

# MINNESOTA GROUND WATER ASSOCIATION

## NEWSLETTER

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Minnesota Ground Water Association, P.O. Box 3362, St. Paul, MN 55165

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v.1, No. 1, OCTOBER 1982

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The Minnesota Ground Water Association is unlike any other professional society in the state. The Association focuses not on one profession, but on one basic resource--ground water. As you are well aware, Minnesotans now face serious ground water contamination problems and, as a result, possible water supply problems. Workable solutions to these problems cannot be provided by any one profession. The Minnesota Ground Water Association has been founded to bring together members of the various professions whose responsibility it is to solve our ground water problems, and to promote intelligent use of ground water resources in the state: not only hydrogeologists, but also engineers, drillers, chemists, consultants, lawyers, academicians, administrators, regulators, and contractors, working both in government and in the private sector. As many of you said in the MGWA questionnaire, what we need to get our jobs done is an exchange of information within and among the various professions.

The Board of Directors of the Association has initiated a program to bring about this exchange through general membership meetings, seminars, and the MGWA Newsletter. A general membership meeting will be held each quarter, with a speaker or panel discussing a topic of interest to a majority of the members. Meetings which are of interest to fewer members will be arranged and publicized as well, and this may be the most valuable part of the program--helping members to get the word out to those 5, 15, or 50 other people in the state whom they really need to reach. Topics and speakers can be suggested to any member of the Board. A meeting can then be arranged and announced by special mailing or through the Newsletter. The quarterly MGWA Newsletter should be used by the members--you are invited to share or request information, to advertise, to announce meetings.

Topics for meetings and seminars were suggested in response to the MGWA questionnaire and in countless conversations I've had with members. Based on those exchanges and my experience, these are some topics for discussion at future MGWA meetings. What are the available techniques for mapping shallow, discontinuous aquifers? Who owns ground water in Minnesota? What are the criteria for selection of waste disposal sites? What are the negative effects of agriculture and mining practices on Minnesota ground water? Can the practices be changed, and at what cost? What are the options (and the cost of each) for aquifer restoration in St. Louis Park and in New Brighton? What are the probable hydrologic consequences of mining Minnesota's peat? What's the state of the art in ground water monitoring? How is surface water-ground water interaction dealt with in the law? How can we "demystify" the concepts of ground water hydrology for the general public? What institutions and groups can we work with in order to educate the public, our legislators, and one another? Teacher's groups, the media, museums, libraries?

The Minnesota Ground Water Association invites--and challenges--you to work to solve Minnesota's ground water problems. Bring to the Association your experience and professional pride, but not your prejudices. Be generous enough to teach but willing still to learn and listen.

LET'S GET STARTED.

Gil Gabanski, President

The Minnesota Ground Water Association is a legally organized, non-profit corporation under the laws of the State. (Tax-exempt status has been applied for from both the IRS and State of Minnesota.)

The primary objectives of the Association are to advance and promote the science of ground water hydrology, to provide an opportunity for exchange of information regarding all aspects of ground water resources in Minnesota, and to educate the general public regarding ground water resources.

Membership in the Association is open to persons who have an interest in scientific, technical, or legal aspects of ground water resources. The requirement for membership is payment of annual dues.

The Board of Directors of the Association consists of five elected officers: President, Vice-President, Secretary, Treasurer, and Membership Chairman. Board members will serve for two year terms, with the President, Vice-President, and Secretary being elected in even numbered years and the Treasurer and Membership Chairman being elected in odd numbered years. The responsibilities of officers, the nomination and election procedures, and other organizational information is provided in the Bylaws of the Association.

Pat Leonard-Mayer and Pamela Watson are the editors of the MGWA Newsletter. Direct any questions, suggestions, or contributions to any future newsletter to Pat or Pam at:  
 U.S. Bureau of Mines  
 TCRC  
 5629 Minnehaha Ave. So.  
 Minneapolis, MN 55417  
 (612) 725-4500

Pat and Pam are also responsible for bringing together the original committee that went on to become the Minnesota Ground Water Association.

Pat is a ground water hydrologist working for the Bureau of Mines. Her current research involves the development of geophysical methods for determining joint characteristics and for ground water monitoring. Pat received her BS and MS degrees in geology from the University of Wisconsin-Milwaukee and an MA in the Water Resources Program at Princeton University. She is actively pursuing completion of her PhD thesis and is a first year law student at William Mitchell College. Pat is a member of NWWA and the Society of Exploration Geophysicists (SEG).

Pam is a mining engineer with the Bureau of Mines. Her professional interests include development of geophysical methods, mineral resource evaluation, and mining hydrology problems. Pam has a BA in geology from Macalester College and a BGeoE from the University of Minnesota. She is a member of the Tau Beta Pi honorary engineering fraternity.

THE MGWA QUESTIONNAIRE

In July, the Organizing Committee of MGWA distributed a short questionnaire in order to determine the interest in the proposed organization. A mailing list of 200 was put together; by the end of August, more than 50% of them were returned. (To those of you who did not receive a copy of the questionnaire, we regret the oversight.) Many of those responding added written comments and suggestions, and volunteered for organizational and committee work.

Following is a brief summary of the responses received up to mid-August:

Profession

- 26 Hydro/Hydrogeologist
- 23 Engineer
- 12 Geologist
- 8 Lawyer
- 2 Biologist
- 2 Professor
- 2 Soil Scientist
- 3 Geophysicist/Math.
- 1 Environ. Cont.
- 1 Water Well Cont.
- 1 Chemist
- 1 Geographer
- 1 Regulatory Spec.

The Assn. should have:

- 45 Newsletter
- 37 Annual field trip
- 35 Legislative monitoring
- 27 Study groups
- 20 Student section

What areas would you work in:

- 31 Program development
- 17 Field trip
- 16 Legislative monitoring
- 10 Newsletter
- 6 Membership
- 1 Legal

Areas of Professional Interest

- 44 Water quality
- 42 Waste disposal
- 36 Water supply
- 35 Geology
- 34 Monitoring
- 26 Engineering
- 22 Water law
- 16 Geophysics
- 14 Mining hydrology
- 2 Ground water modeling
- 2 Dewatering
- 1 Law and code enforcement

FALL MEETING

The Fall Meeting of the Minnesota Ground Water Association will be held on November 17th at 7:30 p.m. at William Mitchell College of Law in St. Paul in Room Lec 107. The speaker for the evening will be Tom Johnson of the Illinois Geological Survey. A brief summary of Tom's talk follows.

After the presentation, there will be a short business meeting, followed by a reception with cider and snacks.

\* \* \* \* \*

"Waste Disposal and Ground Water Contamination"  
Tom Johnson, Illinois Geological Survey

Ground water hydrologists and others who work in the field of waste disposal and ground water contamination have learned a few hard lessons in recent years. We've learned that in planning:

- long-term, total isolation of wastes in the subsurface is not possible in humid regions;
  - because migration of wastes from disposal sites is inevitable, certain materials are not candidates for subsurface disposal; and in economics:
  - the cost of clean-up from past waste disposal practices has exceeded everyone's expectations;
  - ground water clean-up today involves (expensive) stainless steel and Teflon wells, small diameter pumps, respirators, and chemical analyses in the parts-per-trillion range;
  - the cost to clean up one 130 acre site in Illinois will be \$30 million.
- In addition to the technical problems and uncertainties, the high cost of planning, and the higher cost of clean up, we must sometimes contend with inadequate regulations and the likelihood of being involved in litigation.

The Illinois Geological Survey has had many years of experience in dealing with these problems and is recognized throughout the country for their expertise. In his presentation, Tom Johnson will share some of his experiences with the Survey and describe how they are facing up to the lessons they've learned.

MAP OF MEETING LOCATION

\*\*\*\*\*  
\*  
\* IMPORTANT NOTICES \*  
\*  
\*1.) You need not be a paid-up member to \*  
\* attend this first meeting--but why \*  
\* not bring your dues with you! \*  
\*  
\*2.) In order to continue receiving the \*  
\* Newsletter, you must be a member in \*  
\* good standing--meaning your dues must \*  
\* be paid for the year. \*  
\*  
\*\*\*\*\*

Dues and Contributions

MGWA has filed for tax-exempt status with the IRS and State, which will, when the paper work is complete, make your dues and contributions tax deductible. Payment of dues makes you a member in good standing for one year, beginning in October 1982.

Regular members \$10.00/yr  
Students \$ 5.00/yr

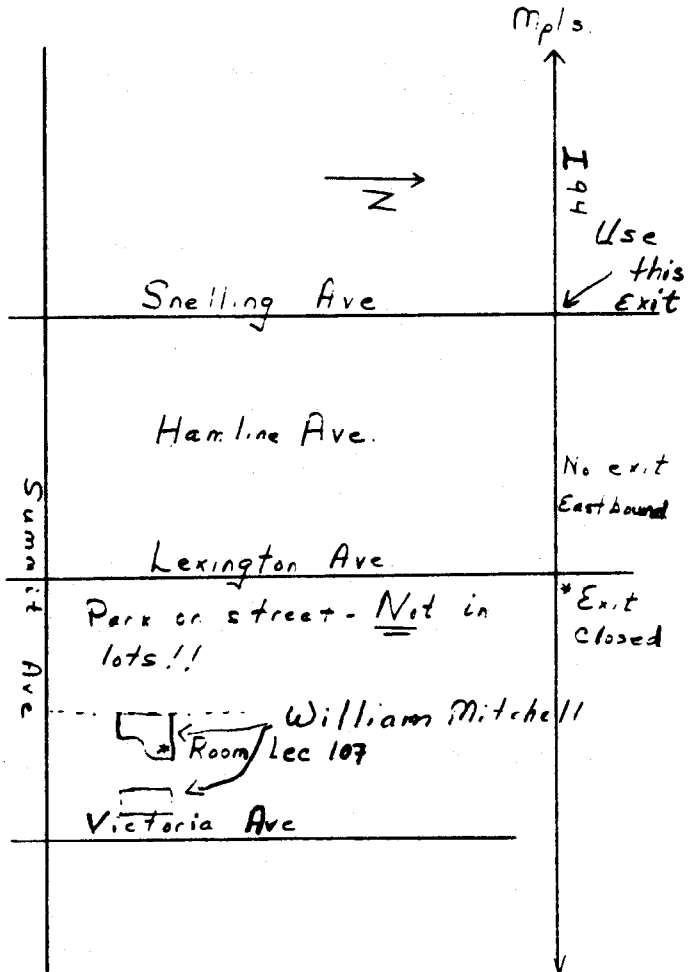
Make checks payable to:

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We encourage members and corporations to contribute to the Association; contributions will be acknowledged in a future edition of the newsletter.



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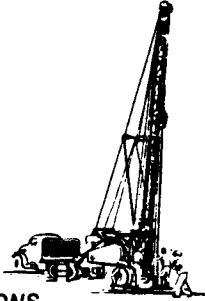
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MGWA BOARD OF DIRECTORS

GILBERT GABANSKI  
President, 1982-1984

Minnesota Dept. of Natural Resources  
444 Lafayette Rd, St. Paul, MN 55101  
(612) 296-0431

Gil Gabanski is a hydrogeologist with the DNR in St. Paul and has also worked for the Minn. Geological Survey as a geologist. Gil has worked on a wide variety of ground water supply and contamination problems in every part of the state; most recently on the problem of evaluating hazardous waste disposal sites. Gil has a degree in geology from Hanover College in Indiana and has done graduate work in geology at both Oklahoma State University and at the University of Minnesota. He is a member of the American Geophysical Union (AGU), National Water Well Association (NWWA), and the American Water Resources Association (AWRA).

DENNIS WOODWARD  
Vice-President, 1982-1984

US Geological Survey  
702 Post Office Bldg., St. Paul, MN 55101  
(612) 725-7841

Dennis is a hydrogeologist with the Geol. Survey in St. Paul. He has also been employed as a geophysicist with the Danish Geological Survey and in the petroleum industry, and as a hydrogeologist with the DNR before coming to the Survey. Dennis has recently served as coordinator of the Minnesota portion of the Regional Aquifer Systems Analysis Study. Dennis completed his undergraduate work at Washington State University and received a MS from the University of Colorado. He is a member of AGU, AIPG, and NWWA. He will be returning from a three month (working) trip to Saudi Arabia in mid-December.

KELTON BARR  
Secretary, 1982-1984

Barr Engineering Co.  
6800 France Ave. S., Mpls., MN 55435  
(612) 920-0655

Kelton is a hydrogeologist who has worked as a consultant on many hazardous waste disposal projects in the Upper Midwest. He was graduated from Carleton College with a degree in geology and received his Masters in hydrogeology from the University of Minnesota. He is a member of AGU, AWRA, NWWA, AIPG, the Geological Society of America (GSA), and Twin Cities Geologists.

KENT PETERSON  
Treasurer, 1982-1983

US Bureau of Mines, TCRC  
5629 Minnehaha Ave. So., Mpls., MN 55417  
(612) 725-4500

Kent is a research geologist with the Bureau of Mines. His current research involves computer and laboratory modeling of mass transport in chemically active systems and applications of geophysical and geochemical techniques in hydrology. Kent received his BS and MS degrees in geology from Northern Illinois University at DeKalb. His professional affiliations include AGU, NWWA, and the Association of Engineering Geologists (AEG).

THOMAS CLARK  
Membership Chairman, 1982-83

Minnesota Pollution Control Agency  
1935 West Co. Rd. B2, Roseville, MN 55113  
(612) 297-2731

Tom is employed as a Senior Hydrologist with the MPCA. The emphasis of his professional work has been on the hydrogeological aspects of monitoring waste management facilities. He currently heads a group charged with developing a ground water protection strategy for Minnesota. Tom has a BA in geology from Oberlin College and an MA in geology from the University of Texas. Tom is a member of AWRA and NWWA and is a member of the Editorial Board for the journal Ground Water.

Committee on Public Education

The Association would like to hear from members who wish to form a Committee on Public Education. The Committee would meet to discuss our role and strategy. We should consider the interest of the membership; resources (\$) available to us from MGWA and other sources; which organization (s) should we work through; what do we expect to achieve and how will we know when we achieve it?

Members who are interested in working on the Committee-- write MGWA or call Pat Leonard-Mayer at (612) 725-4500.

WINTER MEETING

The speaker for the Winter Meeting will be Prof. J. David Prince. Professor Prince is the Northwest Area Foundation Professor of Environmental Law at William Mitchell College of Law. The topic of his presentation is Ground Water Law in Minnesota.

Date, time, and location are to be arranged and will be announced in the next MGWA Newsletter.



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