

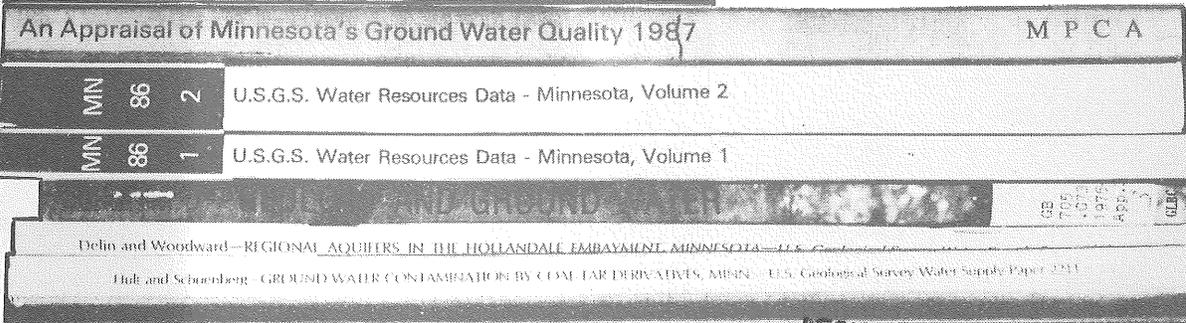
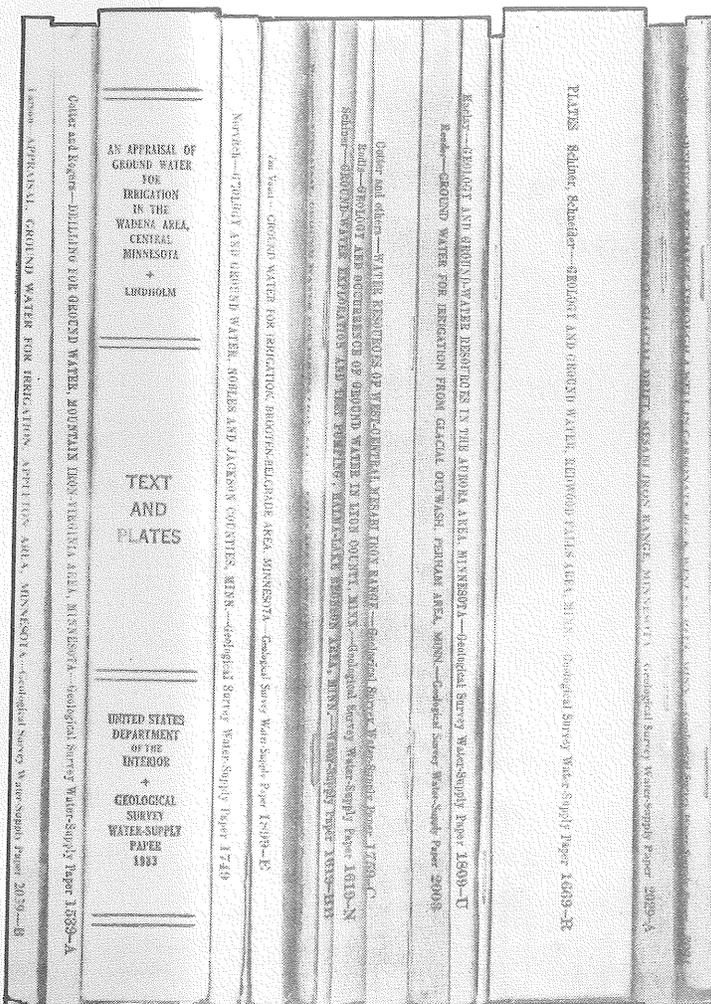


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# MINNESOTA GROUND WATER

# BIBLIOGRAPHY



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**Water Appropriations Manual M.S. 105.41**  
 Minnesota Department of Natural Resources November 1, 1986

MN DEPARTMENT OF NATURAL RESOURCES Division of Waters

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## PREFACE

The primary objectives for this Bibliography were to provide both a localized reference to Ground Water Resource Publications, and a reference to the organizations, agencies and individuals in Minnesota who are currently publishing information on and related to ground water.

The Bibliography is divided into two sections. Chapter I lists the publications of the United States Geological Survey (USGS) and the Minnesota Geological Survey (MGS) for the six DNR regions of Minnesota. These publications should be of interest to anyone interested in locating ground water information for a specific locality in Minnesota. Chapter II lists the publications of the many agencies and organizations involved with ground water. These publications may be useful to anyone pursuing a specific topic related to ground water. Addresses and general phone numbers of most organizations listed in the bibliography are provided in the back of the Bibliography.



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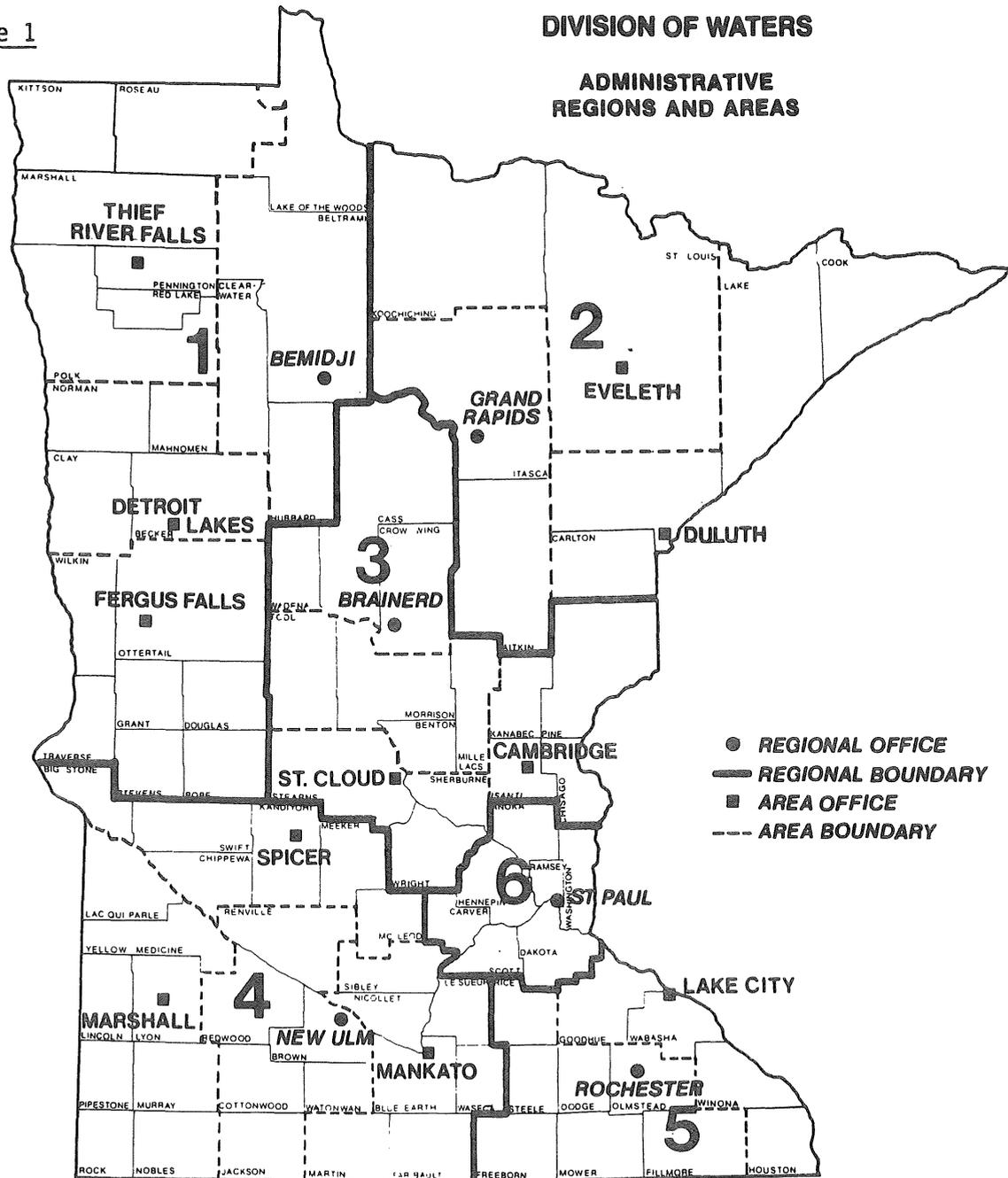
CHAPTER I

GROUNDWATER PUBLICATIONS BY DNR REGION

Introduction

All USGS, MGS and selected Ground Water and Geology Publications pertaining to a specific locality in Minnesota are listed in this section. The DNR has divided the State into six Administrative Regions (See Figure 1). The publications are organized into separate chapters for each of the six DNR Regions plus an additional chapter for publications which relate to Minnesota in general.

Figure 1

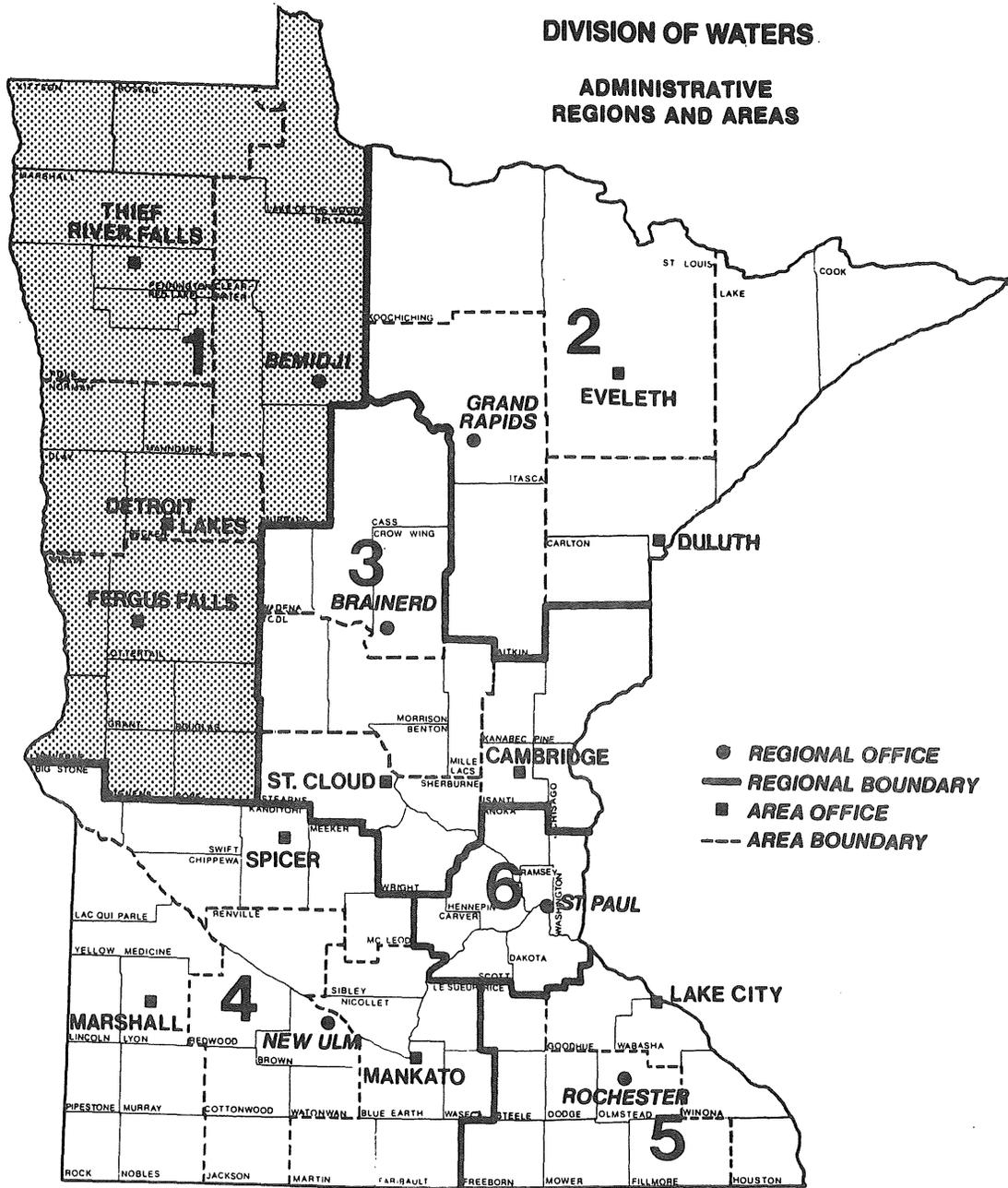




DNR REGION 1: NORTHWEST MINNESOTA

Counties

- Becker
- Beltrami
- Clay
- Clearwater
- Douglas
- Grant
- Hubbard
- Kittson
- Lake of the Woods
- Mahnomen
- Marshall
- Norman
- Otter Tail
- Pennington
- Polk
- Pope
- Roseau
- Stevens
- Traverse
- Wilkin



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REGION 1

PUBLICATIONS BY THE U.S. GEOLOGICAL SURVEY

USGS HYDROLOGIC ATLASES (HA)

- Bidwell, L.E., Winter, T.C., and Maclay R.W. (1970)  
Water Resources of the Red Lake River Watershed,  
Northwestern Minnesota.  
HA-346
- Cotter, R.D., and Bidwell, L.E. (1966)  
Water Resources of the Pomme De Terre River Watershed,  
West Central Minnesota.  
HA-220
- Cotter, R.D., Bidwell, L.E., VanVoast, W.A., and Novitzki, R.P. (1968)  
Water Resources of the Chippewa River Watershed  
West Central Minnesota.  
HA-286
- Helgesen, J.O., Lindholm, G.F., and Ericson, D.W. (1975)  
Water Resources of the Lake of the Woods Watershed,  
North-Central Minnesota.  
HA-544
- Lindholm, G.F., Oakes, E.L., Ericson, D.W., Helgesen, J.O. (1972)  
Water Resources of the Crow Wing River Watershed,  
Central Minnesota.  
HA-380
- Maclay, R.W., Bidwell, L.E., and Winter, T.C. (1969)  
Water Resources of the Buffalo River Watershed,  
West-Central Minnesota.  
HA-307
- Maclay, R.W., Winter, T.C., and Bidwell, L.E. (1968)  
Water Resources of the Mustinka and Bois De Sioux  
Rivers Watershed, West-Central Minnesota.  
HA-272
- Maclay, R.W., Winter, T.C., and Pike, G.M. (1965)  
Water Resources of the Middle River Watershed,  
Northwestern Minnesota.  
HA-201
- Maclay, R.W., Winter, T.C., and Pike, G.M. (1967)  
Water Resources of the Two Rivers Watershed,  
Northwestern Minnesota.  
HA-237
- Oakes, E.L., and Bidwell, L.E. (1968)  
Water Resources of the Mississippi Headwaters  
Watershed, North-Central Minnesota.  
HA-278

Winter, T.C., Bidwell, L.E., and Maclay, R.W. (1969)  
Water Resources of the Otter Tail River Watershed,  
West-Central Minnesota.

HA-296

Winter, T.C., Bidwell, L.E., and Maclay, R.W. (1970)  
Water Resources of the Wild Rice River Watershed,  
Northwestern Minnesota.

HA-339

Winter, T.C., Maclay, R.W., and Pike, G.M. (1967)  
Water Resources of the Roseau River Watershed,  
Northwestern Minnesota.

HA-241

USGS WATER RESOURCE INVESTIGATIONS (WRI)

Adolphson, D.G., Ruhl, J.F., and Wolf, R.J. (1981)  
Designation of Principal Aquifers in Minnesota.

WRI 81-51

Delin, G.N. (1987)  
Evaluation of Availability of Water from Drift Aquifers near  
the Pomme De Terre and Chippewa Rivers, Western Minnesota.

WRI 86-4321

Delin, G.N. (1986)  
Hydrogeology of Confined Drift Aquifers near the Pomme De Terre  
and Chippewa Rivers, Western Minnesota.

WRI 86-4098

Helgesen, J.O. (1977)  
Ground-Water Appraisal of the Pineland Sands Area,  
Central Minnesota.

WRI 77-102

LaBaugh, J.W., Groschen, G.E., and Winter, T.C. (1981)  
Limnological and Geochemical Survey of Williams Lake,  
Hubbard County, Minnesota.

WRI 81-41

Larson, S.P., McBride, M.A., and Wolf, R.J. (1975)  
Digital Models of a Glacial Outwash Aquifer in the Pearl-Sallie  
Lakes Area, West-Central Minnesota.

WRI 40-75

Maclay, R.W., Winter, T.C., and Bidwell, L.E. (1972)  
Water Resources of the Red River Drainage Basin in Minnesota.

WRI 1-72

McBride, M.A. (1975)  
Ground Water for Irrigation in the Viking Basin,  
West-Central Minnesota.

WRI 23-75

- Myette, C.F. (1984)  
Ground Water Quality and Appraisal of Sand-Plain Aquifers  
in Hubbard, Morrison, Otter Tail, and Wadena Counties, Minnesota.  
WRI 84-4080
- Ruhl, J.F. (1984)  
Hydrogeologic and Water Quality Characteristics of the Red River-  
Winnipeg Aquifer, Northwestern Minnesota.  
WRI 84-4111
- Siegal, D.I. (1981)  
Hydrogeologic Setting of the Glacial Lake Agassiz Peatlands,  
Northern Minnesota.  
WRI 81-24
- Soukup, W.G., Gillies, D.G., and Myette, C.F. (1984)  
Appraisal of the Surficial Aquifers of the Pomme De Terre and the  
Chippewa River Valleys, Western Minnesota.  
WRI 84-4086
- Wolf, R.J. (1976)  
Buried Aquifers in the Brooten-Belgrade and Lake Emily Area,  
West-Central Minnesota.  
WRI 76-100
- Wolf, R.J. (1981)  
Hydrogeology of the Buffalo Aquifer, Clay and Wilkin Counties,  
West-Central Minnesota.  
WRI 81-4

USGS WATER SUPPLY PAPERS (WS)

- Larson, S.P. (1975)  
An Appraisal of Ground Water for Irrigation in the Appleton  
Area, West-Central Minnesota.  
WS-2039-B
- Reeder, H.O. (1972)  
Availability of Ground Water for Irrigation from Glacial  
Outwash in the Perham Area, Otter Tail County, Minnesota.  
WS-2003
- Schiner, G.R. (1963)  
Ground-Water Exploration and Test Pumping in the Halma-Lake  
Bronson Area, Kittson County, Minnesota.  
WS-1619-BB
- Van Voast, W.A. (1971)  
Ground Water for Irrigation in the Brooten-Belgrade Area,  
West-Central Minnesota.  
WS-1899-E
- Van Voast, W.A. (1971)  
Ground Water for Irrigation near Lake Emily, Pope County,  
West-Central Minnesota.  
WS-1899-J

USGS OPEN FILE REPORTS (OFR)

- Lindholm, G.F., and Norvitch, R.F. (1976)  
Groundwater in Minnesota.  
OFR-76-354
- Miller, R.T. (1982)  
Appraisal of the Pelican River Sand-Plain Aquifer,  
Western Minnesota.  
OFR-82-347
- Miller, R.T. (1980)  
Hydrologic Data for the Pelican River Sand-Plain  
Aquifer, Western Minnesota.  
OFR-80-695
- Myette, C.F. (1982)  
Baseline Water-Quality Data for Sand-Plain Aquifers in  
Hubbard, Morrison, Otter Tail and Wadena Counties, Minnesota.  
OFR-82-909
- Siegal, D.I. (1979)  
Potential Hydrologic Effects of Peat Mining in the Red Lake  
Peatlands, North-Central Minnesota --- a project plan.  
OFR-79-1591
- Siegal, D.I., and Winter, T.C. (1980)  
Hydrologic Setting of Williams Lake, Hubbard County, Minnesota.  
OFR-80-403

USGS UNNUMBERED OPEN FILE REPORTS AND OUTSIDE PUBLICATIONS

- Delin, G.M. (1985)  
Confined Drift Aquifer Studied near the Pomme de Terre and  
Chippewa Rivers, West Central Minnesota.  
USGS Water Fact Sheet
- Franzi, D.A. (1987)  
Sedimentary and Post-Depositional Processes Related to Aquifer  
Properties at the Bemidji Research Site, North-Central Minnesota.  
In: USGS Program on Toxic Waste -- Ground-water Contamination,  
Proceedings of 3rd Technical Meeting by B.J. Franks, ed.  
Pensacola, Florida.
- MaClay, R.W., and Schiner, G.R. (1962)  
Aquifers in Buried Shore and Glaciofluvial Deposits Along the Gladstone  
Beach of Glacial Lake Agassiz near Stephen, Minnesota.  
USGS Prof. Paper 450-D
- MaClay, R.W. and Winter, T.C. (1967)  
Geochemistry and Ground-water Movement in Northwestern Minnesota.  
Ground Water Vol. 5, No. 1.

- Miller, R.T. (1985)  
Hydrogeology and Preliminary Regional Flow Model at the Bemidji, Minnesota Research Site. USGS Paper given on 10/21/85 at the Toxic Waste Technical Meeting, Hyannis, Mass.
- Reeder, H.O. (1978)  
Summary Appraisals of the Nation's Groundwater Resources. Souris-Red-Rainy Region.  
USGS Professional Paper 813-K
- Stoner, J.D. and Streitz, A.R. (1987)  
Locating Confined Aquifers in Glacial Drift with Seismic Reflection Methods, Western Minnesota.  
Abstract with Programs.  
The Geological Society of America, North-Central Section, 21st Annual Meeting. Volume 18, Nov. 4, March, 1987.

GEOLOGY AND GROUND WATER REFERENCES OTHER THAN THE USGS

- Allison, I.S. (1932)  
The Geology and Water Resources of Northwestern Minnesota.  
Minnesota Geological Survey  
Bulletin 22
- Baldwin, Mark (1926)  
Reconnaissance Soil Survey of Lake of the Woods County, Minnesota.  
U.S. Department of Agriculture  
Bur. Chem. Soils, Series 1926,  
No. 8
- Bergsrud, F.G. (1982)  
"Irrigation System Design Capacities for West-Central Minnesota as Related to the Available Water Holding Capacity and Irrigation Management". American Society of Agricultural Engineers.  
Paper No. NCR 82-101
- Dennis, P.E., Akin, P.D., and Worts, G.G., Jr. (1949)  
Geology and Ground-Water Resources of Parts of Cass and Clay Counties, North Dakota and Minnesota.  
North Dakota Ground-Water  
Studies, No. 11
- Langford, R.H. (1964)  
Quality of Water of Kittson and Parts of Marshall and Roseau Counties, Northwestern Minnesota.

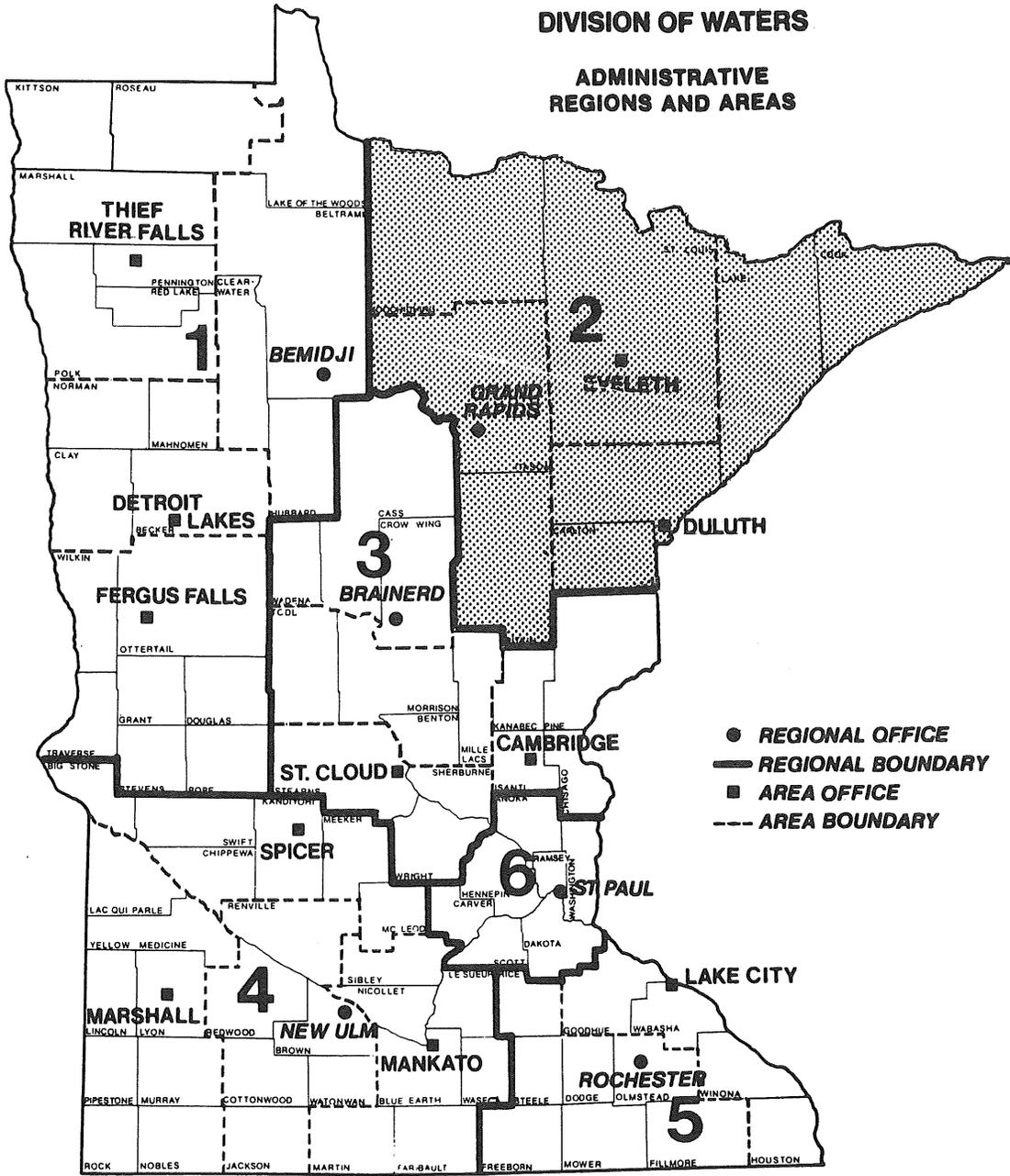
- Lawson, A.C. (1885)  
Report on the Geology of the Lake of the Woods Region, with  
Special Reference to the Keewatin (Huronian?) Belt of the  
Archean Rocks.  
Canada Geol. Survey  
Annual Report No. 1
- McMiller, P.R., and Others (1942)  
Soil Survey of Roseau County  
U.S. Soil Conservation  
Service, Series 1936, No. 11
- Nikiforoff, C.C. and Others (1939)  
Soil Survey (Reconnaissance of the Red River Valley Area),  
Minnesota  
U.S. Dept. Agriculture  
Series 1933, No. 25
- Siegal, D.I. (1983)  
Ground Water and the Evolution of Patterned Mires, Peatlands, Northern  
Minnesota.  
J. Ecol. No. 71
- Southwick, D.L. (1980)  
Subsurface Research and Scientific Drilling in Western  
Minnesota.  
Information Circular #18  
Minnesota Geological Survey



DNR REGION 2: NORTHEAST MINNESOTA

Counties

Aitkin  
 Carlton  
 Cook  
 Itasca  
 Koochiching  
 Lake  
 St. Louis



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REGION 2

PUBLICATIONS BY THE U.S. GEOLOGIC SURVEY (USGS)

USGS HYDROLOGIC ATLASES (HA)

Ericson, D.W., Lindholm, G.F., and Helgesen, J.O. (1976)  
Water Resources of the Rainy Lake Watershed,  
Northeastern Minnesota.

HA-556

Helgesen, J.O., Lindholm, G.F., Ericson, D.W. (1975)  
Water Resources of the Lake of the Woods Watershed,  
Northeastern Minnesota.

HA-544

Helgesen, J.O., Lindholm, G.F., and Ericson, D.W. (1976)  
Water Resources of the Little Fork River Watershed,  
Northeastern Minnesota.

HA-551

Lindholm, G.F., et al. (1979)  
Water Resources of the St. Louis River Watershed,  
Northeastern Minnesota.

HA-586

Lindholm, et al. (1976)  
Water Resources of the Big Fork River Watershed,  
North-Central Minnesota.

HA-549

Oakes, E.L., and Bidwell, L.E. (1968)  
Water Resources of the Mississippi Headwaters Watershed,  
North-Central Minnesota.

HA-278

Olcott, P.G., et al. (1978)  
Water Resources of the Lake Superior Watershed  
Northeastern Minnesota.

HA-582

USGS WATER RESOURCE INVESTIGATION (WRI)

Anderson, H.W. (1986)  
Hydrogeologic and Water Quality Characteristics of Crystalline-Rock  
Aquifers of Archean and Proterozoic Age, Minnesota.

WRI 86-4033

Cotter, R.D. and Young, H.L. (1960)  
Municipal Water Supplies on the Mesabi and Vermillion Iron Ranges  
Northeastern Minnesota.  
Ground Water Series Basic Data Release 1

- Myette, C.F. (1986)  
Hydrogeology of the Sand-Plain Aquifers in Carlton, Kanabec and Pine  
Counties, East-Central Minnesota.  
WRI 85-4334
- Olcott, P.G. and Siegel, D.I. (1978)  
Physiography and Surficial Geology of the Copper-Nickel Study Region,  
Northeastern Minnesota.  
WRI 78-51
- Siegel, D.I. (1981)  
Hydrogeologic Setting of the Glacial Lake Agassiz Peatlands,  
Northern Minnesota.  
WRI 81-24
- Siegel, D.I. and Ericson, D.W. (1980)  
Hydrology and Water Quality of the Copper-Nickel Study Region,  
Northeastern Minnesota.  
WRI 80-739
- Stark, J.R., Strudell, J.D., Bloomgren, P.A. and Eger, P. (1987)  
Ground Water and Soil Contamination near Two Pesticide Burial Sites in  
Minnesota  
WRI 87-4115

USGS WATER SUPPLY PAPERS (WS)

- Cotter, R.D. et al. (1965)  
Ground and Surface Water in the Mesabi and Vermillion Iron Range Area,  
Northeastern Minnesota.  
WS 1759-A
- Cotter, R.D. et al. (1965)  
Water Resources in the Vicinity of Municipalities on the Western  
Mesabi Iron Range, Northeastern Minnesota.  
WS 1759-B
- Cotter, R.D. et al. (1965)  
Water Resources in the Vicinity of Municipalities on the West-Central  
Mesabi Iron Range, Northeastern Minnesota.  
WS 1759-C
- Cotter, R.D. et al. (1965)  
Water Resources in the Vicinity of Municipalities on the Central  
Mesabi Iron Range, Northeastern Minnesota.  
WS 1759-D
- Cotter, R.D. et al. (1965)  
Water Resources in the Vicinity of Municipalities on the East-Central  
Mesabi Iron Range, Northeastern Minnesota.  
WS 1759-E

Cotter, R.D. et al. (1965)

Water Resources in the Vicinity of Municipalities on the Eastern  
Mesabi Iron Range and the Vermillion Iron Range, Northeastern  
Minnesota.

WS 1759-F

Cotter, R.D. and Rogers, J.E. (1961)

Exploratory Drilling for Ground Water in the Mountain Iron - Virginia  
Areas St. Louis County, Minnesota.

WS 1539-A

Maclay, R.W. (1966)

Reconnaissance of the Geology and Ground Water Resources in the Aurora  
Area, St. Louis County, Minnesota.

WS 1809-U

Winter, T.C. (1973)

Hydrogeology of Glacial Drift, Mesabi Iron Range, Northeastern  
Minnesota.

WS 2029-A

Winter, T.C., Cotter, R.D. and Young, H.C. (1973)

Petrography and Stratigraphy of Glacial Drift Mesabi-Vermillion Iron  
Range Area, Northeastern Minnesota.

Bulletin 1331-C

USGS UNNUMBERED OPEN-FILE REPORTS (OFR)

Liesch, B.A. and Norvitch, R.F. (1963)

Geology and Ground-Water Conditions of the Chisholm-Dewey Lake Area  
St. Louis County, Minnesota

Norvitch, R.F. (1963)

Reconnaissance Geology and Hydrology on the Nett Lake Indian  
Reservation, Minnesota

Rogers, J.E. (1962)

Reconnaissance of Ground-Water Conditions in the Duluth Municipal  
Airport Area, Minnesota

GEOLOGY AND GROUND WATER REFERENCES OTHER THAN THE USGS

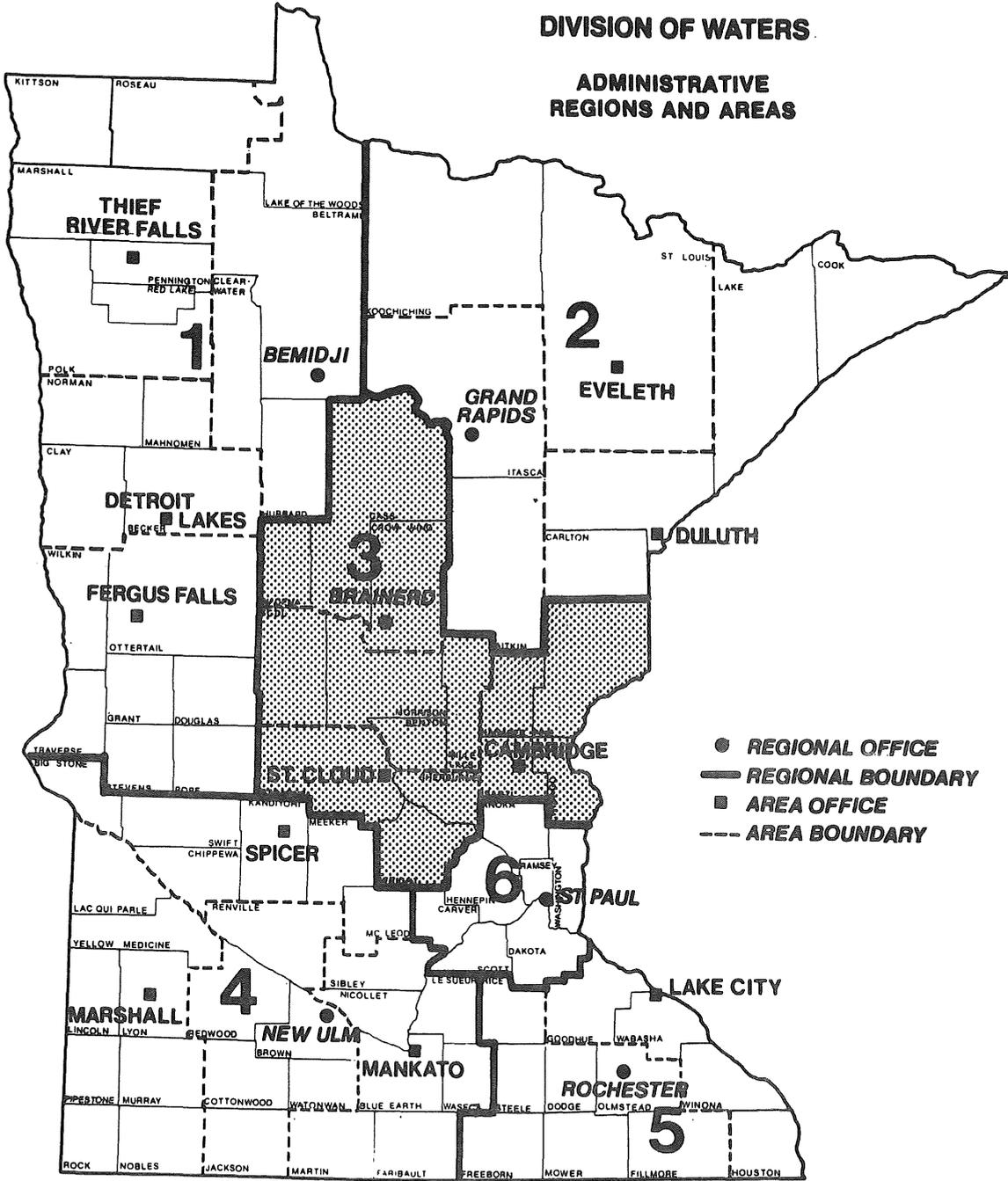
- Aiken, P.D., et al. (1951)  
Geology and Ground Water Resources of the Cloquet Area,  
Carlton County, Minnesota.  
Minnesota Department of Conservation Bulletin No. 6
- DNR, Division of Waters (1966)  
The Lake Superior Watershed Unit  
Bulletin 24
- Great Lakes Basin Commission (1974)  
Appendices to Great Lakes Basin Framework Study:  
Geology and Ground Water Appendix 3  
Water Supply: Municipal, Industrial, Rural Appendix 6  
Irrigation Appendix 15
- Morey, G.B., Sims, P.K., Cannon, W.F., Mudrey, Jr., M.G., and Southwick,  
D.L. (1982)  
Geologic Map of the Lake Superior Region:  
Minnesota, Wisconsin and Northern Michigan  
MGS State Map Series, S-13
- Morey, G.B., et al. (1970)  
Stratigraphy of Lower Precambrian Rocks in the Vermillion District  
Northeastern Minnesota  
MGS Report of Investigations 14
- Stark, J.R. (1977)  
Surficial Geology and Ground Water Geology of the Babbitt-Kawishiwi  
Area  
Northeastern Minnesota  
M.S. Thesis, University of Wisconsin
- Thiel, G.A. (1947)  
The Geology and the Underground Waters of Northeastern Minnesota  
MGS Bulletin 32



DNR REGION 3: CENTRAL MINNESOTA

Counties

- Benton
- Cass
- Chisago
- Crow Wing
- Isanti
- Kanabec
- Mille Lacs
- Morrison
- Pine
- Sherburne
- Stearns
- Todd
- Wadena
- Wright



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REGION 3

PUBLICATIONS BY THE U.S. GEOLOGICAL SURVEY (USGS)

USGS HYDROLOGIC ATLASES (HA)

- Ericson, D.W., Lindholm, G.F. and Helgesen, J.O. (1974)  
Water Resources of the Rum River Watershed,  
East-Central Minnesota.  
HA-509
- Helgesen, J.O., Ericson, D.W. and Lindholm, G.F. (1975)  
Water Resources of the Mississippi and Sauk Rivers Watersheds,  
Central Minnesota.  
HA-534
- Helgesen, J.O., Lindholm, G.F., Broussard, W.L. and Ericson, D.W. (1973)  
Water Resources of the Kettle River Watershed,  
East-Central Minnesota.  
HA-437
- Lindholm, G.F., Farrell, D.F. and Helgesen, J.O. (1974)  
Water Resources of the Crow River Watershed,  
South-Central Minnesota.  
HA-528
- Lindholm, G.F., Helgesen, J.O., Broussard, W.L. and Ericson, D.W. (1974)  
Water Resources of the Snake River Watershed,  
East-Central Minnesota.  
HA-488
- Lindholm, G.F., Helgesen, J.O., Broussard, W.L. and Farrell, D.F. (1974)  
Water Resources of the Lower St. Croix River Watershed,  
East-Central Minnesota.  
HA-490
- Lindholm, G.F., Oakes, E.L., Ericson, D.W. and Helgesen, J.O. (1972)  
Water Resources of the Crow Wing River Watershed,  
Central Minnesota.  
HA-380
- Oakes, E.L. and Bidwell, L.E. (1968)  
Water Resources of the Mississippi Headwaters Watershed,  
North-Central Minnesota.  
HA-278
- Woodward, D.G. (1986)  
Hydrologic Framework and Properties of Regional Aquifers in the  
Hollendale Embayment, Southeastern Minnesota,  
HA-677

USGS WATER RESOURCE INVESTIGATIONS (WRI)

- Helgesen, J.O. (1977)  
Ground-Water Appraisal of the Pineland Sands Area,  
Central Minnesota.  
WRI 77-102
- Lindholm, G.F. (1980)  
Ground-Water Appraisal of Sand Plains in Benton, Sherburne, Stearns,  
and Wright Counties, Central Minnesota.  
WRI 80-1285
- McBride, M.A. (1975)  
Ground Water for Irrigation in the Viking Basin,  
West-Central Minnesota.  
WRI 23-75
- Myette, C.F. (1983)  
Appraisal of Water from Surficial-Outwash Aquifers in Todd County and  
Parts of Cass and Morrison Counties, Central Minnesota.  
WRI 83-4156
- Myette, C.F. (1984)  
Ground Water Quality and Appraisal of Sand-Plain Aquifers in Hubbard,  
Morrison, Otter Tail, and Wadena Counties, Minnesota.  
WRI 84-4080
- Myette, C.F. (1985)  
Hydrogeology of Sand-Plain Aquifers in Carlton, Kanabec and Pine  
Counties, East-Central Minnesota.  
WRI 85-4334
- Wolf, R.J. (1976)  
Buried Aquifers in the Brooten-Belgrade and Lake Emily Areas,  
West-Central Minnesota.  
WRI 76-100

USGS WATER SUPPLY PAPERS (WS)

- Helgesen, J.O. (1973)  
Appraisal of Ground Water for Irrigation in the Little Falls Area,  
Morrison County, Minnesota.  
WS 2009-D
- Jones, J.R., Akin, P.D. and Schneider, Robert (1963)  
Geology and Groundwater Conditions in the Southern Part of the Camp  
Ripley Military Reservation, Morrison County, Minnesota.  
WS 1669-A
- Lindholm, G.F. (1970)  
An Appraisal of Ground Water for Irrigation in the Wadena Area,  
Central Minnesota.  
WS 1983

VanVoast, W.A. (1971)  
Ground Water for Irrigation in the Brooten-Belgrade Area,  
West-Central Minnesota.

WS 1899-E

USGS NUMBERED OPEN FILE REPORTS (OFR)

Lindholm, G.F. (1980)  
Ground Water Appraisal for Sand Plains in Benton, Sherburne, Stearns  
and Wright Counties, West-Central Minnesota.

OFR 80-1285

Myette, C.F. (1982)  
Baseline Water-Quality Data for Sand-Plain Aquifers in Hubbard,  
Morrison, Otter Tail and Wadena Counties, Minnesota.

OFR 82-909

Siegal, D.I. and Winter, T.C. (1980)  
Hydrologic Setting of Williams Lake, North-Central Minnesota.

OFR 80-403

GEOLOGY AND GROUND WATER REFERENCES OTHER THAN THE USGS

Anderson, H.W. (1987)  
Effects of Land Use on Quality of Water in the Anoka Sand Plain  
Aquifer, Minnesota.  
Abstracts with Programs-Geological Society of America, in The  
Geological Society of America, North-Central Section, 21st Annual  
Meeting, Vol. 19, No. 4, March 1987.

Dennis, P.E., Aiken, P.O. and Worts, G.K. (1949)  
Geology and Ground-water Resources of Parts of Cass and Clay Counties,  
North Dakota and Minnesota.  
USGS, North Dakota Ground-Water Studies; No. 11, Minnesota  
Ground-Water Studies No. 1.

Helgesen, J.O. and Lindholm, G.F. (1973)  
Geology and Water Supply Potential of the Anoka Sand Plain Aquifer,  
Minnesota.

DNR-DOW Technical Paper #6

Meyer, G.N. (1986)  
Subsurface Till Stratigraphy of the Todd County Area, Central  
Minnesota.

MGS Report of Investigations 34

Sabel, G., Bruemmer, L, Rongitsch, B., Zwilling, D and Bloomgren, P. (1986)  
Land Use and Your Well: From the Field to the Faucet in Minnesota's  
Central Sandplain Region.

MPCA and DNR-DOW

Schneider, A.F. (1961)  
Pleistocene Geology of the Randall Region, Central Minnesota  
MGS Bulletin 40

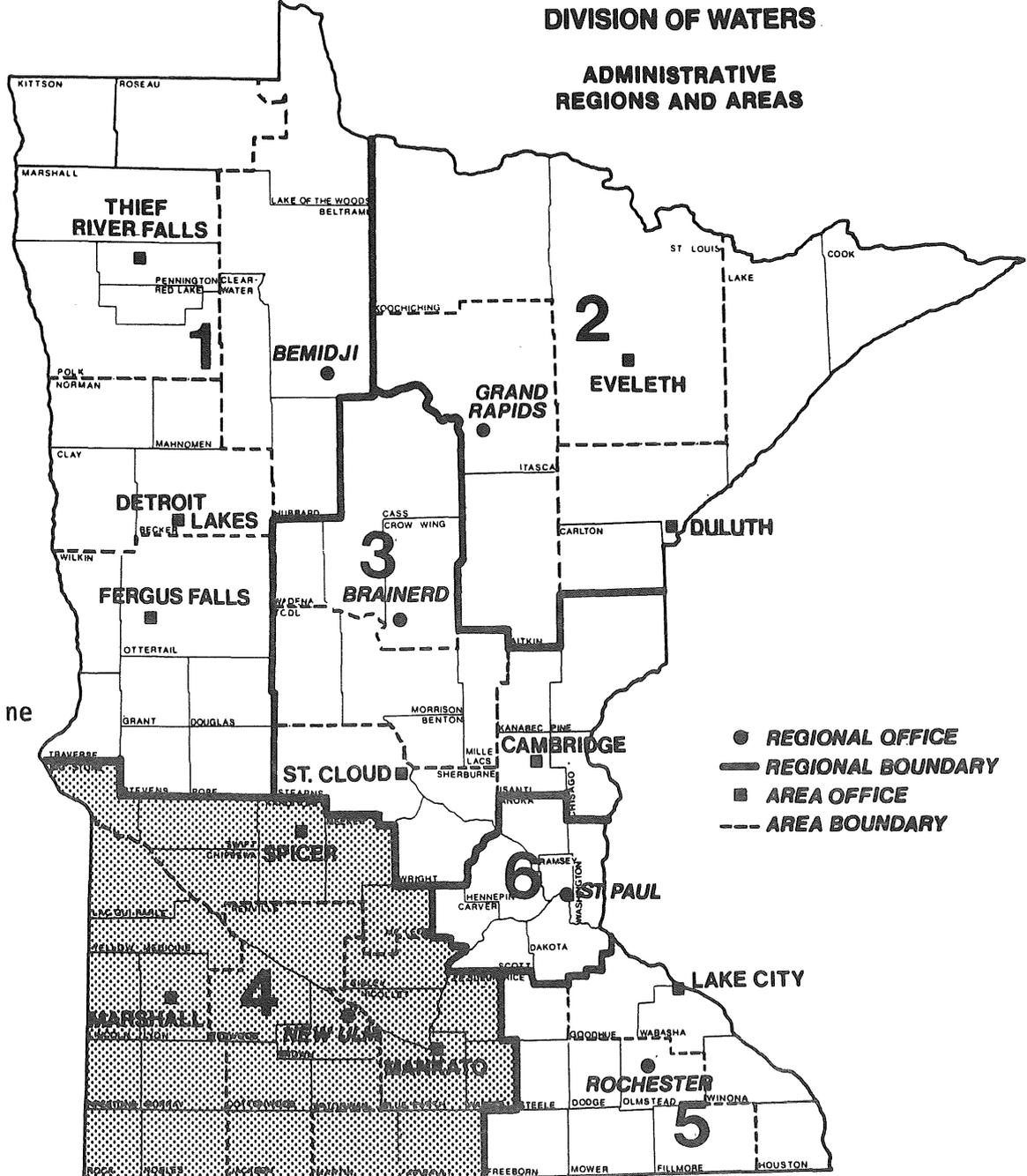
University of Minnesota (1979)  
Irrigation Potential: Heartland, Ottertail Oasis, and Morrison County  
Regions, Minnesota.  
Ag Experiment Station and Ag Extension  
Service



DNR REGION 4: SOUTHWEST MINNESOTA

Counties

- Big Stone
- Blue Earth
- Brown
- Chippewa
- Cottonwood
- Faribault
- Jackson
- Kandiyohi
- Lac Qui Parle
- LeSueur
- Lincoln
- Lyon
- Martin
- McLeod
- Meeker
- Murray
- Nicollet
- Nobles
- Pipestone
- Redwood
- Renville
- Rock
- Sibley
- Swift
- Waseca
- Watsonwan
- Yellow Medicine



- REGIONAL OFFICE
- REGIONAL BOUNDARY
- AREA OFFICE
- - - AREA BOUNDARY

revised 5/89

REGION 4

PUBLICATIONS BY THE U.S. GEOLOGICAL SURVEY

USGS HYDROLOGIC ATLASES (HA)

Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., Felsheim, P.E. (1978)  
Water Resources of the Cannon River Watershed,  
Southeastern Minnesota.

HA-522

Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L. (1974)  
Water Resources of the Blue Earth River Watershed,  
South-Central Minnesota.

HA-525

Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L. (1974)  
Water Resources of the Lower Minnesota River Watershed,  
South-Central Minnesota.

HA-526

Anderson, H.W., Jr., Broussard, W.L., Farrell, D.F., and Hult, M.F. (1976)  
Water Resources of the Des Moines River Watershed,  
Southwestern Minnesota.

HA-553

Anderson, H.W., Jr., Broussard, W.L., Farrell, D.F., and Felsheim, P.E. (1976)  
Water Resources of the Rock River Watershed, Southwestern Minnesota.

HA-555

Broussard, W.L., Anderson, H.W., Jr., and Farrell, D.F. (1973)  
Water Resources of the Cottonwood River Watershed,  
Southwestern Minnesota.

HA-466

Cotter, R.D., Bidwell, L.E., VanVoast, W.A., and Novitzki, R.P. (1968)  
Water Resources of the Chippewa River Watershed,  
West-Central Minnesota.

HA-286

Cotter, R.D. and Bidwell, L.E. (1968)  
Water Resources of the Lac Qui Parle River Watershed,  
Southwestern Minnesota.

HA-269

Cotter, R.D., Bidwell, L.E., Oakes, E.L., and Hollenstein, G.H. (1966)  
Water Resources of the Big Stone Lake Watershed,  
West-Central Minnesota.

HA-213

- Cotter, R.D. and Bidwell, L.E. (1966)  
Water Resources of the Pomme de Terre River Watershed,  
West-Central Minnesota.  
HA-220
- Lindholm, G.F., Farrell, D.F., Helgesen, J.O. (1974)  
Water Resources of the Crow River Watershed,  
South-Central Minnesota.  
HA-528
- Novitzki, R.P., VanVoast, W.A., and Jerabek, L.A. (1969)  
Water Resources of the Yellow Medicine Watershed,  
Southwestern Minnesota.  
HA-320
- VanVoast, W.A., Broussard, W.L., and Wheat, D.E. (1972)  
Water Resources of the Minnesota River-Hawk Creek Watershed,  
Southwestern Minnesota.  
HA-391
- VanVoast W.A., Jerbeck, L.A., and Novitzki, R.P. (1970)  
Water Resources of the Redwood River Watershed,  
Southwestern Minnesota.  
HA-345

USGS WATER RESOURCE INVESTIGATIONS (WRI)

- Adolphson, D.G. (1983)  
Availability and Chemical Quality of Water from Surficial Aquifers in  
Southwestern Minnesota.  
WRI 83-4030
- Delin, G.N. (1987)  
Evaluation of Availability of Water from Drift Aquifers near the Pomme  
de Terre and Chippewa Rivers, Western Minnesota.  
WRI 86-4321
- Delin, G.N. (1986)  
Hydrogeology of Confined-Drift Aquifers near the Pomme de Terre and  
Chippewa Rivers, Western Minnesota.  
WRI 86-4098
- Soukup, W.G., Gillies, D.C., and Myette, C.F. (1984)  
Appraisal of the Surficial Aquifers in the Pomme de Terre and Chippewa  
River Valleys, Western Minnesota.  
WRI 84-4036
- Woodward, D.G., and Anderson, H.W., Jr. (1984)  
Hydrogeologic and Water-Quality Characteristics of the Cretaceous  
Aquifer, Southwestern Minnesota.  
WRI 84-4153

USGS WATER SUPPLY PAPERS (WS)

- Delin, G.N., and Woodward, D.G. (1984)  
Hydrogeologic Setting and the Potentiometric Surfaces of Regional  
Aquifers in the Hollandale Embayment, 1970-1980,  
Southeastern Minnesota.  
WS 2219
- Hall, W.C., Meinzer, O.E., and Fuller, M.L. (1911)  
Geology and Underground Waters in Southern Minnesota.  
WS 256
- Larson, S.P. (1976)  
An Appraisal of Ground Water for Irrigation in the Appleton Area,  
West-Central Minnesota.  
WS 2039-B
- Norvitch, R.F. (1964)  
Geology and Groundwater Resources of Nobles County and Part of Jackson  
County, Minnesota.  
WS 1749
- Rodis, H.G. (1963)  
Geology and Occurrence of Groundwater in Lyon County, Minnesota.  
WS 1619-N
- Schneider, R., and Rodis, H.G. (1961)  
Aquifers in Meltwater Channels Along the Southwest Flank of the Des  
Moines Lobe, Lyon County, Minnesota.  
WS 1539-F
- Thompson, G.L. (1962)  
Hydrology of Melt-Water Channels in Southwestern Minnesota.  
WS 1809-K

USGS OPEN FILE REPORTS (OFR)

- Adolphson, D.G. (1982)  
Availability and Chemical Quality of Water from Surficial Aquifers in  
Southwestern Minnesota.  
OFR 82-88
- Lindholm, G.F. and Norvitch, R.F. (1976)  
Groundwater in Minnesota.  
OFR 76-354
- Myette, C.F. (1980)  
Hydrologic Budget for Eagle Lake near Willmar, Minnesota.  
OFR 80-163
- Soukup, W.G. (1980)  
Ground Water Appraisal in Northwestern Big Stone County,  
West-Central Minnesota.  
OFR 80-568

USGS UNNUMBERED OPEN FILE REPORTS AND OTHER USGS PUBLICATIONS

- Delin, G.N. (1985)  
Confined-Drift Aquifer Studied Near the Pomme de Terre and Chippewa Rivers, West-Central Minnesota.  
USGS Water Fact Sheet
- Rodis, H.G. (1961)  
Availability of Groundwater in Lyon County, Minnesota.  
USGS Circ. 444
- Rodis, H.G. and Schneider (1960)  
Occurrence of Groundwater of Low Hardness and High Chloride Content in Lyon County, Minnesota.  
USGS Circ. 423

GEOLOGY AND GROUND WATER REFERENCES OTHER THAN THE USGS

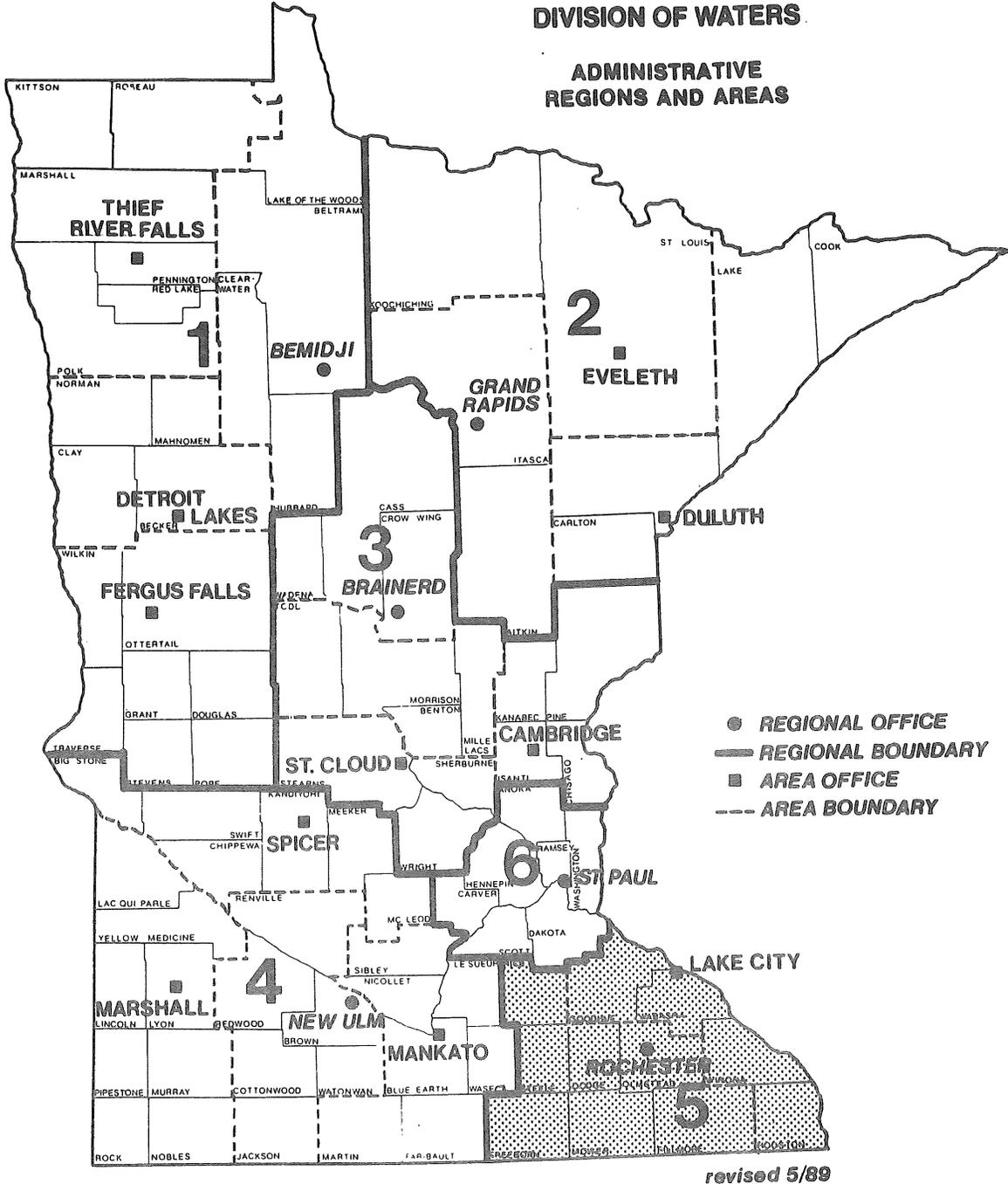
- Byers, A.C. Wenzel, L.K., Laird, W.M. and Dennis, P.E. (1946)  
Groundwater in the Fargo-Moorhead Area, North Dakota and Minnesota.
- Beissel, D.R. (1980)  
Groundwater Hydrology of Swift County, Minnesota: A Preliminary Investigation and Data Summary, Minnesota DNR, Division of Waters Bulletin 28.
- Fax, J.G. and Rongitsch, B.A. (1983)  
Ground-Water Hydrology of Lac Qui Parle County Minnesota, A Preliminary Investigation and Data Summary. Minnesota DNR, Division of Waters Bulletin 29.
- Grove, A.M. (1960)  
The Stratigraphy of the City Wells and the Problems of Water Distribution at Mankato, Minnesota. Minn. Acad, Sci, Proc., Vol. 25/26, p. 355-359.
- Norvitch, R.F. (1960)  
Groundwater in Alluvial Channel Deposits, Nobles County, Minnesota. Minnesota DNR, Division of Waters Bulletin 14.
- Rodis, H.G. (1961)  
Use of Water-Well Data in Interpreting Occurrence of Aquifers in Northeastern Lyon County, Minnesota. G.S.A. Bulletin, Vol. 72, No. 8, p. 1275-1278.
- Rodis, H.G. (1958)  
Use of Water-Well Data in Interpreting the Occurance of Upper Cretaceous Aquifers in Northeastern Lyon County, Minnesota. Econ. Geol., Vol. 53, No. 7, p. 926. G.S.A. Bull., Vol. 69, No. 12, Pt. 2, p. 1634-1635.
- Woodward, D.G., and Delin, G.N. (1981)  
Potentiometric Surfaces of Regional Aquifers in the Hollandale Embayment, Southeastern Minnesota: AGU Midwest Meeting, Minneapolis, MN.



DNR REGION 5: SOUTHEAST MINNESOTA

Counties

Dodge  
 Fillmore  
 Freeborn  
 Goodhue  
 Houston  
 Mower  
 Olmsted  
 Rice  
 Steele  
 Wabasha  
 Winona



REGION 5

PUBLICATIONS OF THE U.S. GEOLOGICAL SURVEY

USGS HYDROLOGIC ATLASES (HA)

Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Felsheim, P.E.  
(1974)  
Water Resources of the Cannon River Watershed,  
Southeastern Minnesota.

HA-522

Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Hult, M.F. (1975)  
Water Resources of the Zumbro River Watershed,  
Southeastern Minnesota.

HA-543

Broussard, W.L., Farrell, D.F., Anderson, H.W., Jr., and Felsheim, P.E.  
(1975)  
Water Resources of the Root River Watershed, Southeastern Minnesota.

HA-548

Farrell, D.F., Broussard, W.L., Anderson, H.W., Jr., and Hult, M.F. (1975)  
Water Resources of the Cedar River Watershed, Southeastern Minnesota.

HA-552

Woodward, D.G. (1986)  
Hydrogeologic Framework and Properties of Regional Aquifers in the  
Hollandale Embayment, Southeastern Minnesota.

HA-677

USGS WATER RESOURCE INVESTIGATIONS (WRI)

Ruhl, J.F., Wolf, R.J. and Adolphson, D.G. (1982)  
Hydrogeologic and Water-Quality Characteristics of the  
Ironton-Galesville Aquifer, Southeast Minnesota.

WRI-83-4080

Ruhl, J.F., Wolf, R.J. and Adolphson, D.G. (1983)  
Hydrogeologic and Water-Quality Characteristics of the Prairie du  
Chien-Jordan Aquifer, Southeast Minnesota.

WRI-83-4045

Ruhl, J.F., Wolf, R.J. and Adolphson, D.G. (1983)  
Hydrogeologic and Water-Quality Characteristics of the St. Peter  
Aquifer, Southeastern Minnesota.

WRI-83-4200

Ruhl, J.F. and Wolf, R.J. (1984)  
Hydrogeologic and Water-Quality Characteristics of the Upper Carbonate  
Aquifer, Southeastern Minnesota.

WRI-84-4150

Wolf, R.J., Ruhl, J.F. and Adolphson, D.G. (1983)  
Hydrogeologic and Water-Quality Characteristics of the Mount  
Simon-Hinckley Aquifer, Southeastern Minnesota.  
WRI-83-4031

Woodward, D.G. (1983)  
Trends in Municipal-Well Installations and Aquifer Utilization in  
Southeastern Minnesota, 1880-1980.  
WRI-83-4222

#### USGS WATER SUPPLY PAPERS (WS)

Delin, G.N., and Woodward, D.G. (1984)  
Hydrogeologic Setting and the Potentiometric Surfaces of Regional  
Aquifers in the Hollandale Embayment, Southeastern Minnesota,  
1979-1980.  
WS-2219

Hall, C.W., Meinzer, O.E., and Fuller, M.L. (1911)  
Geology and Underground Waters of Southern Minnesota.  
WS-256

Reeder, H.O. (1976)  
Artificial Recharge Through a Well in Fissured Carbonate Rocks, West  
St. Paul, Minnesota.  
WS-2004

#### GEOLOGY AND HYDROGEOLOGY REFERENCES OTHER THAN THE USGS

Alexander, E.C., Jr., and Shaw, G.H. (1979)  
Southeastern Minnesota Ground Water Study in Problems Relating to Safe  
Water Supply in Southeastern Minnesota: Report Prepared for the  
Legislative Commission on Minnesota Resources, p. B1-B27.

Alexander, E.C., Jr., (ed.) (1980)  
Introduction to the Caves of Minnesota, Iowa, and Wisconsin.  
Guidebook for the 1980 National Speleological Society Convention. NSS  
Convention Guidebook #21.

Austin, G.S. (1963)  
Geology of Clay Deposits, Red Wing Area, Goodhue and Wabasha Counties,  
Minnesota. Minnesota Geological Survey Report Inv. 2, 23 p.

Austin, G.S. (1969)  
Paleozoic Lithostratigraphic Nomenclature for Southeastern Minnesota.  
Minnesota Geological Survey Information Circular 6, 11 p.

Austin, G.S. (1970)  
Deep Stratigraphic Test Well near Hollandale, Minnesota. Geological  
Survey Report Inv. 12, 52 p.

Austin (1971)  
Paleozoic Lithostratigraphy of Southeastern Minnesota. In:  
Sims, P.K., and Morey G.B., eds., Geology of Minnesota: A Centennial  
Volume, Minnesota Geological Survey, p. 459-473.

- Balaban, N.H. (1988)  
 Geologic Atlas of Olmsted County, Minnesota.  
 Minnesota Geological Survey County Atlas C-3.
- Balaban, N.H. and McSwiggen, P.I. (1984)  
 Geologic Atlas of Winona County, Minnesota.  
 Minnesota Geological Survey County Atlas C-2.
- Berg, R.R., Nelson, C.A., and Bell, W.C. (1956)  
 Upper Cambrian Rocks in Southeastern Minnesota: In: Lower Paleozoic  
 Geology of the Upper Mississippi Valley, Geol. Soc. America Guidebook  
 Series, G.M. Schwartz, Editor, Field Trip No. 2, p. 1-23.
- Bleifuss, R.L. (1972)  
 The Iron Ores of Southeastern Minnesota. In: Sims, P.K., and Morey,  
 G.B., eds., Geology of Minnesota: A Centennial Volume, Minnesota  
 Geological Survey, p. 498-505.
- Craddock, C., Thiel, E.C., and Gross, B. (1963)  
 A Gravity Investigation of the Precambrian of Southeastern Minnesota  
 and Western Wisconsin, Journal of Geophysical Research, Vol. 68,  
 p. 6015-6032.
- Foss, J.E., and Rust, R.H. (1962)  
 Soil Development in Relation to Loessial Deposition in Southeastern  
 Minnesota, Soil Sci. Soc. America Proc., Vol. 26, p. 270-274.
- Milske, J.A. (1982)  
 Stratigraphy and Petrology of Clastic Sediments in Mystery Cave,  
 Fillmore County, Minnesota. M.S. Thesis, University of Minnesota.
- Minnesota Geological Survey (1984)  
 Geologic Atlas of Winona County. County Atlas Series Atlas C-2.
- Minnesota Department of Health (1976)  
 Problems Relating to Safe Water Supply in Southeastern Minnesota:  
 Report to the Legislative Commission on Minnesota Resources, p. 85.
- Mohr, R.E., and Pizzuto, J.E. (1979)  
 The Analysis of Joint Orientation Systematics in a Small Area of  
 Southeastern Minnesota, in Problems Relating to Safe Water Supply in  
 Southeastern Minnesota: Report Prepared for the Legislative  
 Commission on Minnesota Resources, p. B29-B46.
- Mohring, E.H. (1983)  
 A Study of Subsurface Water Flow in a Southeastern Minnesota Karst  
 Drainage Basin. M.S. Thesis, University of Minnesota.
- Morey, G.B. (1972)  
 Petrology of Keweenawan Sandstones in the Subsurface of Southeastern  
 Minnesota. In: Sims, P.K., and Morey, G.B., eds., Geology of  
 Minnesota: A Centennial Volume, Minnesota Geological Survey, p.  
 436-449.

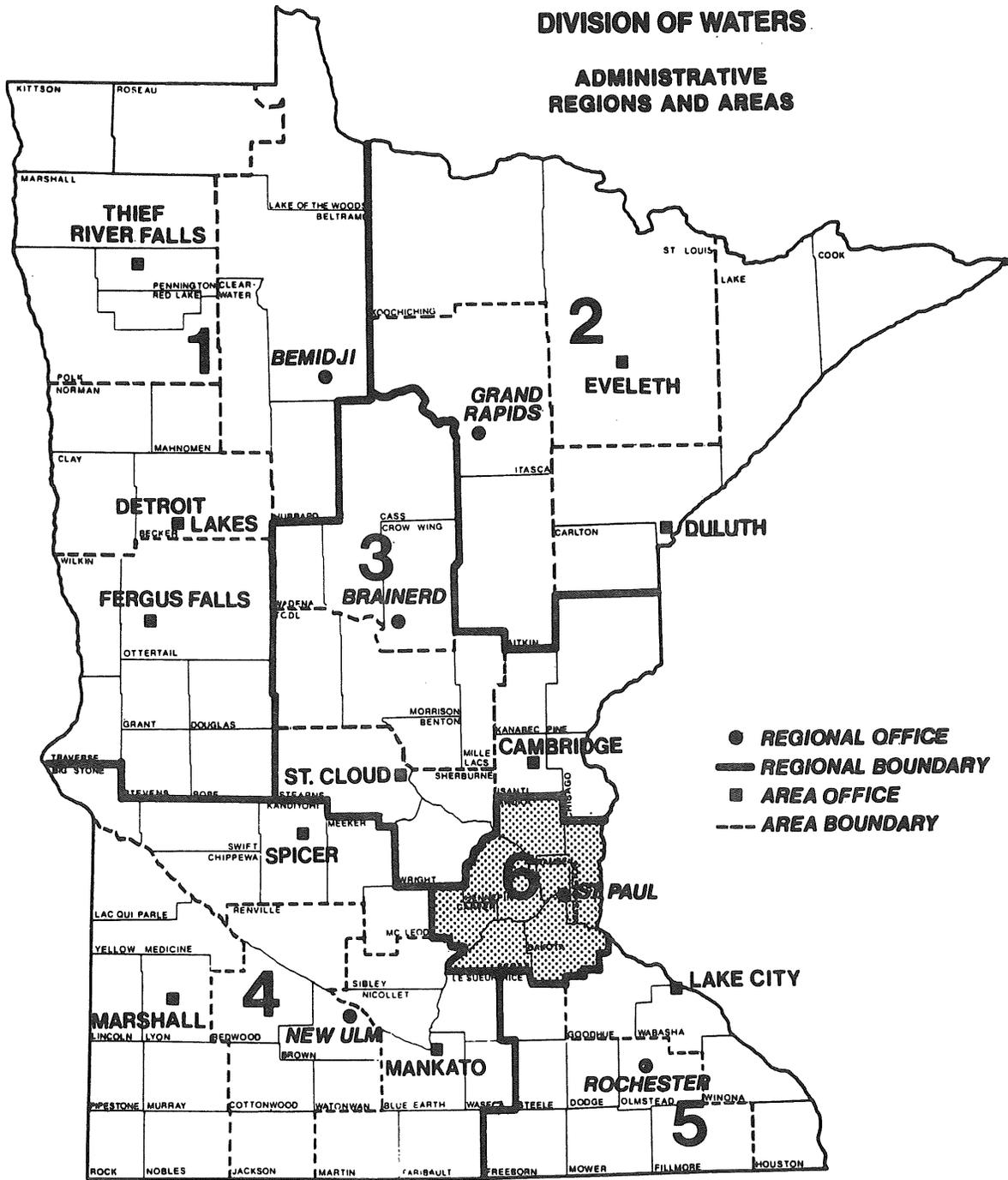
- Morey, G.B. (1977)  
 Revised Keweenaw Subsurface Stratigraphy,  
 Southeastern Minnesota. Minnesota Geological Survey Report of  
 Investigations No. 16.
- Mossler, J.H. (1983)  
 Paleozoic Lithostratigraphy of Southeastern Minnesota.  
 Minnesota Geological Survey, Miscellaneous Map Series M-51, 8 p.
- Mossler, J.H. (1985)  
 Sedimentology of the Middle Ordovician Platteville Formation,  
 Southeastern Minnesota. Minnesota Geological Survey Report of  
 Investigations No. 33.
- Mossler, J.H. (1987)  
 Paleozoic Lithostratigraphic Nomenclature for Minnesota. Minn. Geol.  
 Survey Report Inv. 36.
- Parham, W.E., and Austin, G.S. (1967)  
 Clay Mineralogy of the Glenwood Formation, Southeastern Minnesota and  
 Adjacent Areas. Jour. Sed. Petrology, Vol. 37, p. 863-868.
- Parham, W.E. (1969)  
 Clay Mineralogy, Fabric and Industrial Uses of the Shale of the  
 Decorah Formation, Southeastern Minnesota. Minnesota Geological  
 Survey, Report Inv. 10, 32 p.
- Philbin, P.W., and Gilbert, F.P. (1966)  
 Aeromagnetic Map of Southeastern Minnesota.  
 U.S. Geol. Survey, Geophys. Inv. Map GP-559.
- SIGMA Associates Inc. (1979)  
 Southeastern Minnesota Ground Water Study: Final Report for the  
 Period 1977-78: Report to the Legislative Commission on Minnesota  
 Resources, Minnesota Department of Health, Minneapolis, Minnesota.
- Singer, R.D., Osterholm, M.T., and Straub, C.P. (1982)  
 Ground Water Quality in Southeastern Minnesota. Water Resources  
 Research Center, Graduate School, University of Minnesota, St. Paul,  
 Minnesota. 45 p.
- WRRC Bulletin 109
- Sloan, R.E. (1987)  
 Middle and Late Ordovician Lithostratigraphy and Biostratigraphy of  
 the Upper Mississippi Valley, Minnesota Geological Survey,  
 Report of Investigations No. 35.
- Stauffer (1937a)  
 A Diminutive Fauna from the Shakopee Dolomite (Ordovician) at Cannon  
 Falls, Minnesota. Jour. Paleontology, Vol. 11, No. 1, p. 55-60.
- Stauffer, C.R., and Thiel, G.A. (1941)  
 The Paleozoic and Related Rocks of Southeastern Minnesota. Minn.  
 Geol. Survey Bull. 29, 261 p.

- Stauffer (1944)  
The Iron Ores of Southeastern Minnesota, Econ. Geology, Vol. 39,  
p. 327-339.
- Stauffer (1949)  
The Iron Ores of Southeastern Minnesota. Minn. Geol. Survey Summary  
Report 3, 6 p.
- Thiel, G.A. and Schwartz, G.M. (1941)  
Subsurface Structure of the Paleozoic Rocks of Southeastern Minnesota.  
Geol. Soc. America Bull., Vol. 52, p. 49-60.
- Theil, G.A. (1944)  
The Geology and Underground Water of Southern Minnesota. Minnesota  
Geologic Survey Bull. 31, 506 p.
- Webers, G.F., and Austin, G.S. (1972)  
Field Trip Guidebook for Paleozoic and Mesozoic Rocks of Southeastern  
Minnesota, Minnesota Geologic Survey Guidebook Series No. 4, 91 p.

DNR REGION 6: TWIN CITIES METRO REGION

Counties

Anoka  
 Carver  
 Dakota  
 Hennepin  
 Ramsey  
 Scott  
 Washington



revised 5/89

REGION 6

PUBLICATIONS BY THE U.S. GEOLOGICAL SURVEY (USGS)

USGS HYDROLOGIC ATLASES (HA)

- Anderson, H.W., Jr. et al. (1974)  
Water Resources of the Cannon River Watershed,  
Southeastern Minnesota.  
HA-522
- Anderson, H.W., Jr., Farrell, D.F. and Broussard, W.L. (1974)  
Water Resources of the Lower Minnesota River Watershed,  
South-Central Minnesota.  
HA-526
- Ericson, D.W., Lindholm, G.F. and Helgesen, J.O. (1974)  
Water Resources of the Rum River Watershed,  
East-Central Minnesota.  
HA-509
- Lindholm, G.F., Farrell, D.F. and Helgesen, J.O. (1974)  
Water Resources of the Crow River Watershed,  
South-Central Minnesota.  
HA-528
- Lindholm, G.F., Helgesen, J.O., Broussard, W.L. and Farrell, D.F. (1974)  
Water Resources of the Lower St. Croix River Watershed,  
East-Central Minnesota.  
HA-490

USGS WATER RESOURCE INVESTIGATIONS (WRI)

- Brown R.G. (1983)  
Atmospheric Deposition of Selected Chemicals and Their Effect on  
Non-Point Source Pollution in the Twin Cities Metropolitan Area,  
Minnesota.  
WRI 83-4195
- Brown, R.G. (1985)  
Effects of Wetlands on Quality of Runoff Entering Lakes in the Twin  
Cities Area, Minnesota.  
WRI 85-4170
- Brown, R.G. (1985)  
Hydrologic Factors Affecting Lake-Level Fluctuations in Big Marine  
Lake, Washington County, Minnesota.  
WRI 85-4176
- Guswa, J.H., Siegel, D.I. and Gillies, D.C. (1982)  
Preliminary Evaluation of the Ground-Water-Flow System in the Twin  
Cities Metropolitan Area, Minnesota.  
WRI 83-4033

- Horn, M.A. (1983)  
Ground-Water Use Trends in the Twin Cities Metropolitan Area,  
Minnesota, 1880-1980.  
WRI 83-4033
- McBride, M.S. (1976)  
Hydrology of Lakes in the Minneapolis-St. Paul Metropolitan Area: A  
Summary of the Available Data.  
WRI 76-85
- Schoenberg, M.E. (1983)  
Water Levels and Water-Level Changes in the Prairie du Chien-Jordan  
and Mount Simon-Hinckley Aquifers, Twin Cities Metropolitan Area,  
Minnesota, 1971-1980.  
WRI 83-4237
- Stark, J.R. and Hult, M.R. (1985)  
Ground-Water Flow in the Prairie du Chien-Jordan Aquifer Related to  
Contamination by Coal-Tar Derivatives, St. Louis Park, Minnesota.  
WRI 85-4087
- Woodward, D.G. (1985)  
Seismic-Refraction Study of Suspected Drift-Filled Bedrock Valleys in  
Ramsey County, Minnesota.  
WRI 85-4107

USGS WATER SUPPLY PAPERS (WS)

- Delin, G.N. and Woodward, D.G. (1984)  
Hydrogeologic Setting and the Potentiometric Surfaces of Regional  
Aquifers in the Hollandale Embayment, Southeastern Minnesota,  
1970-1980.  
WS-2219
- Hult, M.F. and Schoenberg, M.E. (1984)  
Preliminary Evaluation of Ground Water Contamination by Coal Tar  
Derivatives, St. Louis Park, Minnesota.  
WS-2211

USGS NUMBERED OPEN-FILE REPORTS (OFR)

- Anderson, H.W. (1987)  
Effects of Land Use on Quality of Water in the Anoka Sand-Plain  
Aquifer, Minnesota.  
OP 97
- Hoger, M.L. and Miller, R.Y. (1987)  
Aquifer Thermal Energy Storage (ATES) Field Experiments and Modeling  
Using Fraconia-Ironton-Galesville Confined Aquifer, St. Paul,  
Minnesota.  
OP 134

- Horn, M.A. (1984)  
Annual Ground-Water Use in the Twin Cities Metropolitan Area,  
Minnesota, 1970-1979.  
OFR 84-577
- Hult, M.F. (1984)  
Assessment of Ground Water Contamination by Coal Tar Derivatives, St.  
Louis Park Area, Minnesota.  
OFR 84-867
- Hult, M.F. and Schoenberg, M.E. (1981)  
Preliminary Evaluation of Ground Water Contamination by Coal-Tar  
Derivatives, St. Louis Park, Minnesota.  
OFR 75-342
- Larson-Higdem, D., Larson, S.P. and Norvitch, R.F. (1975)  
Configuration of the Water Table and Distribution of Downward Leakage  
to the Prairie du Chien-Jordan Aquifer in the Minneapolis-St. Paul  
Metropolitan Area, Minnesota.  
OFR 75-342
- Nelson, L. and Brown, R.G. (1983)  
Streamflow and Water Quality Data for Lake and Wetland Inflows and  
Outflows in the Twin Cities Metropolitan Area, Minnesota.  
OFR 83-543
- Schoenberg, M.E. (1987)  
Effects of Future Groundwater Withdrawals on Water Levels in the Twin  
Cities Aquifer System, Minnesota/  
Abs. with Programs, GSA 21st Annual Meeting, V. 19, No. 4, March 1987.  
OP-279
- Trotta, L. (1988)  
Aggregation of Water-Use Data and Transfer of Data to the National  
Water-Use Data System: Procedures and Programs.  
OFR 87-40
- Trotta, L. (1988)  
Inventory of Interbasin Water Transfers in Minnesota.  
OFR 88-466

USGS UNNUMBERED OPEN FILE REPORTS AND OUTSIDE PUBLICATIONS

- Norvitch, R.F. and Brietkritz, A. (1971)  
Hydrogeologic Maps of the Minneapolis-St. Paul Artesian Basins,  
Minnesota.
- Norvitch, R.F., Ross, T.G. and Brietkritz, A. (1972)  
Water Resources Outlook for the Minneapolis-St. Paul Metropolitan  
Area, Minnesota. Published in cooperation with the Metropolitan  
Council of the Twin Cities Area.
- Norvitch, R.F. and Walter, M.S. (1979)  
Geologic and Hydrologic Aspects of Tunneling in the Twin Cities Area,  
Minnesota.  
USGS Misc. Inv. Map I-1157

## GEOLOGY AND GROUND WATER REFERENCES OTHER THAN THE USGS

- Ayers, M.A., Brown, R.G. and Payne, G.A. (1981)  
Non-Point Source Runoff in the Twin Cities Metropolitan Area.  
AWRA 1981 Meeting
- Helgesen, J.O. and Lindholm, G.F. (1973)  
Geology and Water Supply Potential of the Anoka Sand Plain Aquifer,  
Minnesota.  
DNR DOW Technical Report #6
- Liesch, B.A. (1961)  
Geohydrology of the Jordan Aquifer in the Minneapolis-St. Paul Area,  
Minnesota.  
Tech. Paper #2
- Metropolitan Council (1978)  
Water Resources Outlook for the Minneapolis-St. Paul Area.
- Miller, R.T. (1984)  
Anisotropy of the Ironton-Galeville Sandstone near a Thermal Energy  
Storage Well, St. Paul, Minnesota.  
Ground Water, Vol. 22, No. 5, p. 532-537, September-October 1984.
- Sabel, G., Bruemmer, L., Rongitsch, B., Zwilling, D. and Bloomgren P.  
(1986)  
Land Use and Your Well: From the Field to the Faucet in Minnesota's  
Central Sandplain Region.  
MPCA and DNR DOW Pub.

## MAPS BY THE MINNESOTA GEOLOGICAL SURVEY (MGS)

- Balaban, N.H. and McSwiggner, P.L. Eds. (1982),  
Geologic Atlas of Scott County, Minnesota.  
County Atlas Series C-1

### Surficial Maps

- Quaternary Geologic Map of the Minneapolis-St. Paul Urban Area, Minnesota.  
G.N. Meyer. 1985. Color. Scale 1:48,000.

### Bedrock Maps

- Bedrock Geologic and Topographic Maps of the Seven-County Twin Cities  
Metropolitan Area, Minnesota. M.A. Jirsa, B.M. Olsen and B.A. Bloomgren.  
1986. Color. Scale 1:125,000, 2 pls.

- Bedrock Geologic and Topographic Maps of the Minneapolis-St. Paul Urban  
Area, Minnesota. B.A. Bloomgren. 1985. Color. Scale 1:48,000, 2 pls.



MINNESOTA (GENERAL)

PUBLICATIONS OF THE U.S. GEOLOGICAL SURVEY

USGS WATER RESOURCE INVESTIGATIONS (WRI)

- Adolphson, D.G., Ruhl, J.F. and Wolf, R.J. (1981)  
Designation of Principal Water-Supply Aquifers in Minnesota.  
WRI 81-51
- Anderson, A.W. and Ruhl, J.F. (1981)  
Geohydrology and Quality of Water in Aquifers in Minnesota.  
WRI 81-51
- Anderson, H.W. (1986)  
Hydrogeologic and Water Quality Characteristics of Crystalline Rock  
Aquifers of Archaean and Proterozoic Age, Minnesota.  
WRI 86-4033
- Horn, M.A. (1986)  
Development of a Water Use Data System in Minnesota.  
WRI 85-4306
- Ruhl, J.F. (1987)  
Hydrogeologic and Water Quality Characteristics of Glacial Drift  
Aquifers in Minnesota.  
WRI 87-4224
- Ruhl, J.F. (1984)  
Hydrogeologic and Water-Quality Characteristics of the Upper  
Carbonates Aquifer in Minnesota.  
WRI 84-4150
- Siegal, D.I. (1981)  
Hydrogeologic Setting of the Glacial Lake Agassiz Peatlands,  
Northern Minnesota.  
WRI 81-24
- Stark, J.R., Strudell, J.D., Bloomgren, P.A. and Eger, P. (1987)  
Ground Water and Soil Contamination near Two Pesticide Burial Sites in  
Minnesota.  
WRI 87-4115
- Steinhilber, W.C. and Young, H.L. (1979)  
Plan of Study for the Northern Midwest Regional Aquifer-System  
Analysis.  
WRI 79-44
- Woodward, D.G. and Anderson, H.W. (1986)  
Hydrogeologic and Water Quality Characteristics of the Cretaceous  
Aquifer, Southwestern Minnesota.  
WRI 84-4153

### USGS WATER SUPPLY PAPERS (WS)

- Brown, R.G. (1987)  
Errors in Estimating Ground-Water Components of Hydrologic and Phosphorus Budgets of Lakes. In: Selected Papers in the Hydrologic Sciences by Seymore Sabitzby.  
WS 2310
- Delin, G.N. and Woodward, D.G. (1984)  
Hydrogeologic Setting and the Potentiometric Surfaces of Regional Aquifers in the Hollandale Embayment, Southeastern Minnesota 1920-1980.  
WS 2219
- Gunard, K.T. (1985)  
Minnesota Water Facts - Surface Water Resources.  
WS 2300
- Reeder, H.O., Wood, W.W., Erlich, G.G. and Sun, R.J. (1976)  
Artificial Recharge Through a Well in Fissured Carbonate Rock, West St. Paul, Minnesota.  
WS 2004
- Schneider, Robert (1961)  
Correlation of Ground-Water Levels and Air Temperatures in the Winter and Spring in Minnesota.  
WS 1539-D
- Woodward, D.G. (1985)  
Minnesota Water Facts - Ground Water Resources.  
WS 2275

### USGS WATER FACT SHEETS

- Albin, D.R. (1988)  
U.S. Geological Survey Ground Water Studies in Minnesota.  
OFR 88-127
- Delin, G.N. (1986)  
Confined-Drift Aquifers Studied near the Pomme De Terre and Chippewa Rivers, West-Central Minnesota.
- Woodward, D.G. (1986)  
The Study of Buried-Drift Aquifers in Minnesota by Seismic Geophysical Methods.

### USGS NUMBERED OPEN FILE REPORTS (OFR)

- Albin, D.R. and Bruemmer, L.B. (1987)  
Minnesota Ground-Water Quality.  
OFR 87-0733

- Hult, M.F. (1979)  
Design of a Network for Monitoring Ground-Water Quality in Minnesota.  
OFR 79-1164
- Larson and Higden, D.C. (1976)  
Map Showing Altitude of the Bedrock Surface in Minnesota.  
OFR 76-788
- Lindholm, G.F. and Norvitch, R.F. (1976)  
Ground Water in Minnesota.  
OFR 76-354
- Lindholm, G.F. and Norvitch, R.F. (1976a)  
Remote Sensing as an Aide in Water Resource Studies in Minnesota.  
OFR 76-213
- Miller, R.T. (1984)  
Preliminary Modeling of an Aquifer Thermal Storage System.  
OFR 84-8111
- Payne, G.A., Ayers, M.A. and Brown, R.G. (1982)  
Quality of Runoff from Small Watersheds in the Twin City Metropolitan  
Area, Minnesota.  
OFR 82-504
- Winter, T.C. (1976)  
The Hydrologic Setting of Lakes in Minnesota and Adjacent States with  
Emphasis on the Interaction of Lakes and Groundwater.  
OFR 76-81

USGS UNNUMBERED OPEN FILE REPORTS

- Miller, W.A. and Straka, G.C. (1969)  
Graphs of Groundwater Levels in Minnesota.

USGS ANNUAL WATER DATA REPORTS

- Surface Water Supply of the United States, 1951-1970.
- Quality of Surface Waters of the United States, 1941-1971.
- Groundwater Levels in the United States, 1935-1974.
- Water Resources Data for Minnesota, 1961-1974  
Vol. 1 Surface Water Resources  
Vol. 2 Water Quality Resources
- Water Resources Data: Minnesota, 1975-Present  
Vol. 1 Great Lakes and Souris-Red-Rainy River Basins  
Vol. 2 Upper Mississippi and Missouri River Basins

BOOKS AND REPORTS OF THE MINNESOTA GEOLOGICAL SURVEY (MGS)

- Alexander, E.C., Jr. (1980)  
An Introduction to Caves of Minnesota, Iowa and Wisconsin  
1980 NSS Convention Guidebook.
- Kanivetsky, R. (1979)  
A Regional Approach to Estimating the Groundwater Resources of  
Minnesota.
- Lively, R.S. and Southwick, D.L. (1981)  
Radon Activity in Ground Waters of Seven Test Areas in Minnesota.
- Olsen, B.M., Mohring, E.K. and Bloomgren, P.A. (1987)  
Using Groundwater Data for Water Planning.  
MGS Ed Series 8
- Ojakengas, R.W. and Matsch, C.L. (1982)  
Minnesota's Geology.
- Melone, T.G. and Weiss, L.W. (1951)  
Bibliography of Minnesota's Geology [through 1950].
- Morey, G.B., Balaban, N.H. and Swanson, L. (1981)  
Bibliography of Minnesota's Geology 1951-1980.
- Swanson, L., Balaban, N.H. and Morey, G.B. (1986)  
Bibliography of Minnesota's Geology 1981-1985.
- Mossler, J.H. (1987)  
Paleozoic Lithostratigraphic Nomenclature for Minnesota.
- Sansome, C.J. (1983)  
Minnesota Underfoot. A Field Guide to the State's Outstanding  
Geologic Features.
- Schwartz, G.M. and Thiel, G.M. (1973)  
Minnesota's Rocks and Water: A Geological Story.  
Bulletin 37
- Sims, P.K. and Morey, G.F. eds. (1972)  
Geology of Minnesota: A Centennial Volume.
- Swanson, L. (1985)  
Publications of the Minnesota Geological Survey and its predecessor,  
the Geological and Natural History Survey of Minnesota.

## MAPS AVAILABLE FROM THE MGS

Balaban, N.H. (1988)  
Geologic Atlas of Olmsted County, Minnesota.  
County Atlas C-3

Balaban, N.H. and McSwiggen, P.L. Eds. (1982)  
Geologic Atlas of Scott County, Minnesota.  
County Atlas C-1

Balaban, N.H. and Olson, B.M. Eds. (1984)  
Geologic Atlas of Winona County, Minnesota.  
County Atlas C-2

## Surficial Maps

Geologic Map of Minnesota, Quaternary Geology. H.C. Hobbs and J.E. Goebel (1982) Color, Scale 1:500,000.

Geologic Map of Minnesota, Quaternary Geology, J.E. Goebel and Matt Walton (1979) Color. Scale 1:3,168,000.

Quaternary Geologic Map Index of Minnesota. J.E. Goebel (1976) 22 p.  
1 pl.

State of Minnesota Watershed Boundaries. Minnesota Department of Natural Resources (1979) Scale 1:500,000. Accompanying text.

## Hydrogeological Maps

Hydrogeologic Map of Minnesota, Bedrock Hydrogeology. R. Kanivetsky (1978) Color. Sheet 1 (map), Sheet 2 (cross sections), and accompanying text. Scale 1:500,000.

Hydrogeologic Map of Minnesota, Quaternary Hydrogeology. R. Kanivetsky (1979) Color. Scale 1:3,168,000.

Hydrogeologic Map of Minnesota, Bedrock Hydrogeology. R. Kanivetsky. (1979) Color. Scale 1:3,168,000.

Hydrogeologic Map of Minnesota, Quaternary Hydrogeology. R. Kanivetsky. (1979) Color. Scale 1:3,168,000.

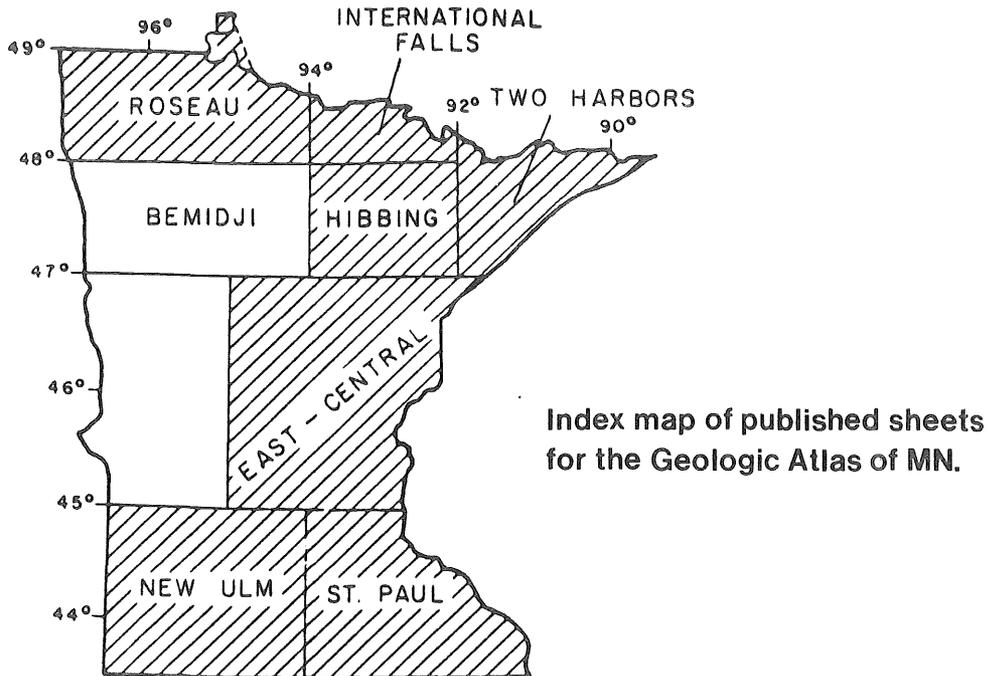
Hydrogeologic Sensitivity Mapping in Minnesota. R. Kanivetsky and B.M. Olsen (Reprint from Hydrological Science and Technology: Short Papers, Vol. 2, No. 2, 1986, p. 45-50).

Also to accompany the maps above:

Kanivetsky, R. and Walton M. (1979)  
Hydrologic Map of Minnesota Bedrock Hydrogeology: A Discussion to  
Accompany State Map Series S-2.

Kanivetsky, R. (1979)  
A Regional Approach to Estimating the Groundwater Resources of  
Minnesota.

Geologic Map Atlas of Minnesota



Austin, G.S., Grant, J.A., Ikola, R.J. and Sims, P.K. (1970)  
New Ulm Sheet, Bedrock Geology.

Green, J.L. (1982)  
Two Harbors Sheet, Bedrock Geology.

Morey, G.B., Olsen, B.M. and Southwick, D.L. (1981)  
East Central Minnesota, Bedrock Geology (includes Duluth and Stillwater sheets, plus the parts of Brainerd and St. Cloud sheets east of 95°).

Ojakangas, R.W., Mossler, J.H. and Morey, G.B. (1979)  
Roseau Sheet, Bedrock Geology.

Sims, P.K., Morey, G.B., Ojakangas, R.W. and Viswanathan, S. (1970)  
Hibbing Sheet, Bedrock Geology.

Sloan, R.E., and Austin, G.S. (1966)  
St. Paul Sheet, Bedrock Geology.

Southwick, D.I. and Ojakangas, R.W. (1979)  
International Falls Sheet, Bedrock Geology.

## USGS GEOLOGIC MAPS AND REPORTS AVAILABLE THROUGH MGS

- Geologic and Hydrologic Aspects of Tunneling in the Twin Cities Area, Minnesota. R.F. Norvitch and M.S. Walton, eds. (1979) Color. Scale 1:24,000, 7 pls.
- Geologic Map of Minnesota, Bedrock Geology. G.B. Morey. (1976) Color. Scale 1:3,168,000 (1 inch = 50 miles). Includes Brief Discussion of Geologic Terranes of Minnesota by Matt Walton.
- Geologic Map of Minnesota, Bedrock Outcrops. G.B. Morey. (1982) Color. Scale 1:3,168,000.
- Geologic Map of Minnesota, Bedrock Topography. B.M. Olsen and J.H. Mossler. 1982. Scale 1:1,000,000.
- Geologic Map of Minnesota, Depth to Bedrock. B.M. Olsen and J.H. Mossler. (1982) Scale 1:1,000,000.
- Surficial Geology of the New Brighton Quadrangle, Minnesota. J.E. Stone. (1966). Colored Map, Scale 1:24,000, and 39 p. text, 3 pls. 11 figs., 6 tbls.
- Geology of the Cloquet Quadrangle. H.E. Wright, Jr., L.A. Mattson and J.A. Thomas. (1970) Colored Map, Scale 1:24,000, and 30 p. text, 12 figs., 2 tbls.

## USGS TOPOGRAPHIC MAPS

USGS Topographic Maps of Minnesota are available from the Minnesota Geological Survey. Entire state at the scale 1:500,000 with topographic contour lines @ \$5.25. 1:250,000 sheets (1 inch = 4 miles) @ \$4.50. 7½ minute quadrangles (1:24,000 or 1 inch = 2,000 feet) @ \$2.75. Index map upon request, \$1.00 for postage and handling.

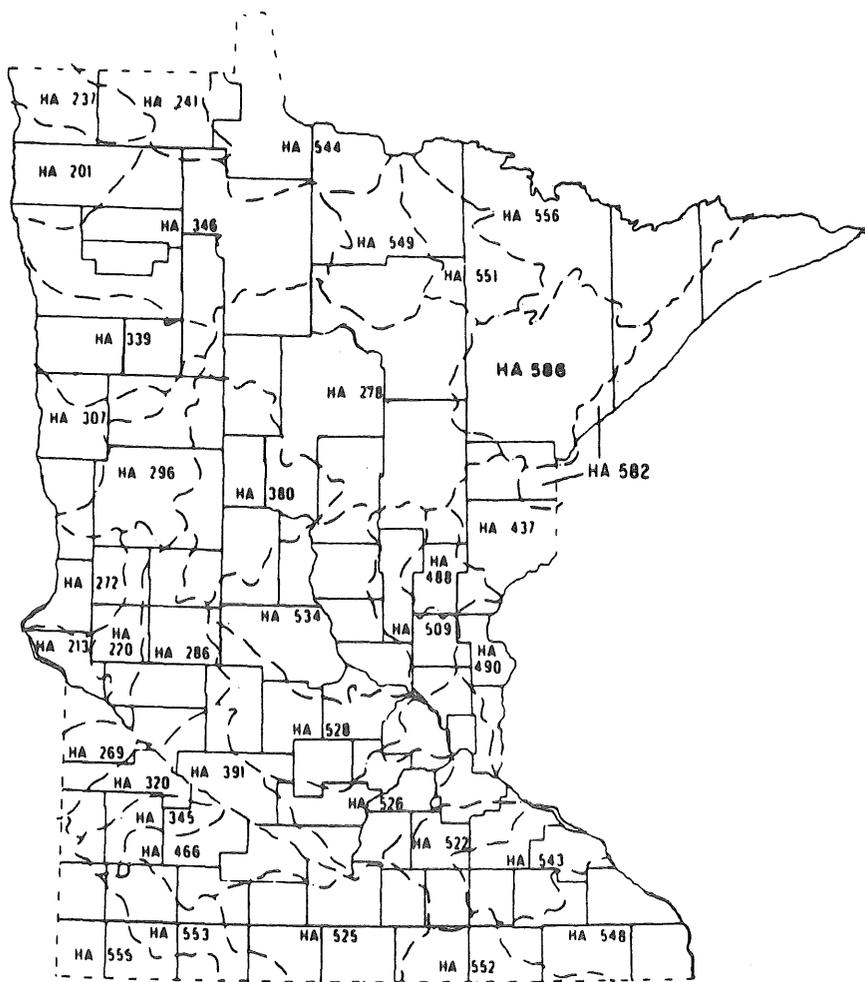
## USGS OUTSIDE PUBLICATIONS (OP)

Baedecker, M.J., Eganhouse, R.P., Miller, R.J. and Hult, M.F. (1986)  
The Composition and Fate of Hydrocarbons in a Glacial Aquifer.  
GSA 95th Annual Meeting. Vol. 18 No. 6  
OP-183

Brown, R.G. and Stark, J.D. (1986)  
A Comparison of Ground Water and Surface Water Interaction in  
Wetlands: Minnesota and Wisconsin. Abs. in 31st Annual Midwest  
Groundwater Conference.

OP-115

USGS HYDROLOGIC ATLASES (Available through the MGS)



**Index Map of Hydrologic Atlases**

- HA-201 Middle River
- HA-213 Big Stone Lake
- HA-220 Pomme de Terre River
- HA-237 Two Rivers
- HA-241 Roseau River
- HA-269 Lac Qui Parle River
- HA-272 Mustinka-Bois de Sioux
- HA-278 Mississippi headwaters
- HA-280 Hibbing area
- HA-286 Chippewa River
- HA-296 Otter Tail River
- HA-299 Red Lake River

HA-307 Buffalo River  
HA-320 Yellow Medicine River  
HA-339 Wild Rice River  
HA-345 Redwood River  
HA-346 Red Lake River  
HA-380 Crow Wing River  
HA-391 Minnesota River-Hawk Creek  
HA-437 Kettle River  
HA-466 Cottonwood River  
HA-488 Snake River  
HA-490 Lower St. Croix River  
HA-509 Rum River  
HA-522 Cannon River  
HA-525 Blue Earth River  
HA-526 Lower Minnesota River  
HA-528 Crow River  
HA-534 Mississippi & Sauk Rivers  
HA-543 Zumbro River  
HA-544 Lake of the Woods  
HA-548 Root River  
HA-549 Big Fork River  
HA-551 Little Fork River  
HA-552 Cedar River  
HA-553 Des Moines River  
HA-555 Rock River  
HA-556 Rainy Lake  
HA-582 Lake Superior  
HA-586 St. Louis River  
HA-677 Hollandale Embayment



## CHAPTER II

### GROUND WATER PUBLICATIONS BY AGENCY/ORGANIZATION

#### Introduction

There are many agencies and organizations involved in ground water who have publications that are available to the public.

The three primary state agencies holding responsibility for ground water are the MDH, DNR and MPCA. Publications by these agencies are listed in Part A.

In addition to the above agencies. There are many other organizations with ground water involvement. Publications of these organizations are listed in Part B in alphabetical order.

A. PRIMARY GROUND WATER AGENCIES

Publications of the Minnesota Department of Health (MDH)

- Gibson, A. and Singer, R. (1969)  
Water Well Manual - A Practical Guide for Locating and  
Constructing Wells for Individual and Small Community  
Water Supplies.
- Hoagberg, R.K. and Rajaram, V. (1981)  
Implementation of a Limited Underground Injection Control  
Program in the State of Minnesota. Task II - Evaluation  
of groundwater ... Source Head Pumps.
- Klaseas, T. (1986)  
Minnesota Pesticide Monitoring Survey's  
Interim Report.
- Liesch, B.A. Assoc. (1981)  
Identification of Class IV and Class V Wells in the  
State of Minnesota.
- MN Department of Health (1987)  
A Guide for Local Health Professionals Involved in  
County Comprehensive Water Management Plans.
- MN Department of Health (1988)  
Abandoned Wells.
- MN Department of Health (1988)  
Abandoned Wells, Protecting Groundwater is Everybody's Business.
- MN Department of Health (1985)  
CHS Well Water Testing Reference List.
- MN Department of Health (1988)  
Coliforms in Drinking Water.
- MN Department of Health (1985)  
Health Effects of Lead in the Environment.
- MN Department of Health (1977)  
Implications of the Safe Drinking Water Act in Minnesota.
- MN Department of Health (1979)  
Interaquifer Flow and Problems for Safe Water in  
Southeast Minnesota.
- MN Department of Health (1988)  
Minnesota Homeowner's Guide to Radon.
- MN Department of Health  
Minnesota Water Well Construction Code.

- MN Department of Health (1987)  
Minnesota Water Well Manual.
- MN Department of Health (1986)  
Nitrate Fact Sheet.
- MN Department of Health (1989)  
Nitrates in Drinking Water.
- MN Department of Health (1988)  
Noncommunity Public Water Supply Survey for  
Volatile Organic Chemicals - LCMR Report.
- MN Department of Health (1989)  
Noncommunity Water Supplies.
- MN Department of Health (1988)  
Pesticides and Groundwater: Surveys of Selected  
Minnesota Wells - LCMR Report.
- MN Department of Health (1976)  
Problems Relating to Safe Water Supply in  
Southeastern Minnesota.
- MN Department of Health (1979)  
Problems Relating to Safe Water Supply in  
Southeastern Minnesota.
- MN Department of Health (1983)  
Public Water Supply Data.
- MN Department of Health (1987)  
Radium in Drinking Water.
- MN Department of Health (1988)  
Radon Facts.
- MN Department of Health (1977)  
Rural Domestic Water Supply in Minnesota.
- MN Department of Health (1987)  
Soil Lead Report to the MN State Legislature.
- MN Department of Health (1977)  
A Summary of Municipal Water Use.
- MN Department of Health (1989)  
Survey of Radon in Minnesota Homes.
- MN Department of Health (1989)  
Volatile Organics in Drinking Water.
- MN Department of Health (1985)  
Volatile Organic Survey of Community Water Supplies.

- MN Department of Health (1979)  
Water Distribution System Operation and Maintenance.
- MN Department of Health (1977)  
Water Quality of Municipal Supply Systems in Minnesota.
- MN Department of Health (1988)  
Water Supply Monitoring Near Metropolitan Solid Waste  
Disposal Facilities.
- MN Department of Health (1983)  
Wells and Well Water in Minnesota: A Consumers  
Guide to Water Wells.
- MN Department of Health (1987)  
Directory of Minnesota Licensed Water Well Contractors.

PUBLICATIONS OF THE DEPARTMENT OF NATURAL RESOURCES (DNR)

Bloomgren, P. and Rongitsch, B.  
Ground Water.

DNR Report No. 105

Blomquist, P.K. and Rongitsch, B. (1984)  
An Inventory of Water Wells on DNR-Managed Land in Southeastern  
Minnesota

DNR (1987)  
Ground Water Investigations and Data Automation. LCMR Report.

DNR (1985)  
Accelerated Ground Water Management. Geophysics Phase. Report of  
Biennium 1983-1985. LCMR Report

DNR (1985)  
Pilot Study of Ground Water Resource Management in Swift County,  
Minnesota. LCMR Report.

DNR (1985-1987)  
Water Allocation and Management Program Project Products LCMR Report

Primary Reports

- Volume I: The Value of Water to Minnesota.
- Volume II: Developing a Geographic Information System for  
Minnesota Water Resources.
- Volume III: The Economic Value of Water.

Technical Reports

DNR Division of Waters:

- An Analysis of Water Use in Minnesota.
- Statewide Instream Flow Assessment.
- Water Use in Minnesota Agriculture.

Natural Resources Research Institute:

- The Value of Water for Economic Production and Recreation in  
Minnesota, Volumes 1 and 2.

DNR Office of Planning:

- Significance of Water-Related Outdoor Recreation to the  
Minnesota Economy.

U.S. Geological Survey:

- Low Flow Statistics at Stream Gaging Stations in Minnesota
- Peak Flow Statistics at Stream Gaging Stations in Minnesota
- Surface Water Availability in Minnesota

Soil Water Systems Analysis and Modeling  
 A Review of Soil Erosion Modeling  
 Soil Data for a Water Resources GIS  
 Terrain Data for a Water Resources GIS  
 Groundwater Systems Analysis and Modeling  
 Groundwater Data for a Water Resources GIS  
 Conclusions and Summary of Recommendations for a Water  
 Resources Geographic Information System  
 Crop Production Response to Moisture Supply in Minnesota,  
 Special Report 9  
 Relationship Between Climate and the Mean Annual Flow of the  
 Mississippi River at St. Paul, Minnesota, Special Report 11  
 Twin Cities Surface Water Simulation Modeling Demonstration,  
 Special Report 12  
 Bear Creek Surface Water Simulation Modeling Demonstration,  
 Special Report 13  
 Modeling Soil Water Variability, Special Report 14  
 Minnesota Drought, Special Report 15  
 A Computer Program to Exchange ERDAS and EPPL7 Data Files,  
 Special Report 16

DNR (1984 through 1987)

- \*Observation Well Data Summary - Water Year 83 - Region 1, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Region 2, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Region 3, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Region 4, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Region 5, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Region 6, June 1984.
- \*Observation Well Data Summary - Water Year 83 - Statewide, June 1984.

\*Also for Water Years 84, 85, 86 and 87.

DNR (1979)

Location of Ground Water Observation Wells Map H-2.

DNR (1976)

Ground Water Resources in Minnesota. Bulletin No. 27.

DNR (1968)

An Inventory of Minnesota Lakes. Bulletin No. 25.

DNR (1962)

Water Resources of Minnesota, A Study Guide. Bulletin 16.

DNR (1962)

Water Use for Irrigation in Minnesota. Bulletin 17.

DNR (1961)

Water Resources of the Minneapolis-St. Paul Metropolitan Area.  
 Bulletin 11.

DNR (1959)

Hydrologic Atlas of Minnesota. Bulletin No. 10.

- Frellsen, S.A. (1952)  
An Estimate of Total Water Use in Minnesota for 1950 and 1975.
- Helgesen, J.O. and Lindholm, G.F. (1977)  
Geology and Water Supply Potential for the Anoka Sand-Plain Aquifer, Minnesota
- Johnston, R.M. et al. (1980)  
Selected Aquifer Tests in Minnesota. Technical Paper 8.
- Liesch (1961)  
Geohydrology of the Jordan Aquifer in the Minneapolis-St. Paul Area, Minnesota
- Maderack, M.L. (1965)  
Chemical Quality of Ground Water in the Minneapolis-St. Paul Area, Minnesota. Bulletin 23.
- Mohring, E.H. (1986)  
The Effects of Lake Level Lowering on Lake-Groundwater Interaction at School Section Lake, Stearns County, Minnesota
- Schneider, R. (1958)  
Correlation of Groundwater Levels and Air Temperature in Winter and Spring in Minnesota. Technical Paper 1.
- Sium, Ogbazghi (1986)  
Hydrologic Evaluation of Small Watersheds in Minnesota Using TR-20 Model
- Straka, G.C. and Miller, W.A. (1963)  
Graphs of Ground Water Levels in Minnesota 1957-1961. Bulletin 18.
- Straka, G.C. and Schneider, R. (1957)  
Graphs of Ground Water Levels in Minnesota through 1956. Bulletin 9.
- Tufford, S.  
Water-Rich Minnesota  
DNR Report No. 83
- Winter, T.C. (1974)  
The Natural Quality of Ground Water in Minnesota. Bulletin 26.
- Woodward, D.G. (1977)  
Ground Water and Aquifer Tests.  
Technical Report No. 5
- Young, P.G. and Woods, S. (1987)  
Water Use in Minnesota Agriculture.
- Zwilling, D. and Rongitsch, B. (1987)  
Understanding Ground Water Level Trends: A Key to Managing Water Use.

Articles from the Minnesota Volunteer  
Department of Natural Resources

1978

Sandstrom, B.  
Water Violations - May/June

1979

Hughes, R.  
Freshwater Biological Institute: What Makes Water Tick? -  
July/August.

Olsenius, C.  
Is Minnesota's Clean Water Running Out? - July/August.

1981

Wood, J.  
Minnesota in the Year 2000 - Water - January/February.

1982

Hoff, R.  
Striking Back Against Toxic Waste - November/December.

1984

Brustman, S.  
How Safe is Our Drinking Water? - January/February.

Caroon, J.B. and Ford, D.R.  
Surveying Our Underground Reservoir of Water - September/October.

Rongitsch, B.  
Tapping Waterville's Gas Bubble - September/October.

Luoma, J.R.  
Can we Really Protect Minnesota's Groundwater - November/December.

Volunteer Reports  
Minnesota's Pending Water Crisis - November/December.

1985

Anderson, L.I. and Petersen, J.M.  
What is Minnesota's Water Worth? - March/April.

Hollenstein, G.  
Planning for Water in Minnesota's Future - July/August.

Tufford, S. and Young, G.  
Water Shortages in Minnesota: It's Possible - November/December.

1986

Slobic, P.  
Tracking Disappearing Water Underground - January/February.

Publications of the Minnesota Pollution Control Agency (MPCA)

- Badalich, J.P. (1969)  
Pollution Control through Land Use Management.
- Barr Engineering (1973)  
Hazardous Waste Generation in the Twin Cities Metro Area.
- Bruemmer, L.B. (1982)  
Dealing with Groundwater Protection in Southeastern Minnesota.
- Bruemmer, L.B. and Thomas, D.C. (1984)  
Groundwater in Minnesota: A Users Guide to Understanding  
Minnesota's Groundwater.
- Hickok and Associates (1978)  
Effects of Wastewater Stabilization Pond Seepage on  
Groundwater Quality.
- Hickok and Associates (1983)  
Hydrogeologic Assessment of a Clay Landfill.
- MN Pollution Control Agency (1985)  
An Appraisal of Minnesota's Groundwater Quality.
- MN Pollution Control Agency (1981)  
Animal Feedlots.
- MN Pollution Control Agency (1984)  
Garvin Brook Watershed Water Quality - General Program for  
the Rural Clean Water Program.
- MN Pollution Control Agency  
Groundwater: A Compilation of Annotated References.
- MN Pollution Control Agency (1983)  
Groundwater Contamination in Minnesota.
- MN Pollution Control Agency (1987)  
Groundwater Monitoring Techniques.
- MN Pollution Control Agency (1983)  
Groundwater Protection Strategy Framework for Minnesota.
- MN Pollution Control Agency (1984)  
HRSA: High Rate Soil Absorption Final Report.
- MN Pollution Control Agency (1988)  
Minnesota Ground Water Protection Strategy.
- MN Pollution Control Agency (1982)  
Minnesota River Watershed Water Quality: An Assessment of  
Non-Point Source Pollution.

- MN Pollution Control Agency (1986)  
Minnesota Water Quality Management Plan.
- MN Pollution Control Agency (1985)  
Minnesota Water Quality, Water Years 1984-1985  
The Report to the Congress of the U.S.
- MN Pollution Control Agency (1978)  
Residual Wastes.
- MN Pollution Control Agency (1980)  
Water Quality Management  
Minnesota's 208 Plan.
- MN Pollution Control Agency (1979)  
Water Quality Monitoring at Solid Waste Disposal  
Sites in Minnesota.
- MN Pollution Control Agency (1978)  
Water Quality and Non-Point Sources.
- MN Pollution Control Agency (1984)  
Water Quality Sampling Program: Minnesota Lakes and  
Streams. A Compilation of Analytical Data.
- Sabel, G. (1985)  
Groundwater Quality Monitoring Program  
A Compilation of Analytical Data Collected 1978-1984.
- Sabel, G. and Clark, T. (1985)  
Procedures for Groundwater Monitoring,  
MPCA Guidelines.
- Sabel G. and Procher, E. (1987)  
Groundwater Quality Monitoring Program  
An Appraisal of Minnesota Ground Water Quality.
- Thompson, D.B. (1985)  
Groundwater Analysis Near Open Dumps.
- Trippler, D. and Clark, T. (1983)  
Procedures for Groundwater Monitoring,  
MPCA Guidelines.
- Wolford, R.A., Higgins, D.A. and Brooks, K.N. (1978)  
Non-Point Pollution Related to Forest Management  
Practices - Focus on N.E. Minnesota.

B. OTHER AGENCIES/ORGANIZATIONS WHO DEAL WITH GROUNDWATER

Publications of the Agricultural Experiment Station, University of Minnesota

Development of Irrigation and Specialty Crops Reports (DISC)

The Potential for Irrigated Crop Production (1975).

Water Sources and Irrigation Economics (1978).

Economic Impact of Irrigated Agriculture in Western Minnesota (1976).

The Quality of Water for Irrigation.

Technical Bulletin No. 239

Baker, D.C., Nelson, W.W. and Kuehnast, E.L. (1979)  
Climate of Minnesota. Part XII - The Hydrologic  
Cycle and Soil Water.

Eidman, V.R. (1977)

Irrigation in Minnesota.

Minnesota Agricultural Economist No. 592

Board of Water and Soil Resources (formally Water Management Board, Southern MN  
Rivers Basin Board, Soil and Water Conservation Board)

Pesticides and Groundwater: A Health Concern for the Midwest  
(1986 conference proceedings).

Southern MN Rivers Dam Board (1977)  
Minnesota Rivers Basin Report.

Southern MN Rivers Basin Board (1980)  
Southeast Minnesota Tributaries Basin Report.

Water Management in Transition 1985.

Water Values and Markets: Emerging Management Tools.

Watershed Districts in Minnesota (Pamphlet) (1986).

Watershed Management - A Community Commitment (1989).

Water Cycle and Land Use Reports

1) 23 x 35 - no text

2) 11 x 22 - with geology of Minnesota text.

Bloomgren, P. and Bruemmer, L. (1985)

Groundwater - Understanding Our Hidden Resource.

Publications of the Farm Bureau

Groundwater and Environmental Pollution,  
Self Help Checklist for Farmsteads and Farm Fields.

Protecting our Groundwater - A Growers Guide.

Publications of the Freshwater Foundation

Agrichemicals and Groundwater: Perspectives and Solutions  
1988 Journal of Freshwater.

Agrichemicals and Groundwater Protection: Resources and  
Strategies for State and Local Management. Proceedings of  
October 1983 Conference, St. Paul, Minnesota.

Agricultural Chemicals and Groundwater Protection: Emerging  
Management and Policy. (1987 conference proceedings)  
Proceedings of 1987 Conference.

Agriculture Chemicals and Groundwater Protection: Suggested  
Directions for Consideration and Action.

Groundwater: New Perspectives, New Initiatives. 1985.

Nitrates and Groundwater: A Public Health Concern.

## Publications of the Metropolitan Council

- Administration of Individual Sewage Treatment Systems (1980).
- Amendments to Part I - Water Resources Management Development (1985).
- Assessment of Water Pollution From Mining Activities (1977).
- Environmental Impacts of Sanitary Landfills in the Twin Cities Metropolitan Area (1984).
- Guide for Water Quality Investigations of Metropolitan Area Lakes (1982).
- Hydrogeologic Evaluation at Proposed Sludge/Ash Landfill Sites (1982).
- Hydrogeology: Special Study Report for I-35E Environmental Impact Statement (1981).
- Interim Output Report 108 Areawide Water Quality Management Program Twin City Metro Area (1977).
- Leachate Generation Potential from Landfills in the Twin City Metro Area (1978).
- Municipal Wastewater Treatment by Land Application (1978).
- Natural Resource Handbook - Land Use and Natural Resource Inventory and Trends.
- Proposed Amendments to Part I. Water Resources Management Development Guide (1984).
- Quality of Runoff from Small Watersheds in the Twin Cities Metropolitan Area (1982).
- Regional Water Resource Management - Council Role and Program (1977).
- Relationship of Septic Tank Absorption Systems to Soils (1976).
- Spreading Sewage Sludge on Farm Land, Some Questions and Answers (1984).
- Streamflow and Water Quality Data for Wetland Inflows and Outflows in the Twin City Metropolitan Area (1983).
- Surface Water Management Watershed Planning Guide (1983).
- Surface Water Management: An Overview of Runoff Quantity and Quality Models (1984).

Surface Water Management: Evaluation of Nationwide Urban Runoff (1983).

Surface Water Management: Financing Local Management Programs (1983).

Surface Water Management: Management Practices Evaluation (1983).

Surface Water Management: Precipitation Frequency Analysis (1984).

Surface Water Management: Simplified Modeling for Watersheds (1983).

Surface Water Management: Watershed Planning Guide (1983).

Understanding Watershed and Lake Management (1984).

Water Conservation in the Twin Cities Metropolitan Area (1983).

Water Pollution from Non-Point Sources (1979).  
An Assessment and Recommendations.

Water Pollution from Urban Runoff (1978).

Water Quality Management Development (1981)  
Guide/Policy Plan Part I Point Sources.

Water Quality Management Plan for the Twin City Metro Area (1975).

Water Resources Management Part 3: Water Availability and Use:  
Summary (1988).

Water Resources Management: Non-Point Source Pollution Technical  
Report (1983).

Water Resources Outlook for Minneapolis/St. Paul Metro Area (1973).

Water Use in the Twin Cities Metropolitan Area (1984).

Publications of the Minnesota Department of Agriculture

Klaseus, T., Buzicky, G. and Schneider, E. (1988)  
Pesticides and Groundwater: Surveys of Selected Minnesota  
Wells.

LCMR Report

Klaseus, T., Buzicky, G., Schneider, E. and Hines, J. (1988)  
Pesticides and Groundwater: Surveys of Selected Minnesota  
Wells.  
Paper presented at the Agricultural Impacts on Groundwater  
Conference, NWWA, Des Moines, Iowa.

MN Department of Agriculture (1988),  
Summary of Water Well Pesticide Surveys.

MN Department of Agriculture (1981),  
The Use and Management of Water for Irrigated Agriculture  
in Minnesota.

Publications of the Department of Transportation

Busacker, G.P. (1987)  
Water Quality of Hornbeam Lake, Dakota County  
Minnesota: Before, During and After Construction  
of Interstate Highway I-494.

Publications of the MN Environmental Education Board (MEEB)

MEEB (1988)  
Groundwater Take a Closer Look ...  
Prairie - Woods Environmental Education Council.

MEEB  
Groundwater: What's in it for you?  
Southeast Environmental Education Council.

Publications of the Minnesota Environmental Quality Board

- Environmental Quality Board (1980)  
Environmental Issues Relating to Animal Feedlots.
- Environmental Quality Board (1986)  
Groundwater in Minnesota.
- Environmental Quality Board (1988)  
Handbook for Local Water Planning.
- Environmental Quality Board  
Minnesota Environmental Quality - Trends in Resource  
Conditions and Current Issues.
- Environmental Quality Board (1988)  
Protecting Minnesota Waters - Priorities for 89/91  
Biennium.
- Environmental Quality Board (1988)  
Protecting Minnesota Waters - Strategy for the Wise Use  
of Pesticides and Nutrients.
- Environmental Quality Board (1983)  
Trends in Resource Conditions and Current Issues.

Publications of the Office of the Legislative Auditor

- Office of the Legislative Auditor (1987)  
Water Quality Monitoring.

UNIVERSITY OF MINNESOTA  
M.S. and Ph.D. Theses

Agricultural Engineering Department

- Almquist, A. (1955)  
Farm Drainage in the Red River Valley.  
[M.S.]
- Bay, R. (1967)  
Interpretation of Fundamental Hydrologic Relationships of  
Forested Bogs in Northern Minnesota.  
[M.S.]
- Bosch, D. (1986)  
The Effects of Rainfall on the Hydraulic Conductivity  
of Soil Surfaces.  
[M.S.]
- Canton, C. (1985)  
Adoption of the NIRM Model for Land Application of  
Wastewater.  
[Ph.D.]
- Dahlin, W. (1961)  
A Study of Seepage Site Subsurface Drains by the Hydraulic and  
Electric Analog Methods.  
[M.S.]
- Dhaltar, M.A. (1980)  
Use of the Buffered and Covered Plats Method for Evaluating  
Water Requirements of a Rice Paddy.  
[Ph.D.]
- Everts, C. (1980)  
Effects of Tillage and Manure on Nitrogen and Phosphorus  
Movement with Sediment and Surface Runoff.  
[M.S.]
- Gilley, J. (1971)  
Steady Two-Dimensional Infiltration from Buried Line  
Sources.  
[M.S.]
- Golany, P. (1970)  
Effects of Watershed Characteristics on the t-parameter  
of Runoff Hydrographs.  
[Ph.D.]
- Hirschi, M. (1980)  
Hydraulic Conductivity and Degree of Saturation During  
Infiltration.  
[M.S.]

- Idike, F. (1977)  
Experimental Evaluation of Infiltration Equations.
- Killen, M. (1984)  
Modifications of the Checkbook Method of Irrigation Scheduling  
for Use in Minnesota.  
[M.S.]
- Knoch, B. (1983)  
Predicting Direct Recharge of Surficial Aquifers.  
[M.S.]
- Lundstrom, D. (1988)  
The Projection of Irrigation Diversions Using Stochastic  
Models.  
[Ph.D.]
- Mein, R. (1971)  
Modeling of the Infiltration Component of the Watershed  
Rainfall-Runoff Process.  
[Ph.D.]
- Molnau, M. (1963)  
A Field Study of Improved Techniques for the Development  
of Well Points for Irrigation Use.  
[M.S.]
- Moore, I. (1979)  
Infiltration into Tillage Affected Soils.  
[M.S.]
- Reinke, J. (1968)  
The Hydrology of a Typical Ice Block Glacial Lake.  
[M.S.]
- Retka, E. (1972)  
Some Aspects of the Use of Water Wells in Unconsolidated  
Aquifers.  
[Ph.D.]
- Wilson, B. (1979)  
The Importance of Air Movement in the Prediction of  
Infiltration.  
[Ph.D.]

Chemical Engineering Department

- Jerauld, G.R. (1985)  
Flow and Transport in Chaotic Media: Four Case Studies.  
[Ph.D.]

Civil Engineering Department

- Asgian, M.I. (1977)  
The Analytic Solutions of Two Groundwater Flow Problems.  
[M.S.]
- Curtis, J.G., Jr. (1983)  
Simulation of Salt Water Intrusion by Analytic Elements.  
[Ph.D.]
- Detournay, C.P. (1985)  
Application of Boundary Elements to the Hydrograph Method.  
[Ph.D.]
- Detournay, C.P. (1980)  
Unconfined Steady Flow of Infiltrated Groundwater Over a  
Sloping Bed.  
[M.S.]
- Fitts, C.R. (1985)  
Modeling Aquifer Inhomogeneities with Analytic Elements.  
[M.S.]
- Haitjema, H.M. (1982)  
Modeling Three Dimensional Flow in Confined Aquifers  
Using Distributed Singularities.  
[Ph.D.]
- He, H.Y. (1987)  
Groundwater Modeling of Leaky Wall.  
[M.S.]
- Heitzman, G.E. (1977)  
Analytical Modeling of Multi-Layered Groundwater Flow.  
[M.S.]
- Keil, G.D. (1982)  
A Dupuit Analysis for Leaky Unconfined Aquifers.  
[M.S.]
- Vanlent, J.J. (1983)  
Modeling of Finite Canals Using Isolated Singularities.  
[M.S.]
- Zaadnoordijk, W.J. (1988)  
Analytic Elements in Transient Groundwater Flow.  
[Ph.D.]

Ecology Department

- Almendinger, J.E. (1988)  
Lake and Groundwater Paleohydrology. A Groundwater Model  
to Explain Past Lake Levels in West Central Minnesota.  
[Ph.D.]

## Forest Resources Department

### Plan B's

- Barton, P. (1985)  
Testing and Refinement of the Peatland Hydrological Model.
- Curtis, W. (1964)  
Response of Springflow to Same Climatic Variables in the Driftless Area of Southwest Wisconsin.
- Eychaner, J. (1974)  
Interflow: One Facet of Subsurface Flow.
- Leete, J.H. (1978)  
Phosphorus Release Following Clearcutting of a Black Spruce Fen and a Black Spruce Bog.
- Leete, J.H. (1977)  
Assessment of Water Quality Status and Trends in Minnesota by Remote Sensing Techniques.
- Miles, P. (1984)  
Assessing the Economic Implications of Managing Nonpoint Forestry Sources of Water Pollutants: Case Studies in 5 Midwest States.
- Mital, D.  
Observation and Prediction of Soil Moisture Under 4 Aspen Stands in Minnesota.
- Predmore, S. (1978)  
Hydrologic Effects of Peat Harvesting.
- Weible, R. (1978)  
The Economics of Managing Non-Point Forestry Sources of Water Pollutants.
- Williams, T. (1971)  
Effects of Mechanized Harvesting on Soil Water Properties.

### M.S. and Ph.D. Thesis

- Balar, M. (1971)  
Spring Runoff as Affected by Soil Permeability on 2 Forested Watersheds.  
[Ph.D.]
- Clausen, J. (1981)  
Methods for Assessing the Quality of Runoff from Minnesota Peatlands.  
[Ph.D.]

Gatni, A. (1986)  
Field Tracing Approach to Determine Flow Velocity and  
Hydraulic Conductivity in Saturated Peat Soils.  
[Ph.D.]

Leete, J. (1986)  
Sediment and Phosphorus Load to Streamflow from Natural  
and Disturbed Watersheds in Northeastern Minnesota.  
[Ph.D.]

Tayaa, M. (1977)  
Watershed Management Practices for Rehabilitation of  
Critical Areas.  
[Ph.D.]

#### Geo-Engineering Department

Melnyk, J.J. (1982)  
Solving Steady State Groundwater Problems Using Potentials.  
[MGEOT]

#### Geology and Geophysics Department

Baghadi, Khaled A. (1977)  
Application of the Gravity and the Seismic Refraction Methods  
for Mapping Bedrock Topography in East-Central Minnesota.  
[M.S.]

Barr, Kelton (1978)  
Estimation of Groundwater and Lake Chemistry Parameters and  
Their Inter-Relationships in Glaciated Terrains.  
[M.S.]

Bauer, Robert (1981)  
The Petrology and Structural Geology of the Western Lake  
Vermilion Area, Northeastern Minnesota.  
[Ph.D.]

Chernicoff, Stanley (1980)  
The Superior-Lobe and Grantsburg-Sublobe Tills: Their  
Compositional Variability in East-Central Minnesota.  
[Ph.D.]

Cohen, Gary B. (1982)  
Dispersion and Sorption of Hydrocarbons in Aquifer  
Materials.  
[M.S.]

Convery, Michael (1979)  
The Behavior and Movement of Petroleum Products in  
Consolidated Surficial Deposits.  
[M.S.]

- Cook, Kevin (1982)  
Water Resources as a Possible Growth-Limiting Factor  
in a World Futures Model.  
[M.S.]
- Czarnecki, John B. (1988)  
Characterization of the Subregional Ground-Water Flow  
System of a Potential Site for a High-Level Nuclear  
Waste Repository.  
[Ph.D.]
- Dalgleish, Janet B. (1985)  
Sinkhole Distribution in Winona County, Minnesota.  
[M.S.]
- Day, Warren (1983)  
Petrology and Geochemistry of the Vermilion Granitic  
Complex, Northern Minnesota.  
[Ph.D.]
- Eames, Valerie (1982)  
Influence of Water Saturation on Oil Retention Under Field  
and Laboratory Conditions.  
[M.S.]
- Edens, Mark (1979)  
Hydrologic Study of a Landfill Site Consisting of Highly  
Compressed Solid Waste.  
[M.S.]
- Erickson, Denis (1981)  
A Study of Littoral Groundwater Seepage at Williams Lake,  
Minnesota Using Seepage Meters and Wells.  
[M.S.]
- Ferguson, Richard R. (1981)  
An Investigation of Lake Level Fluctuations for the  
Minneapolis Chain of Lakes.  
[M.S.]
- Freidman, Albert (1982)  
Surficial Geology of the Isabella Quadrangle, Minnesota.  
[M.S.]
- Goldstein, Barry S. (1986)  
Stratigraphy, Sedimentology, and Late-Quaternary History  
of the Wadena Drumlin Region, Central Minnesota.  
August 1986  
[M.S.]
- Goudreault, Paul R. (1985)  
A Two-Dimensional, Finite-Difference Groundwater Flow  
Model of the Minneapolis Chain of Lakes and Surrounding  
Surficial Water Table Aquifer.  
[M.S.]

- Groschen, George (1987)  
Geochemistry of Williams Lake, Hubbard County, Minnesota.  
[M.S.]
- Grow, Sheila R. (1986)  
Water Quality in the Forestville Creek Karst Basin of  
Southeastern Minnesota. October 1986.  
[M.S.]
- Hackenmueller, Joseph M. (1983)  
Environmental Effects on the Magnetic Properties of Soils  
and Lake Sediments Across the Forest-Prairie Ecotone in  
Central Minnesota.  
[M.S.]
- Hewett, Martha J. (1982)  
Hydrology of Stockpiles of Sulfide Bearing Gabbro in  
Northeastern Minnesota.  
[M.S.]
- Highland, William R. (1975)  
The Reynold's Number in Problems of Flow Through Porous  
Media - a Comparison of Some Theoretical and Experimental  
Techniques.  
[M.S.]
- Kronig, Donald M. (1977)  
Cavity Detection by Geophysical Methods.  
[M.S.]
- Labno, Bruce A. (1973)  
The Hydrogeological Implications of Chemical Waste Disposal  
in a Glaciated Terrain, Rosemount, Minnesota.  
[M.S.]
- Makeig, Kathryn (1978)  
Hydrogeologic Evaluation of a Drift-Filled Bedrock Valley  
Aquifer by Means of a Pumping Test and Finite Element Model.  
[M.S.]
- McBride, Mark S. (1972)  
Hydrology of Lake Sallie, Northwestern Minnesota, with  
Special Attention to Ground Water-Surface Water Interactions.  
[M.S.]
- Miller, James D. (1986)  
The Geology and Petrology of Anorthositic Rocks of the  
Duluth Complex, Snowbank Lake Quadrangle, Northeastern  
Minnesota.  
[Ph.D.]
- Milski, Jodi (1982)  
Stratigraphy and Petrology of Clastic Sediments in Mystery  
Cave, Fillmore County, Minnesota.  
[M.S.]

- Mohring, Eric (1983)  
A Study of Subsurface Water Flow in a Southeastern Minnesota  
Karst Drainage Basin.  
[M.S.]
- Mooers, Howard D. (1988)  
Quaternary History and Ice Dynamics of the Late Wisconsin  
Rainy and Superior Lobes, Central Minnesota.  
[Ph.D.]
- Nourse, Susan M. (1986)  
A Laboratory Investigation of Mass Transfer from Hydrocarbons  
to Water in Porous Media.  
[M.S.]
- Olsen, Bruce (1976)  
Stratigraphic occurrence of Argillaceous Beds in the St. Peter  
Sandstone.  
[M.S.]
- Oulgout, Bassou (1984)  
Groundwater Use of Geoelectric Resistivity for Estimating the  
Thickness of Glacial Deposits in Clear Lake Area, Sherburne  
County.  
[M.S.]
- Pollock, David W. (1977)  
Numerical Simulation of Energy Transport in Shallow Aquifers  
Subjected to a Thermal Stress from High Temperature Energy  
Storage in the Unsaturated Zone.  
[M.S.]
- Rosenberry, Donald O. (1985)  
Factors Contributing to the Formation of Transient Water  
Table Mounds on the Outflow Side of a Seepage Lake, Williams  
Lake, Central Minnesota.  
[M.S.]
- Saint, P.K. (1973)  
Effects of Landfill Disposal of Chemical Wastes on  
Groundwater Quality.  
[Ph.D.]
- Sansome, Constance J. (1972)  
Minnesota Geology: A Laboratory and Field Manual for a  
First Course in Geology with an Elaboration on the  
Ordovician Stratigraphy in Sogn Quadrangle, Goodhue  
County.  
[M.S.]
- Seaberg, John K. (1985)  
Geohydrologic Interpretation of Glacial Geology near  
Williams Lake, Central Minnesota, with Emphasis on  
Lake-Groundwater Interaction.  
[M.S.]

Streitz, Andrew R. (1989)  
The Application of Shallow Reflection Seismic Investigations  
to the Delineation of Buried Drift Features.  
[M.S.]

Tilley-Grogan, Carol (1978)  
Oil Retention of Unconsolidated Deposits.  
[M.S.]

Winter, Thomas C. (1976)  
The Hydrologic Setting of Lakes in Minnesota and Adjacent  
States - With Emphasis on the Interaction of Lakes and  
Groundwaters.  
[Ph.D.]

Wright, Sally (1972)  
Contribution to Research in Surface Conductivity, Hydrogeological  
and Petrophysical Applications.  
[M.S.]

University of Minnesota-Duluth Geology Department

Berner, Heinz (1977)  
1. Geologic processes and hazards in high-relief terrain. 96 p.  
2. Municipal solid waste disposal: a problem in environmental  
geology. 84 p. [Plan B]  
3. A land suitability study for Lakewood Township in St. Louis  
County, Minnesota. 64 p. [Plan B]

Clark, Richard C. (1985)  
The Structural Geology of the Thomson Formation: Cloquet and Esko  
Quadrangles, East-Central Minnesota.  
[M.S.]

Connolly, Marc. (1981)  
The Geology of the Middle Precambrian Thomson Formation, Southern  
Carlton County, East-Central Minnesota.  
[M.S.]

Feirn, William (1977)  
The Geology of the Early Precambrian Rocks of the Jasper Lake Area,  
Cook County, Northeastern Minnesota.  
[M.S.]

Frantes, James R. (1987)  
Petrology and Sedimentation of the Archean Seine Group,  
Conglomerate and Sandstone, Western Wabigoon Belt, Northern Minnesota  
and Western Ontario.  
[M.S.]

Gross, Laura (1982)  
The Stratigraphy and Lithology of the Glaciogenic Sediments of the  
Two Harbors Area, Northeastern Minnesota.  
[M.S.]

- Hyrkas, Jerry (1982)  
The Sedimentology and Structural Geology of the Middle Precambrian  
Thomson Formation, Central Carlton County, Minnesota.  
[M.S.]
- Jirsa, Mark A. (1980)  
The Petrology and Tectonic Significance of Interflow Sediments in the  
Keeweenawan North Shore Volcanic Group of Northeastern Minnesota.  
[M.S.]
- Lannon, Patrick (1986)  
The Quaternary Stratigraphy and Glacial History of the  
Duluth-Superior Area.  
[M.S.]
- Lehman, George (1980)  
The Late Precambrian and Pleistocene Geology of a Portion of the  
Northeast  $\frac{1}{4}$  of the Cramer Quadrangle, Lake County, Minnesota.  
[M.S.]
- Mattis, Allen F. (1971)  
The Petrology and Sedimentation of the Basal Keeweenawan Sandstones of  
the North and South Shores of Lake Superior.  
[M.S.]
- Moss, Carol (1977)  
The Surficial and Environmental Geology of the French River  
Quadrangle, Cook County, Minnesota.  
[M.S.]
- Motamedi, Shoallah (1984)  
The Keeweenawan Lavas in the City of Duluth.  
[M.S.]
- Neuman, Scott N. (1985)  
Lower and Middle Precambrian Geology of the Denham Area, Northern Pine  
County, East-Central Minnesota.  
[M.S.]
- Norton, Arthur (1983)  
Quaternary Geology of the Itasca-St. Croix Moraine Interlobate  
Area, North-Central Minnesota.  
[M.S.]
- Reid, David F. (1973)  
Quaternary Geology of the Lake Johanna Region, West-Central Minnesota.  
[M.S.]
- Saremba, Scott P. (1971)  
1. Macrofabric Analysis of Glacial Till.  
[Plan B]

- Severson, Mark (1978)  
Petrology and Sedimentation of Early Precambrian Greywackes in the  
Eastern Vermilion District, Northeastern Minnesota.  
[M.S.]
- Squillace, Paul (1979)  
The Geology of the New Richmond Member of the Shakopee Formation (Lower  
Ordovician Upper Mississippi Valley).  
[M.S.]
- Steinmaus, Karen (1983)  
Geology and Exploration Geochemistry of the Glacial Deposits of  
Northeastern Itasca County, Minnesota.  
[M.S.]
- Stone, David J. (1980)  
The Geology of the Upper Denleith Formation (Prosser Member Galena  
Formation) of Middle Ordovician Age in Southeastern Minnesota.  
[M.S.]
- Vervoort, Jeffrey D. (1987)  
Petrology and Geochemistry of the Archean Rocks of the Jap Lake Area,  
N.E. Minnesota.  
[M.S.]
- Vinje, Steven P. (1979)  
Archean Geology of an Area Between Knife Lake and Kekekabic Lake,  
Eastern Vermilion District, Northeastern Minnesota.  
[M.S.]
- Wangensteen, Martin W. (1983)  
The Hydrogeological Impact of Heavy Metal-Laden Ash Landfilling at the  
WLSSD Landfill, Rice Lake, Minnesota.  
[M.S.]
- Weber, Richard (1981)  
Petrology and Sedimentation of the Upper Precambrian Sioux  
Quartzite, Minnesota, South Dakota and Iowa.  
[M.S.]
- Zamzow, Craig E. (1979)  
Early Precambrian Bedrock Geology of the Northwest Angle, Lake of  
the Woods County, Minnesota.  
[M.S.]
- Zarth, Randee (1977)  
The Quaternary Geology of the Wrenshall and Frogner Quadrangles,  
Northeastern Minnesota.  
[M.S.]

#### Soil Science Department

- Arya, Z. (1973)  
Water Flow in Soil in Presence of Soybean Root Sinks  
[Ph.D.]

- Buzicky, G. (1982)  
Nitrogen Fertilizer Distribution Between Corn Plants, Soil  
and Aquifer Under Irrigated Conditions.  
[M.S.]
- Crum, J. (1984)  
Soils and Till Stratigraphy of West Central Minnesota.  
[Ph.D.]
- Engel, R. (1983)  
Use of Cooling Tower Water from Electrical Power Plants  
for Irrigation in Minnesota.  
[Ph.D.]
- Gantzer, G. (1976)  
Effects of No-Tillage on Several Physical Characteristics  
of a Southern Minnesota Aquic Argindoll.  
[M.S.]
- Gantzer, G. (1980)  
Physical and Morphological Investigations of Surface Seal  
Formation on Selected Soils.  
[Ph.D.]
- Gerwing, T. (1978)  
Water Quality of Aquifers as Affected by Movement of  
Fertilizer Nutrients Under Irrigation.  
[M.S.]
- Gross, E. (1973)  
Buried Soils in the Drainageways in the Driftless Area of  
the Upper Mississippi River Valley.  
[Ph.D.]
- Harris, A. (1971)  
Effect of Deciduous, Conifer, and Abandoned Field Cover on  
the Hydrologic Properties and Frost Morphology of Frozen  
Soil.  
[Ph.D.]
- Hines, J. (1986)  
Measurement and Modeling of Soil Hydraulic Conductivity Under  
Different Tillage Systems.  
[M.S.]
- Johnson, B. (1981)  
Re-Use of Agricultural Drainage Water for On-Site Soil Water  
Recharge and Irrigation.  
[M.S.]
- Krett, D. (1987)  
Soil Physical Properties as Influenced by the Addition of  
Municipal Compost.  
[M.S.]

- Larson, G. (1985)  
Phosphorus Concentrations in Surface Water, Ground Water  
and Soils in the Anoka Sandplain and Peatlands.  
[Plan B]
- Linden, D. (197)  
A Model to Predict Soil Water Storage as Affected by  
Tillage Practices.  
[Ph.D.]
- Malteier, T. (1985)  
The Genesis and Characterization of Some Calcareous Peatlands  
in West Central Minnesota.  
[Ph.D.]
- McCormick, G. (1978)  
Till Genesis and Soils in East Central Minnesota.  
[M.S.]
- Palta, J. (1971)  
Effect of an Asphalt Barrier on Water Redistribution  
after Infiltration in Sandy Soil.  
[M.S.]
- Pierce, F. (1984)  
Assessing Soil Productivity in Relation to Land Use  
and Conservation.  
[Ph.D.]
- Reyes, R. (1978)  
Microbial Degradation of 2, 4-D to CO<sub>2</sub> in Ground Water  
Fen Soils.  
[M.S.]
- Schuh, W. (1981)  
Evaluation of Unsaturated Hydraulic Conductivity in Relation  
to Soil Properties and Methods of Estimation.  
[M.S.]
- Skarie, R. (1979)  
Soil Salinity in Clay County, Minnesota and the Application  
of Color-Infrared Imagery to the Delineation of Affected  
Areas.  
[M.S.]
- Swanson, D. (1983)  
Properties of Peatlands in Relation to Environmental Factors  
in Minnesota.  
[Ph.D.]
- Wall, D. (1987)  
The Influence of Snow Depth on Soil Frost Penetration Depth.  
[M.S.]

## Publications of the Minnesota Extension Service

### Soil

The Center for Agricultural Impacts on Water Quality. (1987)  
AG-MI-3304

Nitrogen Fertilization and Possible Relationship to Groundwater  
(A Review of Research in the Soil Science Department,  
University of Minnesota). (1985)  
AG-FO-2734

Preventing Pollution Problems from Lawn and Garden Fertilizers.  
(1986)  
AG-FS-2923

### Ag. Engineering

Center Pivots and Wetlands. (1986)  
AG-FO-3009

Chlorination of Private Water Supplies. (1971)  
AG-FO-1319

Drinking Water Quality in Minnesota. (1985)  
AG-FO-0814

Driving a Well Point. (1985)  
AG-FS-0951

Feedlot Regulations for the Poultry and Livestock Industries. (1987)  
AG-FS-0639

Get to Know your Septic Tank. (1988)  
AG-FO-0639

How to Run a Percolation Test. (1985)  
AG-FO-0583

Iron in Drinking Water. (1970)  
AG-FO-1318

Irrigation Scheduling: Checkbook Method. (1986)  
AG-FO-1322

Understanding Nitrogen and Agricultural Chemicals in the  
Environment. (1987)

Water Quality for Livestock and Poultry. (1984)  
AG-FO-1864

### 4-H Youth Development

Geology. (1975)  
4H-FO-0324

#### 4-H Youth Development (Cont'd)

Geology Record. (1978)  
4H-FO-0323

Our World of Water. (1978)  
4H-BU-0328

Our World of Water (Record). (1978)  
4H-FO-0327

#### Farm Management

Economic Value of Irrigation for the Swift County Economy. (1982)  
AG-FO-0429

Irrigation Crop-Share and Cash Rental Arrangements for Your Farm.  
(1984)  
AG-BU-2389

Irrigation Crop-Share or Crop-Share-Cash Farm Lease. (1980)  
AG-FO-3432

#### Horticulture

Drought and the Urban Landscape. (1988)  
AG-FO-3548

Watering Lawns and Other Turf. (1987)  
AG-FS-2364

Agricultural Non-Point Pollution. (1987)  
AG-CS-3016

#### Human Shelter

Basement Moisture Problems. (1983)  
HE-FS-0439

Radon Facts for House Sellers and Buyers. (1988)  
HE-FS-3533

Radon Issues in House Buying and Selling. (1988)  
HE-FO-3532

Water Conservation Checklist for the Home. (1988)  
HE-MI-3555

#### Renewable Resources

Groundwater Pollution Prevention in Southeast Minnesota's  
Karst Region. (1982)  
CD-BU-0547

Community and Economic Development

Private Farm/Family Well Analysis Program (Wells) Version 1.1. (1987)  
CO-CS-2834

Miscellaneous

Clean Water - Everybody's Concern. (1988)

Minnesota Water Problems. (1977)  
CD-SS-4446

Town and Country Sewage Treatment. (1980)  
Extension Bulletin 304

Pesticides in the Environment. (1975)  
AG-SS-4497

Protecting the Environment from Pesticides. (1975)  
AG-SS-4535

Garvin Brook Clean Water Project. (1983)  
AG-SS-1897

Hazardous Waste is Everybody's Problem. (1980)  
AG-SS-4300

Runoff: Land Use and Water Quality. (1978)  
AG-FM-5153

Secrets of Limestone Groundwater. (1979)  
AG-FM-5165

Water Movement in the Soil. (1962)  
AG-FM-5239

The Aging Lakes. (1971)  
CD-FM-4753

Agriculture and the Environment. (1970)  
CD-SS-4013

Groundwater Pollution in Southeast Minnesota's Karst Region. (1984)  
CD-SS-1959

Publications of the Water Resources Research Center

- Bakovil, I.L. and Nieber, J.L. (1987)  
Modeling Soil Water Variability.  
Special Report No. 14
- Brown, D.A., Gersmehl, C.A., Drake, J. and Skaggs, R.H. (1987)  
Crop Production Response to Moisture Supply in Minnesota.  
Special Report No. 9
- Gersmehl, C., Drake, T. and Brown D. (1986)  
Minnesota Water: A Geographical Perspective.  
Public Report No. 4
- Goyal, S.A. and Robinson, R.A. (1988)  
Groundwater Pollution by Human and Animal Enteric Viruses.  
Project Technical Report No. 127
- Jensen, J.E. (1981)  
The Relationship of Artificial Drainage to Soils in  
Blue Earth County, Minnesota.  
Special Report No. 2
- Johnson, B.S., Blake, G.R. and Nelson, W.W. (1983)  
Midseason Soil Water Recharge for Corn in the  
Northwestern Corn Belt.  
Project Technical Report No. 113
- Kanivetsky, R. and Palen, B. (1983)  
Ground Water Recharge Rates in Minnesota as Related to  
Precipitation,  
Project Technical Report No. 116
- Knoch, B.C., Slack, D.C. and Larson C.I. (1983)  
Modeling Direct Recharge of Surficial Aquifers.  
Project Technical Report No. 115
- Ljungkul, J.E. and Baker, D.G. (1982)  
An Experimental Investigation of Evapotranspiration Methods.  
Project Technical Report No. 112
- Lundquist, J.B. (1975)  
A Primer on Limnology.  
Public Report No. 1
- Maier, W.J. (1987)  
On Site Biodegradation of Organic Pollutants in Contaminated  
Soils and Groundwater.  
Project Technical Report No. 123

- Moore, J.D. and Larson, C.I. (1979)  
Effects of Drainage Projects on Surface Runoff from Small  
Depressional Watersheds in the North Central Region.  
Project Technical Report No. 99
- Pfannkach, H.O. (1983)  
Hydrocarbon Spills: Their Retention in the Subsurface and  
Propogation into Shallow Aquifers.  
Project Technical Report No.
- Pfannkach, H.O. (1975)  
Study of Criteria and Models Establishing Optimum Level of  
Hydrogeologic Information for Groundwater Basin Management.  
Project Technical Report No. 81
- Quinodoz, H.A.M. and Kinanidis, P.K. (1988)  
Estimation of Transmissivities, Heads, and Velocities in  
Steady-State Groundwater Modeling.  
Project Technical Report No. 126
- Rickson, R.E., Tichenor, P.J., Donohue, G.A. and Olien, C.E. (1979)  
Role of the Scientist Technician in Water Policy Decisions  
at the Community Level: A Study in Perspective Communications.  
Project Technical Report No. 79
- Singer, R.D., Osterholm, M.J. and Straub, C.P. (1982)  
Ground Water Quality in Southeastern Minnesota.  
Project Technical Report No. 109
- Straub, C.P., Goppers, V.M. and DuChene, A. (1977)  
Water Quality Status and Trends in Minnesota-Indices for Water  
Supply and Ground Water Pollution.  
Project Technical Report No. 95
- Swerman, R.R., Baker, D.A. and Skaggs, R.H. (1987)  
Minnesota Drought.  
WRRRL Special Report No. 15
- Walton, W.C. (1973)  
Inventory of Water Resources Research Conducted in  
Minnesota-1963 through 1972.  
Project Technical Report No. 65
- Walton, W.C. (1966)  
Lists of References and Selected Books Bearing on  
Water Resources in Minnesota.  
Project Technical Report No. 4
- Walton, W.C. (1975)  
Minnesota's Water Resources: A Primer.  
Public Report No. 2

- Walton, W.C. (1974)  
Understanding the Water Resources Research Center, Graduate  
School, University of Minnesota.  
Project Technical Report No. 73
- WRRRC (1987)  
Directory of Water Resources Expertise in Minnesota  
Universities and Colleges.  
Special Report No. 8
- WRRRC (1975)  
Proceedings: 8th Annual Water Resources Seminar  
Groundwater Resources and Development.  
Public Report No. 87
- WRRRC (1971)  
Publications Related to Water Resources Research Center  
Projects, 1965-1971. Abstract-Index.  
Project Technical Report No. 32

Publications of the U.S. Bureau of Mines

Leonard-Mayer, P.J. (1984)  
A Surface Resistivity Method for Measuring  
Hydrologic Characteristics of Jointed Formations.

Publications of the U.S. Department of Agriculture

Irrigation Guide for Minnesota. (1977)

Water Requirements and Issues in the Minnesota Agriculture  
System. (1977)

Soil Conservation Service (1988)  
Water Resources Projects Status Report.

Willson, D.H. and Erdman, V.R. (1981)  
The Economy and Irrigating Medium and Fine Textured Soils  
in Minnesota.

MISCELLANEOUS GROUND WATER AND GEOLOGY PUBLICATIONS

- Born, S.M., Smith, S.A. and Stephenson, D.A. (1974)  
The Hydrogeologic Regime of Glacial-Terrain Lakes,  
With Management and Planning Applications  
Upper Great Lakes Regional Commission
- Brugham, R.B. (1981)  
Chemistry of Lake Water and Groundwater in Areas of  
Contrasting Glacial Drifts in Eastern Minnesota  
Hydrobiologia Vo. 80, No. 1
- Dinovo, F. and Jaffe, M. (1984)  
Local Groundwater Protection - Midwest Region  
American Planning Assoc.
- Driscoll, F.G. (1986)  
Groundwater and Wells  
Johnson Division, St. Paul, MN 55112
- Environmental Protection Agency (1983)  
Water Management in Rural Lakes Areas  
EPA Region 5  
Final Generic EIS
- Gerwig, J.R. and Caldwell, A.C. (1979)  
Fertilizer Nitrogen Distribution Under Irrigation  
Between Soil, Plant (Maize) and Aquifer (Contamination,  
GW Pollution, MN)  
Journal of Env. Qual. Vol. 8, No. 3
- Great Lakes Basin Framework Study (1975)  
Appendix 3 Geology and Groundwater  
Appendix 6 Water Supply: Municipal, Industrial and Rural  
Appendix 15 Irrigation
- Hawkinson, C.F., Verry, E.S. and Elon, S. (1975)  
Specific Conductance Identifies Perched and Ground Water Lakes,  
North Central Forest Experiment Station, St. Paul, MN  
Research Paper No. NC-120.
- Kanivetsky, R. (1978)  
Design of a Groundwater Sampling Network for Minnesota  
USDOE GJBX-1 (78)
- Kanivetsky, R. (1979)  
Regional Approach to Estimating Groundwater Resources  
Papers-World Congress on Water Resources,  
Vol. 5, p. 2206-2213

- Maier, W.J., Gast D.G., Nelson W.W. and Anderson, C.T. (1976)  
 Carbon Contacts of Surface and Underground Waters in  
 South Central Minnesota  
 Journal of Env. Qual.  
 Vol. 5, No. 2, p 124-128
- Oberts, G.L. (1986)  
 Pollution Associated with Sand and Salt Applied to Roads  
 in Minnesota.  
 Water Resources Bulletin 22  
 P. 479-483
- Office of the Legislative Auditor (1987)  
 Water Quality Monitoring Evaluation Report 87-01.
- Ojakanagas, R.W. and Matsch, C.L. (1982)  
 Minnesota's Geology. University of Minnesota Press, Minneapolis.
- Pfannkuch, H.O. (1979)  
 Groundwater, Monitor System Design and Operation for a Pipeline  
 Break in Glacial Drift Deposits, Clearwater County, MN.  
 Conference Paper, AGU Fall Meeting 1979
- Pfannkuch, H.O. and Labnu, B.D. (1976)  
 Design and Optimization of Groundwater Monitoring Networks for  
 Pollution Studies.  
 Ground Water Vol. 14, No. 6, p. 455-462
- Rees, M. and Finklea, E. (1976)  
 A Needed Safeguard Against Pollution from Cu-Ni Mining  
 in Minnesota.  
 MPTRG
- Sansome, C.J. (1983)  
 Minnesota Underfoot. Voyaguers Press.  
 Bloomington, MN
- Schwartz, G.M. and Thiel, G.A. (1954)  
 Minnesota's Rocks and Waters.  
 University of Minnesota Press, Minneapolis, MN
- Schwartz, G. Ed. (1956)  
 Precambrian of Northeast Minnesota.  
 Guidebook Series Fieldtrip No. 1 GSA
- Siegal, D.I. (1981)  
 Groundwater and the Evolution of Patterned Mines,  
 Red Lake Peatlands, N. Minnesota.
- Steeler, J.H. and Morandi, C. (1983)  
 Groundwater Management and Protection: A Midwestern States  
 Policy Agenda.  
 National Conference of State Legislatures

- Straub, C.P., Goopers, V.M. and Singer, R.D. (1981)  
Water Quality Study, SW Minnesota Public Water Supplies.
- The Minnesota Project (1981)  
Model Ordinance for Groundwater Protection.  
P.O. Box 4, Preston, MN
- USACE (1977)  
Water Resources Development in Minnesota.
- United States Water Resources Council (1978)  
The Nation's Water Resources, 1975-2000,  
Upper Mississippi Region, Vol. 4
- Van Voast, W.A. and Novitzki, R.P. (1968)  
Groundwater Flow Related to Streamflow and Water Quality.  
WRR Vol. 4 No. 4
- Waelti, J. (19??)  
Understanding the Water Quality Controversy in Minnesota.

C. BIBLIOGRAPHIES

- U.S. Army Corps of Engineers (1980)  
List of Publications of the U.S. Army Corps of  
Engineers Waterways
- Directory of Great Lakes Educational Materials  
Public Info Services, IJC Great Lakes Regional Office  
P.O. Box 32859, Detroit, MI 48232
- Department of Health (1989)  
Bibliography on Groundwater
- DNR-Division of Waters (1989)  
Bibliography of Groundwater Education Materials  
and Curriculum Guides
- MN Pollution Control Agency (1984)  
Groundwater: A Compilation of Annotated References
- The Minnesota Project  
Groundwater Curriculum Materials
- Waste Management Board (1989)  
Waste Education Clearing House

Newsletters

AWG Newsletter

Association for Women Geoscientists

AWRA Newsletter

American Water Resources Association

The Conservation Mentor Newsletter

MN Association of Soil and Water Conservation Districts  
MN Association of Watershed District, Inc.  
Mn Board of Water and Soil Resources

EQB Monitor

MN Environmental Quality Board

Facets of Freshwater

Journal of Freshwater

U.S. Water News

Freshwater Foundation

The International Coalition Annual Report

The International Coalition  
Box 127, Moorhead, MN 56560

Minnesota Agriculture Magazine

Minnesota Agriculture in the Classroom  
90 West Plato Blvd., St. Paul, MN 55107

Minne Gram

Water Resources Research Center  
University of Minnesota

Minnesota Geological Survey Newsletter

Minnesota Geological Survey  
University of Minnesota

Minnesota Ground Water Association Newsletter

Minnesota Ground Water Association

Minnesota Ground Water Newsletter

MN Department of Health

The Technical Assistance Times

Minnesota Rural Water "Today"

Minnesota Rural Water Association  
Elbow Lake, MN 56531

Water Fact Sheet

United States Geological Survey

Minnesota Water Resources Summary  
U.S. Geological Survey

Construction Grants Memorandum  
MN Pollution Control Agency

Generator News  
MN Pollution Control Agency

Lake Watch  
MN Pollution Control Agency

Operator Training and Certification Bulletin  
MN Pollution Control Agency

Solid Waste Briefings  
MN Pollution Control Agency

Tire Tracks  
MN Pollution Control Agency

Seiche  
MN Sea Grant

Water Talk  
MN Department of Natural Resources  
Division of Waters

Facts and Issues  
League of Women Voters of Minnesota

Soil Survey Scene  
Ed. by Soil Science Dept. Specialists, University of Minnesota

Directories

Environmental Quality Board (1988)  
Minnesota Environmental Directory/1988

ADDRESSES AND PHONE NUMBERS

FEDERAL OFFICES

- USDA . . . . . (612) 349-3848  
Suite 100  
202 S. 2nd Street  
Minneapolis, MN 55401
- Soil Conservation Service. . . . . (612) 725-7677  
316 N. Robert Street  
St. Paul, MN 55101
- National Weather Service . . . . . (612) 725-6090  
Minneapolis-St. Paul International Airport  
Minneapolis, MN 55450
- U.S. Army Corps of Engineers . . . . . (612) 725-7506  
180 E. Kellogg Boulevard  
St. Paul, MN 55101
- Environmental Protection Agency. . . . . (312) 353-2000  
Region V Office  
230 S. Dearborn Street  
Chicago, IL 60604
- U.S. Geological Survey . . . . . (612) 725-3502  
Minnesota District Office  
180 E. Kellogg Boulevard  
St. Paul, MN 55101
- U.S. Bureau of Mines . . . . . (612) 725-4610  
5629 Minnehaha Avenue S.  
Minneapolis, MN

Mailing Address for all USGS Publications

USGS  
Books and Open File Reports Section  
Federal Center  
Box 25425  
Denver, Colorado 80225

STATE OFFICES

- Department of Agriculture. . . . . (612) 297-2200  
90 West Plato Boulevard  
St. Paul, MN 55107
- MN Environmental Education Board . . . . . (612) 296-2360  
Box #5  
DNR Building  
500 Lafayette Road  
St. Paul, MN 55155
- Environmental Quality Board. . . . . (612) 296-2603  
300 Centennial Building  
658 Cedar Street  
St. Paul, MN 55155
- Minnesota Geological Survey. . . . . (612) 627-4780  
2642 University Avenue W.  
St. Paul, MN 55114-1057
- Department of Health . . . . . (612) 623-5100  
717 Delaware Street S.E.  
Minneapolis, MN 55440
- Metropolitan Council . . . . . (612) 291-6359  
300 Metro Square Building  
7th and Robert Streets  
St. Paul, MN 55101
- Department of Natural Resources. . . . . (612) 296-4800  
DNR-Division of Waters  
500 Lafayette Road  
St. Paul, MN 55155-4032
- MN Pollution Control Agency . . . . . (612) 296-7373  
520 Lafayette Road  
St. Paul, MN 55101
- State Planning Agency . . . . . (612) 296-2233  
310 Centennial Building  
658 Cedar Street  
St. Paul, MN 55155
- Department of Transportation. . . . . (612) 296-3131  
Transportation Building  
St. Paul, MN 55155
- Waste Management Board. . . . . (612) 649-5750  
1350 Energy Lane  
St. Paul, MN 55108
- Board of Water and Soil Resources . . . . . (612) 296-3767  
90 West Plato Blvd.  
St. Paul, MN 55107

STATE AGENCY REGIONAL OFFICES

Health, Department of

Bemidji District Office . . . . . (218) 755-3820  
1819 Bemidji Avenue  
Bemidji, MN 56601

Duluth District Office. . . . . (218) 723-4642  
320 West Second Street  
Duluth, MN 55807

Fergus Falls District Office. . . . . (218) 739-7585  
Box 675  
Hospital Building  
Fergus Falls, MN 56537

Mankato District Office . . . . . (507) 389-2501  
75 Navaho Avenue  
Mankato, MN 56001

Marshall District Office. . . . . (507) 537-7151  
Box 1065  
Social Sciences Building  
Southwest State University  
Marshall, MN 56258

Rochester District Office . . . . . (507) 285-7289  
2116 Campus Drive Southeast  
Rochester, MN 55904

Central District Office . . . . . (612) 255-4216  
215 North Benton Drive  
Sauk Rapids, MN 56379

Natural Resources, Department of

Region I. . . . . (218) 755-3955  
2115 Birchmont Beach Road N.E.  
Bemidji, MN 56601

Region II . . . . . (218) 327-1755  
1201 East Highway 2  
Grand Rapids, MN 55744

Region III. . . . . (218) 828-2560  
Box 648  
424 Front Street  
Brainerd, MN 56401

Region IV . . . . . (507) 354-2196  
Box 756  
Highway 15 South  
New Ulm, MN 56073

Region V. . . . . (507) 285-7420  
2300 Silver Creek Road Northeast  
Rochester, MN 55904

Region VI . . . . . (612) 296-3572  
1200 Warner Road  
St. Paul, MN 55106

Pollution Control Agency

Region I. . . . . (218) 723-4660  
Room 704  
Duluth Government Services Center  
320 West 2nd Street  
Duluth, MN 55802

Region II . . . . . (218) 828-2492  
Suite 3  
304 East River Road  
Brainerd, MN 56401

Region III. . . . . (218) 847-1519  
116 East Front Street  
Detroit Lakes, MN 56501

Region IV . . . . . (507) 537-7146  
109 South 5th Street  
Marshall, MN 56258-1268

Region V. . . . . (507) 285-7343  
Suite 140  
1200 South Broadway  
Rochester, MN 55901

Regional Environmental Education Councils (REEC)

REECs 6E, 7E, 9, 10 and 11. . . . . (612) 296-2368  
Box #5  
DNR Building  
500 Lafayette Road  
St. Paul, MN 55155-4005

REECs 5 and 7W. . . . . (218) 828-2663  
1601 Minnesota Avenue  
Brainerd, MN 56401

REECs 4, 6W, and 8. . . . . (612) 589-1330  
701 Iowa Avenue  
Morris, MN 56267

REECs 1, 2, and 3 . . . . . (218) 327-4445  
1201 East Highway 2  
Grand Rapids, MN 55744

UNIVERSITY OF MINNESOTA

Gray Freshwater Biological Institute . . . . . (612) 471-8476  
University of Minnesota  
2500 Shadywood Road  
P.O. Box 90  
Navarre, MN 55392

Limnological Research Center . . . . . (612) 624-7005  
220 Pillsbury Hall  
University of Minnesota  
Minneapolis, MN

Minnesota Extension Service. . . . . (612) 625-1915  
University of Minnesota  
St. Paul, MN 55180

St. Anthony Falls Hydraulic Laboratory . . . . . (612) 627-4010  
Mississippi River at 3rd Avenue S.E.  
Minneapolis, MN 55414

Water Resources Research Center . . . . . (612) 624-9282  
866 Biological Science Center  
University of Minnesota  
St. Paul, MN 55108

University of Minnesota (General). . . . . (612) 625-5000  
Ag. Engineering. . . . . (612) 625-7733  
C.E. . . . . (612) 625-5522  
Forest Resources . . . . . (612) 624-3400  
Geology and Geophysics . . . . . (612) 624-1333  
Public Health. . . . . (612) 624-6669  
Soil Science . . . . . (612) 625-1244

CITIZENS ORGANIZATIONS

American Water Resources Association . . . . . (612) 725-7841  
c/o USGS  
702 P.O. Building  
St. Paul, MN 55101

American Water Works Association . . . . . (612) 881-5811  
North Central Section  
2215 West Old Shakopee Road  
Bloomington, MN 55431

Freshwater Foundation/Freshwater Society . . . . . (612) 472-8407  
P.O. Box 90  
2500 Shadywood Road  
Navaree, MN 55392

Geological Society of Minnesota. . . . . (612) 644-6429  
1711 Marshall Avenue  
St. Paul, MN

MN Association of Soil and Water Conservation  
Districts. . . . . (612) 454-8994

2000-450 (612)  
2001-450 (612)  
2002-450 (612)  
2003-450 (612)  
2004-450 (612)  
2005-450 (612)  
2006-450 (612)

WATERSHED DISTRICTS

Water and Soil Resources, Board of. . . . . . (612) 296-3767  
90 West Plato Boulevard  
St. Paul, MN 55107

Bear Valley Watershed District  
Belle Creek Watershed District  
Buffalo Creek Watershed District  
Buffalo-Red River Watershed District  
Carnelian-Marine Watershed District  
Clearwater River Watershed District  
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Coon Creek Watershed District  
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Crooked Creek Watershed District. . . . . (507) 724-2136  
Agricultural Service Center  
P.O. Box 72  
Caledonia, MN 55921

High Island Watershed District  
Joe River Watershed District  
Kanananzi-Little Rock Watershed District  
Lac Qui Parle-Yellow Bank Watershed District  
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Prior Lake-Spring Lake Watershed District . . . . . (612) 447-4166  
Scott-Rice Telephone Building  
4690 Colorado Street  
Prior Lake, MN 55372

Ramsey-Washington Metro Watershed District. . . . . (612) 779-2207  
2785 White Bear Avenue  
Suite 210  
Maplewood, MN 55109

Red Lake Watershed District

Rice Creek Watershed District . . . . . (612) 483-0634  
Suite 117  
3585 Lexington Avenue North  
Arden Hills, MN 55126

Riley-Purgatory Creek Watershed District. . . . . (612) 474-6091  
Eden Prairie City Hall  
8950 Eden Prairie Road  
Eden Prairie, MN 55344

Roseau River Watershed District . . . . . (218) 463-2730  
City Hall  
Roseau, MN 56751

Sand Hill River Watershed District  
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LIBRARIES

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300 Nicollet Mall  
Minneapolis, MN 55410

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U.S. Environmental Protection Agency  
6102 Congdon Boulevard  
Duluth, MN 55804

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University of Minnesota  
203 Green Hall  
1530 North Cleveland Avenue  
St. Paul, MN 55108

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University of Minnesota  
2500 Shadywood Road  
P.O. Box 100  
Navarre, MN 55392

Health Library. . . . . (612) 623-5100  
Minnesota Department of Health  
717 Delaware Street Southeast  
Minneapolis, MN 55440

Lorenz G. Straub Memorial Library . . . . . (612) 623-5100  
St. Anthony Falls Hydraulic Laboratory  
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309 - 19th Avenue South  
University of Minnesota  
Minneapolis, MN 55455

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300 Metro Square Building  
7th and Robert Streets  
St. Paul, MN 55101

Pollution Control Agency Library. . . . . (612) 296-7719  
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