

Pennsylvania

Driller



Fall 2002

Annual Conference Issue

**PGWA Annual
Conference
Penn Stater
Conference
Center Hotel
State College**

**January 23-25,
2003**

*See registration and hotel
information on pages 8
and 9...other sessions
highlighted throughout
this issue and on
www.pgwa.org*

The Role of Drilling in the Quecreek Mine Rescue

presented by the men who were there

This special session will feature five presentations by the men who were there, and directed the rescue, drilled the holes, or supplied the equipment that rescued the nine miners. You will learn many details about how several drilling companies, usually in competition with each other, teamed up and worked together to accomplish what has been called a miracle rescue.

You will hear many amazing details that were not presented by the news media during the rescue. For example, did you know that Lou Bartels didn't shut off his drill rig for 48 hours because it was supplying the air that held the flood water back and provided oxygen and some warmth to the trapped miners? He just

fueled the rig periodically and didn't even check the oil. You will learn that the overshot fishing tool, manufactured by Star Iron Works, was still hot from welding as it was loaded onto a National Guard helicopter in Punxsutawney. Your drill rig has probably never had a State Police escort on the way to a job site, but time was so critical that police escorts brought a rig to the Quecreek rescue site.

These five presentations will illustrate the know-how, teamwork, generosity, and American spirit that all made the rescue a success. Please plan to attend this very special program session that is certain to be the highlight of the 2003 Winter Conference.

2003 Conference Schedule

THURSDAY, JANUARY 23

7:00 am to 1:00 pm PGWA Board Mtg.
10:00 am to 4:00 pm Registration

1:00 pm to 2:00 pm
*Constant Pressure Systems and Variable Speed
Pumps*

2:00 pm to 2:45 pm
*"What You Missed at the 2002 Summer Field
Conference**", by Todd Giddings*

2:45 pm to 3:30 pm
Refreshment Break in the Exhibit Hall

3:30 pm to 4:30 pm
*"Factors Affecting Ground Water Management
and Use**", by Dr. Steve Ragone, NGWA
Director of Science and Technology*

4:30 pm to 5:15 pm
*"PA One-Call & Act 287" by Mark Santayana,
Northeast Representative Liaison*

5:15 pm to 6:30 pm

Exhibit Hall Time

6:30 pm to 8:30 pm

Reception in the Exhibit Hall

8:30 pm to ? Hospitality Rooms

FRIDAY, JANUARY 24

7:30 am to 9:00 am

General Membership Breakfast Meeting

9:00 am to 9:45 am

*"Containment of Cuttings, It's in the Bag**" by
Todd Giddings*

9:45 am to 10:30 am

Refreshment Break in the Exhibit Hall

10:30 am to Noon

*"Introduction to the Year of the Professional**"
by Dave Hanson, the 2003 McEllhiney Lecturer*

Noon to 1:00 pm

Lunch provided

1:00 pm to ?

Ladies Program

1:00 pm to 3:30 pm

*"The Role of Drilling in the Quecreek Mine
Rescue**" Five first-hand accounts by the men
who were there.*

3:30 pm to 4:15 pm

Refreshment Break in the Exhibit Hall

4:15 pm to 5:15 pm

*"How to Grout the Cable-Tool Drilled Well**"
by Judy Bear and Carl Mason*

5:15 pm to 6:30 pm

Free time

6:30 pm to 8:30 pm

Banquet

SATURDAY, JANUARY 25

7:00 am to 10:00 am

NGWA Certification Exam

**

*See more details on these
presentations in this issue*



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Richard Raab
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Vice President

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219. 827. 5140

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William Reichart
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Jodi L. Snyder
717. 566. 4587

Board of Directors

(Officers and the following:)

Judy Bear
John Buehler, Jr.
Richard Burke
Scott Moyer
Richard Raab, Jr.
Todd Reichart
Ernie Smith

The Pennsylvania Ground Water Association newsletter is published quarterly. Deadline for copy and advertising is February 15, May 1, August 15, and November 15, 2003. For information on placing an advertisement or submitting an article, please contact Jodi Snyder, 7 Long Lane Drive, Hummelstown, PA 17036; telephone and fax 717. 566. 4587; email jlsnyder@epix.net.

Report From the President...

It is time to get ready for our Winter Conference at the Penn Stater Conference Center in State College. The dates are January 23, 24, and 25, 2003.

We have a different program this year. I feel there should be something of interest for each and every professional driller. Make your plans to attend the conference.

This fall I had the privilege to travel across the state and meet several drillers. It was a great opportunity to explain the association's goals and also to hear your concerns. I thank you for your hospitality and warm reception.

Your Association is striving to increase our role in education. Four of your Board members took part in a teacher's conference held in Allentown. The subjects covered were water treatment, hydrology, and demonstration of water pumps and well construction.

We are still working on our legislation to protect ground water in the state of Pennsylvania. I recently spoke with several members of the state legislature, as well as Governor Mark Schweiker. Hopefully, I will have some positive news in January.

I wish you a Happy Holiday Season and a healthy and prosperous New Year. See you in State College in January!


Richard Raab, President, Pennsylvania Ground Water Association

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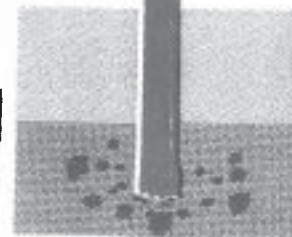
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PGWA Board of Directors Minutes September 25, 2002, Lancaster, PA -- by Jodi Snyder, Executive Director

1. The meeting commenced at 9:30 a.m. The following individuals were in attendance: President Richard Raab, Sr., Vice President James Hartmann, Secretary Todd Giddings, Treasurer William Reichart, II, Directors Rick Raab, Judy Bear, Scott Moyer, Dick Burke, Todd Reichart, and Executive Director Jodi Snyder.
2. **Approval of Minutes.** The correction listed on the minutes of June 29, 2002 was again corrected to state that surety bonds were purchased, not performance bonds. The minutes were approved on a motion by Jim Hartmann, second by Bill Reichart. The motion passed unanimously.
3. **Secretary's Correspondence.** 1. Todd Giddings sent specific information on HB 1591 to a writer of Rep. Keith McCall so the Representative could rebut incorrect information in a letter to the editor in a local newspaper. 2. Handouts containing technical information on household wells and an explanation of why HB 1591 is needed was sent to a Penn State Extension Agent for use in a seminar on wells and septic systems in Lancaster County. 3. Information on the number of household wells and the dependence on ground water in Pennsylvania was provided to Rep. Camile 'Bud' George. He used the information in his Enviro-News Bulletin where he rebutted the misstatements about HB 1591. The Bulletin was sent to 16,000 government and environmental officials in Pennsylvania.
4. **Executive Director's Report.** 1. Report on the Summer Field Conference was distributed. There were 255 people in attendance. A motion was made by Dick Burke to approve the Summer Field Conference Income and Expense report with an additional \$155 of expenses added. The motion received a second by Jim Hartmann and passed unanimously. 2. Correspondence from National regarding need for delegates for NGWA Conference by October 10, 2002. Correspondence from the IRS was received and handled by the PGWA accountant. PGWA Membership is at 268 individuals.
5. **Treasurer's Report.** A motion to approve the Treasurer's Report was made by Jim Hartmann, second by Rick Raab. The motion passed unanimously.
6. **Committee Reports.**
 - a. **Legislative.** Mary Jo White is proposing minor changes to H.B. 1591. On the national level, Dick Burke reported that getting the well financing program (\$10 million) through the Appropriations Committee will be just as much of a battle as getting the bill passed. The IRS is trying to tax the purchase of rigs and all non-farm off-road equipment, including fuel.
 - b. **Education.** The AGWT Teacher Institute was moved to October 8 and 9, 2002 in Allentown. The

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PGWA Minutes...continued

Board concurred that they will wait until after the meeting to discuss supporting the Institute financially.

7. **Winter Meeting January 23, 24, and 25, 2003.** Todd Giddings handed out a proposed program. Included in the program will be a special presentation on 'The Role of Drilling in the Quecreek Mine Rescue'. Fees were established at \$110 for members, \$75 for second person from same firm, including spouses, \$30 for students. The price of the banquet was lowered to \$20 to attract more people. Exhibit tables will be sold at \$210 and \$125 for sponsorships. Children under 12 will be free.

Old Business:

8. **Evaluation of the Summer Field Conference.** Todd Giddings reviewed what people liked and what they benefited from the most at the Summer Field Conference held in June.
9. **Outreach and Education.** Discussion ensued on how to continue our focus on outreach and education to serve the public. Judy Bear will look into prices for a ground water flow model.

10. **Indemnification Insurance for Directors and Officers.** A motion was made by Jim Hartmann, second by Dick Burke to purchase \$1,000,000 worth of coverage for \$1,170. The motion passed unanimously.

New Business:

11. **Facilitated Discussion for Directors at the Winter Meeting.** Kevin McCray will return to lead a facilitated discussion to address our mission of public outreach and education.
12. **Revised Membership Application Form.** A motion was made by Jim Hartmann to revise the membership application form to reflect that all individual categories are \$75. Additional members after first individual are \$30. The motion received a second by Judy Bear and passed unanimously.
13. **The next Board of Directors meeting** is January 23 at 7:00 a.m.
14. **Delegates to the NGWA Expo December 9-11, 2002.** So far, the PGWA Board members attending the

NGWA National Convention as delegates are Dick Raab, Todd Reichart, and Bill Reichart.

15. **Penn State Ag Progress Days.** The Board concurred that Dick Raab should look into obtaining a display table space at next year's event in mid-August.
16. **For Sale Corner in Newsletter.** Items can be advertised for sale for a cost of \$25 for 3 lines.
17. **Bylaws.** The bylaws should once again be changed from the Secretary taking the minutes to the Executive Director taking the minutes. An article will be written for the newsletter to address this change.
18. **Executive Session was held.** Following the Executive Session, the Board returned to regular meeting. Bill Reichart made a motion, seconded by Jim Hartmann, to form a Newsletter Committee. The motion passed. Dick Raab appointed Todd Reichart Chairman of this new committee. The responsibility of the committee is to review the quarterly newsletter content, advertising costs, etc.

How to Grout the Cable Tool Well – or – How to Grout Casing without a Mixer or Pump

by Judy Bear

This presentation at the 2003 Annual PGWA Conference will show an actual cable tool drilled well successfully drilled and grouted without a tremie pipe, grout mixer, or pump. Carl Mason, Bariod Drilling Fluids, joined with Coudersport Well Drilling, to make a video showing how cable tool drillers can grout wells (bedrock and gravel) without expensive equipment. This video will show the driving of the casing through 60' of sand and gravel, with grouting occurring simultaneously. Then, the casing is removed from the borehole, with grout still attached its entire length. This method is anticipated to satisfy impending legislation regarding grouting of residential wells, particularly by the cable tool driller.

PA Driller Deadline

The next deadline for the *PA Driller* falls on **February 15, 2003**. Please submit all articles, advertisements, photos, etc. to:

Jodi Snyder
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Keith Higdon

Factors Affecting Ground Water Management and Use

by Stephen Ragone, Ph.D., NGWA Director of Science and Technology

We are all familiar with the statistic that more than 50 percent of population of the United States uses ground water as the primary source of drinking water. What we rarely see written is that, although this percentage speaks to the important role ground water plays in meeting our water-supply needs, it also speaks to the fact that ground water is an under-utilized resource, given its huge volume as compared with surface water. The US Geological Survey states that the pumpage of fresh ground water in the United States in 1995 was only 8 percent of estimated daily natural recharge. Ground water is overlooked in plans to improve homeland security, mitigate drought affects, polish water quality, maintain stream flow, and sustain ecosystem function. The Second World Water Forum held in Stockholm last year essentially ignored ground water issues. Ground water is not only the “hidden resource” it is the ignored resource.

But this is all changing as the result of the convergence of many natural and anthropogenic forces. First and foremost is that the competition for water will dramatically increase in the twenty-first century as nations, regions and communities strive to meet the demands of growing populations for food, drinking water and industrial development. The extended

drought on the east coast of the United States has shown that even historically water-rich regions—where annual rainfall is thirty to forty inches a year—are suffering under the new reality that there might not be enough water to meet all needs. Industries are formally developing “creative water strategies” to offset the impacts of the loss of their traditional water rights and to deal with shareholder initiatives to improve “corporate environmental performance.” Ground water will play a significant role in the creative water strategies that emerge not only from industry but out of the public demands for better use and management of all water resources. This is happening internationally as well.

The public’s growing disaffection with dams, and the fact that most US surface waters are fully allocated, strongly suggests that ground water will become an increasingly important component of water supplies in the future. Recent findings about the presence of endocrine disruptors in surface waters will heighten public awareness that one community’s water-intake pipe is not too far downstream from another communities sewer outfall. The public will respond by buying more high-priced bottled water and point-of-use water treatment systems. Municipalities will react by incorporating ground water

supplies into their water-production plans. Mixing ground water with surface waters containing high concentrations of organic substances has been shown to decrease the formation for chlorinated hydrocarbons that are formed during chlorination, for instance.

Concerns about the security of our water supplies has focused on surface waters and distribution systems for the most part so far, but the NGWA is working, through congressional testimony, through participation on federal committees and through participation at formal conferences, to explain that the intrinsic characteristics of ground-water systems—its wide distribution and generally slow rate of movement, and the fact that they are located safely tens to hundreds of feet below land surface—make them an ideal source of supply in the face of terrorist threats. In fact, they are the ideal source of supply during natural threats—droughts and floods—as well.

Dr. Ragone’s presentation at the 2003 PGWA Winter Conference will describe the two dimensions to ground-water resource use and management: the social and economic side, and the hydrogeologic side. It is the integration of both sides that will lead to improved ground-water resources management and use.

Introduction to the Year of the Professional

by Dave Hanson

The 2003 William A. McEllhiney Distinguished Lecture Series in Water Well Technology will be presented by Dave Hanson, president of Design Water Technologies in Shorewood, Minnesota. He started the company in 1991 to create products for the ground water industry that safely solved water quality problems in wells and water systems. He has developed products that successfully treat iron bacteria, mineral scale, and coliform bacteria in wells, treatment facilities, and pipelines. Hanson has also taught numerous seminars on water well design, well efficiency, well rehabilitation,

pumping costs, ground water biology, well problems associated with slime production, odors/corrosion, coliform, bacteria, and sales and marketing. He has authored several technical articles, and was one of the writers for the second edition of *Groundwater and Wells*.

Hanson’s lecture is titled “Introduction to the Year of the Professional.” It asks the questions: “Proactive or reactive? Which are you in your business and your life?”

It also will help attendees discover the ‘P’s’ of business — professionalism,

people, partnership, pride, profit, and purpose.

Hanson’s presentation will challenge attendees to answer the following questions:

- Are your profits hurting because of low-price competitors?
- Do you have to go to work in the morning or want to go?
- Do you wait for the phone to ring or work to make it ring?
- Are customers a part of your business or a necessary evil?
- Do you have a plan or do you react to what happens each day?

NGWA Certification Exams Offered

On Saturday, January 25, 2003, Todd Giddings will be proctoring all thirteen categories of certification exams. The exams will begin at 7:00 am, and you may take as many categories as you wish. The exams are designed to test knowledge of specialized equipment and geologic formations. Most exams consist of 50 questions with a mix of true/false and multiple choice. You must pass the General Exam and at least one other exam in a specialized category with scores of 70 percent or more to become certified. If an exam is failed, there is a 90-day waiting period before you may retest in that category. Both exams have to be passed within a 12-month period.

Exam Categories that will be offered:

The **General Exam**, which must be taken by all new applicants, tests your general knowledge of ground water and the ground water industry. You must pass this exam in addition to at least one other exam in a specialized category to qualify for Certification.

Certified Well Driller (CWD) categories:

- Exam A/B: Cable tool drilling
- Exam C/D: Air rotary drilling
- Exam E/F: Mud rotary drilling
- Exam G: Reverse rotary drilling in unconsolidated material
- Exam H: Jetting and driving wells in unconsolidated material
- Exam I: Boring and augering in unconsolidated material
- Exam M: Monitoring well construction
- Exam N: Well servicing and maintenance

Certified Pump Installer (CPI) categories:

- Exam J: Domestic Pump Installation (General Pump Exam)
- Exam K: Pump Installation in Water Systems Less than 100 GPM
- Exam L: Pump Installation in Water Systems Greater than 100 GPM
- Exam O: Ground Water Heat Pumps

If you achieve the status of Certified Well Driller or Pump Installer, you must commit to annual continuing education. If you don't report your continuing education points and pay recertification fees, you won't be recognized as certified.

How to Prepare for the Exams: Study guides are designed to help the driller/pump installer cover the material used in past NGWA contractor certification examinations. While they do not identify specific questions that could be asked on a current exam, they do provide an idea of what to expect. They are available by calling NGWA at (800) 551-7379 or visiting the On-Line Store on the NGWA Web site.

Exam Fees: **NGWA member:** \$35 for the general exam and \$20 for each exam in a specialized category **Prospective member:** \$275 for general exam and first exam in a specialized category and \$20 for additional exams in a specialized category. If you have questions about the NGWA certification programs, contact Lee Salvator, NGWA Certification Manager at (800) 551-7379.

Containment of Cuttings: It's in the Bag!

by Todd Giddings, Ph.D., P.G.

This presentation will show how sediment filter bags are used to solve problems associated with drilling wells near streams and where complete site cleanup is critical. Current regulations in Pennsylvania require the use of Best Management Practices to control sediment and minimize the impact on a stream that receives muddy water during drilling. Control of the cuttings and silt and clay sediment produced when drilling a well can be accomplished by excavating a sediment pit and by using multiple silt fences and straw bales to contain the sediment and protect the stream. Many drill sites near streams do not have the room for a sufficiently large sediment pit, and the flat flow gradient to the stream means you have to pump all of the muddy water to allow the effective use of silt fences and straw bales.

A new technology, the sediment filter bag, is now being used on those difficult sites to contain the sediment and to meet the water quality discharge requirements. State agencies are even requesting the use of sediment filter bags when there is a stream near the well site, and when there is not enough space or slope for standard methods of sediment containment to work effectively. You will see examples of sediment filter bags containing the sediment and discharging to a high-quality, cold water fishery stream called Spring Creek in Centre County. The discharge location was at Fisherman's Paradise, a nationally known catch-and-release only area. The discharge was also within 100 feet of a Pennsylvania Fish and Boat Commission fish hatchery, where waterways patrolmen watched the discharge.

Visit www.pgwa.org for detailed information on the presentations, the conference center facility, and the exams of the 2003 Winter PGWA Conference.

Make Your Room Reservation Today!

The Penn Stater Hotel has a block of sleeping rooms for Conference attendees at a rate of **\$75 per room, per night for single or double occupancy.** Call **(800) 233-7505** to make your reservation today! *Notify the Penn Stater that you are with the PA Ground Water Association. Room block cutoff is December 23, 2002.*

Directions: Take the Penn State University Research Park exit off U.S. 322 West. Turn right and follow Park Avenue to the Penn Stater Conference Center Hotel. If you are using a route other than 322, please call the hotel for directions.

Visit

www.pgwa.org

for detailed information on the presentations, the conference center facility, and the exams of the 2003 Winter PGWA Conference.

Check it out for Quecreek Mine Rescue highlights as well!

Registration Form

2003 PGWA Annual Conference • Penn Stater

Name _____

Company _____

Address _____

City/State/Zip _____

Telephone _____

FAX _____

Email _____

Spouse (if attending) - registration fees apply below

Names of additional persons to be registered and their spouses (if attending) - registration fees apply to all individuals

Name _____ Spouse (registration fees apply)

Name _____ Spouse (registration fees apply)

Name _____ Spouse (registration fees apply)

Name _____ Spouse (registration fees apply)

Pre-Registration for Members by Jan. 17 (Walk-ins \$25 additional)

First member @\$110 \$ _____

___ additional individuals/spouses @\$75 each \$ _____

___ Friday night banquet @\$20 \$ _____

Pre-registration for Non-members by Jan. 17 (Walk-ins \$25 additional)

First Non-Member @\$135 \$ _____

___ additional individuals/spouses @\$100 each \$ _____

___ Friday night banquet @\$20 \$ _____

Number of persons taking Certification exams _____

Number of persons taking Master Well Driller Exam _____

Number of persons participating in Ladies Program _____

Please make check payable to: PGWA
7 Long Lane Drive
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or fax to: (717) 566-4587 (phone also)

Attention Manufacturers and Suppliers!

Here are some new reasons why you should have a display table at the 2003 Winter Conference:

- We expect our attendance to top 300 this year due to our special program. You can reach more potential customers than ever before.
- We have increased the exhibit hall floor space by 50% over last year. Every display table will be easily accessible to visitors.
- We have more scheduled exhibit hall time this year for attendees to be in the exhibit hall.
- The scheduled refreshment breaks in the exhibit hall will be longer than last year.
- We asked the attendees at our Summer Field Conference if the display tables (under the tent) were of value to them. The unanimous answers were YES! Many attendees cited specific displays that they particularly benefited from. Remember, the display tables and face-to-face contact are reasons why ground water industry people attend the PGWA Winter Conference.

And, same as last year, the entire reception will be in the exhibit hall. So, sign up early, and participate the largest PGWA Winter Conference ever.

We are inviting you to attend our conference as a Sponsor or Exhibitor. The Conference will be held at the Penn Stater Conference Center January 23-25, 2003.

A reception will be held on Thursday, January 23. The cost of the demonstration tables below includes the reception sponsorship. It does not include Conference Registration. Reception sponsorship without a display table is \$125.

Again this year, we have arranged to have permanent tables available. You may choose to reserve more than one table (or the equivalent double or triple space without an extra table), if your exhibit is large.

During the reception on Thursday evening, food and the open bars will be located in the exhibit area. Other breaks will also be set up in the exhibit area.

Each display and demonstration table is six feet wide and 30 inches deep. If you will need more space, then rent two or three adjacent tables, as stated above.

The cost for display tables is \$210 each. Each of these rental costs includes a \$75.00 contribution for the food and open bars. Tables will be assigned on a first-come, first-assigned basis. Everyone attending must also be registered for the Conference.

Setup for tables begins at 9:00 a.m. on Thursday, January 23. Tear down begins at 5:00 p.m. on Friday, January 24.

Please contact Jodi Snyder at (717) 566-4587 if you have any questions. Use the Sponsor/Display form below to register today!

Exhibitor/Sponsor Registration Form

Company Name _____

Contact Name _____

Title _____

Address _____

City/State/Zip _____

Telephone _____

FAX _____

- I would like to Sponsor the Thursday Reception @\$125 (if not exhibiting) \$ _____
- I would like to rent an in room display table @\$210 (includes Sponsorship) \$ _____
- I am registering the following individuals to staff the booth (*each individual must be registered!*)
- Person #1 (\$110) _____ \$ _____
- Person #2 (\$75) _____ \$ _____
- Person #3 (\$75) _____ \$ _____
- Person #4 (\$75) _____ \$ _____
- I need electricity for my booth. A separate charge will be assessed by the hotel. A form will be mailed to you if you check this box.

Preferred exhibit location (see page 15) #1 ___ #2 ___ #3 ___ #4 ___

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Please call Jodi Snyder at (717) 566-4587 if you have any questions.

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Add to that prompt and efficient claim handling, and you've got plenty of reasons to switch to the NGWA Business Insurance Plan.

So tap into something special, and call NGWA for more information at 1-800-551-7379 today. If you prefer, call Affinity Programs toll-free 1-866-368-2561.

www.thehartford.com/commercialprograms



What you missed at the 2002 Summer Field Conference

by Todd Giddings, Ph.D., P.G.

The 2002 Summer Field Conference set many new records for PGWA:

- The attendance of more than 250 persons was the largest crowd ever for a PGWA Summer Field Conference.
- More Department of Environmental Protection, Department of Conservation and Natural Resources, and Conservation District employees attended than at any previous PGWA conference, summer or winter.
- The PGWA has never before reached as many non-members as we educated at this field conference.
- We accomplished a major goal of public outreach and education, and showed our leadership in showing how a proper residential well should be constructed as envisioned in House Bill 1591.
- More manufacturers and suppliers donated equipment and materials for the demonstrations and sponsored

meals than at any previous summer meeting.

- More manufacturers and suppliers had display tables than at any previous summer meeting.
- More attendees provided feedback of praise, compliments, and thanks than at any previous summer meeting.
- All companies and personnel involved in the Summer Field Conference demonstrated an unprecedented level of support and cooperation. A special "thank you" to Les Funk and the personnel of Funks Drilling for hosting this event.

So what are we going to do at our 2003 Summer Field Conference to further our mission of public outreach and education, and to surpass many of the records we set in 2002? Attend this session and contribute your ideas, or volunteer to serve on the program committee, or volunteer to help run the 2003 meeting on-site. We need a lot of volunteers, because big summer field conference meetings are a whole lot of work to set up and operate successfully. We want your ideas on who we should invite, and what we should teach them through live demonstrations. If your ideas can't wait until the Winter Conference, contact me by phone or at giddings@vicon.net.

Visit www.pgwa.org for detailed information on the presentations, the conference center facility, and the exams of the 2003 Winter PGWA Conference.

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Soaking Rains Don't Dent Drought in Centre County

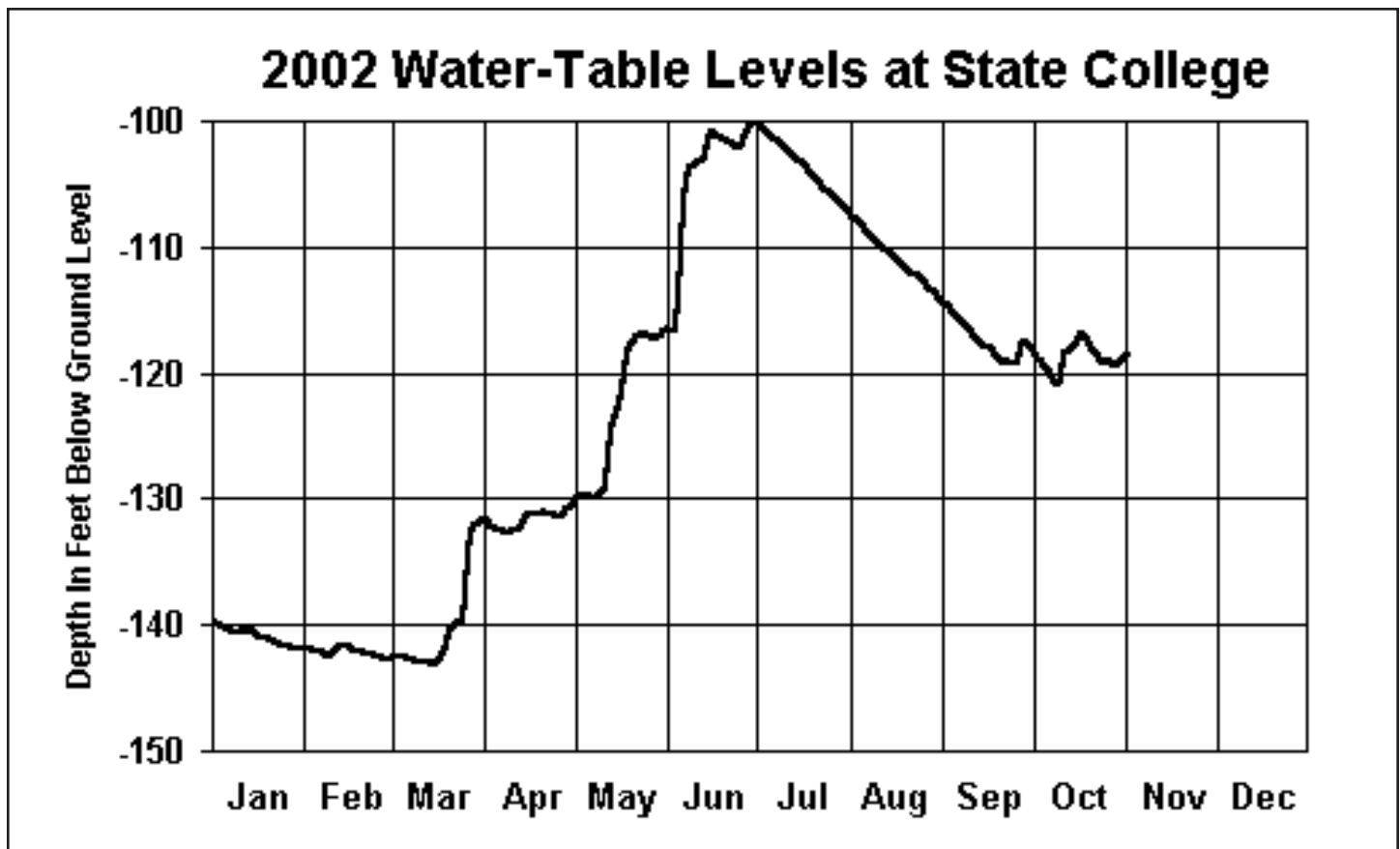
by Todd Giddings, Ph.D., P.G.

The 30 foot rise in the ground-water level hydrograph below clearly shows the impact of the above-normal rainfall in May and June. Following the almost twice normal rainfall in June, July was the second driest July in 107 years of record, and ground-water levels immediately began a steady decline. The drought continued with the total August rainfall 31% below normal. Then, in September and October, several remnants of hurricanes and tropical storms brought above normal rainfall. September rainfall was 9% above normal, and October rainfall was 81% above normal.

So why didn't the water-table rise dramatically in October in response to the large rainfall surplus? There was a large soil moisture deficit, and most of the soaking rains were held in the soil, and then consumed by plants and evaporated back into the atmosphere. The hydrograph below shows how evapotranspiration and the soil-moisture deficit limited or prevented ground-water recharge during this summer. The steady decline in the hydrograph since the end of June shows that there was no significant ground-water recharge until September 25th. During that time, more than 5 inches of rainfall occurred, and was

either consumed by evapotranspiration or ran off into streams.

Warm weather caused evapotranspiration to continue to consume much of the rainfall during October, and hence no significant ground-water recharge occurred. Now that November is here, and temperatures are well below normal, evapotranspiration is very limited and more ground-water recharge is able to occur. Remember, due to the drought during the last four years, many ground-water levels in Central Pennsylvania are still 25 feet below normal.



Visit www.pgwa.org for detailed information on the presentations, the conference center facility, and the exams of the 2003 Winter PGWA Conference.



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What to Do With Your PA One Call Invoice

Paying your PGWA dues annually entitles you to use the PA One Call System free of charge! However, PA One Call will not reimburse you if you pay the bill and then send the paid invoice to us. Send the bill the PGWA for verification of membership, and we'll take care of the rest. This benefit alone almost pays for your membership! If you are not a PGWA member, use the application on the back cover and join today!



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Proposed IRS Change Could Cost Drilling Industry Millions

The Internal Revenue Service (IRS) proposed changing the definition of a highway vehicle so that previously exempt non-farm mobile machinery -- such as water well drilling rigs -- would become subject to federal heavy equipment retail, fuel, tire and use taxes.

The National Ground Water Association estimates the IRS proposed rule change, if finalized, could cost the water well drilling industry an additional \$19 million to \$55 million annually in federal taxes. Imposition of the federal fuel tax may also trigger automatically the imposition of state fuel taxes.

Since 1956, federal highway construction has been supported through highway use taxes. Four federal taxes are levied: a fuel tax on gasoline (18.4 cents per gallon) and diesel fuel (24.4 cents per gallon), tire excise tax on heavy duty tires, new truck and trailer excise tax (12% based on price of truck chassis and other equipment that contributes to highway function), and an annual heavy vehicle tax (based on weight capped at \$550/year).

Because the tax is for highway use, equipment that does not meet the definition of a highway vehicle is exempt from these federal taxes. Farm equipment and off-road equipment currently are exempt. There is a use test, and if equipment is primarily used in off-road situations it is exempt. However, the IRS proposed rule would severely limit the tax exemption for non-farm mobile machinery, such as water well drilling rigs. Under the proposed rule, equipment that can be used over the roads is taxed whether or not its primary use is off-road.

The IRS extended the comment deadline on the proposed rule change from September 4 to December 4, 2002. Take advantage of this deadline extension today. Review the proposed rule, and write to the IRS letting them know how the proposed rule will impact your firm and cost you extra money or extra time not reflective of your use of the highways.

A sample letter to use in writing the IRS is on the NGWA website, www.NGWA.org. Revise the sample letter to reflect your company's operations. It is important that the IRS hear from as many affected companies as possible. Don't forget to also send a copy of your letter to your Congressional members.

A copy of the IRS proposed rule is also available on the NGWA website, along with a method to quickly determine who the Senators and Representatives are in your state.

For more information or to contact NGWA, write or call: Chris Reimer, 601 Dempsey Road, Westerville, OH 43081; (800) 551.7379, Fax/614 898.7786.

Bylaws Amendment to be Voted on at 2003 General Membership Meeting

A copy of PGWA's Bylaws with proposed revisions was inserted into the Spring 2002 edition of this newsletter. A vote to accept the amendments was made by the general membership at its meeting on June 29, 2002. However, the Board voted on April 24, 2002, to require the Executive Director to take the minutes of Board meetings. That motion, unfortunately, was not inserted into the proposed revisions you received. Therefore, on January 24, 2003, at the General Membership Meeting in State College, President Dick Raab will ask for your vote to accept this amendment.

This article shall serve as the "notice of proposed amendment" in accordance with Article IX - Amendments, Section 3 of the Bylaws.

The Sections of the Bylaws affected by this proposed change are:

Article VII - The Executive Director, Section 2(e.) Attend and keep minutes of all meetings of the Board of Directors and General Membership and promptly distribute the minutes to all Directors.

proposed change is underlined

and

Article IV - Officers, Section 4 - Duties of the Secretary. The Secretary shall assist the Executive Director in conducting the correspondence of the Association and in keeping its records. (of minutes of Board meetings) should be deleted in this proposed amendment.

Please attend the January 24th General Membership Meeting to vote on these proposed changes. As always, if you have any questions, please call PGWA headquarters at (717) 566-4587 or email jlsnyder@epix.net.

For Sale Corner

The PGWA Board of Directors recently approved a new feature in this newsletter. We will use this corner to advertise items for sale.

Cost - \$25 for 3 lines of text

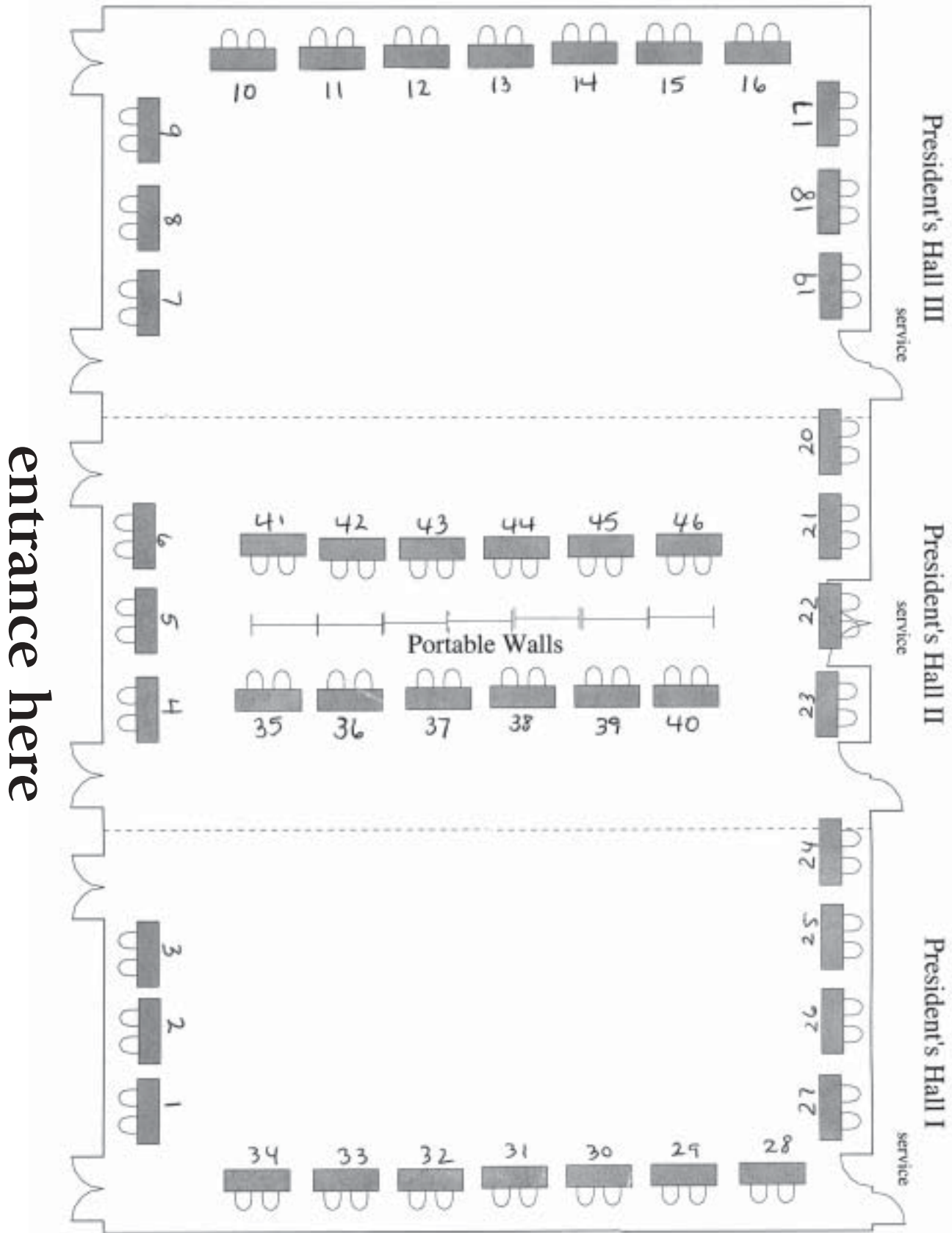
Please send your advertisement to:

Jodi Snyder
c/o PGWA
7 Long Lane Drive
Hummelstown, PA 17036

or email to: jlsnyder@epix.net

2003 PGWA Winter Conference

Exhibitor Floor Plan

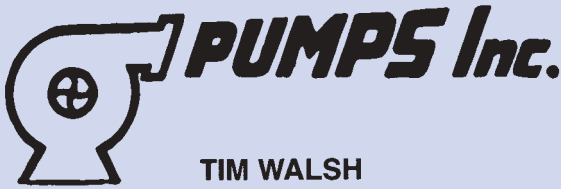


PGWA Membership

Have you paid your PGWA dues? In order to continue to receive the many benefits of membership, please make sure your dues are current. Remember, paying your dues entitles you to use of the Pennsylvania One Call System - free!

Invoices were mailed in the past week or so. If you have not received your invoice, please call Jodi Snyder at (717) 566-4587, or complete another application to the right and enclose payment. **Thanks for your support!**

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PGWA Membership Application

- Contractor - \$75
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- Technical - \$75
- Additional members from same category - \$30

To the PGWA Board of Directors:

I hereby apply for membership in the Pennsylvania Ground Water Association and, if approved, agree to support the objectives of the Association and to pay the prescribed membership dues.

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