastern Illinois and from the Mahomet aquifer system in east-central Illinois. The Illinois State Water Survey (ISWS) is interpreting these data for regional groundwater flow models of the Fox River Basin and the Mahomet aquifer system. The flow models will be used to evaluate the effects of withdrawing groundwater to meet the water demands identified in the various water-demand scenarios. Although the third year of funding for the water-supply planning initiative was withdrawn, the two planning groups continue to function, and the Illinois State Water Survey and the Illinois State Geological Survey continue with preparing reports on the water-resource availability in the two planning areas. These two reports will provide an analysis of the impacts of meeting the water demand as identified in the reports on water demand that were prepared by the planning groups.

More information about the water-supply planning process is available on the web at <http://www.sws.uiuc.edu/wsp>.

State Surveys Merge with University of Illinois

Don McKay, PhD; Illinois State Geological Survey Interim Director

Just three years into its second century, the Illinois State Geological Survey (ISGS) has been swept up in a major change in the administrative structure of taxpayer-supported science done in public service to Illinois. After having been part of state government for 103 years, the ISGS and the other Illinois scientific surveys (Illinois Natural History Survey, Illinois State Water Survey, and the Waste Management and Research Center) were merged with the University of Illinois at Urbana-Champaign on July 1, 2008.

Seven months have passed, and, at this juncture, it is clear that the change is the most significant since the Illinois scientific surveys were organized under a single Board of Natural Resources and Conservation (BNRC) in 1917. Without changing physical location, the Surveys have become divisions of a newly formed University of Illinois Institute of Natural Resource Sustainability. Former ISGS Chief Bill Shilts is the Institute's founding Executive Director, and he reports to Interim Vice Chancellor for Research. We all report to the University Board of Trustees. The Institute will bring together a new advisory body, the Illinois Board of Natural Resource Sustainability. Plans are to retain the members of the former BNRC and to add state agency and University participants.

The move of the Surveys to the University is much more than administrative window dressing. The Surveys' locations, staffing, budgets, and responsibilities remain largely the same. Historic legislative mandates regarding the nature and mainly Illinois focus of our research and service are embedded in Survey tradition and were restated in the new authorizing legislation. Yet we have readily adapted to University governance, policies, and outlook, and those offer us options. Having entered into the university community of scholars and researchers, the Surveys will have opportunities for greater involvement in education. Student participation in Survey research, always an



advantage of our campus location, will increase. There will be opportunities to increase our role in teaching. New opportunities to examine research questions and apply our knowledge in regional, national, or global contexts will be explored. Broader opportunities to attract external funding will open via avenues available to University entities. New and expanded research collaborations are under discussion, and some are beginning.

Therefore, I can report here that the Geological Survey's transition into the University of Illinois is one that has honored our traditions, kept our mandates intact, and retained our name—Illinois State Geological Survey—a significant point of pride for us. We retained our staff, facilities, responsibilities, strong sense of purpose, and most of our budget. Thus, the traditions of ISGS research and service for the benefit of the people of Illinois have not only survived the transition but also have remained our highest and most urgent objectives. At the same time, we gained flexibility that we will use to explore opportunities, to expand our traditional role, to develop new research, and to venture into new areas.

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We're on the Web!

See us at:

Indiana-Illinois Section:
<http://www.aipg.org/Section/IL-IN/IL-INaipg.htm>
Illinois Chapter:
<http://www.aipg.org/StaticContent/anonymous/sections/ILchapter/ILchapteraipg.htm>

2009 National Ground Water Association Meeting

The National Ground Water Association 2009 annual meeting is *Ground Water Summit—Adapting to Increasing Demands in a Changing Climate*. The meeting, taking place April 19-23 in Tucson, Arizona, will bring together a mix of regulators, natural resource managers, practitioners, and those who supply knowledge and technology needed to address our key water issues. The program will focus on the critical role of ground water in the context of a changing climate with regard to water resources and provide insights into the nature of the challenges and opportunities ahead. Program highlights include a keynote presentation, the [NGWREF Darcy lecturer](#), the [GSA Birdsall-Dreiss lecturer](#), short courses, and field trips. The Ground Water Summit offers the opportunity to learn and stay current, present your latest ground water endeavors, and renew existing professional relationships, as well as start new ones. For more information visit the NGWA web site [NGWS web site](#).



About the Illinois Chapter of the Indiana-Illinois AIPG Section...

The Illinois Chapter of the Illinois-Indiana Section of the AIPG was established in October 1999 to serve as an advocacy group for all professional geologists in the state, and specifically for Licensed Professional Geologists and their practice in the State of Illinois.

You may wish to visit the national AIPG web site at www.aipg.org.

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