

MINNESOTA GROUND WATER ASSOCIATION

NEWSLETTER

v.6 n.1 May 1987

Position Wanted Hydrogeologist

B.S. Geology; M.S. Hydrogeology
Five years experience as project
hydrogeologist/project manager
all phases of RCRA and CERCLA.
Desires to relocate in Minnesota.

PRESIDENT'S PAGE

I was trying to figure out a way to get peoples' attention and, judging by recent discussions with those in government and consulting, that little "ad" above seemed like a sure-fire way to accomplish my objective. If anyone knows where I can find such a person, or if you are one, please let me know; I need four. If anyone needs resumes of "hydro"geologists with 10 to 20 years of experience in oil or minerals let me know, I've got lots of them.

The ground water business is obviously booming these days. There is no shortage of legislation dealing with ground water, both at the state and federal level; short courses abound which promise to make ground water experts out of any and all who attend; you must be a hermit if you haven't sponsored, spoken at, or attended numerous conferences or seminars on one of the many pressing issues associated with one of our most precious resources - water. Good, experienced hydrogeologists, seeking employment, are all but impossible to find. Lastly, but perhaps most importantly there is some money available. Those who have been around for awhile have drawn parallels between the current activity and the early days of the construction grants program.

Things are no different here than anywhere else. There has been a fair amount of activity locally and there will continue to be throughout the summer. MGWA did not hold a spring meeting because of the high level of activity as everyone was gearing up for the summer field season, which actually got started quite early this year thanks to the laughter of a "winter" we had. There are, however, a number of MGWA sponsored and co-sponsored activities and some sponsored by other organizations that we hope you'll find time for on your schedule this summer and fall.

The MGWA summer meeting will be quite different, but as usual very interesting and informative. Mike Schoenberg (USGS) has been hard at work on it and I hope to see all of you at the meeting at the St. Paul AVTI. The details are in this newsletter.

The Association of Ground Water Scientists and Engineers (NWWA) is holding its annual meeting in Minneapolis September 15 and 16. MGWA is co-sponsor. This meeting has historically been poorly attended, but AGWSE has developed what looks to be an excellent program to try and break out of the slump. MGWA would like our members to turn out *en masse*. Minnesota has been frequently overlooked on the national scene and we think it is important that others see the interest there is in Minnesota in ground

water and how progressive our programs are. The topic of the meeting will be contaminant hydrogeology and will include such internationally recognized experts as John Cherry (Waterloo), Paul Roberts (Stanford), and Lenny Konikow (USGS). All MGWA members should have already received a call for abstracts and we hope the MGWA membership will be represented among the speakers and/or at the poster sessions.

Locally, MGWA has arranged for Senator David Durenberger (R-MN) to address the meeting of Federal Legislation. In addition, Tom Kalitowski, Executive Director of MPCA will speak on his participation in the implementation of SARA at the state level. Kelton Barr (Barr Engineering), Patricia Leonard-Mayer (Harstad and Rainbow) and Dr. John Niebur (U of Minnesota, representing AIH) will participate with NWWA representative Tom Sheahan (Gerghty & Miller) in a panel discussion on certification of ground water professionals. Let's all turn out for the meeting.

Other local ground water conferences coming up include:

Non-Point Source Pollution - New Initiatives for Management. June 17 and 18; St. Paul, Sponsored by the Upper Mississippi River Basic Association, USEPA and USSCS.

Agricultural Chemicals and Ground Water Quality, October, 1987. Sponsored by the Freshwater Foundation through a grant from the Governor's Rural Development Council. Currently in the planning process.

-See pp.5-6 for others.

Hope to see you at one of these conferences.

Gretchen Sabel now has copies of the updated Procedures for Ground Water Monitoring - MPCA Guideline. If you'd like one, contact Gretchen at the MPCA at (612) 296-7262.

If you haven't decided whether ground water is one word or two, you should check out the Readers Forum in the March-April issue of Ground Water (p. 219). Entertaining if not enlightening.

Have a safe summer and don't forget the AGWSE meeting September 15 and 16 in Minneapolis.

- Rick Johnston

MINNESOTA GROUND WATER ASSOCIATION SPRING MEETING

St. Paul Vocational Technical Institute
235 Marshall Avenue
St. Paul, Minnesota

Wednesday, June 17, 1987

Imagine this: You've just returned from the field and have stacked up all the field data sheets, the pump test records, the survey notes for well elevations, the water level elevations. The pile grows to an intimidating height, yet you aren't worried about getting it all processed in short order. Why not? Your computer workstation consists of the latest in hardware and software. You have a digitizer, a scanner, a large format plotter, high resolution screen and laser graphics; you can download data from remote stations and hand-held data loggers. No problem!

Dream or reality? Now or the future? Well, while the above scene may not yet be true today, its time is fast approaching. With ever increasing amounts of data, our need to effectively and efficiently process it is also increasing. So take one of the future paths of hydrogeology and step into the realm of increasingly automated data entry and analysis. Join us at the Minnesota Ground Water Association for its summer meeting; we will look at computer equipment and software and hear Fritz Ehlers of Cray Research discuss the role workstations and supercomputers may have in your future.

SCHEDULE:

4:30	-	7:00 pm	Computer Fair
7:30	-	8:30 pm	Fritz W. Ehlers of Cray Research: The Role and Use of a Supercomputer Workstation for Hydrogeological Applications.
8:30	-	9:45 pm	Refreshments and conversation

Cut here

REGISTRATION FORM

MGWA SPRING MEETING

June 17, 1987 Starting 4:30 pm
St. Paul Technical Vocational Institute

Fill out this form, include \$2 registration fee, and mail by June 10th to:

MGWA, c/o Mike Schoenberg
U.S. Geological Survey
702 Post Office Building
St. Paul, MN 55101

Names _____
 Affiliation _____
 Address _____
 City/State/Zip _____
 Business/Day Phone _____
 \$2 per registration _____
 \$10 per annual dues (two birds with one stone?) _____
 Total enclosed _____

ANNUAL ELECTIONS

The Association is having its annual spring election. The following members have been nominated for election to the offices of President-Elect and Secretary. The President-Elect serves for one year and then becomes President for the following year. The Secretary serves for two years.

Candidates for President

Charles Job -- Chuck is the Environmental Department Manager for Twin City Testing Corporation. He received a B.S. in geology from Michigan State University and an M.S. in Environmental Science/Ground Water Geology from Miami University. In addition, Chuck has done graduate work at the University of Arizona. Prior to joining Twin Cities Testing, Chuck's work experience included serving as Planning Director for the Great Lakes Basin Commission, Project Manager with the Gas Research Institute, and as a Hydrologist with the EPA.

Linda Lehman -- Linda is President of L. Lehman and Associates. Linda obtained her M.S. degree from the University of South Florida in Hydrogeology and is currently a PhD candidate at the University of Minnesota. She has had extensive professional experience in the field of nuclear and hazardous waste management, including three years with the U. S. Nuclear Regulatory Commission, and as a representative for the State of Minnesota at the National Governor's Association Task Force on High-Level Radioactive Waste Management.

Candidate for Secretary

Gordy Hess -- Gordy is a hydrologist with the firm of Jerry Sunde and Associates. He received B. A. and M.S. degrees from the University of Minnesota and a PhD in Marine Geology from Stanford University. Prior to his current position, Gordy worked for the U.S.G.S., in California, as a marine Geologist.

MGWA BALLOT -- Spring 1987

President-Elect (vote for one)

Charles Job _____

Linda Lehman _____

write-in candidate _____

Secretary (vote for one)

Gordy Hess _____

write-in candidate _____

Please mail this ballot to:

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

MEMBERS' PROMOTIONS, CHANGES AND NEWS

Paul Book, formerly with the Minnesota Pollution Control Agency (PCA), will be manager of geologic investigations with Braun Engineering.

Janet Dagleish has accepted a Hydrogeologist II position in PCA's Division of Solid and Hazardous Waste.

Laurel Reeves has been promoted to Senior Hydrologist and is returning to the DNR's Division of Waters from PCA.

Bay West has moved to new quarters: 5 Empire Drive, St. Paul MN 55103, the new telephone number is (612) 291-0456.

Bruce Davis, formerly at PCA, has moved to Phoenix to head up the State of Arizona's Superfund Program. We hear that he sold off his snowblower and all his Deep Woods Off to the highest bidder.

Larry Johnson, formerly at E. A. Hickok & Assoc. joined Foth & Van Dyke in January.

Jan Falteisek, PCA, was promoted to Senior Hydrologist (Hydro III).

John Dustman, formerly at the Department of Transportation, has joined Twin City Testing.

Dave Vieau, together with other professionals, has formed a new firm, NOVA.

RON NARGANG IS NEW DIRECTOR OF THE DNR DIVISION OF WATERS

Ron Nargang has been appointed Director of the Division of Waters, Minnesota Department of Natural Resources (DNR).

Born and raised in a rural area of northeastern Iowa, Ron received a B.S. degree in Natural Resource Management from the University of Wisconsin - Stevens Point. He served as the Executive Director of the Lake County Soil and Water Conservation District in the Chicago metropolitan area where he coordinated the development of a program to reduce soil erosion and sedimentation on developing urban lands. He moved to Minnesota in 1976 and served as the Assistant Director for the Soil and Water Conservation Board until 1984 when he was appointed Director of the Soil and Water Conservation Board.

Ron assumed his new position in January, 1987. The Division of Waters administers (among other things) the water appropriation permits required by state law for all appropriations which average 6 gpm per day or 2 gpm per year.

NEXT MEETING

The late summer MGWA seminar will be on nitrates. How widespread is Minnesota's nitrate problem? What are the health effects? What research is on-going? What are potential remedies? If you know of someone who has information or research to share on the nitrate problem, please call Pat Bloomgren at DNR (612) 296-0436.

PRISCILLA GREW IS NEW DIRECTOR OF THE MINNESOTA GEOLOGICAL SURVEY

On November 1, 1986, Priscilla C. Grew became Director of the Minnesota Geological Survey and professor in the Department of Geology and Geophysics at the University of Minnesota.

From 1981 to 1986, Dr. Grew was Commissioner of the California Public Utilities Commission. She directed the California Department of Conservation from 1977 to 1981. This Department includes the California Geologic Survey Division, the Division of Mines and Geology and the Regulatory Division of Oil and Gas. Dr. Grew also chaired the California State Mining and Geology Board which is responsible for mined land reclamation policy.

Dr. Grew received her B.A. in Geology from Bryn Mawr and her Ph.D. in Geology from the University of California at Berkeley. She has taught Geology and Environmental Studies at Boston College, the University of California at Davis, and UCLA.

She serves on the U.S. National Committee on Geology and the National Research Council Board on Mineral and Energy Resources. She is a fellow of the Geological Society of America and the American Association for the Advancement of Science. She chairs the committee on public affairs of the American Geophysical Union.

She is married to Edward S. Grew who is Associate Research Professor of Geology at the University of Maine at Orono. His research concerns Precambrian studies in East Antarctica and petrology of granulite facies of metamorphic rocks.

MGWA

MEMBERSHIP LIST

1987

Byron Andrew Adams
MN Pollution Control
Site Response
520 Lafayette Road
St. Paul, MN 55155

Thomas Bader
Box 79
Taylor's Falls, MN 55084

Dr. Roger V. Blomquist
Braun Environmental Labs
6800 S. Co. Rd. 18
Box 35108
Minneapolis, MN 55435

Dr. C.E. Buchwald
Carleton College
Department of Geology
Northfield, MN 55057

Dr. E. Calvin Alexander
U of M - Geology Department
30A Pillsbury Hall
Minneapolis, MN 55455

Kevin L. Baker
Box 426
Kerkhoven, MN 56252

Peter Blomquist
Colorado Geologic Inc.
12395 W. 53rd Ave.
Suite 205
Arvada, CO 80002

Michael R. Burke
Leggette Brashears & Graham
1210 W. Co. Rd.E
Suite A1211
St. Paul, MN 55112

Rebecca A. Allen
Winona State University
902 Parks Avenue
- #237
Winona, MN 55987

Charles Barger
11141 Irwin Ave.
Bloomington, MN 55437

Patricia Bloomgren
MDNR Waters
Technical Analysis Unit
500 Lafayette Rd., Box 32
St. Paul, MN 55155

Shelley Burman
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

James Almendinger
U of M
Dept of Ecology
318 Church St. SE
Minneapolis, MN 55455

Douglas Barr
Barr Engineering Co.
7803 Glenroy Road
Minneapolis, MN 55435

Justin Blum
MPCA
Site Response
520 Lafayette Road
St. Paul, MN 55155

Greg P. Busacker
U.S. Army Corps of Eng.
2714 Galtier
Roseville, MN 55113

William P. Amann
Delta Environmental Consultants
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Kelton Barr
Barr Engineering Co.
7803 Glenroy Road
Minneapolis, MN 55435

Paul Book
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

Gregory C. Buzicky
MN Dept. of Agriculture
90 West Plato
St. Paul, MN 55107

Craig Anderson
Bay West Inc.
5 Empire Drive
St. Paul, MN 55103

Daniel R. Berg
MPCA
Planning and Review
520 Lafayette Road
St. Paul, MN 55155

Judy Boudreau
Metro DNR
1200 Warner Road
St. Paul, MN 55106

Catherine A. Carlson
528 Johnson St.
Winona, MN 55987

Henry W. Jr. Anderson
U.S. Geological Survey
4105 Brigadoon Dr.
Shoreview, MN 55126

Jim Berg
Bay West, Inc.
5 Empire Drive
St. Paul, MN 55103

David Brazil
PACE Laboratories
1710 Douglas Drive N.
Minneapolis, MN 55422

George H. Carlson
US Geological Survey
4901 Madison Street NE
Columbia Height, MN 55421

Michael Applewick
Northeast Technical Services
P.O. Box 1142
Virginia, MN 55792

Fred Bergsrud
University of Minnesota
213 Agricultural Eng.
St. Paul, MN 55108

Bob Brown
Bolton and Menck Inc.
515 North Front St.
Mankato, MN 56001

Leon Carlson
North Central Agricultural Ser
P.O. Box 193
Benson, MN 56125

Keith A. Bachmann
Bonestroo and Assoc.
2335 West Trunk Highway 36
St. Paul, MN 55113

Gerald T. Blaha
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

Linda Bruemmer
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

Robert Christen
Lakehead Testing Lab
PO Box 7168
Duluth, MN 55807

Todd Christenson
Twin Cities Testing Inc.
662 Cromwell Avenue
St. Paul, MN 55114

Michael J. Costello
3474 Churchill St.
Shoreview, MN 55112

Dr. Dianne Dorland
Materials Proc. Eng.
107 RLB
UMD
Duluth, MN 55812

Craig O. Evans
3314 Nicollet Ave S#10
Minneapolis, MN 55408

Citizens League
Member Organization
708 South Third St.
Suite 500
Minneapolis, MN 55415

Glen Craven
Culligan Water Systems
1137 Whitewater Ave.
St. Charles, MN 55972

John E. Drawz
LeFevre, Lefler, Kennedy et al
200 First Bank Place West
120 S. Sixth Street
Minneapolis, MN 55402

Glenn L. Evavold
RREM Inc.
408 Board of Trade Bldg.
Duluth, MN 55802

Thomas P. Clark
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

David Crisman
MPCA
Hazardous Waste
520 Lafayette Road
St. Paul, MN 55155

James DuBois
DuBois Geotechnical Services
1835 North Stevens St.
Box 9
Rhinelander, WI 54501

Jan D. Falteisek
MPCA
Hazardous Waste
520 Lafayette Road
St. Paul, MN 55155

Mark Collins
Illinois State Water Survey
2204 Griffith Drive
Champaign, IL 61820

Dr. S.C. Csallany
Env. Hydrology & Engineering
2145 Draper Avenue
St. Paul, MN 55113

George H. Duckwitz, Jr.
George H. Duckwitz, Inc.
Route 1
Box 38
Holloway, MN 56249

John Fax
MN Dept of Natural Resces
Division of Waters
2211 Matterhorn Lane
St. Paul, MN 55119

Daniel A. Comeau
PACE Labs
1710 Douglas Drive N.
Minneapolis, MN 55422

Janet Dalgleish
Barr Engineering Co.
7803 Glenroy Road
Minneapolis, MN 55435

Robert Elliot
Pace Laboratories
1710 Douglas Drive North
Golden Valley, MN 55422

John Findley
NOVA Environmental Serv
Hazeltine Gates
Suite 420
Chaska, MN 55318

Doug Connell
Barr Engineering Co.
7803 Glenroy Road
Minneapolis, MN 55435

Jim Dalsin
Downhole Services
4241 24th Ave. S.
Minneapolis, MN 55406

Cathy Endress
General Delivery
Box 122
Mosinee, WI 54455

Dale Folen
RCM Associates
10901 Red Circle Dr.
Suite 200
Minnetonka, MN 55343

Paula Connell
Federal Cartridge Corp.
2176 Camden Ct.
White Bear Lake, MN 55110

Marsha A. Davis
U of Minnesota
Geology Dept.
2203 Doswell Ave.
St. Paul, MN 55108

John B. Erdman
Wenck and Associates
15500 Wayzata Blvd. #832
Wayzata, MN 55391

David R. Ford
MN DNR
Division of Waters
500 Lafayette Rd.
St. Paul, MN 55155

Michael P. Convery
MPCA
Hazardous Waste
520 Lafayette Road
St. Paul, MN 55155

James M. DeLambert
Bruce Leisch & Associates Inc.
3131 Fernbrook Lane
Plymouth, MN 55441

Don Erickson
Bay West Inc.
5 Empire Drive
St. Paul, MN 55103

G. Rudy Ford
MN Dept. of Transportation
130 Transportation Bldg
St. Paul, MN 55155

R.J. Corbett
Corbett and Assoc.
7207 Kyle N.
Box 29375
Minneapolis, MN 55429

Geoffrey N. Delin
U.S.G.S.
702 Post Office Building
St. Paul, MN 55101

James E. Eulberg, P.E.
4765 Natchez Ln.
Savage, MN 55378

Sandra J. Forrest
MPCA
Site Response
520 Lafayette Road
St. Paul, MN 55155

Thomas W. P.E. Foster
Maier-Stewart & Assoc. Inc.
110 Hanover
480 Cedar St.
St. Paul, MN 55101

John Gleason
Precision Environmental Serv
8009 Ranchers Road NE
Minneapolis, MN 55432

Paul A. Harris
Davy Laboratories
115 S. 6th St. SE
Box 2076
LaCrosse, WI 54602

Kenneth E. Hjelmstad
U.S. Bureau of Mines
7426 Stevens Ave S
Minneapolis, MN 55423

Jay Ronald Frischman
MN-DNR
Waters
500 Lafayette Rd.
St. Paul, MN 55155

Diane Glinsman
Control Data Corp.
545 Lake Cove Court
Shoreview, MN 55112

Gary F. Hart
Bergerson-Caswell Inc.
5115 Industrial Street
Maple Plain, MN 55359

Richard Hlavka
3272 Blackstone Ave.
St. Louis Park, MN 55416

John W. Fulton
Delta Environmental Consult
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Barb Gnabsik
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

Robert J. Havrilak
IT Corporation
3570 N. Lexington
Suite 2000
St. Paul, MN 55126

Rudy Hoagberg
Rudy Hoagberg and Assoc.
1409 Willow Street
Room 304
Minneapolis, MN 55403

Gilbert Gabanski
Twin City Testing Inc.
662 Cromwell Avenue
St. Paul, MN 55114

John D. Gray
Minnesota Valley Testing Lab
326 Center Street
New Ulm, MN 56073

Henry He
Wenck Associates
Twelve Oaks Center
15500 Wayzata Blvd. #832
Wayzata, MN 55391

John N. Holck
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

Abraham Gafni
University of Minnesota
1232 Gibbs Avenue
St. Paul, MN 55108

William Greg
501 Van Buren Terrace N.
Hopkins, MN 55343

Michael J. Heiling
IBM Corp.
7F2/658-B
Hwy. 52N and 37th St. NW
Rochester, MN 55901

Paul J. Jr. Horick
Iowa Geologic Survey
1411 Oaklawn
Iowa City, IA 52240

Kurt Geiser
4007 Bloomington Ave. S.
Minneapolis, MN 55407

Lynne Grigor
14901 Hillside Lane
Burnsville, MN 55337

Duane Heley
P.O. Box 3042
Fargo, ND 58108

Marc Hult
U.S. Geological Survey
702 Post Office Building
St. Paul, MN 55101

Gary D. Gilbert
Delta Environmental Consult.
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Shiela Grow
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

Gordon Hess
Sunde Engineering
9001 E. Bloomington Fwy
Bloomington, MN 55420

George Huppert
Univ. of Wisconsin LaCrosse
Department of Geology
LaCrosse, WI 54601

John Gilbertson
Bergerson-Caswell Inc.
5115 Industrial St.
Maple Plain, MN 55359

LeeAnn Hammerbeck
University of Minnesota
Civil and Mineral Engineering
545 Lake Cove Court
Shoreview, MN 55126

Michael L. Hestick
NSP Co.
414 Nicollet Mall
Minneapolis, MN 55401

Laura Huston
Environmental Protection
Labs
217 Osseo Avenue N.
St. Cloud, MN 56301

Daniel C. Gillies
U.S. Geological Survey
Nuclear Hydrology Program
Mail Stop 416, Federal Center
Lakewood, CO 80225

Michael J. Hansel
MPCA
Air Quality
8835 42nd St. N
Lake Elmo, MN 55042

Eugene Hickok
E. A. Hickok and Assoc
545 Indian Mound
Wayzata, MN 55391

Derric L. Iles
Twin Cities Testing Inc.
662 Cromwell Avenue
St. Paul, MN 55114

Don Jakes
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

Rick Johnston
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

David L. Kill
Johnson Well Screens
P.O. Box 64118
St. Paul, MN 55164

Terrence Lee
Olmsted Co. Health Dept
415 4th St. SE
Rochester, MN 55904

Nancy O. Jannik
Geology Department
Winona State Univ.
Winona, MN 55987

Perry M. Jones
301 5th St. SE
Apt. #12
Minneapolis, MN 55414

K. Dennis Kim
Enviroscience
4120 Auburn Drive
Minnetonka, MN 55343

Dr. Jeanette H Leete
DNR Division of Waters
Technical Analysis Unit
500 Lafayette Rd.
St. Paul, MN 55155

James Japs
MDNR
Waters
3453 Fremont Ave. S.
Minneapolis, MN 55408

Michael Jost
5712 46th Ave. S.
Minneapolis, MN 55417

Roman J. Koch
MN Dept. of Health
Environmental Health
717 Delaware St. SE
Minneapolis, MN 55440

Linda Lehman
L. Lehman & Associates
1103 W. Burnsville Parkway
Suite 107
Burnsville, MN 55337

Suzanne D. Jiwani
Barr Engineering Co.
7803 Glenroy Road
Minneapolis, MN 55435

John C. Jungwirth
Delta Environmental
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Mary Ellen Kochenderfer
5211 Elliot Avenue S.
Minneapolis, MN 55417

Patricia Leonard-Mayer
Harstad and Rainbow Atty's
1036 Norwest Midland Bldg.
Minneapolis, MN 55401

Charles A. Job
6300 W 98th St
Bloomington, MN 55438

Roman Kanivetsky
MN Geological Survey
2642 University Ave.
St. Paul, MN 55114

Kathryn Kramer
MN Pollution Control
Site Response
520 Lafayette Road
St. Paul, MN 55155

Amy Loisel
MN-DNR
Waters
1201 East Highway 2
Grand Rapids, MN 55744

William P. Jr. Johnsen
Winona State University
Department of Geology
Winona, MN 55987

Robert M. Karls
Delta Environmental
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Patricia E. Kuderer
Hoff and Allen P.A.
300 Prairie Center Drive
Eden Prairie, MN 55344

Gail Lowry
MPCA
Water Quality
520 Lafayette Road
St. Paul, MN 55155

George E. Johnson
MN Pollution Control
Hazardous Waste
1946 East Larpenteur
St. Paul, MN 55109

Lee J. Keller
3024 - 44th Ave. S.
Minneapolis, MN 55406

Patrick M. Lannon
Geology Department
University of Minnesota
Duluth
Duluth, MN 55812

Tom Lucas
Northeast Technical Services
HCR S
Box 334
Hibbing, MN 55792

Larry L. Johnson
E. A. Hickok and Assoc
5007 Fremont Ave. S.
Minneapolis, MN 55419

Loni Kemp
The Minnesota Project
P.O.Box 4
Preston, MN 55965

Eric J. Larson
Minnesota DNR
Waters Division
2711 Aldrich Ave S #1
Minneapolis, MN 55408

Audrey J. Luebeck
Pope-Reid Assoc.
245 E 6th St
Suite 813
St. Paul, MN 55101

Scot Johnson
MN Pollution Control
Solid Waste
240 Grandview #109
Roseville, MN 55113

Kristin M. Kennedy
Leggette Brashears and Graham
1210 W. Co. Rd. E
Suite A1211
St. Paul, MN 55112

Mark B. Larson
L. Lehman and Assoc.
1103 W Burnsville Parkway
Suite 107
Burnsville, MN 55337

Marilyn D. Lundberg
State Planning Agency
100 Capitol Square Building
St. Paul, MN 55101

Michael T. P.E Lustig
Patzig Testing Laboratories

3922 Delaware Avenue
Des Moines, IA 50313

Steve McComas
Applied Research & Tech.
1811 Eleanor Ave

St. Paul, MN 55116

John Moeger
MPCA
Solid Waste
520 Lafayette Road
St. Paul, MN 55155

Carol Nankivel
MPCA
Program Development
520 Lafayette Road
St. Paul, MN 55155

William C. MacDonald

1405 Como Ave. SE
Apt. #8
Minneapolis, MN 55414

Brian McHugh
Delta Environmental Consult
1775 Old Hwy 8
Suite 104
New Brighton, MN 55112

Eric Mohring
MDNR
Waters
35 Sidney Place SE
Minneapolis, MN 55414

Ron Nargang
Director DNR-DOW
5376 Osgood Ave.
Afton, MN 55001

Kenneth R. Madison
Community Health Services

606 Kennedy Street
Marshall, MN 56258

Steve McManamon
Winona State University
Geology Department

Winona, MN 55987

Gunilla Montgomery
MN Dept. of Health
Environmental Health
717 Delaware St. SE
Minneapolis, MN 55440

Michael Nash
LeFebvre Lefler Kennedy et al.

200 First Bank Place West
Minneapolis, MN 55402

Eric Madsen
Control Data Corporation

1425 Arlington Ave. E.
St. Paul, MN 55106

Company Member
Harold Ruppert & Son
Drilling
20420 County Road 50
Hamel, MN 55340

John Morley
L. Lehman & Associates
1103 W. Burnsville Parkway
Suite 107
Burnsville, MN 55337

Nebraska
Groundwater Foundation
P.O. Box 2558

Lincoln, NE 68502

Suzanne Maeder
MN Land Mgmt Info Center
LL65
Metro Square Bldg.
St. Paul, MN 55101

George Mickelson
I.T. Corporation
806 W.Co.Rd.D #134
New Brighton, MN 55112

Christopher Mosentine
E.A.Hickok and Assoc.
545 Indian Mound
Wayzata, MN 55391

John Nedved
924 S. Smith Ave.
W. St. Paul, MN 55118

Joe Magner
MPCA
Water Quality
520 Lafayette Road
St. Paul, MN 55155

Ross D. Miller
Braun Environmental Labs
6800 S. Co. Rd. 18
Box 35108
Minneapolis, MN 55435

Gene L. Mosing
Solid Waste Management Dept
Winona County Courthouse
171 W. Third St.
Winona, MN 55987

Kevin Neitzke
4427 2 1/2 St NE
Columbia Hgts, MN 55421

Richard Manser
Barr Engineering Co.

7803 Glenroy Rd.
Minneapolis, MN 55345

Donald K. Milless
Pace Laboratories
1710 Douglas Drive N.
Golden Valley, MN 55422

Leon F. Mucha
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New Brighton, MN 55112

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Carol Beim Nulsen
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John Pegors
MPCA/Duluth
320 W. 2nd St
Room 704
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George Pruchnofski
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Daniel L. Sanville
Delta Environmental Consult
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Suite 104
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Katherine M. Sanville
Delta Environmental Consult
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Lab Superintendent
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Robert Sass
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Bradley R. Sielaff
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Program Development
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Matt Stevens
Winona State University
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Robert Schnobrich
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U.S. Geological Survey
Room 702
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Ronald D. Thompson
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Environmental Health
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Minneapolis, MN 55414

Michael E. Schoenberg
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Albert J. Smith
Johnson Well Screens
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Mark R. Storck
904 E 14th
Bloomington, IN 47401

Michael J. Tibbets
MPCA
Hazardous Waste
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Marti Scholl
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Excelsior, MN 55331

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Dale J. Trippler
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Sarah P. Tufford
MNDR
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Dorie E. Turpin
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Larry Van De Brake
Well Driller
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Steve A. Vanderboom
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Carleton College
Geology Department
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Bruce A. Liesch and Assoc.
3131 Fernbrook Lane
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James L. Warner
MPCA
Solid Waste
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St. Paul, MN 55155

Mike Westerheim
Twin Cities Testing Inc.

662 Cromwell Avenue
St. Paul, MN 55114

Robin Whitaker
Twin City Testing
662 Cromwell
St. Paul, MN 55114

Dan Whitman
STS Consultants
2405 Annapolis Lane
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Douglas A. Wierman
1840 18th St. NW
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Jane M. Willard
Twin Cities Testing
662 Cromwell Ave.
St. Paul, MN 55114

David L. Williams
1839 61st Avenue N.
St. Cloud, MN 56301

Earl Windahl
10451 Greenbriar Rd. #316
Minnetonka, MN 55343

Dennis Woodward
U.S. Geological Survey
Federal Bldg
300 E. 8th St.
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Jerry Wright
Univ. of Minnesota Extension
West Central Exper. Station
Morris, MN 56267

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CALENDAR

May 14 - 15 *The Fundamentals of Ground Water Contamination*. To be held at the Stouffer Concourse Hotel, Arlington, Virginia. Contact: R. M. Miller, American Ecology Services, Inc., 127 East 59th St., New York, NY 10022.

May 18 - 22 *1987 AGU Spring Meeting and Special Poster Symposium: Evaluation of Ground-Water Flow and Transport Modeling Strategies*. To be held in Baltimore, Maryland. Registration is still possible by calling AGU at 1-800-424-2488.

May 18 - 21 *First National Outdoor Action Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods*. A new format will be used: conference, outdoor workshops and demonstrations, and an exposition. To be held in Las Vegas, Nevada at the Tropicana Hotel by the Association of Ground Water Scientists (AGWSE), a division of the National Water Well Association (NWWA).

June, 1987 *ASCE National Conference on Water Resources Planning and Management*. To be held in Kansas City, Missouri. Contact: Harry Tuvel, ASCE, 345 E. 47th St. New York, NY 10017.

June 1 - 5 *Practical Approaches to Ground-Water Hydrology and Contamination*. To be held in Stillwater, Oklahoma by Oklahoma State University, Arts and Sciences Extension, 206 Life Sciences East, Stillwater, OK 74078-0276. This course uses a practical approach, calling upon experienced professionals in ground-water monitoring, aquifer restoration, modeling, well construction and design, and contaminant transport. The latest information about Superfund and RCRA amendments will be presented. Two hours of graduate credit are available. Offered again **July 13 - 17**.

June 2 - 4 *Principles of Ground Water*. To be held in Columbus, Ohio by NWWA. This course concentrates on essential concepts, including aquifer test procedures.

June 8 - 9 *Conference on the Quality of Ground Water in Geologically Sensitive Areas at Winona State University*. Registration details available from Dr. Wayne E. Dunbar, Chemistry Department, Winona State University, Winona, MN 55987. After May 28, call 1-507-457-5296.

June 8 - 11 *Underground Storage Tanks*. To be held at the Airport Marriott in Orlando, Florida. Contact: Mean Free Path Corp. 220 Pegasus Ave., Northvale, New Jersey 07647.

June 9 - 10 *Northeast Ground Water Exposition*. To be held in Albany, New York by NWWA.

June 15 - 17 *Corrective Actions for Containing and Controlling Ground-Water Contamination*. To be held in Bloomington, Minnesota by NWWA.

June 15 - 19 *Ground Water Modeling Without Advanced Mathematics*. To be held in Somerset, New Jersey by NWWA.

June 16 - July 16 *Water Resources/Hydrogeology*. To be held at Macalester College in St. Paul, Minnesota. This course will meet in the late afternoon and evenings T-W-Th. Participants receive six quarter hours of credit. A limited number of professionals in hydrogeology will be given an introduction to the basic types of ground water models, their assumptions and applications. Hands-on modeling experience and the use of digitizers and computer graphics will be emphasized. Contact: Macalester's Summer Session Program (696-6296) for registration materials.

June 18 *DRASTIC Workshop. A standardized approach for evaluating ground water pollution potential using hydrogeologic settings*. To be held in Bloomington, Minnesota by NWWA.

June 22 - 25 *Local Ground Water Management: Contamination Impacts and Response Strategies*. To be held at Cornell University. Contact: Programs in Professional Education, Cornell University, B12 Ives Hall, Ithaca, New York 14853-3901.

June 22 - 26 *Safety at Hazardous Waste Materials Sites: A (Gloved) Hands-On Workshop*. To be held in Valhalla, New York by NWWA.

June 22 - 26 *International Ground Water Conference - Ground Water and the Environment*. To be held in Kuala Lumpur, Malaysia. Contact: Secretary, Ground Water Conference, 1987, c/o Department of Geology, Faculty of Physical and Applied Science, Universiti Kebangsaan Malaysia, 4300 Bangi, Selangor, Malaysia.

July 7 - 9 *Introduction to Ground Water Geochemistry*. To be held at the Colonnade Hotel in Boston, Massachusetts by AGWSE (NWWA). To be repeated September 29 - October 1 in San Diego, California.

July 7 - 9 *Fundamentals of Ground Water and Well Technology: An Introductory Short Course*. To be held in Columbus, Ohio by NWWA.

July 13 - 17 *Aquifer Analysis*. To be held in Columbus, Ohio by NWWA. Five week-long short courses will be offered this summer. At this one, the first, 3 quarter hours of graduate credit are available (Ohio State). This course will teach the use of both graphical and computer analysis. After all if we are wrong on T, S, boundary conditions and leakage, we are wrong about everything else as well! Other dates: **July 20 - 24** at Somerset, New Jersey; **July 27 - 31** at Orlando, Florida; **August 3 - 7** at Denver, Colorado; **August 24 - 28** at Stockton, California.

July 21 - 22 *Effective Use of Geologic Information in Ground Water Models*. Distinguished Seminar Series - Dr. Mary P. Anderson. To be held in Bloomington, Minnesota by NWWA.

August 1 - 6 *The 25th Annual Conference of URISA (Urban and Regional Information Systems Association)*. To be held in Fort Lauderdale, Florida. Contact: URISA 319 C St. SE, Washington, D.C. 20003.

August 5 *Risk Assessment for the Ground Water Scientist*, taught by Dr. Ronald Block. To be held in Baltimore, Maryland, by NWWA.

August 10 - 12 *Ground Water Treatment Technology Short Course*. To be held in Seattle, Washington, by NWWA.

August 11 - 12 *Underground Storage Tank Management*. To be held in Burlington, Massachusetts by NWWA.

September 15 - 16 *Annual Meeting of the Association of Ground Water Scientists and Engineers - Contaminant Hydrogeology*. Dr. John Cherry will keynote the conference to be held in Minneapolis, Minnesota.

September 18 - 20 *Fluid flow in fractured media*. To be held in Atlanta, Georgia. Sponsored by the USGS, the Georgia Water Research Institute, and Georgia State University.

September 29 - October 1 *Agricultural Impacts on Ground Water*. To be held in Des Moines, Iowa by AGWSE (NWWA).

October 12 - 13 *Geologic and environmental characterization at hazardous waste facilities and Ground water protection and management strategies*. Both to be held in Atlanta, Georgia. Sponsored by the Association of Engineering Geologists, co-sponsored by the Georgia Ground Water Association.

October 13 - 15 *Ground Water and Geotechnical Problems Conference*. To be held in Chicago, Illinois by AGWSE (NWWA).

October 26 - 29 *International Conference on Ground Water Contamination: Use of Models in Decision-Making*. To be held in Amsterdam, The Netherlands. Contact: TNO Corporate Communication Department, P.O. Box 297, 2501 BD The Hague, The Netherlands.

October 28 - 30 *32nd Annual Midwest Ground Water Conference*. To be held in Madison, Wisconsin. Contact: Alexander Zaporozec, Wisconsin Geological and Natural History Survey, 3817 Mineral Point Road, Madison, Wisconsin 53705.

November *Ground Penetrating Radar Workshop*. To be held in Gainesville, Florida. Contact: Gregg Schellentrager, 401 S. E. First Ave., Room 248, Gainesville, Florida 32601.

November 1 - 6 *23rd Annual AWRA Conference - Averting Water Crises and Symposium - Water Resources Problems Related to Mining and Energy: Preparing for the Future*. To be held in Salt Lake City, Utah. Contact: Dr. Alten B. Davis, Department of Political Science (1203), Weber State College, Ogden, Utah 84408.

November 4 - 6 *Petroleum Hydrocarbons and Organic Chemicals in Ground Water*. To be held in Houston, Texas by NWWA.

November 9 - 12 *NCGA's Mapping and Geographic Information Systems '87*. To be held in San Diego, California by the National Computer Graphics Association. Contact: NCGA, 2722 Merrilee Drive, Suite 200, Fairfax, Virginia 22031.

November 19 - 20 *20th Annual Water Resources Conference - Stormwater Management: Policy and Practice*. To be held at the University of Minnesota. Contact: Cheryl Jones, University of Minnesota, 315 Pillsbury Drive, S.E., Minneapolis, Minnesota 55455 or call 1-612-625-9516.

For information about meetings and seminars to be held by the NWWA, contact NWWA at 6375 Riverside Drive, Dublin, Ohio 43017 (614) 761-1711, Telex 241302.

WINTER MEETINGS

The association held its winter meeting on February 10, 1987 at the Earle Brown Center on the University of Minnesota's St. Paul campus. The meeting, titled *Hydrocarbon Contamination*, was attended by about 100 members. Kevin Miller (Leggett, Brashears & Graham, Inc.), Bob Karls (Delta Environmental Consultants, Inc.), Marc Hult (USGS), and Olaf Pfannkuch (University of Minnesota) spoke on various aspects of practical and theoretical topics in hydrocarbon contamination. Linda Lehman and John Morley (both from L. Lehman and Associates, Inc.) coordinated and moderated the meeting. The meeting had something for each of us. Thanks to all who participated.

The association also held a joint meeting with TWIN CITIES GEOLOGISTS at the Stroh's Brewery on January 21. Priscilla Grew, the new Director of the Minnesota Geological Survey, spoke about her visit to the apatite mines on the Kola peninsula of the Soviet Union. A tour of the brewery preceded the meeting. The presentation was interesting and the beer was varied and abundant. Thanks to Dr. Grew and the TWIN CITIES GEOLOGISTS

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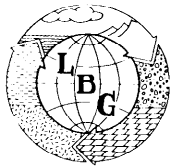
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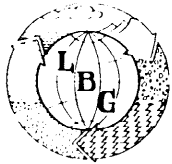
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