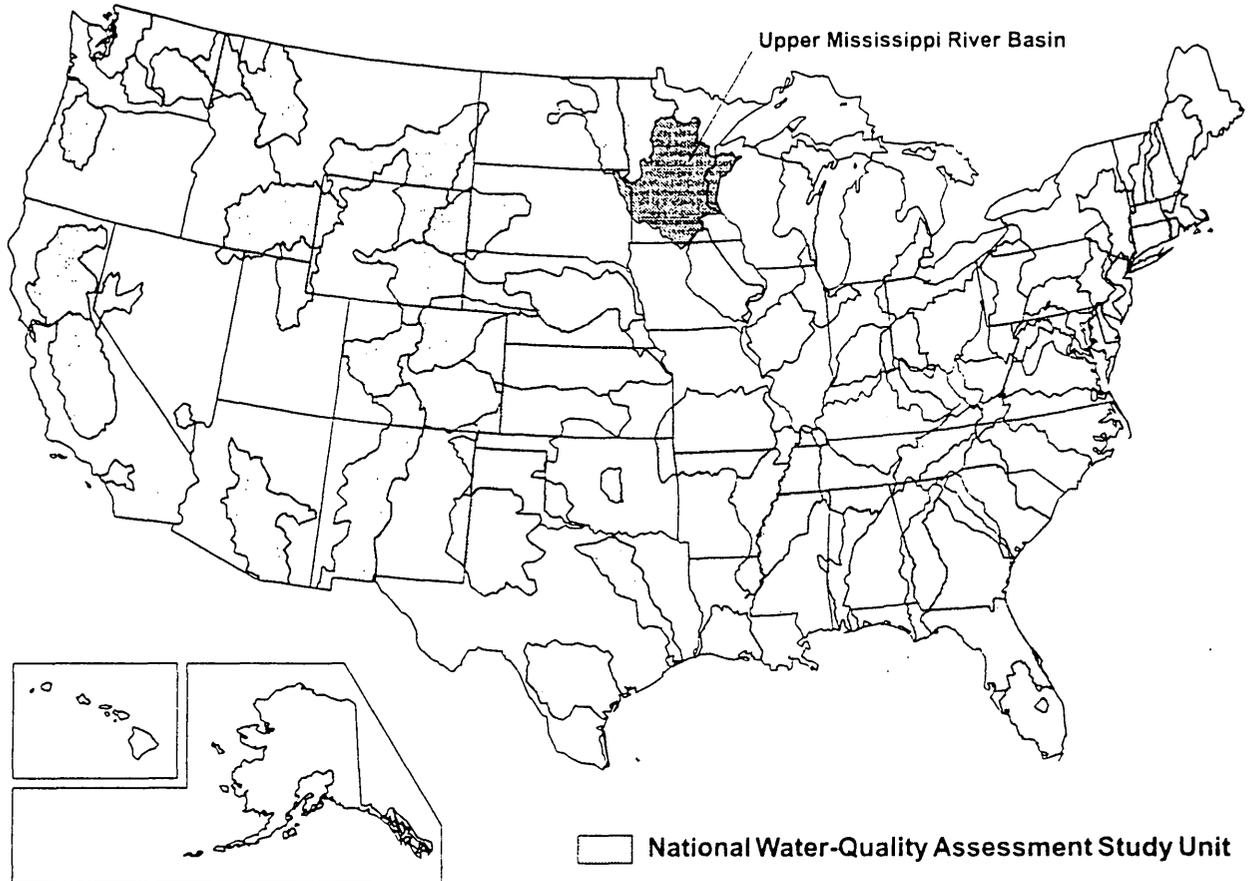


Water-Quality Assessment of Part of the Upper Mississippi River Basin, Minnesota and Wisconsin— Compilation of Related Literature

U.S. Geological Survey Open-File Report 96-579



Contribution from the National Water-Quality
Assessment Program



Water-Quality Assessment of Part of the Upper Mississippi River Basin, Minnesota and Wisconsin— Compilation of Related Literature

By J.R. Stark, and G.L. Amos

U.S. Geological Survey Open-File Report 96-579

**Contribution from the National Water-Quality
Assessment Program**



**Mounds View, Minnesota
1996**

U.S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For additional information write to:

District Chief
U.S. Geological Survey
2280 Woodale Drive
Mounds View, MN 55112

Copies of this report can be purchased from:

U.S. Geological Survey
Branch of Information Services
Box 25286
Denver Federal Center
Denver, CO 80225

Foreword

The mission of the U.S. Geological Survey (USGS) is to assess the quantity and quality of the earth resources of the Nation and to provide information that will assist resource managers and policy makers at Federal, State, and local levels in making sound decisions. Assessment of water-quality conditions and trends is an important part of this overall mission.

One of the greatest challenges faced by water-resources scientists is acquiring reliable information that will guide the use and protection of the Nation's water resources. That challenge is being addressed by Federal, State, interstate, and local water-resource agencies and by many academic institutions. These organizations are collecting water-quality data for a host of purposes that include: compliance with permits and water-supply standards; development of remediation plans for a specific contamination problem; operational decisions on industrial, wastewater, or water-supply facilities; and research on factors that affect water quality. An additional need for water-quality information is to provide a basis on which regional and national-level policy decisions can be based. Wise decisions must be based on sound information. As a society we need to know whether certain types of water-quality problems are isolated or ubiquitous, whether there are significant differences in conditions among regions, whether the conditions are changing over time, and why these conditions change from place to place and over time. The information can be used to help determine the efficacy of existing water-quality policies and to help analysts determine the need for and likely consequences of new policies.

To address these needs, the Congress appropriated funds in 1986 for the USGS to begin a pilot program in seven project areas to develop and refine the National Water-Quality Assessment (NAWQA) Program. In 1991, the USGS began full implementation of the program. The NAWQA Program builds upon an existing base of water-quality studies of the USGS, as well as those of other Federal, State, and local agencies. The objectives of the NAWQA Program are to:

- Describe current water-quality conditions for a large part of the Nation's freshwater streams, rivers, and aquifers.
- Describe how water quality is changing over time.
- Improve understanding of the primary natural and human factors that affect water-quality conditions.

This information will help support the development and evaluation of management, regulatory, and monitoring decisions by other Federal, State, and local agencies to protect, use, and enhance water resources.

The goals of the NAWQA Program are being achieved through ongoing and proposed investigations of 60 of the Nation's most important river basins and aquifer systems, which are referred to as study units. These study units are distributed throughout the Nation and cover a diversity of hydrogeologic settings. More than two-thirds of the Nation's freshwater use occurs within the 60 study units and more than two-thirds of the people served by public water-supply systems live within their boundaries.

National synthesis of data analysis, based on aggregation of comparable information obtained from the study units, is a major component of the program. This effort focuses on selected water-quality topics using nationally consistent information. Comparative studies will explain differences and similarities in observed water-quality conditions among study areas and will identify changes and trends and their causes. The first topics addressed by the national synthesis are pesticides, nutrients, volatile organic compounds, and aquatic biology. Discussions on these and other water-quality topics will be published in periodic summaries of the quality of the Nation's ground and surface water as the information becomes available.

This report is an element of the comprehensive body of information developed as part of the NAWQA Program. The program depends heavily on the advice, cooperation, and information from many Federal, State, interstate, Tribal, and local agencies and the public. The assistance and suggestions of all are greatly appreciated.

Robert M. Hirsch
Chief Hydrologist

Contents

Abstract.....	1
Introduction.....	1
Alphabetical listing by author.....	4
General hydrology.....	144
Geology and ground water.....	153
Surface water and water quality.....	206
Biology.....	248
Miscellaneous.....	266

Illustrations

Figure 1. Location of the Upper Mississippi River Basin NAWQA study unit, focused study area, hydrography, selected towns, and major cities.....	3
---	---

Water-Quality Assessment of Part of the Upper Mississippi River Basin, Minnesota and Wisconsin— Compilation of Related Literature

By James R. Stark, and Ginger L. Amos

Abstract

The U.S. Geological Survey began full-scale implementation of the National Water-Quality Assessment (NAWQA) Program in 1991. The purposes of NAWQA are to describe the status and trends in the quality of the Nation's water resources and aquatic ecosystems, and to determine factors affecting water quality at local, regional, and national scales. The Upper Mississippi River (UMIS) NAWQA study unit, which includes all of the surface drainage to the Mississippi River Basin upstream from Lake Pepin, encompasses 47,000 mi². The study characterizes the geographic and seasonal distribution of water quality and aquatic biota in relation to anthropogenic activities and natural features. The initial phase of the UMIS study, during 1994-99, is focused on an area in Minnesota and Wisconsin that includes the seven-county Twin Cities (Minneapolis and St. Paul) metropolitan area. This report is a compilation of selected sources of information that are being used to aid in understanding water-quality issues and processes that form the basis of the sampling design for the study. This literature review includes sources of information about geology, surface- and ground-water hydrology, water quality, and aquatic biology and ecology.

Introduction

The U.S. Geological Survey (USGS) began full scale implementation of the National Water Quality Assessment (NAWQA) Program in 1991. The purposes of the NAWQA Program are to describe the status and trends in the quality of the Nation's water resources and aquatic ecosystems, and to determine factors affecting water quality. Study-unit investigations are significant components of the program. Study units are made up of hydrologic systems that include parts of most major river basins and aquifer systems in the United States.

The Upper Mississippi River (UMIS) NAWQA study unit includes all of the surface drainage to the Mississippi River Basin upstream from Lake Pepin and encompasses 47,000 mi² (fig. 1). The Upper Mississippi River Basin was selected as a study unit because water quality of the Mississippi River, the largest river in the Nation, is of national concern.

The purposes of the UMIS NAWQA study are to describe the status and trends in quality of water resources and to provide an understanding of factors affecting water-quality and ecosystem status within the study unit. During the initial phase of the study (1994-99), emphasis is focused on a 19,500 mi² area in Minnesota and Wisconsin that includes the seven-county Twin Cities (Minneapolis and St. Paul) metropolitan area. The study area includes the UMIS drainage from Lake Pepin upstream to include all of the St. Croix River Basin and to points on the Minnesota (Jordan, Minnesota) and Mississippi (Royalton, Minnesota) Rivers where long-term water-quality data are available (fig. 1). During the initial phase of the study, the focus is on the most prominent water-quality and ecosystem issues, principally the effects of the Twin Cities metropolitan area on water quality and aquatic ecosystems. The study characterizes the geographic and seasonal variations of water quality, aquatic biota, and aquatic-habitat conditions in relation to anthropogenic activities and natural features. Pesticides, nutrients, volatile-organic chemicals, and biological conditions are of specific interest to NAWQA from a national perspective.

This report is a compilation of selected published information on the geology, surface- and ground-water hydrology, water quality, and aquatic biology and ecology of the UMIS study unit. Water quality in the study unit is affected by natural and anthropogenic factors. Natural factors include climate, physiography, geology, soils, topography, vegetation and aquatic biology. Anthropogenic factors include hydrologic modification, point- and nonpoint-source contaminant discharges, and changes to land use and to land cover.

Water-quality issues of local importance, and important to the program at a national level, have been defined by the study's liaison committee composed of representatives from Federal, state, and local agencies, private industry, and by NAWQA Program leadership. These issues have guided the literature review. Important sources of information include the Metropolitan Council Environmental Services, Minnesota Department of Agriculture, Minnesota Department of Health, Minnesota Department of Natural Resources, Minnesota Geological Survey, Minnesota Pollution Control Agency, University of Minnesota, U.S. Geological Survey, Wisconsin Department of Natural Resources, and Wisconsin Geological Survey. The list of publications completed for this effort consists of approximately 2,000 citations. Literature data bases searched include Aquatic Sciences and Fisheries Abstracts, Biosis, Compendex Plus, Dissertation Abstracts, Enviroline, Georef, Pollution Abstracts, and Water Resources Abstracts. The list of citations is available at the UMIS Home Page on the World Wide Web at: "<http://www.mn.cr.usgs.gov/umis/index.html>".

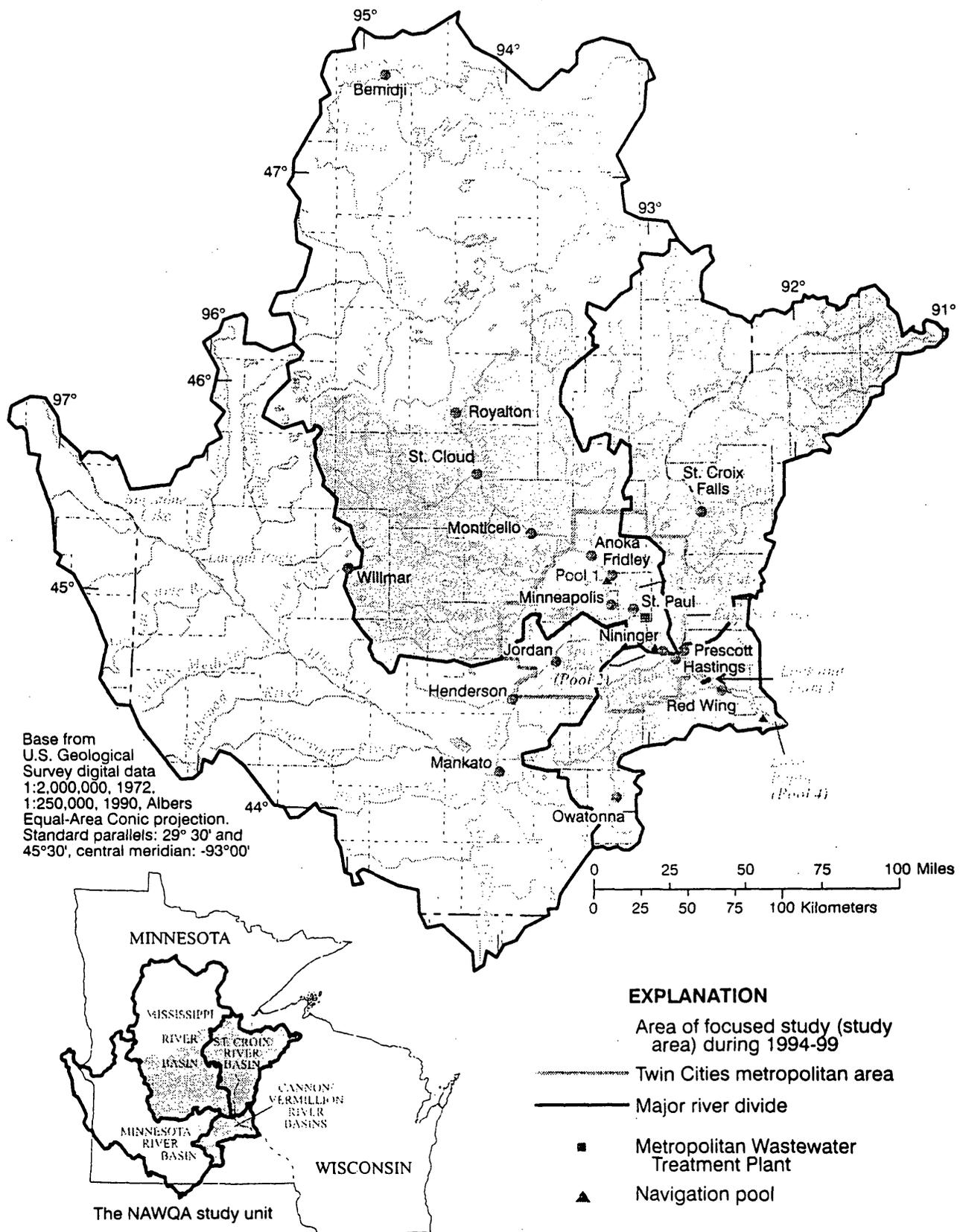


Figure 1.--Location of the Upper Mississippi River Basin NAWQA study unit, focused study area, hydrography, selected towns, and major cities.

Alphabetical Listing by Author

- Aadland, L.P., 1989, Microhabitat criteria for selected stream fishes and methodological considerations for instream flow studies, Waterville, Minnesota: Minnesota Department of Natural Resources, 75 p.
- Ables, J.H., Jr., 1979, Vortex problem at intake, lower St. Anthony Falls Lock and Dam, Mississippi River, Minneapolis, Minnesota—Hydraulic model investigation: Army Engineer Waterways Experiment Station, Vicksburg, Massachusetts, Technical Report HL-79, 69 p.
- Adamson, W.W., 1977, Who owns a river? A story of environmental action: Dillon Press, Minneapolis, Minnesota, 95 p.
- Adolphson, D.G., Ruhl, J.R., and Wolf, R.J., 1981, Designation of principal water-supply aquifers in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 81-51, 19 p.
- Afifi, A., Doe, B.R., Sims, P.K., and Delevaux, M.H., 1983, U-Th-Pb isotopic chronology of sulfide ores and rocks in the early Proterozoic metavolcanic belt of northern Wisconsin [abs.]: Canadian Geophysical Union—Program with abstracts joint annual meeting, May 11-13, 1983, Victoria, British Columbia, p. A1.
- Agency for Toxic Substances and Disease Registry, 1988, Health assessment for Waste Disposal Engineering, Inc. sanitary landfill site, Andover, Minnesota: Agency for Toxic Substances and Disease Registry, Atlanta, Georgia, 12 p. [Available from the National Technical Information Service, Springfield, VA 22161, as PB90-100306.]
- _____, 1989, Health Assessment for South Andover, Andover, Minnesota: Agency for Toxic Substances and Disease Registry, Atlanta, Georgia, 10 p. [Available from the National Technical Information Service, Springfield, VA, 22161, as PB90-107350]
- _____, 1989, Health Assessment for Whitaker Corporation National Priorities List (NPL) Site, Minneapolis, Hennepin County, Minnesota: Agency for Toxic Substances and Disease Registry, Atlanta, Georgia, 13 p. [Available from the National Technical Information Service, Springfield, VA 22161, as PB90-100314/AS.]
- _____, 1990, Hexachlorobenzene: Agency for Toxic Substances and Disease Registry Public Health Statement, Atlanta, Georgia, 3 p.
- Ahlen, J.L., 1952, Regional stratigraphy of the Jordan Sandstone in west central Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Aiken, G.R., Capel, P.D., Furlong, E.T., Hult, M.F., and Thorn, K.A., 1991, Mechanisms controlling the transport of organic chemicals in subsurface environments. *in* Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program-Proceedings of the technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 633-637.
- Akin, P.D., and Jones, J.R., 1952, Geology and ground-water resources of the Cloquet area, Carlton County, Minnesota: Minnesota Department of Conservation, Division of Waters Bulletin 6, 63 p.
- Albin, D.R., 1987, Minnesota ground-water quality: U.S. Geological Survey Open-File Report 87-733, 10 p.

- _____, 1988, U.S. Geological Survey ground-water studies in Minnesota: U.S. Geological Survey Open-File Report 88-127, 2 p.
- Albin, D.R., and Breummen, L.B., 1987, Minnesota ground-water quality, *in* Moody, D.W., Carr, Jerry, Chase, E.B., and Paulson, R.W., compilers, National Water Summary 1986: U.S. Geological Survey Water-Supply Paper 2325, p. 313-320.
- Alexander, E.C., Jr., and Alexander, S.C., 1991, A chemical and isotopic survey of the age of ground waters in the Paleozoic karst aquifers of southeastern Minnesota [abs.], *in* Peacock, Norma, National Speleological Society 1988 annual meeting: National Speleological Society Bulletin v. 53, no. 1, p. 22.
- Alexander, E.C., Jr., Alexander, S.C., and Lively, R.S., 1987, Recharge of the Mt. Simon/Hinckley aquifer—Responses to climate change and water use: EOS, Transactions, American Geophysical Union, v. 68, no. 44, p. 1270.
- Alexander, E.C., Jr., Guo, Lifeng, Regan, C.P., and Landon, M.K., 1992, Geochemistry of ground water in an outwash aquifer under agricultural fields at the Management Systems Evaluation Area (MSEA) near Princeton, Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 73, no. 43, p. 158.
- Alexander, E.C., Jr., and Milske, J.A., 1986, Dye tracing studies of the Fountain, Minnesota sewage system, *in* Proceedings of the environmental problems in karst terranes and their solutions conference: Water Well Journal Publishing Company, Dublin, Ohio, p. 249-262.
- Allen, K.O., and Hardy, J.W., 1980, Impacts of navigational dredging on fish and wildlife—A literature review: U.S. Fish and Wildlife Service FWS/OBS-80/07, 88 p.
- Allie, B., Nelson, C.L., and Knutson, K.M., 1985, Modeling the Horseshoe Chain of Lakes [abs.], Abstracts for 53rd annual Minnesota Academy of Science Meeting: Journal of the Minnesota Academy of Science, v. 50, no. 2, p. 17.
- Allred, E.R., 1974, Subsurface irrigation with heated water, its management and application toward reduction of thermal pollution problems: University of Minnesota, Minneapolis, Minnesota, 20 p.
- Allred, E.R., and Gilley, J.R., 1974, Use of thermally enriched water for growing field crops in Minnesota: University of Minnesota, Minneapolis., Minnesota, 6 p.
- Allred, E.R., Read, P.E., and Gilley, J.R., 1973, Use of waste heat for soil warming and irrigation in northern climates: 1973 winter meeting of American Society of Agricultural Engineers, Chicago, Illinois, December 11-14, 1973, Paper 73-2544, 8 p. [Available from the National Technical Information Service, Springfield, VA 22161, as PB-240 181.]
- Almendinger, J.C., and Epp, Al, 1991, Washington County biological survey—Report and map: Minnesota Department of Natural Resources, 1 map, scale 1:75,000.
- Almendinger, J.E., 1991, Relation of nitrate concentrations in ground water to agricultural land use and soil type in Dakota County, Minnesota: U.S. Geological Survey Open-File Report 91-235, 2 p.

- Almendinger, J.E., and Leete, Jeanette, 1994, Hydrology, geochemistry, and substrate of calcareous fens in the Minnesota River Basin [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 7.
- Almendinger, J.E., and Mitton, G.B., 1995, Hydrology and relation of selected water-quality constituents to selected physical factors in Dakota County, Minnesota, 1990-91: U.S. Geological Survey Water-Resources Investigations Report 94-4207, 26 p.
- Ambrose, R.B., 1987, Modeling volatile organics in the Delaware estuary: Journal of Environmental Engineering, v. 113, no. 4, p. 703-721.
- Ammerman, H., Faber, N.D., 1975, A comparative age and growth study of the white bass (*Morone chrysops*) collected in 1974 from Cedar Lake and the St. Croix River in Wisconsin: St. Mary's College, Winona, Minnesota, 54 p.
- Amrhein, C., and Strong, J.E., 1990, Effect of deicing salts on trace metal mobility in roadside soils: Journal of Environmental Quality, v. 19, no. 4, p. 765-772.
- Amrhein, C., Strong, J.E., and Mosher, P.A., 1992, Effect of deicing salts on metal and organic matter mobilization in roadside soils: Environmental Science and Technology, v. 26, no. 4, p. 703-709.
- Andelman, J.B., 1990, Total exposure to volatile organic compounds in potable water. *in* Significance and Treatment of Volatile Organic Compounds in Water Supplies: Lewis Publishers, Inc., Chelsea, Michigan, p. 485-504.
- Anderson, D.B., and Burmeister, I.L., 1970, Floods of March-May 1965 in the Upper Mississippi River Basin: U.S. Geological Survey Water-Supply Paper 1850-A, p. A1-A448.
- Anderson, D.B., and Soroka, L.G., 1980, Glacial drift stratigraphy—New London-Spicer area, Minnesota: Journal of the Minnesota Academy of Science, v. 46, no. 1, p. 6-8.
- Anderson, D., and Proctor, B., 1991, Contaminants associated with suspended solids in the Minnesota River system [abs.]: 201st American Chemical Society National Meeting, Atlanta, Georgia, April 14-19, 1991, v. 201, no. 1, p. 41.
- Anderson, D., Earl C., and Lime, D.W., 1978, An annotated bibliography on river recreation: North Central Forest Experiment Station, University of Minnesota, Minneapolis, Minnesota, 62 p.
- Anderson, D.B., 1973, Drainage ditch inventory, State of Minnesota: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 230 p.
- Anderson, D.B., and Schwob, H.H., 1970, Floods of April-May 1969 in upper midwestern United States: U.S. Geological Survey Open-File Report, 555 p.
- Anderson, D.D., Whiting, R.J., and Jackson, B., 1981, An assessment of water-quality impacts of maintenance dredging on the Upper Mississippi River in 1978: U.S. Army Corps of Engineers, St. Paul District, 171 p.

- Anderson, D.D., Whiting, R.J., and Nosek, J., 1981, An assessment of water-quality impacts of maintenance dredging on the Upper Mississippi River in 1979: U.S. Army Corps of Engineers, St. Paul District, 93 p.
- Anderson, H.W., Jr., 1980, Minnesota standards for coding ground-water site inventory data: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 57 p.
- _____, 1985, Impact of agriculture on quality of water in surficial sand-plain aquifers in central Minnesota [abs.]: Annual Midwest Ground Water Conference, 30th, St. Paul, Minnesota, October 23-25, 1985 [Proceedings], p. 9.
- _____, 1986, Hydrogeologic and water-quality characteristics of crystalline-rock aquifers of Archean and Proterozoic age, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 86-4033, 2 plates.
- _____, 1989, Effects of agriculture on quality of water in surficial sand-plain aquifers in Douglas, Kandiyohi, Pope, and Stearns Counties, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 87-4040, 52 p.
- _____, 1993, Effects of agricultural and residential land use of ground-water quality. Anoka Sand Plain aquifer, east-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 93-4074, 62 p.
- Anderson, H.W., Jr., Broussard, W.L., Farrell, D.F., and Felsheim, P.E., 1976, Water resources of the Rock River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-555, 3 sheets, scale 1:250,000.
- Anderson, H.W., Jr., Farrell, D.F., and Broussard, W.L., 1974, Water resources of the Blue Earth River watershed, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-525, 3 sheets, scale 1:500,000.
- _____, 1974, Water resources of the lower Minnesota River watershed, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-526, 3 sheets, scale 1:500,000.
- Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Felsheim, P.E., 1974, Water resources of the Cannon River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-522, 3 sheets, scales 1:250,000 and 1:500,000.
- Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Hult, M.F., 1975, Water resources of the Zumbro River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-543, 3 sheets, scale 1:250,000.
- Anderson, H.W., Jr., and Ruhl, J.F., 1984, Geohydrology and hydrochemistry of aquifers in Cretaceous rocks, Minnesota, *in* Geohydrology of the Dakota aquifer, C.V. Theis Conferences on Geohydrology, 1st, Lincoln, Nebraska, October 5-6, 1982: National Water Well Association [Proceedings], p. 27-37.

- Anderson, H.W., Jr., and Stoner, J.D., 1989, Effects of controlled agricultural practices on water quality in a Minnesota sand-plain aquifer: U.S. Geological Survey Open-File Report 89-267, 2 p.
- Anderson, J.D., and Bettis, E.A., 1989, Postsettlement alluvium in the Upper Mississippi River Basin—Recognition, distribution, and implications concerning floodplain management [abs.]: Dymek, Robert F., and Shelton, Kevin L., Annual meeting of the Geological Society of America, St. Louis, Missouri, v. 21, no. 6, p.304.
- Anderson, J.L., Dowdy, R.H., and Delin, G.N., 1991, Ground water impacts from irrigated ridge tillage, *in* Irrigation and Drainage—1991 National Conference, Honolulu, Hawaii, July 22-26, 1991, Proceedings: American Society of Civil Engineers, Irrigation and Drainage Division, p. 604-611.
- Anderson, J.L., Dowdy, R.H., Lamb, J.A., Delin, G.N., Knighton, Ray, Clay, David, and Lowery, Birl, 1993, Northern cornbelt sand plains Management Systems Evaluation Area, *in* Agricultural Research to Protect Water Quality, Minneapolis, Minnesota, February 21-24, 1993, Proceedings: Soil and Water Conservation Society, p. 39-47.
- Anderson, J.L., and Grigal, D.F., 1984, Soils and landscapes of Minnesota, Agricultural Experiment Station AG-FO-2331: University of Minnesota, Minneapolis, Minnesota, 8 p.
- Anderson, J.R., 1976, Major land uses in the United States, *in* National Atlas of the United States of America: U.S. Geological Survey, Washington DC, p. 158-159.
- Anderson, J.R., Hardy, E.E., Roach, J.T., and Witmer, R.E., 1976, A land use and land cover classification system for use with remote sensor data: U.S. Geological Survey Professional Paper 964, 28 p.
- Anderson, R.C., 1986, Preglacial drainage in the Upper Mississippi River Valley Region [abs.]: The Geological Society of America, 99th Annual Meeting of the Geological Society of America, v. 18, no. 6, p. 527.
- Andres, G.E., and Dustman, J.E., 1989, Remediation investigation of hydrocarbon contamination in a complex aquifer system along the Mississippi River, Minneapolis, Minnesota, *in* Proceedings of the Third National Outdoor Action Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods: Association of Ground Water Scientists and Engineers, Orlando, Florida, May 22-25, 1989, v. 3, p. 645-658.
- Andrew, J.A., 1965, Size distribution of the sand and heavy minerals in the Ironston Sandstone (Upper Cambrian) of western Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Andrews, W.J., 1995, Volatile organic compounds in surface and ground water in the Upper Mississippi River Basin, Minnesota and Wisconsin, 1978-94 [abs.]: 40th Annual Midwest Ground Water Conference, Columbia, Missouri, October 16-18, 1995, p. 24.
- Andrews, W.J., Fallon, J.D., and Kroening, S.E., 1995, Water-quality assessment of the Upper Mississippi River Basin, Minnesota and Wisconsin—Presence and distribution of volatile organic compounds in surface and ground water, 1978-94: U.S. Geological Survey Water-Resources Investigations Report 95-4216, 39 p.

- Andrews, W.J., Trotta, L.C., and Schoenberg, M.E., 1995, Ground-water withdrawals and water-level declines from 1980-90 in the Prairie du Chien-Jordan and Mt. Simon-Hinckley aquifers, Twin Cities Metropolitan Area, Minnesota, *in* Proceedings of the 31st Annual Conference of the American Water Resources Association, November 5-9, 1995, Houston, Texas, p. 63-72.
- _____, 1995, Water-level declines from 1980-90 in major aquifers in the Twin Cities area, *in* Loethen, M.L., ed., *Water Management in Urban Areas*, Houston, Texas, November 5-10, 1995, Proceedings: American Water Resources Association, p. 63-72.
- Arntson, A.D., and Lorenz, D.L., 1987, Low-flow frequency characteristics for continuous-record streamflow stations in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 86-4353, 15 p.
- Arntson, A.D., and Tornes, L.H., 1985, Rainfall-runoff relationship and water-quality assessment of Coon Creek watershed, Anoka County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4013, 97 p.
- Arthur, J.W., Corlis, W.W., Allen, K.N. and Hedtke, S.F., 1987, Seasonal toxicity of ammonia to five fish and nine invertebrate species: *Bulletin of Environmental Contamination and Toxicology*, v. 38, p. 324-331.
- Arthur, J.W., and Horning, W.B., II, 1969, The use of artificial substrates in pollution surveys: *American Midland Naturalist*, v. 82, no. 1, p. 83-89.
- Arthur, J.W., Thompson, J.A., Walbridge, C.T., Read, A.W., 1993, Ambient toxicity assessments in the Minnesota River Basin: U.S. Environmental Protection Agency Environmental Research Library, Duluth, Internal report 2737, Duluth, Minnesota, variously paged.
- Attig, J.W., Clayton, L., and Mickelson, D.M., 1985, Correlation of late Wisconsin glacial phases in the western Great Lakes area: *Geological Society of America Bulletin* v. 96, no. 12, p. 1585-1593.
- Aulerich, R.J., and Ringer, R.K., 1977, Current status of PCB toxicity to mink, and effect on their reproduction: *Archives of Environmental Contamination and Toxicology*, v. 6, p. 279-292.
- Austin, G.S., 1972. Cretaceous rocks. *in* *Geology of Minnesota—A centennial volume*: Minnesota Geological Survey, p. 509-512.
- Avery, E.L., 1985, Sexual maturity and fecundity of brown trout in central and northern Wisconsin streams: Wisconsin Department of Natural Resources Technical Bulletin 154, 12 p.
- Ayers, M.A., Brown, R.G., and Oberts, G.L., 1985, Runoff and chemical loading in small watersheds in the Twin Cities metropolitan area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4122, 35 p.
- Ayers, M.A., Payne, G.A., and Have, M.R., 1980, Effects of urbanization on the water quality of lakes in Eagan, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-71, 42 p.

- Ayers, M.A., Payne, G.A., and Oberts, G.L., 1980, Quality of runoff from small watersheds in the Twin Cities metropolitan area, Minnesota—A project plan: U.S. Geological Survey Open-File Report 80-592, 31 p.
- Bacon, W.S., 1938, Character of the Franconia Sandstone at Taylors Falls, Minnesota: Master's thesis, University of Minnesota, Minneapolis, Minnesota.
- Baedecker, M.J., Cozzarelli, I.M., Bennett, P.C., Eganhouse, R.P., and Hult, M.F., 1993, Evolution of the contaminant plume in an aquifer contaminated with crude oil, Bemidji, Minnesota [abs.], *in* Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 103.
- Baedecker, M.J., Cozzarelli, I.M., and Hopple, J.A., 1987, The composition and fate of hydrocarbons in a shallow glacial-outwash aquifer, *in* Franks, B.J., ed., U. S. Geological Survey program on toxic waste ground water contamination, Proceedings of the third technical meeting, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109, p. C23-C24.
- Baedecker, M.J., Eganhouse, R.P., Miller, R.T., and Hult, M.F., 1986, The composition and fate of hydrocarbons in a glacial aquifer [abs.], Symposium on scientific advances in geology and hydrology from studies of contaminant plumes, San Antonio, Texas, November 1986. Proceedings: Geological Society of America, v. 18, no. 6, p. 531.
- Baehr, A.L., and Hult, M.F., 1987, Mathematical modeling of hydrocarbon and oxygen transport coupled with microbial degradation in the unsaturated zone [abs.], *in* Franks, B.J., ed., U.S. Geological Survey program on toxic waste—ground-water contamination—Proceedings of the third technical meeting, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109, p. C-27-28.
- _____, 1989, Determination of the air-phase permeability tensor of an unsaturated zone at the Bemidji, Minnesota research site, *in* Mallard, G.E., and Ragone, S.E., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting, Phoenix, Arizona, September 26-30, 1988: U.S. Geological Survey Water-Resources Investigations Report 88-4220, p. 55-62.
- _____, 1991, Evaluation of unsaturated zone air permeability through pneumatic tests: *Water Resources Research*, v. 27, no. 10, p. 2605-2617.
- Bailey, P.A., and Rada, R.G., 1984, Distribution and enrichment of trace metals (Cd, Cr, Cu, Ni, Pb, Zn) in bottom sediments of navigation pools 4 (Lake Pepin), 5, and 9 of the Upper Mississippi River, *in* Wiener, J.G., Anderson, R.V., McConville, D.R., eds., *Contaminants in the Upper Mississippi River*: Butterworth Publishers, Stoneham, Massachusetts, p. 119-138.
- Baker, A.L., and Baker, K.K., 1979, Effects of temperature and current discharge on the concentration and photosynthetic activity of the phytoplankton in the Upper Mississippi River: *Freshwater Biology*, v. 9, p. 191-198.

- Baker, D.G., and Kuehnast, E.L., 1978, Climate of Minnesota Part X - Precipitation normals for Minnesota, 1941-1970: University of Minnesota, St. Paul, Minnesota, Agricultural Experiment Station Technical Bulletin 314, 16 p.
- Baker, D.G., Kuehnast, E.L., and Zandlo, J.A., 1985, Climate of Minnesota Part XV—Normal temperatures (1951-1980) and their application: University of Minnesota, St. Paul, Minnesota, Agricultural Experiment Station AD-SB-2777, 66 p.
- Baker, D.G., Nelson, W.W., and Kuehnast, E.L., 1979, Climate of Minnesota Part XII—The hydrologic cycle and soil water: Agricultural Experiment Station Technical Bulletin 322, University of Minnesota, 24 p.
- Baker, R.W., 1986, Evidence for an early Pleistocene minimum age for the Upper Mississippi River Valley [abs.], 99th annual meeting of the Geological Society of America, Abstracts with programs: Geological Society of America, v. 18, no. 6, p. 533.
- Baker, R.W., and Simpson, T.W., 1981, Pre-Woodfordian glaciation in West-Central Wisconsin. *in* Biggs, D.L., ed., 15th annual meeting of the Geological Society of America, North Central Section: Geological Society of America, v. 13, no. 6, p. 270.
- Baker, R.W., Huppert M.L., Masek, S.J., and Parks, J.A., 1993, The effect of highway construction on the geochemistry of a small watershed, west-central Wisconsin [abs.], Geological Society of America, North Central Section, 27th annual meeting, Rolla, Missouri, March 29-30, 1993—Abstracts with Programs: Geological Society of America, v. 25, no. 3, p. 4.
- Baker, R.W., Masek, S.J., and Parks, J.A., 1992, Geochemistry of a small watershed in west-central Wisconsin in relation to precipitation and agricultural inputs [abs.], Geological Society of America, North Central Section, 26th Annual, Abstracts with Programs, Iowa City, Iowa, April 30-May 1, 1992: Geological Society of America, v. 24, no. 4, p. 4.
- Bakush, S.H., 1985, Carbonate microfacies, depositional environments and diagenesis of the Galena Group (Middle Ordovician) along the Mississippi River (Iowa, Wisconsin, Illinois and Missouri), United States: Doctoral thesis, University of Illinois, Urbana, Illinois, 233 p.
- Balaban, N.H., ed., 1989, Geologic atlas, Hennepin County, Minnesota: Minnesota Geological Survey County Atlas C-4, 9 plates.
- Balaban, N.H., and Hobbs, H.C., eds., 1990, Geologic atlas, Dakota County, Minnesota: Minnesota Geological Survey County Atlas C-6, 9 plates.
- Balaban, N.H., and McSwiggen, P.L., eds., 1982, Geologic atlas, Scott County, Minnesota: Minnesota Geological Survey County Atlas C-1, 6 plates.
- Ball, J.R., and Marshall, D.W., 1978, Seston characterization of major Wisconsin rivers: Wisconsin Department of Natural Resources Technical Bulletin no. 109, 102 p.
- Ballinger, D.G., and McKee, G.D., 1971, Chemical characterization of bottom sediments: Journal of Water Pollution Control Federation, v. 43, no. 2, p. 216-227.

- Barbash, J.E., and Barker, J.F., 1985, Statistical examination of small-scale spatial variability of volatile organic compounds and inorganic anions in groundwater, *in* Second International Conference on Ground Water Quality Research: National Center for Ground Water Research, Houston, Texas [Proceedings], p. 177-180.
- Barbash, J., and Roberts, P.V., 1986, Volatile organic chemical contamination of groundwater resources: U.S. Water Pollution Control Federation Journal, v. 58, no. 5, p. 343-348.
- Bardon, R., Nute, G.L., eds, 1948, A winter in the St. Croix Valley—George Nelson's Reminiscences, 1802-03: Minnesota Historical Society, 46 p.
- Barnes, W.J., 1974, A history of the vegetation of Eau Claire County: Transactions of the Wisconsin Academy of Sciences, Arts and Letters, v. 62, p. 357-375.
- Barr Engineering, Inc., 1964, Report on ground-water inflow, lower Minnesota River: lower Minnesota River Watershed District, 12 p.
- Barr, K.D., 1987, Local-scale hydraulic characteristics of the Platteville Formation, Minneapolis-St. Paul area, Minnesota [abs.], Geological Society of America, North Central Section, 21st annual meeting, Abstracts with programs, St. Paul, Minnesota, April 30-May 1, 1987: Geological Society of America, v. 19, no. 4, p.187-188.
- Barton, D.A., McKeown, J.J., and Chudyk, W., 1992, VOC fate model verification at multiple pulp mill wastewater treatment sites: Water Science and Technology, v. 26, no. 1-2, p. 407-415.
- Bath, G.D., Schwartz, G.M., and Gilbert, F.P., 1964, Aeromagnetic and geologic map of northwestern Minnesota: U.S. Geological Survey Geophysical Investigations Map GP-471, 1 sheet, scale 1:250,000.
- Bather, R., and Wolsfeld, Jarvis and Gardner, Inc., 1978, St. Croix Trail Corridor Study for DNR-Parks: Minnesota Department of Natural Resources, 74 p.
- Battista, J.R., and Connelly, J.P., 1989, VOC contamination at selected Wisconsin landfills—Sampling results and policy implications: Wisconsin Department of Natural Resources Report, 74 p.
- Bauer, R.L., 1976, Structural studies of Precambrian rocks in the Minnesota River valley [abs.]: 22nd annual institute on Lake Superior geology, St. Paul, Minnesota, May 3-7, 1976, v. 22, p. 7.
- _____, 1980, Multiphase deformation in the Granite Falls-Montevideo area, Minnesota River valley, *in* Morey, G.B., Hanson, G.N., ed., Selected studies of Archean gneisses and lower Proterozoic rocks, southern Canadian Shield: Special Paper Geological Society of America, v. 182, p. 1-17.
- Baxter, S.M., and Vick, T.D., 1987, The relationship of joint pattern to buried structure—A study of the Northfield Anticline [abs.], 21st annual meeting Geological Society of America, North Central Section, Abstracts with programs: Geological Society of America, v. 19, no. 4, p. 188.
- Bebel, D.J., 1898, A ground resistivity technique for locating fracture aquifers in buried Precambrian basement, central Wisconsin [abs.], *in* Green, J.C., Ojakangas, R.W., and Holst, T.B., eds., Institute on Lake Superior geology, 35th annual meeting. University of Minnesota, Duluth, Minnesota, May 4-5, 1989: Proceedings and Abstracts Institute on Lake Superior Geology, v. 35, p. 3.

- Beccasio, A.D., Redfield, A.E., Frew, R.L., and others, 1983, Lower Mississippi Valley ecological inventory—User's guide and information base: U.S. Fish and Wildlife Service Report FWS/OBS-83/19, 84 p.
- Becker, G.C., 1983, Fishes of Wisconsin: University of Wisconsin Press, Madison, Wisconsin, 1052 p.
- Bell, D.T., and Johnson, F.L., 1974, Flood-caused tree mortality around Illinois reservoirs: Transactions of the Illinois State Academy of Science, v. 67, p. 2837.
- Bell, E.A., Hindall, S.M., 1975, The availability of ground water for irrigation in the Rice Lake-Eau Claire area, Wisconsin: University Extension, Geological and Natural History Survey Information Circular 31, 65 p.
- Belt, C.B., Jr., 1977, The Upper Mississippi River—from a natural to a social system [abs.]: Geological Society of America North-Central Section, 11th annual meeting, Carbondale, Ill, April 28-29, 1977: Geological Society of America, p. 572-573.
- Bennett, P.C., Siegel, D.I., Baedecker, M.J., and Hult, M.F., 1993, Crude-oil in a shallow sand and gravel aquifer—Hydrology and inorganic chemistry: Applied Chemistry, v. 8, no. 6, p. 529-549.
- Berkey, C.P., 1898, Geology of the St. Croix Dalles: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, variously paged.
- Berry, R.F., and Anderson, D.D., 1986, Habitat development applications—Lower Pool 5 Channel Maintenance/weaver Bottoms Rehabilitation Plan. *in* Beneficial uses of dredged material: Proceedings of the First Interagency Workshop, Pensacola, Florida, October 7-9, 1986, p. 134-139.
- Bhowmik, N.G., 1992, Hydraulic and geomorphic classification of the Upper Mississippi River system—Pilot study of three pools, *in* Jennings, M.E., and Bhowmik, N.G., Hydraulic engineering—Saving a theoretical resource in search of solutions: American Society of Civil Engineers, New York, NY, p. 666-671.
- Bidwell, L.E., Winter, T.C., and Maclay, R.W., 1970, Water resources of the Red Lake River watershed, northwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-346, 4 sheets, scales 1:500,000 and 1:250,000.
- Birney, E.C., 1991, Minnesota county biological survey—1988 small mammal surveys: Minnesota Department of Natural Resources Biological Report no. 11, 77 p.
- Biziuk, M., Kozlowski, E., and Blasiak, A., 1991, Determination of volatile halogenated compounds in tap and surface waters from the Gdansk District: International Journal of Environmental Analytical Chemistry, v. 44, no. 3, p. 147-151.
- Blad, B.L., and Baker, D.G., 1971, A three-year study of net radiation at St. Paul, Minnesota: Journal of Applied Meteorology, v. 10, p. 820-824.
- Blegen, T.C., 1936, Some sources for St. Croix Valley history: Minnesota History, v. 17, p. 385-95.
- Bloyd, R.M., 1975, Summary appraisals of the nation's ground-water resources—Upper Mississippi Region: U.S. Geological Survey Professional Paper 813-B, 22 p.

- Bogan, A.E., 1993, Freshwater bivalve extinctions (Mollusca: Unionoida)—a search for causes: *American Zoologist*, v. 33, p. 599-609.
- Bohlke, J.K., Wanty, R.B., Tuttle, M.L., Delin, G.N., and Landon, M.K., 1994, Resolving the effects of varying land use and aquifer reactions on nitrate contamination of ground water in central Minnesota [abs.]: *EOS, Transactions, American Geophysical Union*, v. 75, no. 19, p. 154.
- Bock, D., 1990, Acid Rain Index (published quarterly) and Monthly Monitoring Index: Minnesota Pollution Control Agency, variously paged.
- Boning, C.W., Parrett, C., and Melcher, N.B., 1993, Stage and discharge characteristics of the Upper Mississippi River floods of 1993[abs.]: *EOS, Transactions, American Geophysical Union*, v. 74, supp. 43, p. 62.
- Borchert, J.R. and Gustafson, N.C., 1980, *Atlas of Minnesota: Resources and Settlement*, 3rd ed., Center for Urban Development and Regional Affairs, Minneapolis, Minnesota, 309 p.
- Borchert, J.R. and Yaeger, D.P., 1968, *Atlas of Minnesota Resources and Settlement*, Minnesota State Planning Agency, St. Paul, Minnesota, 262 p., 1 plate.
- Borman, R.G., 1971, Preliminary map showing thickness of glacial deposits in Wisconsin: U. S. Geological Survey Open-File Report 71-52, 1 map.
- _____, 1976, Ground-water resources and geology of St. Croix County, Wisconsin: Wisconsin Geologic and Natural History Survey Circular 32, 30 p.
- Boyce, D.L., 1989, A preliminary reconstruction of Sangamonian, and early Wisconsinan interstadial landscapes, north-central Minnesota, *in* 57th annual spring meeting of the Minnesota Academy of Science: *Journal of the Minnesota Academy of Science*, v. 54, no. 3, p. 20.
- Boyd, N.K., and Smithson, S.B., 1994, Seismic profiling of Archean crust—Crustal structure in the Morton Block, Minnesota River Valley Subprovince. *in* Clowes, R.M., and Green, A.G., *Seismic reflection probing of the continents and their margins*: University of British Columbia, Department of Geophysics and Astronomy, Vancouver, British Columbia, p. 211-224.
- Boyer, H.A., Trace elements in the water, sediments, and fish of the Upper Mississippi River, Twin Cities metropolitan area. *in* *Contaminants in the Upper Mississippi River—Proceedings of the 15th Annual Meeting of the Mississippi River Research Consortium*, La Crosse, Wisconsin, April 14-15, 1982, p. 195-230.
- Boyle, T.P., and Beeson, D.R., 1990, The effect of tributaries on the structure and functional groups composition of the benthic macroinvertebrate community in the St. Croix River, Minnesota and Wisconsin: Colorado State University, Fort Collins, Colorado.
- Boyle, T.P., Hoefs, N.J., and Beeson, D.R., 1992, An evaluation of the status of benthic macroinvertebrate communities in the Saint Croix National Scenic Riverway, Minnesota and Wisconsin: Water Resources Division National Park Service Colorado State University, variously paged.

- Brady, N.C., 1984, *The nature and properties of soils*: Macmillan Publishing Company, New York, New York, 750 p.
- Breining, G., 1994, *Is the Mississippi dying?: The Minnesota Volunteer*, Nov-Dec 1994, p. 8-19.
- Brezonik, P.L., ed., 1988, *Water supply issues in the metropolitan Twin Cities area—Planning for future droughts and population growth*, Summary of a workshop, St. Paul Minnesota, October 25, 1988: Minnesota Water Resources Research Center, St. Paul, Minnesota, 78 p.
- Briggs, Mark, 1994, *Minnesota Fish Contaminant Monitoring Program 1990-1992 data document*: Minnesota Department of Natural Resources, 81 p.
- Brigham, M.E., 1994, *Pesticides detected in surface waters and fish of the Red River of the North drainage basin [abs.]*: North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 26.
- _____, 1994, *Pesticides detected in surface waters and fish of the Red River of the North drainage basin*, in North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 256-269.
- Brigham, M.E., Tornes, L.H., and Lorenz, D.L., 1994, *Load estimates for pesticides in the Red River of the North drainage basin [abs.]*: American Geophysical Union 1994 Fall Meeting, San Francisco, California, December 5-9, 1994, Proceedings: American Geophysical Union, p. 230.
- Bright, R.C., Gatenby, C., Olson, D., Plummer, E. 1990. *A survey of the mussels of the Minnesota River*: Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.
- Brockman, K.M., and Dow, R., eds., 1982, *Wildlife in early Wisconsin*: University of Wisconsin, Stevens Point, Wisconsin, 581 p.
- Broussard, W.L., Anderson, H.W., Jr., and Farrell, D.F., 1973, *Water resources of the Cottonwood River watershed, southwestern Minnesota*: U.S. Geological Survey Hydrologic Investigations Atlas HA-466, 3 sheets.
- Broussard, W.L., Farrell, D.F., Anderson, H.W., Jr., and Felsheim, P.E., 1975, *Water resources of the Root River watershed, southeastern Minnesota*: U.S. Geological Survey Hydrologic Investigations Atlas HA-548, 3 sheets, scale 1:250,000.
- Brown, B.A., 1988, *Bedrock geology of Wisconsin*: Wisconsin Geological and Natural History Survey Map 88-7, 1 sheet.
- Brown, D., and Skaggs, R., 1974, *Remote sensing applications to hydrology in minnesota*, in *A study of Minnesota forests and lakes using data from earth resources technology satellites*: University of Minnesota, Minneapolis, Minnesota, p. 81-196

- Brown, H.S., and Hattis, D., 1989. Role of skin absorption as a route of exposure to volatile organic compounds in household tap water—A simulated kinetic approach: *Journal of the American College of Toxicology*, v. 8, no. 5, p. 839-851.
- Brown, R.F., and Cotter, R.D., 1963, *Water and the Minnesota Iron Range*: U.S. Geological Survey, 16 p.
- Brown, R.G., 1983, Atmospheric deposition of selected chemicals and their effect on nonpoint-source pollution in the Twin Cities metropolitan area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 83-4195, 24 p.
- _____, 1984, Effects of an urban wetland on sediment and nutrient loads in runoff: *Wetlands*, v. 4, p. 147-158.
- _____, 1984, Hydrologic effects of impoundments in Sherburne National Wildlife Refuge, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4175, 20 p.
- _____, 1984, Precipitation and streamflow data-Collections techniques, *in* Understanding Watershed and Lake Management Conference, Bloomington, Minnesota, March 23, 1984 [Proceedings], p. 18-29.
- _____, 1984, Relationship between quantity and quality of storm runoff and various watershed characteristics in Minnesota, USA, *in* International Conference on Urban Storm Drainage, 3rd, Goteborg, Sweden, June 4-8, 1984 [Proceedings], p. 791-799.
- _____, 1985, Effects of wetlands on quality of runoff entering lakes in the Twin Cities metropolitan area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4170, 32 p.
- _____, 1985, Errors associated with estimating ground-water flow and phosphorus flux components in hydrologic and phosphorous budgets of lakes [abs.]: Annual Midwest Ground Water Conference, 30th, St. Paul, Minnesota, October 23-25, 1985 [Proceedings], p. 3.
- _____, 1985, Hydrologic factors affecting lake-level fluctuations in Big Marine Lake, Washington County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4176, 23 p.
- _____, 1987, Effects of wetland channelization of storm runoff in Lambert Creek, Ramsey County, Minnesota: National Wetlands Symposium of Wetland Hydrology, Chicago, Illinois, September 16-18, 1987 [Proceedings], p. 130-136.
- _____, 1987, Effects of wetland channelization of storm runoff in Lambert Creek, Ramsey County, Minnesota: National Wetlands Symposium of Wetland Hydrology, Chicago, Illinois, September 16-18, 1987 [Proceedings], p. 130-136.
- Brown, R.G., Patterson, G.L., and Stark, J.R., 1986, Ground-water and surface-water interaction in wetlands comparisons and contrasts [abs.]: Wisconsin Section Annual Meeting, Wisconsin Dells, Wisconsin, April 3-4, 1986, Proceedings: American Water Resources Association, p. 1.
- Brown, R.G., and Stark, J.R., 1989, Hydrologic and water quality characteristics of a wetland receiving wastewater effluent in St. Joseph, Minnesota: *Wetlands*, v. 9, no. 2, p. 191-206.

- Brown, R.G., and Stark, J.R., and Patterson, G.L., 1985, Ground-water and surface-water interactions in Minnesota and Wisconsin wetlands, *in* Hook, D.D., McKee, W.H., Jr., Smith, H.K., Gregory, J., Burrell, V.G., Jr., DeVee M.R., Sojka, R.E., Gilberts, S., Banks, R., Stolzy, L.H., Brooks, C., Matthews, T.D., and Shear, T.H., *The ecology and management of wetlands: Portland, Oregon*, Timber Press, p. 176-180.
- Bruemmer, L.B., and Clark, T.P., 1986, Ground water in Minnesota—A user's guide to understanding Minnesota's ground water resource: Minnesota Pollution Control Agency, 63 p.
- Brugam, R.B., 1981, Chemistry of lake water and groundwater in areas of contrasting glacial drifts in eastern Minnesota: *Hydrobiologia*, v. 80, no. 1, p. 47-62.
- Bryan, T.A., 1978, Vegetation quality and human use of the Lower St. Croix River: Master's thesis, University of Wisconsin., Madison, Wisconsin.
- Buhl, K.J., and McConville, D.R., 1984, Heavy metal accumulation in selected sessile components of Fountain City Bay, Pool 5A, of the Upper Mississippi River, *in* Contaminants in the Upper Mississippi River: Proceedings of the 15th Annual Meeting of the Mississippi River Research Consortium: Butterworth Publishers, Boston, Massachusetts, p. 171-194.
- Burkholder, M.B., 1963, *The Willow River-St.Croix County, Wisconsin*: Star-Observer Printing, Hudson, Wisconsin.
- Bury, C.A., 1958, The geology of the Cedar Mountain Complex, Minnesota River Valley: Master's thesis, University of Minnesota, Duluth, Minnesota, 31 leaves.
- Cadena, F., Fingleton, D.J., and Peters, R.W., 1989, Evaluation of VOC emissions from land farming operations, *in* Proceedings of the 44th Purdue Industrial Waste Conference, Boca Raton, Florida, May 9-11, 1989, p. 453-463.
- Capel, P.D., 1990, Atmospheric deposition of herbicides in Minnesota [abs.]: *Minnesota Water 1990—Facing Environmental Challenges of the 1990's*, St. Paul, Minnesota, April 1990, Proceedings: Minnesota Water Resources Research, p. 27.
- _____, 1990, Atmospheric deposition of herbicides in the midcontinental United States [abs.]: *EOS, Transactions, American Geophysical Union*, v. 71, no. 43, p. 1329.
- _____, 1990, A bibliography of atrazine and its simple degradation products in the environment: U.S. Geological Survey Open-File Report 89-613, 5 p.
- _____, 1991, Wet atmospheric deposition of herbicides in Minnesota, *in* Mallard, G.E., and Aronson, D.A., eds., *U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034*, p. 334-337.
- Capel, P.D., Lin, Ma, Schroyer, B.R., Larson, S.J., and Gilchrist, T.A., 1995, Analysis and detection of the new corn herbicide acetochlor in river water and rain: *Environmental Science and Technology*, v. 29, no. 6, p. 1702-1705.

- Carery, K.L., 1966, Observed configuration and computed roughness of the underside of river ice, St. Croix River, Wisconsin: U.S. Geological Survey Professional Paper 550-B, p. 192-198.
- _____, 1967, The underside of river ice, St. Croix River, Wisconsin: U.S. Geological Survey Professional Paper, 575-C, p. 195-199.
- Carlander, H.B., 1954, A history of the fish and fishing in the Upper Mississippi River: Upper Mississippi River Basin Coordination Committee Special Publication, 96 p.
- Carlander, K.D., Carlson, C.A., Gooch, V., and Wenke, T.L., 1967, Populations of *Hexagenia* mayfly naiads in Pool 19, Mississippi River, 1959-1963: *Ecology*, v. 48, p. 873-878.
- Carlson, G.H., 1971, Flooded area of Lake St. Croix Beach, Minnesota: U.S. Geological Survey Open-File Report, 4 p.
- _____, 1971, Flooded area of Lakeland Shores, Minnesota: U.S. Geological Survey Open-File Report, 5 p.
- _____, 1971, Flooded area of Montevideo, Minnesota: U.S. Geological Survey Open-File Report, 6 p.
- _____, 1991, Minnesota floods and drought. *in* Paulson, R.W., Chase, E.B., Williams, J.S., and Moody, D.W., compilers, National Water Summary 1988-89: U.S. Geological Survey Water-Supply Paper 2375, p. 345-352.
- _____, 1994, Changes in 100-year flood discharge estimates with varying period of record on Minnesota streams [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 11.
- Carlson, G.H., and Guetzkow, L.C., 1980, Flood-plain areas of the Mississippi River mile 866.8 to mile 888.0: U.S. Geological Survey Water-Resources Investigations Report 80-972, 8 sheets.
- Carlson, G.H., and Gunard, K.T., 1979, Small stream flood investigations in Minnesota, October 1958 to September 1977: U.S. Geological Survey Open-File Report 79-1061, 194 p.
- Carlson, G.H., Zandlo, J.A., Nindles, D.B., and Sium, Ogbazghi, 1990, Minnesota floods and drought, *in* Paulson, R.W., Chase, E.B., Roberts, R.S., and Moody, D.W., compilers, National Water Summary 1988-89: U.S. Geological Survey Water-Supply Paper 2375, p. 345-352.
- Cavaleri, M.E., Mossler, J.H., and Webers, G.F., 1987, The geology of the St. Croix River Valley, *in* Balaban, N.H., ed., Field trip guidebook for the Upper Mississippi River Valley, Minnesota, Iowa, and Wisconsin. Minnesota Geological Survey Guidebook Series 15, p. 23-43.
- Chamberlain, R.T., 1905, The glacial features of the St. Croix Dalles region: *Journal of Geology*, v. 13, no. 3, p. 238-256.
- Chamberlin, T.C., 1975, Supplementary hypothesis respecting the origin of the loess of the Mississippi Valley, *in* Smalley, I.J., Loess—Lithology and genesis: Dowden, Hutchinson, and Ross, Inc., Stroudsburg, Penn., p. 37-44.

- Chan, C.L., 1993, A moissanite-like phase [abs.], 1993 annual meeting of the Geological Society of America, Boston, Massachusetts, October 25-28, 1993: Geological Society of America, v. 25, no. 6, p. 383.
- Chandler, V.W., and Schaap, B.D., 1992, Geophysical evidence for internal subdivisions of the Minnesota River Valley subprovince, southwestern Minnesota [abs.]: 26th annual meeting of the Geological Society of America, North-Central Section, Iowa City, Iowa, April 30-May 1, 1992, abstracts with programs: Geological Society of America, v. 24, no. 4, p. 8-9.
- Chang, F.H., Hult, M.F., and Noben, N.N., 1987, Quantitative studies of biodegradation of petroleum and some model hydrocarbons in ground water and sediment environments, in Fairchild, D.M., ed., Ground-water quality and agricultural practices: Lewis Publishers, Chelsea, Michigan, p. 295-318.
- Chang, F.H., Noben, N.N., Brend, Daniel, and Hult, M.F., 1988, Microbial degradation of crude oil and some model hydrocarbons. in Ragone, S.E., ed., U.S. Geological Survey Program on toxic waste-ground-water contamination—Proceedings of the second technical meeting, Cape Cod, Massachusetts, October 21-25, 1985: U.S. Geological Survey Open-File Report 86-481, p. C33-C42.
- Chase, R.A., 1989, Recreational interests and needs of special needs groups—Survey results and recommendations. 159 p. [Available from the Metropolitan Council Data Center, Mears Park Centre, 230 E. 5th Street, St. Paul, MN 55101]
- Cheetham, R.N., Jr., and Ahl, L.M., 1977, Erosion and sedimentation in Wisconsin counties with drainage to the Mississippi River and to the Wisconsin River below Prairie du Sac Dam: U.S. Soil Conservation Service Reference Report 4, 135p.
- Chen, Y.H., and Simons, D.B., 1977, Mathematical model study of the Upper Mississippi River Basin [abs.]: 11th annual meeting of the Geological Society of America, North-Central Section, Carbondale, Illinois, April 28-29, 1977: Geological Society of America, v. 9, no. 5, p. 582-583.
- _____, 1979, Geomorphic Study of Upper Mississippi River: Journal of the Waterway, Port, Coastal and Ocean Division, American Society of Civil Engineers, v. 105, no. WW3, p. 313-328.
- Chen, Y.H., Simons, D.B., Li, R.M., and Ellis, S.S., 1984, Investigation of effects of navigation traffic activities on hydrologic, hydraulic, and geomorphic characteristics in the Upper Mississippi River system, in Contaminants in the Upper Mississippi River—Proceedings of the 15th Annual Meeting of the Mississippi River Research Consortium, La Crosse, Wisconsin, April 14-15, 1982, p. 299-324.
- Chernicoff, S.E., 1980, The Superior-lobe and Grantsburg-sublobe tills—Their compositional variability in east-central Minnesota: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, 268 p.
- _____, 1983, Glacial characteristics of a Pleistocene ice lobe in east-central Minnesota: Geological Society of America Bulletin, v. 94, no. 12, p. 1401-1414.
- Chilton, E.W., 1990, Macroinvertebrate communities associated with three aquatic macrophytes (*Ceratophyllum demersum*, *Myriophyllum spicatum*, and *Vallisneria spiralis*) in Lake Onalaska, Wisconsin: Journal of Freshwater Ecology, v. 5, no. 4, p. 455-466.
- Christianson, R.W., 1974, Commercial navigation on the Upper Mississippi River—An economic review of its development and public policy issues affecting Minnesota: University of Minnesota Water Resources Research Bulletin 75, 115 p.

- _____, 1975, Commercial navigation on the Upper Mississippi—Economic and environmental choices: Minnesota Agricultural Economist, University of Minnesota, Agricultural Extension Service no. 564, 6 p.
- Ciccioli, P., 1993, VOC's and air pollution. *in* Bloemen, H.J., and Burn, J., eds., Volatile organic compounds in the environment (1st ed.): Chapman and Hall, Glasgow, United Kingdom, 290 p.
- Clafin, T.O., 1977, Regression model of a navigation pool—Upper Mississippi River [abs.]: 11th annual meeting the Geological Society of America, Carbondale, Illinois, April 28-29, 1977: Geological Society of America, p. 583.
- _____, 1977, The turbidity effects of hydraulic dredging of navigation pool no. 2, Upper Mississippi River: U.S. Army Corps of Engineers, St. Paul District.
- Clark, J.M., and Fuller, C.L., 1987, Total exposure and risk assessment for drinking water contaminated with volatile organic compounds: University of Illinois, School of Public Health ILENR/RE-AQ-87/22, 119 p.
- Clark, J.R., 1992, Detection of bedrock-related geochemical anomalies at the surface of transported overburden: *Explore*, v. 76, p. 1, 5-6, 8-11.
- Clay, R.T., and Clark, W.R., 1985, Demography of muskrats on the Upper Mississippi River: *Journal of Wildlife Management*, v. 49, 883-890.
- Clayton, L., 1982, Influence of Agassiz and Superior drainage on the Mississippi River. *in* Knox, J.C., Quaternary history of the Driftless Area, with special papers: Wisconsin Geological Natural History Survey Field Trip Guide Book 5, p. 83-87.
- Clayton, L., and Attig, J.W., 1987, Drainage of Lake Wisconsin near the end of the Wisconsin Glaciation. *in* Mayer, L., Nash, D., Catastrophic flooding: Miami University, Department of Geology, Miami, Florida, United States, Binghamton Symposia in Geomorphology International Series 18, p. 139-153.
- Clement, G.M., 1935, Paleozoic stratigraphy and structure on St. Croix River: *Studies in Natural History*, Iowa University, Ames, Iowa, v. 16, no. 6, p. 473-496.
- Coastal Zone Resources Corporation, 1975, Study of land use for recreation and fish and wildlife enhancement, appendix D, volume II, Case studies D.6.1 to D.13.1: Coastal Zone Resources Corporation, 200 p.
- Cobban, W.A., and Merewether, E.A., 1983, Stratigraphy and paleontology of Mid-Cretaceous rocks in Minnesota and contiguous areas: U.S. Geological Survey Professional Paper 1253, 52 p.
- Cochran, P.A., 1987, The southern brook lamprey (*Ichthyomyzon gagei*) in the St. Croix River drainage of Wisconsin and Minnesota, USA: *Copeia*, v. 2, p. 443-446.
- Cochran, P.A., Timothy C., 1988, Northern and southern brook lampreys (*Ichthyomyzon fossor* and *I. gagei*) in Minnesota: *Journal of the Minnesota Academy of Sciences*, v. 54, no. 1, p. 23-27.
- Coffin, B., and Pfannmuller, L., 1988, Minnesota's endangered flora and fauna: Minnesota Department of Natural Resources, 473 p.

- Coker, R.E., 1930, Studies of common fishes of the Mississippi River at Keokuk, 1930, *in* Bureau of Fisheries Document 1072: Bulletin of the Bureau of Fisheries, v. 45, p. 141-225.
- Colingsworth, R.F., 1973, Environmental impact assessment of the northern section of the Upper Mississippi River, Pool 2: U.S. Army Corps of Engineers, 211 p.
- Collier, C.R., 1974, An approximation of sediment yields from watersheds in Minnesota, *in* Winter Meeting, Chicago, Illinois, December 10-13, 1974, Proceedings: American Society of Agricultural Engineers, 9 p.
- Collins, J.T., 1991, Amphibians and reptiles in the Upper Mississippi River Valley—Systematic and distributional problems: *Journal of the Tennessee Academy of Science*, v. 66, p. 149-152.
- Conger, D.H., 1971, Estimating magnitude and frequency of floods in Wisconsin: U.S. Geological Survey 71-76, 206 p.
- _____, 1981, Techniques for estimating magnitude and frequency of floods for Wisconsin streams: U.S. Geological Survey Water-Resources Investigations Open-File Report 80-1214, 116 p.
- Coon, T.G., Eckblad, J.W., and Trygstad, P.M., 1977, Relative abundance and growth of mussels (*Mollusca: Eulamellibranchia*) in pools 8, 9, and 10 of the Mississippi River: *Freshwater Biology*, v. 7, p. 279-285.
- Cooper, W.S., 1935, The history of the Upper Mississippi River in Late Wisconsin and postglacial time: *Minnesota Geological Survey Bulletin* 26, 116 p., 4 pl.
- Copaken, J., 1987, Trihalomethanes—Is Swimming Pool Water Hazardous? *in* Water chlorination—Chemistry, environmental impact and health effects, Proceedings of the 6th conference on water chlorination—Environmental impact and health effects, Oak Ridge, Tennessee, May 3-8, 1987: Lewis Publishers, Chelsea, Michigan, p. 101-104.
- Cope, W.G., Wiener, J.G., Steingraeber, M.T., and Atchison, G.J., 1994, Cadmium, metal-binding proteins, and growth in bluegill (*Lepomis macrochirus*) exposed to contaminated sediments from the Upper Mississippi River Basin: *Canadian Journal of Fisheries and Aquatic Sciences*, v. 51, no. 6, p. 1356-1367.
- Cordua, W.S., 1978, Geology of the St. Croix Valley, Wisconsin and Minnesota—A Guidebook: University of Wisconsin, River Falls, Wisconsin.
- _____, 1983, An Ordovician cryptoexplosion structure from near Rock Elm, Pierce County, Wisconsin, *in* Bornhorst, T.J., and Diehl, J.F., 29th annual institute on Lake Superior geology, Proceedings: Annual Institute on Lake Superior Geology, Houghton, Michigan, May 11-14, 1983, v. 29, p. 8-9.
- Cotter, J.F.P., 1993, Sedimentary analysis of glacial deposits, west central Minnesota [abs.]: 1993 annual meeting of the Geological Society of America, Boston, Massachusetts, October 25-28, 1993: Geological Society of America, v. 25, no. 6, p. 149-150.

- Cotter, J.F.P., Rocha-Campos, A.C., dos-Santos, P.R., and Canuto, J.R., 1993. A comparison of Quaternary and late Paleozoic striated and faceted boulder pavements—Minnesota River Valley, U.S.A. and Capivari, Sao Paulo State, Brazil—Insights on origins and processes [abs.], 1993 annual meeting of the Geological Society of America, Boston, Massachusetts, October 25-28, 1993: Geological Society of America, v. 25, no. 6, p. 158.
- Cotter, R.D., and Bidwell, L.E., 1966, Water resources of the Pomme de Terre River watershed, west-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-220, 4 sheets, scale 1:250,000.
- _____, 1968, Water resources of the Lac qui Parle River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-269, 4 sheets, scale 1:250,000.
- 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: U.S. Geological Survey Hydrologic Investigations Atlas HA-213, 4 sheets, scale 1:250,000.
- Cotter, R.D., Bidwell, L.E., VanVoast, W.A., and Novitzki, R.P., 1968, Water resources of the Chippewa River watershed, west-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-286, 4 sheets, scale 1:250,000.
- Cotter, R.D., and Rogers, J.E., 1961, Exploratory drilling for ground water in the Mountain Iron-Virginia area, St. Louis County, Minnesota: U.S. Geological Survey Water-Supply Paper 1539-A, 13 p.
- _____, 1964, Glacial geology of the Mountain Iron-Virginia-Eveleth area Mesabi Iron Range, Minnesota: U.S. Geological Survey Professional Paper 501-C, p. C144-C146.
- Cotter, R.D., and Young, L.H., 1960, Municipal water supplies on the Mesabi and Vermillion Iron Ranges, northeastern Minnesota: U.S. Geological Survey Ground Water Series Basic Data Release 1, 61 p.
- Cotter, R.D., Young, H.L., Petri, L.R., and Prior, C.H., 1965, Ground and surface water in the Mesabi and Vermillion Iron Range area, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-A, p. A1-A36.
- _____, 1965, Water resources in the vicinity of municipalities on the central Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-D, 20 p.
- _____, 1965, Water resources in the vicinity of municipalities on the east-central Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-E, 23 p.
- _____, 1965, Water resources in the vicinity of municipalities on the eastern Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-F, 27 p.
- _____, 1965, Water resources in the vicinity of municipalities on the west-central Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-C, 21 p.

- _____, 1965, Water resources in the vicinity of municipalities on the western Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 1759-B, 24 p.
- Cotter, R.D., Young, H.L., and Winter, T.C., 1964, Preliminary surficial geologic map of the Mesabi-Vermillion Iron Range area northeastern Minnesota: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-403, 1 sheet, scale 1:125,000.
- Cowdery, T.K., 1994, Nutrient concentrations near the water table of the Sheyenne Delta aquifer beneath cropland areas—Preliminary results from a Red River of the North Basin land-use study [abs.], in Sorenson, S.K., ed., Proceedings Abstracts American Water Resources Association's Symposium on the National Water-Quality Assessment (NAWQA) Program, Chicago, Illinois, November 7-9, 1994: U.S. Geological Survey Open-File Report 94-397, p. 7.
- _____, 1995, Similar agricultural areas, different ground-water quality—Red River of the North Basin, 1993-95: U.S. Geological Survey Open-File Report 95-441, 4 p.
- Cowdery, T.K., and Brigham, M.E., 1992, Baseflow dissolved-solids loads to streams of the Red River of the North Basin, South Dakota, North Dakota, and Minnesota [abs.]: Annual Midwest Ground-Water Conference, 37th, Souix Falls, South Dakota, October 14-16, 1992 [Proceedings], p. 38.
- Cowdery, T.K., and Goff, Karin, 1994, Nitrogen concentrations near the water table of the Sheyenne Delta aquifer beneath cropland areas, near Ransom and Richland Counties, North Dakota [abs.], North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 14.
- _____, 1994, Nitrogen concentrations near the water table of the Sheyenne Delta aquifer beneath cropland areas, Ransom and Richland Counties, North Dakota, in North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 89-102.
- _____, 1994, Nutrient concentrations near the water table of the Sheyenne Delta aquifer beneath cropland areas, Ransom and Richland Counties, North Dakota [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 8-9.
- Crawford, G.A., 1976, Post-inundation depositional history of the Weaver Bottoms, Upper Mississippi River, based on cesium-137 data: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Crawford, G.A., and Nielsen, D.N., 1977, Sedimentation rates in the Weaver Bottoms backwater area, Upper Mississippi River, determined using (137)Cs and bottom profile comparisons [abs.]: 11th annual meeting of the Geological Society of America, Carbondale, Illinois, April 28-29, 1977: Geological Society of America, v. 9, no. 5, p. 586-587.
- Creason, J.R., and Runge, C.F., 1992, Use of lawn chemicals in the Twin Cities: University of Minnesota Water Resources Research Center Public Report Series Number 7, 21 p.

- Crohurst, H.R., 1932, A study of the pollution and natural purification of the Upper Mississippi River—
Surveys and laboratory study: U.S. Treasury Department, Public Health Service, Public Health
Bulletin No. 203, 113 p.
- Crowley, A.J., 1939, The relationship of the Hinckley Sandstone to the St. Croix Series: Master's thesis,
University of Minnesota, Minneapolis, Minnesota.
- Cummings, M.L., 1984, The Eau Claire River Complex—A metamorphosed Precambrian mafic intrusion
in western Wisconsin: Geological Society of America Bulletin, v. 95, no.1, p. 75-86.
- Curtis, J.T., 1959, The vegetation of Wisconsin: University of Wisconsin Press, Madison, Wisconsin, 657 p.
- Cvancara, V.A., 1975, Studies on the tolerance of young of the year Mississippi River fish to heated waters:
University of Wisconsin, Department of Botany, Eau Claire, Wisconsin, 21 p.
- Dahlgren, R.B., 1990, Fifty years of fur harvest on the Upper Mississippi River National Wildlife and Fish
Refuge—Consistencies, anomalies, and economics, *in* Proceedings of the 46th Annual Meeting of the
Upper Mississippi River Conservation Committee, Rock Island, Illinois, p. 142-160.
- Danelski, T.C., Moe, S.A., Weeks, M.R., and Anderson, G.G., 1993, Ice-thrust Wadena drift in the southern
St. Croix Moraine, Stearns County, Minnesota [abs.]: 27th annual meeting of the Geological Society
of America, North Central Section, Abstracts with Programs, Kalamazoo, Michigan, April 28-29,
1994: Geological Society of America, v. 25, no. 3, p. 15-16.
- Davidson, M.J., 1984, The impact of erosion control structures on the water quality of the Cobb River in
Blue Earth County, Minnesota: Water Resources Research Report 5, 70 p.
- Davis, D.M., Carlson, D.A., and Johnson, M.D., 1994, River Warren flood deposits near St. Peter,
Minnesota [abs.]: 27th annual meeting of the Geological Society of America, North Central Section,
Abstracts with Programs, Kalamazoo, Michigan, April 28-29, 1994: Geological Society of America,
v. 26, no. 5, p. 11-12.
- Davis, J.G., and Brinson, M.M., 1980 Responses of submersed vascular plant communities to
environmental change: U.S. Fish and Wildlife Service Report FWS/OBS-79/33, p. 70.
- Dawley, C., 1947, Distribution of aquatic mollusks in Minnesota: American Midland Naturalist, v. 38,
p. 671-697.
- Dawson, V.K., Jackson, G.A., and Korschgen, C.E., 1984, Water chemistry at selected sites on pools 7 and
8 of the Upper Mississippi River—A ten-year survey, *in* Wiener, J.G., Anderson, R.V., and
McConville, D.R., eds., Contaminants in the Upper Mississippi River: Butterworth Publishers,
Stoneham, Massachusetts, p. 279-291.
- Delaney, H.J., Fitzsimonds, M.R., Bogart, L.E., Silling, R.M., and Readdy, L.A., 1982, Eau Claire
Quadrangle, Wisconsin and Minnesota: Golder Association, Kirkland, Washington, p. 34.
- Delfino, J.J., 1977, Effects of river discharge and suspended sediment on water quality in the Mississippi
River: Journal of Environmental Science and Health, v.12, no. 3, p. 79-95.

- Delin, G.N., 1985, Confined-drift aquifers studied near the Pomme de Terre and Chippewa Rivers, west-central Minnesota: U.S. Geological Survey Open-File Report, 2 p.
- _____, 1986, Confined-drift aquifers in Minnesota: U.S. Geological Survey Open-File Report 86-240, 2 p.
- _____, 1986, Hydrogeology of confined-drift aquifers in part of west-central Minnesota [abs.]: Annual Meeting North-Central Section of Geological Society of America, 20th, Kent, Ohio, April 24-25, 1986, Proceedings: Geological Society of America, p. 286.
- _____, 1986, Hydrogeology of confined-drift aquifers near the Pomme de Terre and Chippewa Rivers, western Minnesota: U.S. Geological Survey Open-File Report 86-4098, 90 p.
- _____, 1987, Evaluation of availability of water from drift aquifers near the Pomme de Terre and Chippewa Rivers, western Minnesota: U.S. Geological Survey Water-Resources Investigations Report 86-4321, 53 p.
- _____, 1987, Ground-water quality in a complex system of glacial-drift aquifers in west-central Minnesota [abs.], in Zaporozec, A., ed., Annual Midwest Ground Water Conference, 32nd, Madison, Wisconsin, October 28-30, 1987 [Proceedings], p. 32.
- _____, 1990, Effects of differing agricultural practices on concentrations of nitrate and atrazine in a sandplain aquifer, western Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 71, no. 43, p. 1329.
- _____, 1990, Geohydrology and water quality of confined-drift aquifers in the Brooten-Belgrade area, west-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 88-4124, 138 p.
- _____, 1990, Hydrologic considerations for delineating ground water recharge areas for wells, Rochester, Minnesota [abs.], Minnesota Water 1990—Facing Environmental Challenges of the 1990's, St. Paul, Minnesota, April 1990, Proceedings: Minnesota Water Resources Research, p. 42-43.
- _____, 1991, Hydrogeology and simulation of ground-water flow in the Rochester area, southeast Minnesota, 1978-88: U.S. Geological Survey Water-Resources Investigations Report 90-4081, 102 p.
- _____, 1991, Simulation of effects of ground-water development on water levels in glacial-drift aquifers in the Brooten-Belgrade area, west-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 88-4193, 66 p.
- _____, 1993, Delineation of recharge areas for selected wells in the St. Peter-Prairie du Chien-Jordan aquifer, Rochester, Minnesota: U.S. Geological Survey Water-Supply Paper 2397, 39 p.
- _____, 1993, The Minnesota Management Systems Evaluation Area (MSEA) project—An overview [abs.], Annual Water Resources Conference, 26th, St. Paul, Minnesota, October 26-27, 1993, Proceedings: American Society of Civil Engineers.

- Delin, G.N., and Almendinger, J.E., 1991, Delineation of recharge areas for selected wells in the St. Peter-Prairie du Chien-Jordan aquifer, Rochester, Minnesota: U.S. Geological Survey Open-File Report 90-397, 60 p.
- _____, 1993, Delineation of recharge areas for selected wells in the St. Peter-Prairie du Chien-Jordan Aquifer, Rochester, Minnesota: U.S. Geological Survey Water-Supply Paper 2397, 39.
- Delin, G.N., Anderson, J.L., and Dowdy, R.H., 1991, Integrated hydrologic research at the northern cornbelt sand-plain management system evaluation area, Minnesota, *in* Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 214-218.
- _____, 1992, The Minnesota Management Systems Evaluation Area Project—Assessing the effects of agricultural practices on ground-water quality [abs.], Minnesota Water '92—Sustaining Water Resources in the '90's and Beyond, Minneapolis, Minnesota, Proceedings: University of Minnesota Water-Resources Research Center.
- _____, 1992, The Minnesota Management Systems Evaluation Area Project—Assessing the effects of agricultural practices on ground-water quality [abs.], Minnesota Water Conference, St. Paul, Minnesota, February 13-14, 1992 [Proceedings].
- Delin, G.N., Landon, M.K., Anderson, J.L., and Dowdy, R.H., 1992, Hydrologic research at the Princeton, Minnesota Management Systems Evaluation Area: U.S. Geological Survey Open-File Report 92-107, 2 p.
- Delin, G.N., and Landon, M.K., 1993, Effects of focused recharge on the transport of agricultural chemicals at the Princeton, Minnesota Management Systems Evaluation Area, 1991-92: U.S. Geological Survey Open-File Report 93-42, 8 p.
- _____, 1993, Effects of focused recharge on the transport of agricultural chemicals at the Princeton, Minnesota, Management Systems Evaluation Area, 1991-92 [abs.], Agricultural Research to Protect Water Quality, Minneapolis, Minnesota, February 21-24, 1993, Proceedings: Soil and Water Conservation Society, p. 210-214.
- _____, 1993, Effects of focused recharge on transport of agricultural chemicals at the Princeton, Minnesota Management Systems Evaluation Area, 1991-1992: U.S. Geological Survey Open-File Report 93-79, 2 p.
- _____, 1993, Effects of topography on the transport of agricultural chemicals near Princeton, Minnesota, 1992 [abs.], *in* Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 91.

- _____, 1994, Effects of focused recharge on the transport of agricultural chemicals near Princeton, Minnesota, 1992 [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 9.
- Delin, G.N., Landon, M.K., Anderson, J.L., and Dowdy, R.H., 1992, The Minnesota Management Systems Evaluation Area [abs.], Agronomy Abstracts of 1992 Annual Meeting, Minneapolis, Minnesota, November 1-6, 1992, Proceedings: American Society of Agronomy, p. 322.
- Delin, G.N., Landon, M.K., Healy, R.W., and Olsen, H.W., 1992, Preferential flow through the unsaturated zone beneath a corn field near Princeton, Minnesota [abs.], Joint Spring Meeting of American Geophysical Union, Canadian Geophysical Union, and Mineralogical Society of America, Montreal, Canada, May 12-15, 1992, Proceedings: American Geophysical Union, p. 132.
- _____, 1993, Spatial variability of unsaturated-zone properties in relation to topography in a sand-plain setting near Princeton, Minnesota [abs.], in Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substance Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 92.
- _____, 1994, Spatial distribution of unsaturated-zone properties in relation to topography near Princeton, Minnesota [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 9.
- Delin, G.N., Landon, M.K., Lamb, J.A., and Anderson, J.L., 1994, Characterization of the hydrogeology and water quality at the Management Systems Evaluation Area near Princeton, Minnesota, 1991-92: U.S. Geological Survey Water-Resources Investigations Report 94-4149, 54 p.
- _____, 1994, Hydrogeologic and water-quality data used to characterize the Management Systems Evaluation Area near Princeton, Minnesota, 1991: U.S. Geological Survey Open-File Report 94-337, 42 p.
- Delin, G.N., Landon, M.K., Lamb, J.A., Dowdy, R.H., and Anderson, J.L., 1995, Transport of agricultural chemicals to ground water, Princeton, Minnesota, 1991-93, in Clean Water-Clean Environment—21st Century, Kansas City, Missouri, March 5-8, 1995, Proceedings: American Society of Agricultural Engineers, p. 57-60.
- Delin, G.N., and Woodward, D.G., 1984, Hydrogeologic setting and the potentiometric surfaces of the regional aquifers of the Hollandale Embayment, southeastern Minnesota, 1970-80: U.S. Geological Survey Water-Supply Paper 2219, 56 p.
- Demas, C.R., and Curwick, P.B., 1986, Chemicals associated with lower Mississippi River sediments, in Proceedings of the Fourth Federal Interagency Sedimentation Conference, March 24-27, 1986, Las Vegas, Nevada, v. 2, p. 439-448.
- Devaul, R.W., compiler, 1975, Probable yields of wells in the sand and gravel aquifer, Wisconsin: Wisconsin Geological and Natural History Survey map, 1, sheet, scale 1:1,000,000.

- Dexter, R.N., Hines, W.G., Quinlan, E., and Pavlou, S.P., 1978, Dynamics of polychlorinated biphenyls in the Upper Mississippi River, final report phase 1, task 2— Evaluation of compiled information: Fish and Wildlife Service Report, July 1978, 87 p.
- Dexter, R.N., Pavlou, S.P., Hines, W.G., and Anderson, D.A., 1978, Dynamics of polychlorinated biphenyls in the Upper Mississippi River, final report phase 1, task 1—Compilation of information: U.S. Fish and Wildlife Service Report, April 1978, 71p.
- Dieterman, L.J., and McConville, D.R., 1980, Environmental impact of a nuclear plant on Mississippi River biota in an ecological recovery zone near Red Wing, Minnesota: St. Mary's College, Department of Biology, Winona, Minnesota, 288 p.
- Distefano, M., 1973, The mineralogy and petrology of the Eau Claire Formation, west-central Wisconsin: Master's thesis, Northern Illinois University.
- Ditmars, J.D., McCown, D.L., and Paddock, R.A., 1986, Movement of dredged sand at Thalweg disposal sites, *in* Proceedings of the Fourth Federal Interagency Sedimentation Conference, Las Vegas, Nevada March 24-27, 1986, v. 2, p. 337-346.
- Dobbs, C.A., and Mooers, H.D., 1992, Landscape evolution and culture change in the Lake Pepin region, Upper Mississippi River Valley [abs.]: 26th annual meeting of the Geological Society of America, North Central Section, Abstracts with Programs: Geological Society of America, v. 24, no. 4, p.12.
- Doe, B.R., and Delevaux, M.H., 1980, Lead-isotope investigations in the Minnesota River Valley—Late-tectonic and postectonic granites: *in* Morey, G.B., Hanson, G.N., Selected studies of Archean gneisses and lower Proterozoic rocks, southern Canadian Shield: Minnesota Geology Survey, Saint Paul, Minnesota, p. 105-112.
- Donnermeyer, G.N., and Smart, M.M., 1985, Biomass and nutritive potential of *Vallisneria americana* Michx? in navigation pool 9 of the Upper Mississippi River: Aquatic Botany, v. 22, no. 1, p. 33-44.
- Doust, H.G., and Huang, J.C., 1992, Fate and transport of hazardous chemicals in the subsurface environment: Water Science and Technology, v. 25, no. 1, p. 169-176.
- Doust, L.L., Doust, J.L., and Biernacki, M., 1994, American wildcelery, *vallisneria americana*, as a biomonitor of organic contaminants in aquatic ecosystems: Journal of Great Lakes Research, v. 20, no. 2, p. 333-354.
- Dowdy, R.H., Lamb, J.A., Albus, W.L., Clay, D.E., Lowery, D., Delin, G.N., and Anderson, J.L., 1995, Water quality under a ridge-tilled, corn/soybean farming system, *in* Clean Water-Clean Environment—21st Century, Kansas City, Missouri, March 5-8, 1995, Proceedings: American Society of Agricultural Engineers, p. 57-60.
- Drake, J., and Wilson, J.H., 1948, Pollution of the Mississippi River, Hastings to LaCrosse, November 1947-January 1948: Minnesota Department of Health, Division of Water Pollution Control, mimeographed report.

- Drindak, J.T., 1933, Insoluble residues of the Oneota Dolomite of western Wisconsin: Doctoral thesis, University of Wisconsin, Madison, Wisconsin.
- Driver, N.E., Mustard, M.H., Rhinesmith, R.B., and Middelburg, R.F., 1985, U.S. Geological Survey urban-stormwater data base for 22 metropolitan areas throughout the United States: U.S. Geological Survey Open-File Report 85-337, 219 p.
- Dukerschein, J.T., Wiener, J.G., Rada, R.G., and Steingraeber, M.T., 1992, Cadmium and Mercury in emergent mayflies (*Hexagenia bilineata*) from the Upper Mississippi River: Archives of Environmental Contamination and Toxicology, v. 23, p. 109-116.
- Duncan, R.E., and Theil, P.A., 1989, A survey of the mussel densities in Pool 10 of the Upper Mississippi River: Wisconsin Department of Natural Resources, Technical Bulletin no. 139, 14 p.
- Dunning, R.D., 1990, The Pleistocene-Holocene transition in the Buffalo River valley, Wisconsin: 24th annual meeting of the Geological Society of America, North-Central Section, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 8.
- Dunsmore, L., Quade, H.W., 1979, Public drainage atlas, Blue Earth County, Minnesota, in Limnological Contribution, Mankato State University, Mankato, Minnesota, no. 6, 69 p.
- Dutton, C.E., 1938, Terraces of the Mississippi, Minnesota, and St. Croix Rivers: Geological Society of America Proceedings 1937, p. 77.
- Duyvejonck, J.R., 1987, Upland habitat development on dredged material placement sites, Upper Mississippi River Pool 18. in Inland Waterways—Proceedings of a National Workshop on the Beneficial Uses of Dredged Material, St. Paul, Minnesota, October 27-30, 1987, p. 120-128.
- Eckblad, J.W., Peterson, N.L., Ostlie, K., and Temte, A., 1977, The morphometry, benthos and sedimentation rates of a floodplain lake in Pool 9 of the Upper Mississippi River: American Midland Naturalist, v. 97, no. 2, p. 433-443.
- Ecology Consultants, Inc., 1978, Effects of navigation in inland waterways on the environment and related water-quality parameters: An annotated bibliography: Upper Mississippi River Basin Commission, 152 p.
- Eddy, S., Moyle J.B., and Underhill, J.C., 1963. The fish fauna of the Mississippi River above St. Anthony Falls as related to the effectiveness of these falls as a migration barrier: Minnesota Academy of Science Proceedings, v. 30, no. 2, p. 111-115.
- Eddy, S., and Underhill, J.C., 1974, Northern fishes, with special reference to the Upper Mississippi Valley: University of Minnesota Press, Minneapolis, Minnesota, 414 p.
- Ehrlich, G.G., Georlitz, D.F., Godsy, E.M., and Hult, M.F., 1982, Degradation of phenolic contaminants in ground water by anaerobic bacteria—St. Louis Park, Minnesota: Ground Water, v. 20, no. 6, p. 703-710.

- Eiceman, G., and Cadena, F., 1983, Environmental modeling of toxic volatile organic compounds in rivers: New Mexico Water Resources Research Institute, Las Cruces, Technical Completion Report 173, 46 p.[Available from National Technical Information Service, Springfield, VA 22161, as PB86-237062.]
- Eisenhuth, H.P., 1965, Index of surface-water records to December 31, 1963, Part 5. Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Circular 505, 65 p.
- _____, 1968, Index of surface-water records to September 30, 1967, Part 5. Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Circular 575, 64 p.
- _____, 1971, Index of surface-water records to September 30, 1970, Part 5. Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Circular 655, 65 p.
- Eisenreich, S.J., Hoffmann, M.R., Rastetter, D., Yost, E., and Maier, W.J., 1980, Metal transport phases in the Upper Mississippi River, *in* Kavanaugh, M.C., and Leckie, J.O., Particulates in water—Characterization, fate effects, and removal: Advances in Chemistry Series, v. 189, p. 135-176.
- Eisler, R. 1987, Mercury hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service Biological Report 85, v. 1.10, 90 p.
- _____, 1988, Lead hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service Biological Report 85, v. 1.14, 134 p.
- _____, 1989, Molybdenum hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service Biological Report 85, v. 1.19, 61 p.
- _____, 1989, Tin hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service Biological Report 85, v. 1.15, 83 p.
- _____, 1990, Boron hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service, Biological Report 85, v. 1.20, 32 p.
- _____, 1993, Zinc hazards to fish, wildlife, and invertebrates—A synoptic review: U.S. Fish and Wildlife Service Biological Report 26, 106 p.
- Elder, J.F., and Collins, J.J., 1991, Freshwater molluscs as indicators of bioavailability and toxicity of metals in surface-water systems: Reviews of Environmental Contamination and Toxicology, v. 122, p. 37-79.
- Elder, J.F., Krabbenhoft, D.P., and Walker, J.F., 1992, Water, energy, and biogeochemical budgets (WEBB) Program—Data availability at the northern temperate lakes site, Wisconsin: U.S. Geological Survey Open-File Report 92-48, 15 p.
- Eliason, Bonita, 1991, Minnesota county biological survey—1988 bird surveys: Minnesota Department of Natural Resources Biological Report no. 8, 47 p.
- Ellefson, B.R., Rury, K.S., and Krohelski, J.T., 1988, Water use in Wisconsin, 1985: U.S. Geological Survey Open-File Report 87-699, 1 sheet.

- Ellefson, B.R., Sabin, T.J., and Krohelski, J.T., 1993, Water use in Wisconsin, 1990: U.S. Geological Survey Open-File Report 93-118, 1 sheet.
- Ellingson, S.B., and Hopwood, A.J., 1988, Seasonal variations in water quality parameters of the Mississippi River near St. Cloud, Minnesota: *Journal of the Minnesota Academy of Science*, v. 54, no. 1, p.17-22.
- Ellis, G.S., 1994, In situ application of a semipermeable membrane device for the monitoring of lipophilic organic contaminants: Master's thesis, Colorado School of Mines, 124 p.
- Elstad, C.A., 1986, Macrobenthic distribution and community structure in the upper navigation pools of the Upper Mississippi River: *Hydrobiologia*, v. 136, p. 85-100.
- Emiliani, C., Rooth, C., and Stipp, J.J., 1978, The late Wisconsin flood into the Gulf of Mexico: *Earth Planet Science*, v. 41, no. 2, p. 159-162.
- Emmons, P.J., 1982, Deep test wells: U. S. Geological Survey Professional Paper 1375, 88 p.
- Engels, G.G., 1959, The occurrence of zinc, copper, and lead in the Decorah Formation from the southwestern Wisconsin zinc and lead district: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Engleman, J.R., 1983, Severe and unusual weather: Van Nostrand Reinhold Company Inc., New York, N.Y., 372 p.
- Ensor, K.L., Pitt, W.C., and Helwig, D.D., 1993, Contaminants in Minnesota wildlife 1989-1991: Minnesota Pollution Control Agency, St. Paul, Minnesota, 75 p.
- Envirodyne Engineers, 1980, Preliminary draft environmental impact statement: Metropolitan Waste Control Commission, 192 p.
- EnviroTech Associates, Inc., 1992, Mississippi River phosphorus study—Post audit of the Upper Mississippi River model using 1988 low flow water-quality data, 84 p.
- _____, 1993, Mississippi River phosphorus study—Water quality modeling of the Upper Mississippi River and Lake Pepin, 111 p.
- _____, 1993, Mississippi River phosphorus study—Water quality modeling of the Upper Mississippi River and Lake Pepin [Addendum I], 24 p.
- _____, 1993, Mississippi River phosphorus study—Developing mass transport for WASP models of the Upper Mississippi River, 68 p.
- Ericson, D.W., Lindholm, G.F., and Helgesen, J.O., 1974, Water resources of the Rum River watershed, east-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-509, 3 sheets, scales 1:250,000 and 1:500,000.

- Erickson, B.R., 1967, Paleontological evidence concerning some post glacial features of the Mississippi River valley: St. Paul Institute, Minnesota Science Museum, v. 1, no. 2, 4 p.
- Erickson, R.M., and Cotter, R.D., 1983, Trends in ground-water levels in Wisconsin through 1981: Wisconsin Geological and Natural History Survey Information Circular 43, 139 p.
- Everitt, B.L., 1968, Use of the Cottonwood in a investigation of the recent history of a flood plain: American Journal of Science, v. 266, p. 417-439.
- Ewert, M.A., 1985, Assessment of the current distribution and abundance of the Wood Turtle (*Clemmys insulpta*) in Minnesota and along the St. Croix National Scenic Riverway in Wisconsin: Unpublished report for the Minnesota Nongame Wildlife Program and Minnesota Field Office of the Nature Conservancy, 37 p.
- Faanes, C.A., 1981, Birds of the St. Croix River Valley—Minnesota and Wisconsin: North American Fauna, no. 73, p. 1-196.
- Fago, D., 1986, Distribution and relative abundance of fishes in Wisconsin, St. Croix River Basin: Wisconsin Department of Natural Resources Technical Bulletin no. 159, 112 p.
- Fandrei, G., Heiskary, S., and McCollar, S., 1988, Descriptive characteristics of the seven ecoregions in Minnesota: Minnesota Pollution Control Agency, 140 p.
- Farhat, J.S., 1975, Geochemical and geochronological investigation of the early Archaean of the Minnesota River Valley, and the effect of metamorphism on Rb-Sr whole rock isochrons [abs.]: Dissertation Abstracts International, v. 36, no. 4, p. 1615-1616.
- Farhat, J.S., and Wetherill, G.W., 1974, Geochronology of the Minnesota River Valley [abs.]: Geological Society of America, v. 6, no. 7, p. 729-730.
- Farnsworth, D.K., Thompson, E.S., and Peck, E.L., 1982, Annual free water surface (FWS) evaporation—shallow lake, 1956-1970, of evaporation atlas for the contiguous 48 United States: Washington, D.C., National Oceanic and Atmospheric Administration Technical Report NWS 33, scale 1:4,800,000.
- Farrell, D.F., Broussard, W.L., Anderson, H.W., Jr., and Hult, M.F., 1975, Water resources of the Cedar River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-552, 3 sheets, scale 1:250,000.
- Fassett, N.C., 1975, Spring flora of Wisconsin—A manual of plants growing without cultivation and flowering before June 15: University of Wisconsin Press Madison, Wisconsin, 413 p.
- Fausch, K., 1987, Development and use of the index of biotic integrity to monitor fish communities in the St. Croix National Scenic Riverway: Colorado State University, Fort Collins, Colorado.
- Fax, J.G. and Beissel, D.R., 1980, Ground water hydrology of Swift County, Minnesota: Minnesota Department of Natural Resources, St. Paul, Minnesota, 106 p.

Federal Emergency Management Agency, 1993, Interagency hazard mitigation team report for Minnesota in response to the June 11, 1993 disaster declaration for continuous severe storms, flooding, and tornados in May, June, and July 1993: Federal Emergency Management Agency 993-DR-MN, 39 p.

Federal Power Commission, 1970, Upper Mississippi River comprehensive basin study, appendix m—power. *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission: Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 6, p. M1-M68.

Federal Register, 1992, Endangered and threatened wildlife and plants, 50 CFR 17.11 and 17.12: U.S. Fish and Wildlife Service, 38 p.

Federal Water Pollution Control Administration, 1966, A report on pollution of the Upper Mississippi River and major tributaries: U.S. Department of the Interior, 312 p.

_____, 1966, Upper Mississippi River Basin project study plan for a comprehensive water pollution control program.

_____, 1966, Summary and pollution abatement recommendations for the Upper Mississippi River and major tributaries.

_____, 1967, Proceedings of a conference in the matter of pollution of the interstate and intrastate waters of the Upper Mississippi River and its tributaries - Minnesota and Wisconsin, Second session, February 28, March 1, and March 20, 1967: U.S. Department of the Interior, 3 volumes.

_____, 1967, A report on the immediate water pollution control needs of the Upper Mississippi River mainstem—Minnesota, Wisconsin, and Iowa.

_____, 1968, Proceedings of the progress evaluation meeting in the matter of pollution of the interstate and intrastate waters of the Upper Mississippi River and its tributaries—Minnesota and Wisconsin, April 30, 1968: U.S. Department of the Interior, 324 p.

_____, 1969, Progress evaluation meeting (2nd) in the matter of the interstate and intrastate waters of the Upper Mississippi River and its tributaries—States of Wisconsin and Minnesota, Minneapolis, Minnesota, July 22, 1969: Washington, D.C., 362 p.

_____, 1974, Summary and pollution abatement recommendations for the Upper Mississippi River and major tributaries, 41 p.

Federal Water Quality Administration, 1969, Water supply and water quality control study, Minnesota River Basin reservoirs, Minnesota-South Dakota-Iowa.

_____, 1970, Upper Mississippi River comprehensive basin study, appendix h—water supply and quality control. *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 4, p. H1-H342.

Fedkenheuer, W., 1975, Past and present forest communities of St. Croix State Park, Minnesota and their use in determining ecomangement direction: Doctoral thesis, University of Minnesota, St. Paul, Minnesota.

- Feiler, E.L., 1979, An electrofishing survey of a portion of Pool 2, Mississippi River, from Lock and Dam 2 (RM 815) to Upper Grey Cloud Island (RM 827) August 8, to September 21, 1979: Minnesota Department of Natural Resources, Division of Fish and Wildlife, 30 p.
- Feind, T., Braaten, D., and Quade, H.W., 1981, A limnological compilation of water quality of the Minnesota River watershed, in Minnesota: University of Minnesota Water Resources Research Center Bulletin 107, 49 p.
- Fenneman, N.M., 1938, Physiography of eastern United States: McGraw-Hill Book Company, New York, NY., 691 p.
- Fenneman, N.M., and Johnson, D.W., 1946, Physical divisions of the United States: U.S. Geological Survey, scale 1:7,000,000.
- Feth, J.H., 1965, Preliminary map of the conterminous United States showing depth to and quality of shallowest ground water containing more than 1,000 parts per million dissolved solids: U.S. Geological Survey Hydrologic Investigations Atlas HA-199, 31 p., 2 sheets, scale 1:3,168,000.
- Field, S.J., 1986, Relationship of nonpoint-source discharges, streamflow, and water quality in the Galena River Basin, Wisconsin: U.S. Geological Survey Water-Resources Investigations Report. 85-4214, 48 p.
- Field, S.J., 1985, Hydrology and water quality of the Elk Creek Basin, west-central Wisconsin—An assessment of nonpoint discharges: U.S. Geological Survey Water-Resources Investigations Report 84-4094, 38 p.
- Fink, B., 1896, Contributions to a knowledge of the lichens of Minnesota—The rock lichens of Taylors Falls: Minnesota Botanical Studies, 2, p. 1-18.
- Finlay, D.J., Siff, F.H., and DeCarlo, V.J., 1976, Review of PCB levels in the environment: Environmental Protection Agency Report EPA-560/7-76-001, 137 p.
- Finley, R.W., 1978, The original vegetation cover of Wisconsin: University of Wisconsin, Madison, Wisconsin, 1 map.
- Finney, S.C., and Nitecki, M.H., 1979, Galena receptaculities *oweni* from the Upper Mississippi River Valley [abs.]: 13th annual meeting of the Geological Society of America, Duluth, Minnesota, May 10-11, 1979, Abstract with Programs: Geological Society of America, v. 11, no. 5, 229 p.
- Fisk, H.N., 1945, Late Wisconsin valleys of the lower Mississippi River system: Geological Society of America Bulletin, v. 56, no.12, pt. 2, p. 1158.
- Fitts, C.R., 1985, Modeling aquifer inhomogeneities with analytic elements with application in a model of flow at the St. Croix rest area storm runoff pond: University of Minnesota, Minneapolis, Minnesota, 64 p.
- Fitzgerald, W.F., Mason, R.P., and Vandal, G.M., 1991, Atmospheric cycling and air-water exchange of mercury over mid-continental lacustrine regions: Water, Air, and Soil Pollution, v. 56, p 745-767.

- Flint, R.F., 1936, [Review of] The history of the Upper Mississippi River in the late Wisconsin and postglacial time, by William Skinner Cooper: *American Journal of Science*, 5th, v. 31, no. 185, p. 394-396.
- Flock, M.A., 1983, The late Wisconsinan Savanna Terrace in tributaries to the Upper Mississippi River: *Quaternary Research*, v. 20, no. 2, p. 165-176.
- Forbes, A.M., 1985, Summary of survey data for small mouth bass in Wisconsin streams, 1952-80: Wisconsin Department of Natural Resources, 41 p.
- Ford, G.R., 1958, A study of the Platteville Formation in Dakota, Goodhue and Rice Counties, Minnesota: Master's thesis, University of Minnesota, Minneapolis, Minnesota.
- Foster, P., 1974, History of the Kinnickinnic River Valley: Masters's thesis, University of Wisconsin, River Falls, Wisconsin.
- Fox, P.M., 1968, The link between three hundred years of travel—The Brule-St. Croix portage: Master's thesis, University of Minnesota, Minneapolis, Minnesota, 188 leaves.
- Franzi, D.A., 1986, The geomorphic evolution of a pitted outwash plain near Bemidji, Minnesota, *in* Heimlich, R.A., 20th annual meeting of the Geological Society of America, North Central Section, Kent, Ohio, April 24-25, 1986, Abstracts with Programs: Geological Society of America, v. 18, no. 4, p. 289.
- Franzi, D.A., 1987, Sedimentary and post-depositional processes related to aquifer properties at the Bemidji research site, north-central Minnesota, *in* Franks, B.J., ed., Third technical meeting of the U. S. Geological Survey program on toxic waste ground-water contamination, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109, p. C7.
- Fraser, D.M., 1972, Great Lakes and Upper Mississippi River states concerned about sewage from boats and ships: *Congressional Record*, v. 118, no. 41, p. E2703-E2704.
- Fremling, C.R., 1964, Mayfly distribution indicates water quality on the Upper Mississippi River, *Science*, v. 146, p. 1164-1166.
- _____, 1987, Human impacts on Mississippi River ecology, *in* Proceedings of the 10th national conference estuarine and coastal management, tool of the trade, New Orleans, October 12-15, 1986, p. 235-240.
- _____, 1989, *Hexagenia* mayflies—Biological monitors of water quality in the Upper Mississippi River: *Journal of the Minnesota Academy of Science*, v. 55, no. 1, p. 139-143.
- Fremling, C.R., and Claflin, T.O., 1984, Ecological history of the Upper Mississippi River, *in* Contaminants in the Upper Mississippi River—Proceedings of the 15th annual meeting of the Mississippi River Research Consortium: Butterworth Publishers, Boston, Massachusetts, p. 5-24.
- Friedman, L.C., and Erdmann, D.E., 1982, Quality assurance practices for the chemical and biological analyses of water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chapter A6, 181 p.

- Fremling, C.R., and Johnson, D.K., 1990, Recurrence of hexagenia mayflies demonstrates improved water quality in Pool 2 and Lake Pepin, Upper Mississippi River, mayflies and stoneflies: Proceedings of the International Conference on Ephemeroptera, v. 5, p. 243-248.
- Fremling, C.R., Rasmussen, J.L., Sparks, R.E., Cobb, S.P., Bryan, C.F., and Claflin, T.O., 1989, Mississippi River fisheries—A case history, *in* Dodge, D.P., ed., Proceedings of the International Large River Symposium: Canadian Journal of Fisheries and Aquatic Sciences, Special Publication, p. 309-351.
- Friedman, M.A., 1988, Volatile organic compounds in groundwater and leachate at Wisconsin landfills: Wisconsin Department of Natural Resources Report PUBL-WR-192, 79 p.
- Fritzsche, C.J., 1992, Calcium magnesium acetate deicer—An effective alternative for salt-sensitive areas: Water Environment and Technology, v. 4, no.1, p. 44-51.
- Fuller, S.L.H., 1978, Final Report, freshwater mussels (mollusca: Bivalva: unionidae) of the Upper Mississippi River—Observations at selected sites within the 9-foot channel navigation project on behalf of the U.S. Army Corps of Engineers: Academy of Natural Sciences of Philadelphia, Division of Limnology and Ecology, Report no. 78-33, 401 p.
- _____, 1979, Historical and current distribution of fresh-water mussels (Mollusca: Bivalvia: Unionidae) in the Upper Mississippi River, *in* Rasmussen, J.L., ed., Proceedings of the Upper Mississippi River Symposium on Upper Mississippi River Bivalve Mollusks, p. 711-19.
- Gamm, M.E., 1981, Relationship of soils to land use in the Blue Earth River Valley, Blue Earth County, Minnesota [abs.]: 1982 annual meeting of the Minnesota Academy of Science: Journal of the Minnesota Academy of Science, v. 47, no. 3, p. 11.
- Garman, G.C., Waters, T.F., 1983, Use of the size-frequency (Hynes) method to estimate annual production of a stream fish population: Canadian Journal of Fisheries and Aquatic Sciences, v. 40, p. 2030-2034.
- Ganoram, Inc., 1977, Combined sewer overflow study—Interim report on available data and existing programs: Metropolitan Waste Control Commission, 148 p.
- _____, 1978, Combined sewer overflow study—Interim report on models selection, design criteria, and the alternatives analysis procedure: Metropolitan Waste Control Commission, 98 p.
- _____, 1978, Combined sewer overflow study—Interim report on quantity and quality calibration/verification of the EPA SWMM runoff model: Metropolitan Waste Control Commission, 176 p.
- _____, 1979, Combined sewer overflow study—Interim report on waste allocations: Metropolitan Waste Control Commission, 76 p.
- _____, 1980, Combined sewer overflow study final report: Metropolitan Waste Control Commission, 127 p.
- _____, 1980, Combined sewer overflow study—Interim evaluation of system modeling results: Metropolitan Waste Control Commission, 333 p.

- Gaugush, R.F., and Wilcox, D.B., 1994, Investigate sediment transport/deposition and predict future configuration of Upper Mississippi River sediment channels and floodplain: National Biological Survey, Onalaska, Wisconsin, variously paged.
- Gay, J., Jeffcoate, R., Dunn, P.J., and Hawkins, J.E., 1987, Stormwater contamination at airports and remedial options—with particular reference to Stansted: *Journal of the Institution of Water and Environmental Management*, v. 1, no. 3, p. 253-262.
- Gebert, W.A., Graczyk, D.J., and Krug, W.P., 1986, History of annual streamflows from the 21 water resources regions in the United States and Puerto Rico, 1951-83: U.S. Geological Survey Open-File Report 86-128, 30 p.
- _____, 1987, Average annual runoff in the United States, 1951-80: U.S. Geological Survey Hydrologic Investigations Atlas HA-710, scale 1:7,500,000.
- Gebert, W.A., and Holmstrom, B.K., 1974, Low-flow characteristics of Wisconsin streams at sewage-treatment plants: U.S. Geological Survey Water-Resources Investigations Report 45-74, 101 p.
- Gebert, W.A., and Holmstrom, B.K., 1977, Low-flow characteristics at gaging stations on the Wisconsin, Fox, and Wolf Rivers, Wisconsin: U.S. Geological Survey Water-Resources Investigations 77-27, 20 p.
- Geissman, J.W., Harlan, S.S., Saxton, J.L., and Cavanaugh, M.D., 1987, Late Archean to early middle Proterozoic paleomagnetism of the central and western United States—New data, assessment of earlier results, and implications for Proterozoic tectonics [abs.], in Dickinson, W.R., ed., 1987 annual meeting and exposition of the Geological Society of America, Phoenix, Arizona, October 26-29, 1987: *Geological Society of America*, v. 19, no. 7, p. 674.
- Gervin, J.C., Lu, Y., and Soyke, P.D., 1982, Floodplain management applications of Landsat data for the Upper Mississippi River Basin. in Cardwell, F.S., Black, R., and Cole, B.M., 1982 American Congress of Surveying and Mapping, Fall Technical Meeting, Hollywood, Florida, September 19-23, 1982, p. 159-169.
- Giacomini, E.G., Wolf, R.J., Payne, G.A., and Adolphson, D.G., 1980, Hydrologic characteristics of Elim, Skunk, and Deer Creeks, Upper Nemadji River Basin, Minnesota: U.S. Geological Survey Open-File Report 80-47, 65 p.
- Giaquinta, A.R., and Croley, T.E., II, 1980, Water conservation on the Upper Missouri and Mississippi Rivers through thermal standards modifications: Iowa State Water Resources Research Institute Report ISWRRI-100, 34 p.
- Gibbon, G.E., 1973, The Sheffield Site: An oneota site on the St. Croix River, St. Paul, Minnesota: Minnesota Historical Society, Prehistoric Archeology Series no.10, 62 p.
- Gibbons, R.D., 1987, Statistical models for the analysis of volatile organic compounds in waste disposal sites: *Ground Water*, v. 25, no. 5, p. 572-580.

- Gibbs, A.K., Payne, B., Setzer, T., Brown, L.D., Oliver, J.E., and Kaufman, S., 1982, Seismic reflection study of the Precambrian crust of central Minnesota, 95th Annual Meeting of the Geological Society of America, New Orleans, Louisiana, October 18-21, 1982, Abstracts with Programs: Geological Society of America, v. 14, no. 7, p. 495.
- _____, 1984, Seismic-reflection study of the Precambrian crust of central Minnesota: Geological Society of America Bulletin, v. 95, no. 3, p. 280-294.
- Gibson, U.P., Straub, C.P., and Bond, R.G., 1970, Integrating water quality management into total water resources management in Minnesota: Water Resources Research Center Bulletin 23, 222 p.
- Giencke, A.G., Paulson, R.O., and Crum, J.R., 1984, Identification and characterization of three glacial tills in Kandiyohi County, Minnesota: Journal of the Minnesota Academy of Science, v. 49, no. 1, p. 7-9.
- Gilbertson, J.P., Bratrud, M.L., and Matsch, C.L., 1990, Pre-late Wisconsin drift stratigraphy in the Upper Minnesota River Valley, southwestern Minnesota and northeastern South Dakota [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 11.
- Gilbertson, J.P., and Jensema, S., 1987, Till stratigraphy of eastern Grant County, South Dakota, and western Lac qui Parle County, Minnesota [abs.], Geological Society of America, North Central Section, 21st annual meeting, St. Paul, Minnesota, April 30-May 1, 1987, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 200.
- Gilhousen, Marlin, 1987, Land-use trends 1970-84 in the Twin Cities metropolitan area, 1970-84: Metropolitan Council of the Twin Cities Area 620-87-097, 79 p.
- Gillham, R.W., and Rao, P.S.C., 1990, Transport, distribution, and fate of volatile organic compounds in groundwater, *in* Significance and Treatment of Volatile Organic Compounds in Water Supplies: Lewis Publishers, Inc., Chelsea, Michigan, p. 141-181.
- Gilliom, R.J., Alley, W.M., and Gurtz, M.E., 1995, Design of the National Water-Quality Assessment Programs—Occurrence and distribution of water-quality conditions: U.S. Geological Survey Circular 112, 33 p.
- GKY and Associates, Inc., 1980, An independent analysis of the modeling and assessment for Minneapolis and St. Paul's advanced waste treatment needs: U.S. Environmental Protection Agency, Implementation Branch, Water Planning Division, Washington, D.C., 38 p.
- GKY and Associates, Inc., 1981, Review of water-quality modeling and streams data for the Mississippi River at Minneapolis-St. Paul, Minnesota: U.S. Environmental Protection Agency, Region V, 91 p.
- Glaser, P.H., 1989, Detecting biotic and hydrogeochemical processes in large peat basins with Landsat TM imagery: Remote Sensing of Environment, v. 28, p. 109-119.
- Gleason, H.A., and Cronquist, A., 1991, Manual of vascular plants of the northeastern United States and adjacent Canada: New York Botanical Garden, Bronx, New York, 910 p.
- Goddard, S.V., 1972, Comparison of breeding bird populations of the lower Kinnicinnic River Valley: Passenger Pigeon, v. 34, no. 3, p. 91-95.

- _____, 1975, Spring waterfowl utilization of western Wisconsin wetlands: *Passenger Pigeon*, v. 37, no. 1, p. 32-44.
- Goebel, J.E., 1978, Glacial drift characteristics of Minnesota as revealed on Landsat imagery: Doctoral thesis, Texas Tech University, 147 p.
- Gohl, K., Hawman, R.B., and Smithson, S.B., 1988, Wide angle recording in the Archean of Minnesota [abs.], American Geophysical Union 1988 Fall Meeting, San Francisco, California, December 6-11, 1988: *EOS, Transactions*, v. 69, no. 44, p. 1313.
- Goldich, S.S., 1972, Geochronology and geochemistry, *in* Field Trip Guide Book for Precambrian Migmatitic Terrane of the Minnesota River Valley: Minnesota Geological Survey Guidebook Series 5, p. 17-41.
- Goldich, S.S., Doe, B.R., and Delevaux, M.H., 1975, Possible further evidence for 3.8 b.y.-old rocks in the Minnesota River valley of southwestern Minnesota: U. S. Geological Survey Open-File Report 75-65, 11 p.
- Goldich, S.S., and Hedge, C.E., 1962, Dating of the Precambrian of the Minnesota River Valley, Minnesota: *Journal of Geophysical Research.*, v. 67, no. 9, p. 3561-3562.
- _____, 1962, Investigations in Rb-Sr dating: *Journal of Geophysical Research*, v. 67, no. 4, p. 1638.
- _____, 1974, 3,800-Myr granitic gneiss in south-western Minnesota: *Nature*, v. 252, no. 5483, p. 467-468.
- Goldich, S.S., Hedge, C.E., Stern, T.W., Wooden, J.L., Bodkin, J.B., and North, R.M., 1980, Archean rocks of the Granite Falls area, southwestern Minnesota, *in* Morey, G.B., and Hanson, G.N., Selected studies of Archean gneisses and lower Proterozoic rocks, southern Canadian Shield: *Special Paper Geological Society of America*, v. 182, p. 19-43.
- Goldich, S.S., and Wooden, J.L., 1978, Geochemistry of the Archean rocks in the Morton and Granite Falls areas, southwestern Minnesota, *in* Smith, I.E.M., and Williams, J.G., Proceedings of the 1978 Archean geochemistry Conference, Quetico, Ontario, August 2-17, 1978, p. 285-318.
- _____, 1978, Minnesota River valley, *in* Smith, I.E.M., and Williams, J.G., Proceedings of the 1978 Archean Geochemistry Conference, Quetico, Ontario, August 2-17, 1978, p. 69.
- _____, 1980, Origin of the Morton Gneiss, southwestern Minnesota; Part 3, Geochronology, *in* Morey, G.B., and Hanson, G.N., Selected studies of Archean gneisses and lower Proterozoic rocks, southern Canadian Shield: *Special Paper Geological Society of America*, v. 182, p. 77-94.
- Goldich, S.S., Wooden, J.L., Ankenbauer, G.A., Jr., Levy, T.M., and Suda, R.U., 1976, Precambrian history of the Morton-New Ulm reach of the Minnesota River Valley [abs.]: 22nd annual institute on Lake Superior Geology, St. Paul, Minnesota, May 3-7, 1976, p. 22.
- Goldman, C.R., Lubnow, F.S., and Elser, J.J., 1992, Environmental effects of calcium magnesium acetate on natural phytoplankton and bacterial communities in northern Californian lakes, *in* *Chemical Deicers and the Environment*: Lewis Publishers, Boca Raton, Florida, 229-244.

- Goldstein, B.S., 1985, Sedimentology and genesis of the Wadena drumlin field, central Minnesota [abs.], 19th annual meeting of the Geological Society of America, North Central Section, DeKalb, Illinois, April 25-26, 1985, Abstracts with Programs: Geological Society of America, v. 17, no. 5, p. 332.
- _____, 1986, Stratigraphy, sedimentology, and late-Quaternary history of the Wadena drumlin region, central Minnesota: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, 234 p.
- _____, 1987, Geomorphology and Pleistocene glacial geology of central Minnesota. *in* Balaban, N.H., Field trip guidebook for Quaternary and Cretaceous geology of west central Minnesota and adjoining South Dakota: Guidebook Series Minnesota Geological Survey 16, p. 1-46.
- _____, 1989, Lithology, sedimentology, and genesis of the Wadena drumlin field, Minnesota, U.S.A.. *in* Menzies, J., and Rose, J., Subglacial bedforms, Rogen moraine and associated subglacial bedforms: *Sedimentary Geology*, v. 62, no. 2/4, p. 241-277.
- Goldstein, R.M., 1995, Aquatic communities and contaminants in fish from streams of the Red River of the North Basin, Minnesota and North Dakota: U.S. Geological Survey Water-Resources Investigations Report 95-4047, 34 5 p.
- Goldstein, R.M., and Brigham, M.E., 1995, Comparison of mercury concentrations in liver, fillet tissue, and whole bodies of fish from the Red River of the North [abs.]: Mercury Pollution in the Upper Great Lakes Region, Minneapolis, Minnesota, June 9, 1995, p. 14.
- Goldstein, R.M., Simon, T.P., Bailey, P.A., Ell, Michael, Pearson, Eric, Schmidt, Konrad, and Enblom, J.W., 1994, Concepts for an index of biotic integrity for streams of the Red River of the North Basin [abs.], North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 19.
- _____, 1994, Concepts for an index of biotic integrity for streams of the Red River of the North Basin, *in* North Dakota Water-Quality Symposium, 4th biennial, Fargo, North Dakota, March 30-31, 1994, Proceedings: North Dakota State University Extension Service, p. 169-180.
- Goodenkauf, O., and Atkinson, J.C., 1986, Occurrence of volatile organic chemicals in Nebraska ground water: *Ground Water*, v. 24, no. 2, p. 231-233.
- Goolsby, D.A., 1990, Herbicides in rivers and streams of the upper midwestern United States, *in* Proceedings of the 46th annual meeting of the Upper Mississippi River Conservation Committee, Bettendorf, Iowa, March 13-15, 1990, v. 46, p. 99-106.
- Goolsby, D.A., Battaglin, W.A., and Thurman, E. M., 1993. Occurrence and transport of agricultural chemicals in the Mississippi River Basin July through August 1993: U.S. Geological Survey Circular 1120-C, 22 p.
- Goolsby, D.A., Coupe, R.C., and Markovchick, D.J., 1991, Distribution of selected herbicides and nitrate in the Mississippi River and its major tributaries, April through June 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4163, 40 p.

- Goudreault, P.R., and Crisman, D.P., 1987, Applying field, laboratory and analytical techniques to characterize a glacial till aquitard, New Brighton, Minnesota [abs.], 21st annual meeting of the Geological Society of America, North Central Section, St. Paul, Minnesota, April 30-May 1, 1987, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 200-201.
- Graczyk, D.J., 1986, Water quality in the St. Croix National Scenic Riverway, Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 85-4319, 48 p.
- _____, 1993, Surface-water hydrology and quality, and macroinvertebrate and smallmouth bass populations in four stream basins in southwestern Wisconsin, 1987-90: U.S. Geological Survey Water-Resources Investigations 92-4024, 70 p.
- Graczyk, D.J., Walker, J.F., Greb, S.R., Corsi, S.R., and Owens, D.W., 1993, Evaluation of nonpoint-source contamination, Wisconsin—Selected data for 1992 water year: U.S. Geological Survey Open-File Report 93-630, 48 p.
- Grant, J. A., 1969, Geology and geochronology of Precambrian rocks, Minnesota River valley, *in* Summary of fieldwork, 1969: Minnesota Geological Survey Information Circular 7, 17 p.
- _____, 1972, Minnesota River Valley, southwestern Minnesota. *in* Geology of Minnesota—A centennial volume: Minnesota Geological Survey, p. 177-196.
- _____, 1972, Geology and structure. *in* Field Trip Guide Book for Precambrian Migmatitic Terrane of the Minnesota River Valley: Minnesota Geological Survey Guidebook Series 5, p. 1-16.
- Grant, J.A., Himmelberg, G.R., and Goldich, S.S., 1972, Field Trip Guide Book for Precambrian Migmatitic Terrane of the Minnesota River Valley: Minnesota Geological Survey Guidebook Series 5, 52 p.
- Grant, J.A., and Weiblen, P. W., 1970, Retrograde zoning in garnet near the second sillimanite isograd: EOS, Transactions, American Geophysical Union, v. 51, no. 4, p. 444-445.
- Great River Environmental Action Team, 1980, A study of the Upper Mississippi River, 9 volumes.
- _____, 1980, Water-quality work group appendix—A study of the Upper Mississippi River, v. 4, app. F, 79 p.
- _____, 1980, Sediment and erosion work group appendix—A study of the Upper Mississippi River: v. 4, app. G, 155 p.
- _____, 1978, A pilot study on effects of hydraulic dredging and disposal on water quality of the Upper Mississippi River (July 1976), 38 p.
- _____, 1979, Effects of clamshell (mechanical) dredging and disposal on water quality of the Upper Mississippi River, 50 p.
- Green, J.C., 1977, Keweenawan plateau volcanism in the Lake Superior region, *in* Baragen, W.R., Coleman, L.C., and Hall, J.M., eds., Volcanic regimes in Canada: Geological Association of Canada Special Paper 15, p. 407-422.

- Green, W.E., 1947, Effects of impoundment on tree mortality and growth: *Journal of Forestry*, v. 45, p. 118-120.
- Greer, B.A., and Boyle, W.C., 1987, Volatile organic compounds (VOC's) in small community wastewater disposal systems using soil absorption. *in On Site Wastewater Treatment—Proceedings of the Fifth National Symposium on Individual and Small Community Sewage Systems*, Chicago, Illinois, December, 1985: American Society of Agricultural Engineers, St. Joseph, Michigan, p. 284-293.
- Greeson, P.E., ed., 1979, A supplement to methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A4, 92 p.
- Griggs, R.F., 1906, The Buffalo River [Minnesota]—An interesting meandering stream: *American Geological Society Bulletin*, v. 38, p. 168-177.
- Grimes, D.J., 1977, Microbiological water-quality effects of hydraulically dredging polluted bottom sediments in the Upper Mississippi River—I. Resuspension of bacteria: Great River Environmental Action Team, Water Quality Work Group.
- _____, 1978, Microbiological water-quality effects of clamshell dredging bottom sediments from the Upper Mississippi River: Great River Environmental Action Team, Plater Quality Work Group, 34 p.
- _____, 1980, Bacteriological water quality effects of hydraulically dredging contaminated Upper Mississippi River bottom sediment: *Applied and Environmental Microbiology*, v. 39, no. 4, p. 782-789.
- Groschen, G.E., 1983, Hydrology of Big Marine Lake, Washington County, Minnesota: U.S. Geological Survey Professional Paper 1375, 191 p.
- Groschen, G.E., and Alexander, E.C., Jr., 1981, Geochemistry of Williams Lake, Hubbard County, Minnesota [abs.]: *EOS, Transactions, American Geophysical Union*, v. 63, no. 33, p. 613.
- Grout, F.F., Gruner, J.W., Schwartz, G.M., and Thiel, G.A., 1951, Precambrian stratigraphy of Minnesota: *Geological Society of America Bulletin*, v. 62, no. 9, p. 1017-1078.
- Grubaugh, J.W., and Anderson, R.V., 1988, Spatial and temporal availability of floodplain habitat—Long-term changes at Pool 19, Mississippi River: *American Midland Naturalist*, v. 119, no. 2, p. 402-411.
- _____, 1989, Upper Mississippi River—Seasonal and floodplain forest influences on organic matter transport: *Hydrobiologia*, v. 174, no. 3, p. 235-244.
- Grueter, J.C., 1982, Petrology and structure of the Archean amphibolite facies gneiss terrain exposed adjacent to the Yellow River, Chippewa County, Wisconsin: Master's Thesis, University of Wisconsin, Milwaukee, Wisconsin, 172 p.
- Gudmundson, B.J.R., 1975, Strategies for monitoring environmental impacts on the Upper Mississippi River, *in* Krizek, R.J., and Mosonyi, E.F., Data acquisition and analysis: Ann Arbor Scientific Publications, Ann Arbor, Mich., p. 111-121.

- Guetzkow, L.C., 1973, Small stream flood investigations in Minnesota, October 1958 to September 1971: U.S. Geological Survey Open-File Report, 159 p.
- _____, 1977, Techniques for estimating magnitude and frequency of floods in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 77-31, 33 p.
- Guetzkow, L.C., and Carlson, G.H., 1969, Small stream flood investigations in Minnesota, October 1958 to September 1967: U.S. Geological Survey Open-File Report, 174 p.
- _____, 1973, Flood-plain areas of the lower Minnesota River: U.S. Geological Survey Open-File Report 74-15, 12 sheets.
- Guetzkow, L.C., and Gunard, K.T., 1967, Small stream flood investigations in Minnesota, October 1958 to September 1965: U.S. Geological Survey Open-File Report, 162 p.
- _____, 1975, Small stream flood investigations in Minnesota, October 1958 to September 1973: U.S. Geological Survey Open-File Report, 161 p.
- _____, 1977, Small stream flood investigations in Minnesota October 1958 to September 1975: U.S. Geological Survey Open-File Report 77-39, 161 p.
- Gulliver, J.S., and Stefan, H.G., 1986, Wind function for a sheltered stream: *Journal of Environmental Engineering*, v. 112, no. 2, p. 387-399.
- Gunard, K.T., 1971, Flooded area of St. Mary's Point, Minnesota: U.S. Geological Survey Open-File Report, 6 p.
- _____, 1985, Minnesota surface-water resources, in Woody, D.W., Chase, E.B., and Aronson, D.A., compilers, *National Water Summary 1985*: U.S. Geological Survey Water-Supply Paper 2300, p. 285-294.
- Gunard, K.T., and Guetzkow, L.C., 1971, Small stream flood investigations in Minnesota, October 1958 to September 1969: U.S. Geological Survey Open-File Report, 174 p.
- Gunard, K.T., Hess, J.H., Zirbel, J.L., and Cornelius, C.E., 1984, Water resources data, Minnesota, water year 1983. Volume 2, Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-83-2, 447 p.
- _____, 1986, Water resource data, Minnesota, water year 1984. Volume 2, Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-84-2, 211 p.
- _____, 1987, Water resources data, Minnesota, water year 1985. Volume 2, Upper Mississippi and Missouri River Basin: U.S. Geological Survey Water-Data Report MN-85-2, 341p.
- _____, 1988, Water resources data, Minnesota, water year 1986. Volume 2, Upper Mississippi and Missouri River Basin: U.S. Geological Survey Water-Data Report MN-86-2, 295p.

- _____, 1990, Water resources data, Minnesota, water year 1989. Volume 2, Upper Mississippi and Missouri River Basin: U.S. Geological Survey Water-Data Report MN-89-2, 335p.
- Gunard, K.T., and Smith, C.J., 1982, Small stream flood investigations in Minnesota October 1958 to September 1980: U.S. Geological Survey Open-File Report 82-433, 221 p.
- Guo, Lifeng, Alexander, E.C. Jr., Landon, M.K., Delin, G.N., and Regan, C.P., 1994, Geochemical characteristics and transport of agricultural leachates in a surficial sand and gravel aquifer near Princeton, Minnesota, 1991-92 [abs.], 1993 Fall Meeting, San Francisco, California, December 6-10, 1993, Proceedings: American Geophysical Union, p. 269.
- Gupta, V.K., Duckstein, L., and Peebles, R.W., 1976, On the joint distribution of the largest flood and its time of occurrence: *Water Resources Research*, v. 12, no. 2, p. 295-304.
- 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: U.S. Geological Survey Water-Resources Investigations Report 82-44, 65 p.
- Hajic, E., and Bettis, E.A., III, 1989, Settlement patterns or sediment patterns? A stratigraphic model for interpretation of the archaeological record of the Upper Mississippi River Basin [abs.], in Dymek, R.F., and Shelton, K.L., 1989 Annual meeting of the Geological Society of America, St. Louis, Missouri, November 6-9, 1989: *Geological Society of America*, v. 21, no. 6, p. 214.
- Hall, C.W., Meinzer, O.E., and Fuller, M.L., 1911, Geology and underground waters of southern Minnesota: U.S. Geological Survey Water-Supply Paper 256, 406 p.
- Hamblin, C.W., 1970, Joint discussion—expanding to serve metropolitan areas—St. Paul: *Journal of the American Water Works Association*, v. 62, no. 1, p. 33-34.
- Hamilton, L.J., 1971, Water for cranberry culture in the Cranmoor area of central Wisconsin: U.S. Geological Survey Water-Supply Paper 1999-I, 20 p.
- Hanson, D.L., and Waters, T.F., 1974, Recovery of standing crop and production rate of a brook trout population in a flood-damaged stream: *Transactions, American Fish Society*, v. 103, p. 431-439.
- Hanson, G.M., 1968, K-Ar ages for hornblende from granites and gneisses and for basaltic intrusives in Minnesota: *Minnesota Geological Survey Report Investigations 8*, 20 p.
- Hanson, G.N., 1975, REE analyses of the Morton and Montevideo gneisses from the Minnesota River Valley [abs.]: *Geological Society of America Abstracts and programs*, v. 7, no. 7, p. 1099.
- _____, 1979, Contrasting petrogenesis of granitic rocks in Archean greenstone and gneiss terranes, Minnesota, in Papike, J.J., Simonds, C.H., and McGetchin, T.R., Workshop on ancient crusts of the terrestrial planets, Houston, Texas, February 12-14, 1979, p. 36.
- Hanson, G.N., and Goldich, S.S., 1976, Rare earth element studies of the Archean gneisses of the Minnesota River valley [abs.]: 22nd annual institute on Lake Superior Geology, St. Paul, Minnesota, May 3-7, 1976, p. 30.

- Hanson, S., 1980, 1980 Mississippi River Pool 2 electrofishing survey: Minnesota Department of Natural Resources, Ecological Services Section memorandum, November 7, 1980, 13 p.
- Harkin, J.M., Blondin, G.A., Knobeloch, L.M., and Read, H.W., 1924, Mitochondrial bioassay for toxic substances in water [Available from National Technical Information Service, Springfield, VA 22161 as PB91-192419].
- Harris, A., Blair, L.F., Lamm, W.T., Felstehausen, H., and Austin, T.A., 1976, Problem identification and ranking—A selected review of techniques used by public agencies: Regional Research series, University of Minnesota, Water Resources Research Center, 121 p.
- Harris, G.S., 1968, Development of a computer program to route runoff in the Minneapolis-St. Paul interceptor sewers: St. Anthony Falls Hydraulic Laboratory, University of Minnesota, Memorandum no. 121, 18 p.
- _____, 1968, Mathematical models of major diversion structures in the Minneapolis-St. Paul interceptor sewer system: St. Anthony Falls Hydraulic Laboratory, University of Minnesota, Memorandum no. 120, 21 p.
- Harris, K.L., 1975, Pleistocene geology of the Grand Forks-Bemidji area, northwestern Minnesota: Doctoral thesis, University of North Dakota, 210 p.
- Hart, S.R., and Goldich, S.S., 1975, Most-ancient known rocks may be found in all Earth's Precambrian shields: *Geotimes*, v. 20, no. 3, p. 22-24.
- Hatch, J.R., and Morey, G.B., 1985, Hydrocarbon source rock evaluation of Middle Proterozoic Solo Church Formation, North American Mid-Continent Rift System, Rice County, Minnesota: *American Association of Petroleum Geologists Bulletin*, v. 69, no. 8, p. 1208-1216.
- Hatch, J.T., 1982, Life history of the gilt darter, *Percina evides* (Jordan and Copeland), in the Sunrise River, Minnesota: Doctoral thesis, University of Minnesota, Duluth, Minnesota, 162 p.
- _____, 1985, Distribution, habitat and status of the gilt darter (*Percina evides*) in Minnesota: *Journal of the Minnesota Academy of Sciences*, v. 51, p. 11-16.
- _____, 1990, Comparative growth, reproduction, habitat and food utilization of darters of the St. Croix River Drainage: University of Minnesota, Minneapolis, Minnesota, 39 leaves.
- Hatch, J.R., and Morey, G.B., 1984, Hydrocarbon source rock evaluation—Solo Church Formation (middle Proterozoic, Keeweenawan Supergroup), southeastern Minnesota: U.S. Geological Survey Open-File Report 84-554, 17 p.
- Hatfield, J.L., Anderson, J.L., Alberts, E.E., Prato, Tony, Watts, D.G., Ward, Andrew, Delin, G.N., and Swank, Robert, 1993, Management Systems Evaluation Areas—An overview: Agricultural Research to Protect Water Quality, Minneapolis, Minnesota, February 21-24, 1993, Soil and Water Conservation Society [Proceedings], p. 1-10.

- Hauck, S.A., and Heine, J.J., 1991, Regional and local geologic, mineralogic, and geochemical controls of industrial clay grades in the Minnesota River Valley and the Meridian aggregates quarry, St. Cloud, Minnesota: University of Minnesota, Duluth, Minnesota, 227 p.
- Have, M.R., 1975, Some limnological aspects of 20 selected lakes in Eagan and Apple Valley, Minnesota: U.S. Geological Survey Open-File Report 75-528, 44 p.
- _____, 1975, A water-quality assessment of the Burham Creek watershed, Polk County, Minnesota: U.S. Geological Survey Open-File Report 75-647, 15 p.
- _____, 1980, Water quality of Rogers Lake, Dakota County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-5, 35 p.
- _____, 1991, A comparison of selected water-quality characteristics in Accounting Unit 070102, Upper Mississippi River Basin, Royalton to Hastings, Minnesota [abs.], in Childress, C.J. Oblinger, V., and Charlene C., Abstracts from the technical sessions of the first U.S. Geological Survey water quality workshop, northeastern region, Skyland, Virginia, March 31-April 3, 1986: U.S. Geological Survey Open-File Report 91-225, p. 18.
- _____, 1991, Selected water-quality characteristics in the Upper Mississippi River Basin, Royalton to Hastings, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 88-4053, 152 p.
- _____, 1991, Streamflow entering and leaving Lake Bemidji, Beltrami County, Minnesota, July 1989-September 1989: U.S. Geological Survey Open-File Report 91-499, 25 p.
- Have, M.R., Payne, G.A., and Ayers, M.A., 1981, Water quality of Alimagnet, Farquar, and Long Lakes in Apple Valley, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 81-40, 38 p.
- Have, M.R., and Tornes, L.H., 1987, Water-quality data for Orwell Reservoir and Otter Tail River near Fergus Falls, Minnesota: U.S. Geological Survey Open-File Report 87-537, 48 p.
- Havlik, M.E., 1980, The historic and present distribution of the endangered naiad mollusk *Lampsilis higginsii*: Bulletin of the American Malacological Union, p. 19-22.
- Hawkins, A., 1986, Weaver bottoms targeted for restoration: Fish and Wildlife News, p. 8-9.
- Hawkinson, B., and Grunwald, G., 1979, Observation of a wintertime concentration of catfish in the Mississippi River: Minnesota Department of Natural Resources Investigations Report 365, 13 p.
- Hayes, M.J., and Nelson, C.L., 1990, Geology of Wright County using well log data [abs.], in Fralick, P.W., Institute on Lake Superior Geology, 36th annual meeting, Thunder Bay, Ontario, May 9-12, 1990, v. 36, no. 1, p. 30-31.
- HDR Engineering, Inc., 1992, City of Minneapolis storm water NPDES, Part II—monitoring and modeling results: HDR Engineering, Inc., Minneapolis, Minnesota, variously paged.

- Hedge, C.E., and Goldich, S.S., 1976, Rb-Sr geochronology of the Montevideo Gneiss, Minnesota River valley [abs.], 22nd annual institute on Lake Superior Geology, St. Paul, Minnesota, May 3-7, 1976: Institute on Lake Superior Geology, Technical Session Abstract Field Guides, v. 22, p. 31.
- Heil, T.P., and Lindsay, R.C., 1988, Volatile compounds in flavor-tainted fish from the Upper Wisconsin River: *Journal of Environmental Science and Health*, v. 23, no. 5, p. 489-512.
- Heine, J.J., 1991, Bedrock controls on clay distribution in the Minnesota River valley. *in* Hauck, S.A., and Heine, J.J., Regional and local geologic, mineralogic, and geochemical controls of industrial clay grades in the Minnesota River Valley and the Meridian aggregates quarry, St. Cloud, Minnesota: Natural Resource Research Institute, University of Minnesota, Duluth, Minnesota, p. 166-209.
- _____, 1991, Geochemistry of the bedrock and residual clays of the Meridian aggregates quarry. *in* Hauck, S.A., and Heine, J.J., Regional and local geologic, mineralogic, and geochemical controls of industrial clay grades in the Minnesota River Valley and the Meridian aggregates quarry, St. Cloud, Minnesota: Natural Resource Research Institute, University of Minnesota, Duluth, Minnesota, p. 210-227.
- Heine, J.J., and Toth, T.A., 1992, Regional and local geologic, mineralogic, and geochemical controls of the industrial clay grades in the Minnesota River Valley [abs.], *in* Sidder, G.B., Sims, P.K., Chadima, S., and Biek, R.F., Industrial minerals, today and tomorrow—The raw material to build the upper Midwest: U.S. Geological Survey Open-File Report 92-514, p. 24-25.
- Heiskary, S. and Vavricka, M., 1993, Mississippi River phosphorus study: Lake Pepin water quality (1976-91): Minnesota Pollution Control Agency, 119 p.
- Heiskary, S., Vavricka, M., and Walker, W.W., Mississippi River phosphorus study: Lake Pepin and Mississippi River BATHTUB modeling: Minnesota Pollution Control Agency, 62 p.
- Helgen, J., 1990, Data base of aquatic invertebrates for Minnesota: Minnesota Pollution Control Agency, 103 leaves.
- Hickok, E.A., and Assoc., Inc., 1977, Baseline environmental inventory—Twin City metro area: Metropolitan Waste Control Commission, St. Paul, Minnesota, 470 p.
- Helgen, J.C., 1990, The distribution of the crayfishes of Minnesota: Minnesota Department of Natural Resources, 128 p.
- Helgen, J., 1987, The distribution of crayfishes (Decapoda, Cambaridae) in Minnesota: Minnesota Department of Natural Resources, 106 p.
- Helgesen, J.O., 1971, Appraisal of ground water for irrigation in the Little Falls area, Morrison County, Minnesota: U.S. Geological Survey Open-File Report, 54 p.
- _____, 1973, Appraisal of ground water for irrigation in the Little Falls area, Morrison County, Minnesota: U.S. Geological Survey Water-Supply Paper 2009-D, 40 p.
- _____, 1977, Ground-water appraisal of the Pineland Sands area, central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 77-102, 49 p.

- Helgesen, J.O., Ericson, D.W., and Lindholm, G.F., 1975, Water resources of the Mississippi and Sauk Rivers watershed, central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-534, 3 sheets.
- Helgesen, J.O., and Lindholm, G.F., 1973, Geology and water-supply potential of the Anoka Sand Plain aquifer, Minnesota: U.S. Geological Survey Open-File Report, 19 p.
- _____, 1977, Geology and water-supply potential of the Anoka Sand Plain aquifer, Minnesota: Minnesota Department of Natural Resources Technical Paper 6, 17 p.
- Helgesen, J.O., Lindholm, G.F., Broussard, W.L., and Ericson, D.W., 1973, Water resources of the Kettle River watershed, east-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-437, 4 sheets, scale 1:250,000.
- _____, 1976, Water resources of the Little Rock River watershed, northeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-551, 2 sheets, scale 1:500,000.
- Helms, D.R., 1975. Variations in the abundance of channel catfish year classes in the Upper Mississippi River and causative factors: Iowa Fisheries Research, Technical Series no. 75-1, 31 p. [Available from the National Technical Information Service, Springfield, Va, 22161 as PB-254 071.]
- Helsel, D.R., and Hirsch, R.M., 1992, Statistical methods in water resources, Studies in Environmental Science 49: Elsevier, 522 p.
- Hem, J.D., 1985, Study and interpretation of the chemical characteristics of natural water: U.S. Geological Survey Water-Supply Paper 2254, 263 p.
- Henderson, C.L., 1982, Minnesota colonial waterbird nesting site inventory: Journal of the Minnesota Academy of Sciences, v. 48, no. 3, p. 35-37.
- Henrich, E.W., and Daniel, D.N., 1986, Drainage area data for Wisconsin streams: U.S. Geological Survey Open File Report 83-933, 322 p.
- Herb, W.J., 1989, Minnesota District Water Resources Division—Information and technical assistance, *in* Agrichemicals and Ground Water Protection—Resources and Strategies for State and Local Management, St. Paul, Minnesota, October 24-25, 1988 [Proceedings], p. 93-97.
- Hesse, L.W., Stalnaker, C.B., Benson, N.G., and Zuboy, J.R., 1993, Proceedings of the symposium on restoration planning for the rivers of the Mississippi River ecosystem: National Biological Survey, 31 p.
- Eugene A. Hickok and Associates, 1972, Storm water impact investigation for the Metropolitan Council: Metropolitan Council of the Twin Cities Area, 124 p.
- _____, 1978, Environment of the lower Minnesota River; southwest area 201: Metropolitan Waste Control Commission, 113 p.

- _____, 1979, Wetlands and organic soils for the control of urban stormwater, *in* Lake Restoration: U.S. Environmental Protection Agency Report no. EPA 440/5-79-001, p. 153-158.
- Hickok-RCM International, 1974, Load allocation study for the lower Minnesota River segment for the Minnesota Pollution Control Agency: Minnesota Pollution Control Agency, 82 p.
- Hicks, J.K., 1974, Coon Rapids pool hydrographic study: U.S. Geological Survey Open-File Report, 6 p.
- Hill, E.J., 1891, Notes on the flora of the St. Croix Region: Botanical Gazette, v. 91, p 108-113.
- Hilsenhoff, W.L., 1966, Effect of diquat on aquatic insects and related animals: Journal of Economic Entomology, v. 59, p. 520-1521.
- _____, 1981, Aquatic insects of Wisconsin: Natural History Council Wisconsin, Madison, 60 p.
- _____, 1982, Using a biotic index to evaluate water quality in streams: Wisconsin Department of Natural Resources Technical Bulletin no. 132, 22 p.
- Hindall, S.M., 1972, Sediment yields of Wisconsin streams: U.S. Geological Survey Open-File Report, 2 p.
- _____, 1976, Measurement and prediction of sediment yields in Wisconsin streams: U.S. Geological Survey Water-Resources Investigations 54-75, 27 p.
- _____, 1979, Ground-water quality in selected areas of Wisconsin: U.S. Geological Survey Open-File Report 79-1594, 20 p.
- _____, 1976, Prediction of sediment yields in Wisconsin streams, *in* Proceedings of the Third Federal Inter-Agency Sedimentation Conference, Denver, Colorado, March 22-25, 1976: Water Resources Council, Sedimentation Committee, p. 1-205 - 1-218.
- Hindall, S.M., and Skinner, E.L., 1973, Water resources of Wisconsin—Pecatonica-Sugar River Basin: U.S. Geological Survey Hydrologic Investigations Atlas HA-453, 3 sheets, scale 1:1,000,000.
- Hindall, S.M., and Flint, R.F, 1970, Sediment yields of Wisconsin streams: U.S. Geological Survey Hydrologic Investigation Atlas HA-376, 1 sheet.
- Hine, R.L., 1981, Leopard frog populations and mortality in Wisconsin, 1974-76: Wisconsin Department of Natural Resources Technical Bulletin 122, 39 p.
- Hoagberg, R.K., 1990, Glacial stratigraphy of northwestern Hennepin County, Minnesota [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-26, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 13.
- _____, 1992, Holocene stratigraphy of a part of the Minnesota River valley, Savage, Minnesota [abs.], Geological Society of America, North Central Section, 26th annual meeting, Iowa City, Iowa, April 30-May 1, 1992, Abstracts with Programs: Geological Society of America, v. 24, no. 4, p. 21.
- _____, 1988, Holocene depositional environments within the lower Minnesota River Valley, Savage, Minnesota [abs.], Geological Society of America, 22nd annual meeting, North Central Section, Akron, Ohio, April 21-22, 1988, Abstracts with Programs: Geological Society of America, v. 20, no. 5, p. 348.

Hobbs, H.C., 1983, Drainage relationship of glacial Lake Aitkin and Upham and early Lake Agassiz in northeastern Minnesota, *in* Teller, J.T., and Clayton, L., Glacial Lake Agassiz, University of Manitoba, Earth Science Department, Winnipeg, Manitoba, Canada: Special Paper Geological Association of Canada, v. 26, p. 245-259.

_____, 1983, Structure and geomorphology of the St. Croix Moraine, Swanville area, Minnesota [abs.], Craddock, J.C., 17th annual meeting, Geological Society of America, North Central Section, Madison, Wisconsin, April 28-29, 1983, Abstracts with Programs: Geological Society of America, v. 15, no. 4, p. 251.

_____, 1985, Surficial geology of Winona County, southeastern Minnesota [abs.], Berg, J.H., Geological Society of America, North Central Section, 19th annual meeting, DeKalb, Illinois, April 25-26, 1985, Abstracts with Programs: Geological Society of America, v. 17, no. 5, p. 292.

_____, 1987, Quaternary geology of southeastern Minnesota, *in* Balaban, N.H., Field trip guidebook for the Upper Mississippi River Valley, Minnesota, Iowa, and Wisconsin: Guidebook Series Minnesota Geological Survey 15, p. 153-185.

_____, 1990, Why is there a thick, late Wisconsinan fill in the Upper Mississippi River Valley? [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 13-14.

_____, 1992, Thin Des Moines Lobe till outside the Bemis Moraine in southeastern Minnesota [abs.], Geological Society of America, North Central Section, 26th annual meeting, Iowa City, Iowa, April 30-May 1, 1992, Abstracts with Programs: Geological Society of America, v. 24, no. 4, p. 21.

_____, 1994, Karst is a repository for old sediments [abs.], Geological Society of America, North Central Section, 27th annual meeting, Kalamazoo, Michigan, April 28-29, 1994, Abstracts with Programs: Geological Society of America, v. 26, no. 5, p. 21

Hobbs, H.C., Alford, J. J., Anderson, R.C., Balek, C. J., Bettis, E.A.,III, Curry, B.B., Hajic, E.R., Hess, D., F., Knox, J.C., Leigh, D.S., and Rieck, R.L., 1990, Geologic history and development of the Upper Mississippi River, *in* Hammer, W., Hess, D.F., and Fairchild, C., Geology field guidebook—Current perspectives on Illinois Basin and Mississippi Arch geology: Augustana College, Rock Island, Illinois, p. F1-F52.

Hobbs, H.C., and Goebel, J.E., 1982, Geologic Map of Minnesota—Quaternary geology: Minnesota Geological Survey State Map Series S-1, 1 sheet

Hoelt, D.R., 1959, The litho-stratigraphy of the Glenwood and Platteville Formations of southeastern Minnesota: Master's thesis, University of Minnesota, Minneapolis, Minnesota, unknown p.

Hoffman, F., and Dresen, M.D., 1990, Method to evaluate the vertical distribution of VOC's in ground water in a single borehole: Ground Water Monitoring Review, v. 10, no. 2, p. 95-100.

Hogberg, R.K., 1968, Gravel deposits of the Minneapolis quadrangle, Minnesota. *in* Forum on Geology of Industrial Minerals, 4th, Austin, Texas: University of Texas, p. 151-156

- Holland, L.E., 1986, Effects of barge traffic on distribution and survival of ichthyoplankton and small fishes in the Upper Mississippi River: Transactions of the American Fisheries Society, v. 115, no. 1, p. 162-165.
- Holland, L. E., Huff, D., Littlejohn, S., and Jacobsen, R., 1984, Analysis of existing information on adult fish movements through dams on the Upper Mississippi River: U.S. Fish and Wildlife Service, La Crosse, Wisconsin, 210 p.
- Holland-Bartels, L.E., 1990, Physical factors and their influence of the mussel fauna of a main channel border habitat of the Upper Mississippi River: Journal of the North American Benthological Society, v. 9, p. 327-335.
- _____, 1992, Water-quality changes and their relation to fishery resources in the Upper Mississippi River, in Becker, C.D. and Neitzel, D.A., eds., Water quality in North American river systems: Battelle Press, Columbus, Ohio, p. 160-180.
- Holland-Bartels, L.E., and Duval, M.C., 1988, Variations in abundance of young of the year channel catfish in a navigation pool of the Upper Mississippi River: Transactions of the American Fisheries Society, v. 117, no. 2, p. 202-208.
- Holland-Bartels, L.E., and Kammer, T.W., 1989, Seasonal reproductive development of *Lampsilis cardium*, *Amblema plicata plicata*, and *Potamilus alatus* (Pelecypoda: Unionidae) in the Upper Mississippi River: Journal of Freshwater Ecology, v. 5, no. 1, p. 87-92.
- Holmquist, J.D., and Brookins, J.A., 1972, Minnesota's major historic sites—A guide: Minnesota Historical Society, St. Paul, Minnesota, 191 p.
- Holmstrom, B.K., 1972, Drainage-area data for Wisconsin streams: U.S. Geological Survey Open-File Report, 74 p.
- _____, 1979, Low-flow characteristics of Wisconsin streams at sewage-treatment plants and industrial plants: U.S. Geological Survey Water-Resources Investigations Report 79-31, 123 p.
- _____, 1980, Low-flow characteristics of streams in the St. Croix River Basin, Wisconsin: U.S. Geological Survey Open-File Report 80-696, 62 p.
- Holt, C.L.R., Jr., and Knowles, D.B., 1963, The water situation in Wisconsin in the role of ground water in the national water situation, in U.S. Geological Survey Water-Supply Paper 1800, p. 943-960.
- Holt, C.L.R., Jr., and Skinner, E.L., 1973, Ground-water quality in Wisconsin through 1972: Wisconsin Geological and Natural History Survey Information Circular 22, 148 p.
- Holt, C.S., 1965, Effect of light intensity on the stream drift of *Gammarus pseudolimnaeus* Bousfield and *Baetis vagans* McDonough in Valley Creek, Washington County, Minnesota: Doctoral thesis, University of Minnesota, St. Paul, Minnesota.

- Holz, B., Alexander, S.C., Alexander, E.C., Jr., Regan, C.P., and Thompson, B.C., 1992, Brown/Nicollet/Cottonwood County Minnesota clean water partnership—Local assessment of water-quality issues [abs.], 1992 annual meeting of the Geological Society of America, Cincinnati, Ohio, October 26-29, 1992, Abstracts with Programs: Geological Society of America, v. 24, no. 7, p. 242.
- Holzer, J.A., 1980, Determining the significance of wing dams, riprap and sand as fishery habitat. *in* Mississippi River Work Unit Annual Report 1978-1980, La Crosse, Wisconsin: Wisconsin Department Natural Resources, p. 18-28.
- Hoops, R., 1987, A river of grain the evolution of commercial navigation on the Upper Mississippi River: University of Wisconsin, Madison, Wisconsin, 125 p.
- Hopeman, A.R., Jr., 1973, An economic analysis of flood damage reduction alternatives in the Minnesota River Basin: Minnesota Water Resources Bulletin 58, 77 p.
- Hopwood, A.J., 1974, Thermal effects of a nuclear power plant on the Mississippi River at Monticello, Minnesota: Minnesota Water Resources Research Center Bulletin 19, 134 p.
- Hora, M.E., 1975, PCB investigation of the Mississippi River and its tributaries water, bottom sediment, and point sources: Minnesota Pollution Control Agency, 23 p.
- _____, 1984, Polychlorinated biphenyls (PCBs) in common carp (*Cyprinus carpio*) of the Upper Mississippi River. *in* Wiener, J.G., Anderson, R.V., and McConville, D.R., eds., Contaminants in the Upper Mississippi River—Proceedings of the 15th annual meeting of the Mississippi River Research Consortium, LaCrosse, Wisconsin, April 14-15, 1982: Butterworth Publishers, Stoneham, Massachusetts, p. 231-239.
- Horn, M.A., 1981, Data for water resources management in Minnesota. *in* Allee, D.J., Dworsky, L.B., and North, R.M., eds., Unified River Basin Management—Stage II, American Water Resources Association Symposium, Atlanta, Georgia, October 4-8, 1981, Proceedings: American Water Resources Association, p. 429-441.
- _____, 1982, Ground-water use in Minneapolis-St. Paul area, Minnesota: U.S. Geological Survey Professional Paper 1375, 104 p.
- _____, 1983, Ground-water-use trends in the Twin Cities metropolitan area, Minnesota 1880-1980: U.S. Geological Survey Water-Resources Investigations Report 83-4033, 37 p.
- _____, 1984, Annual ground-water use in the Twin Cities metropolitan area, Minnesota 1970-79: U.S. Geological Survey Open-File Report 84-577, 130 p.
- _____, 1986, Development of a water-use data system in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4306, 59 p.
- Horner and Shifrin, Inc., 1968, Study of sewer separation—phase I, City of St. Paul, Minnesota: Horner and Shifrin, Inc., St. Louis, Missouri, 45 p.

- Hornbach, D.J., Deneka, T., Payne, B.S., and Miller, A.C., 1989, Benthic macroinvertebrate community structure in a backwater lake of Pool 2, Upper Mississippi River: *Journal of Freshwater Ecology*, v.5, no. 2, p.131-138.
- Hornbach, D.J., and Miller, A.C., 1989, Benthic macroinvertebrate community structure in a backwater lake of Pool 2, Upper Mississippi River: *Journal of Freshwater Ecology*, v. 5, no. 2, p. 131-138.
- Horton, A.H., and Follansbee, R., 1906, Surface water supply of Upper Mississippi River and Hudson Bay drainages, 1906: U. S. Geological Survey Water-Supply Paper 207, 94 p.
- Hosner, J.F., and Boyce, S.G., 1962, Tolerance to water saturated soil of various bottomland hardwoods: *Forest Science*, v. 8, p. 180-186.
- House, L.B., 1981, An assessment of streamflow, water quality, and the effects of constructing an impoundment on Bridge Creek at Augusta, Wisconsin: U.S. Geological Survey Open File Report, 25p.
- Hoyer, M.C., Hallgren, J.P., Uebel., M.H., Delin, G.N., Eisenreich, S.J., and Sterling, R.L., 1994, University of Minnesota Aquifer Thermal-Energy Storage (ATES) project report on the third long-term cycle: University of Minnesota, St. Paul, Minnesota, 125 p.
- Huber, J.K., and Gilbertson, J.P., 1990, Biotic analysis of late Illinoian fluvial sediments in the Upper Minnesota River Valley, USA [abs.], in Morgan, A.V., Canadian Quaternary Association-American Quaternary Association—first joint meeting, Waterloo, Ontario, June 4-6, 1990, p. 20.
- Hudak, G.J., 1974, Wild River survey: Science Museum of Minnesota, 20 leaves. [Available from the Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota 55155.]
- Hughes, G.L., 1973, Unique and endangered plants and animals in the Twin Cities metropolitan area; Revised by Virginia Fuller Holman, June 1974: Metropolitan Council of the Twin Cities Area, 107 p.
- Hult, M.F., 1979, Design of a network for monitoring ground-water quality in Minnesota: U.S. Geological Survey Open-File Report 79-1164, 44 p.
- _____, 1984, Assessment of ground-water contamination by coal-tar derivatives, St. Louis Park area Minnesota: U.S. Geological Survey Open-File Report 84-867, 57 p.
- _____, 1987, Microbial oxidation of petroleum vapors in the unsaturated zone [abs.], in Franks, B.J., ed., U.S. Geological Survey program on toxic waste—ground-water contamination—Proceedings of the third technical meeting, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109 p. C25-C26.
- _____, 1987, Movement and fate of crude-oil in contaminants in the subsurface environment at Bemidji, Minnesota, Chapter C, in Franks, B.J., ed., U.S. Geological Survey program on toxic waste—ground-water contamination—Proceedings of the third technical meeting, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109, p. C3-C4.

- _____, 1989, Subsurface contamination at the Bemidji, Minnesota research site [abs.], *in* Mallard, G.E., and Ragone, S.E., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting, Phoenix, Arizona, September 26-30, 1988: U.S. Geological Survey Water-Resources Investigations Report 88-4220, p. 3.
- _____, 1991, Overview of research on contamination of the subsurface by crude oil at the Bemidji, Minnesota toxic substances research site, *in* Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 611-613.
- Hult, M.F., ed., 1984, Ground-water contamination by crude oil at the Bemidji, Minnesota research site U.S. Geological Survey toxic waste-ground-water contamination study: U.S. Geological Survey Water-Resources Investigations Report 84-4188, 107 p.
- Hult, M.F., and Grabbe, R.R., 1988, Distribution of gases and hydrocarbon vapors in the unsaturated zone, *in* Ragone, S.E., ed., U.S. Geological Survey program on toxic waste—ground-water contamination—Proceedings of the second technical meeting, Cape Cod, Massachusetts, October 21-25, 1985: U.S. Geological Survey Open-File Report 86-481, p. C21-C25.
- Hult, M.F., Chang, F.H., and Pfannkuch, H.O., 1986, Microbial oxidation of petroleum vapors in the unsaturated zone. *in* Chapman Conference on Microbial Processes in the Transport, Fate and In-situ Treatment of Subsurface Contaminants, Snowbird, Utah, October 1-3, 1986: American Geophysical Union Chapman Meeting Abstracts, p. 23-24.
- Hult, M.F., Landon, M.K., and Pfannkuch, H.O., 1991, Field validation of conceptual models of mobilization and transport of volatile petroleum derivatives in the unsaturated zone near Bemidji, Minnesota. *in* Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 621-626.
- Hult, M.F., and Schoenberg, M.E., 1981, Preliminary evaluation of ground-water contamination by coal-tar derivatives, St. Louis Park area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 81-72, 53 p.
- _____, 1984, Preliminary evaluation of ground-water contamination by coal-tar derivatives, St. Louis Park area, Minnesota: U.S. Geological Survey Water-Supply Paper 2211, 53 p.
- Hult, M.F., and Stark, J.R., 1988, Coal-tar derivatives in the Prairie du Chien-Jordan Aquifer, St. Louis Park, Minnesota. *in* Moody, D.W., Carr, J., Chase, E.B., and Paulson, R.W., National water summary 1986—Hydrologic events and ground-water quality: U.S. Geological Survey Water-Supply Paper 2325, p. 99-102.
- Hunt, R.L., 1981, A successful application of catch and release regulations on a Wisconsin trout stream: Wisconsin Department of Natural Resources Technical Bulletin no. 119, 30 p.

- _____, 1988, A compendium of 45 trout stream habitat development evaluations in Wisconsin during 1953-85: Wisconsin Department of Natural Resources Technical Bulletin no. 162, 80 p.
- Hurtgen, D.C., 1975, Summary of floods, June 29-30 in southwestern Wisconsin, *in* Summary of floods in the United States during 1969: U.S. Geological Survey Water-Supply Paper 2030, p. 116-119.
- Hydroscience, Inc., 1977, Progress report on task I—Review of water-quality models: Metropolitan Waste Control Commission, 34 p.
- _____, 1978, Upper Mississippi River 208 grant water-quality-modeling study summary report: Metropolitan Waste Control Commission, 26 p.
- _____, 1979, Calibration report for the SPAM statistical model, Mississippi River at Minneapolis-St. Paul: Metropolitan Waste Control Commission, 242 p.
- _____, 1979, Upper Mississippi River 208 grant water-quality-modeling study, revised August 1979: Metropolitan Waste Control Commission, 126 p.
- Ince, N., and Inel, Y., 1989, Volatilization of organic chemicals from water: *Water, Air and Soil Pollution*, v. 47, no. 1-2, p. 71-79.
- Ingebritsen, R.H., 1993, Distribution of marcasite-pyrite within stromatolitic facies, Oneota Dolomite, Prairie du Chien Formation, Fillmore County, Minnesota [abs.], Geological Society of America, North Central Section, 27th annual meeting, Rolla, Missouri, March 29-30, 1993, Abstracts with Programs: Geological Society of America, v. 25, no. 3, p. 28.
- Inouye, R.S., 1987, Old-field succession on a Minnesota sand plain: *Ecology*, v. 68, no. 1, p. 12-26.
- Interagency Floodplain Management Review Committee, 1994, Sharing the challenge—Floodplain management into the 21st century: U.S. Government Printing Office, Washington, DC, variously paged.
- International Agency for Research on Cancer, 1991, Monographs on the evaluation of carcinogenic risks to humans—Chlorinated drinking water; chlorination by-products; some other halogenated compounds; cobalt and cobalt compounds: International Agency for Research on Cancer, Lyon, France, v. 52.
- Itasca Engineering, Inc., 1969, Water-resource inventory of the lower Minnesota River watershed district: Lower Minnesota River Watershed District, 147 p.
- Jackson, G.A., Korschgen, C.E., Thiel, P.A., Besser, J.M., Steffeck, D.W., and Bockenbauer, M.H., 1981, A long-term resource monitoring plan for the Upper Mississippi River System: Upper Mississippi River Basin Commission, Comprehensive Master Plan for the Management of the Upper Mississippi River System, Technical Report F, v. I and II, 966 p.

- Jackson, G.A., Korschgen, C.E., Thiel, P.A., and Besser, J.M., Steffek, D.W., and Bockenbauer, M.H., 1984, Problems on the Upper Mississippi River and its tributaries—Need for a long term resource monitoring program, *in* Wiener, J.G., Anderson, R.V., and McConville, D.R., eds., Contaminants in the Upper Mississippi River, Proceedings of the 15th annual meeting of the Mississippi River Research Consortium, Butterworth Publishers, Boston, Massachusetts, p. 325-343.
- Jackson, H., 1961, Mammals of Wisconsin: University of Wisconsin, Madison, Wisconsin, 504 p.
- Jackson, J.L., and Savina, M.E., 1984, Dissemination of Superior Lobe materials in Des Moines Lobe diamictons along the eastern margin of the Des Moines Lobe, southeastern Minnesota [abs.], 33rd annual meeting of the Geological Society of America, Southeastern Section, Lexington, Kentucky, April 4-6, 1984: Geological Society of America, v. 16, no. 3, p. 148.
- Jackson, M., and Van der Voo, R., 1985, A Lower Ordovician paleomagnetic pole from the Oneota Dolomite, Upper Mississippi River Valley: *Journal of Geophysical Research*, v. 90, no. 12, p. 10, p. 449- 461.
- Jackson, M., Van der Voo, R., and Watts, D.R., 1983, Paleomagnetism of the Lower Ordovician Oneota Dolomite, Upper Mississippi River Valley [abs.]: *EOS, Transactions, American Geophysical Union*, v. 64, no. 18, p. 216.
- Jacobs, P.M., and Knox, J.C., 1994, Provenance and petrology of a long-term Pleistocene depositional sequence in Wisconsin's Driftless Area: *Catena*, v. 22, no. 1, p. 49-68.
- James, J., 1977, Paleoenvironments of the Upper Cambrian Lone Rock Formation of west-central and southwestern Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Janecek, J.A., 1988, Literature review on fishes interactions with aquatic macrophytes with special reference to the Upper Mississippi River System. *in* Upper Mississippi River Conservation Committee, Special Report, Rock Island, Illinois, 57 p.
- Jaques, J.E., and Lorenz, D.L., 1988, Techniques for estimating the magnitude and frequency of floods in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 87-4170, 48 p.
- Jaske, R.T., 1970, Improved methods for evaluation of thermal discharge practices and alternative actions: Institute of Environmental Sciences, 1970 annual technical meeting, Boston, Massachusetts, April 12-16, 1970, p. 261-166.
- Jennings, C.A., and Wilson, D.M., 1993, Spawning activity of paddlefish (*Polvodon Dathula*) in the lower Black River, Wisconsin: *Journal of Freshwater Ecology*, v. 8, p. 261-262.
- Johannes, C.A., 1960, Memorandum on Mississippi River in the metropolitan area from junction with Rum River to Minneapolis-St. Paul Sanitary District outfall, October 1960: Minnesota Department of Health, Division of Environment and Sanitation, Section of Water Pollution Control, mimeographed report.
- Johnson, D.K., and Aasen, P.W., 1989, The metropolitan wastewater treatment plant and the Mississippi River—50 years of improving water quality: *Journal of the Minnesota Academy of Science* v. 55, no. 1, p. 134-143.

- Johnson, J.H., 1976, Effects of tow traffic on the resuspension of sediments and on dissolved-oxygen concentrations in the Illinois and Upper Mississippi Rivers under normal pool conditions: U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi, Technical Report Y-76-1, 181 p.
- Johnson, K., 1990, Program 1400—Water Quality Division-1900 Objectives: Metropolitan Waste Control Commission, St. Paul, Minnesota, 38 p.
- Johnson, M.D., 1988, Chetek Member of the Copper Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin 1984-1987: Information Circular Wisconsin Geological and Natural History Survey, p. 47-48.
- _____, 1988, Mikana Member of the Copper Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin: Information Circular Wisconsin Geological and Natural History Survey, p. 37-40.
- _____, 1988, Pokegama Creek Member of the Copper Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin: Information Circular Wisconsin Geological and Natural History Survey, p. 28-31.
- _____, 1988, Poskin Member of the Copper Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin: Information Circular Wisconsin Geological and Natural History Survey, p.32-36.
- _____, 1988, Prairie Farm Member of the River Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin: Information Circular Wisconsin Geological and Natural History Survey, p. 14-18.
- _____, 1988, Sylvan Lake Member of the Copper Falls Formation, *in* Attig, J.W., Clayton, L., and Mickelson, D.M., Pleistocene stratigraphic units of Wisconsin: Information Circular Wisconsin Geological and Natural History Survey, p. 41-46.
- _____, 1994, Evidence for a short-lived glacial Lake Grantsburg [abs.], 27th annual meeting of the Geological Society of America, North Central Section, Abstracts with Programs: Geological Society of America, v. 26, no. 5, p. 22.
- Johnson, S., 1994, Recreational boating impact investigations Upper Mississippi River System, pool 4, Red Wing, Minnesota: National Biological Survey, Onalaska, Wisconsin, 48 p.
- Johnson, S.P., 1980, Slow water—Slow speed zone compliance study, lower St. Croix National Scenic Riverway: Minnesota-Wisconsin Boundary Area Commission.
- Jones, J.R., Akin, P.D., and Schneider, Robert, 1963, Geology and ground-water conditions in the southern part of the Camp Ripley Military Reservation, Morrison County, Minnesota: U.S. Geological Survey Water-Supply Paper 1669-A, 32 p.
- Jorgensen, D.G., Helgesen, J.O., Leonard, R.B., and Signor, D.C., 1986., Equivalent freshwater head and dissolved solids concentration of water in rocks of Cambrian, Ordovician, and Mississippian age in the Northern Midcontinent, USA: U.S. Geological Survey Mineral Investigations Field Studies MF-1835-B, 2 sheets.

- Joyce, E.C., Tozer, M.K., Galer, B.R., Whelan, P.M., and Cotter, J.F.P., 1990, Tectonic implications of the boulder pavement, northeast and south central Minnesota River Valley, Minnesota [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 15-16.
- Jude, D.J., 1973, Food and feeding habits of gizzard shad in Pool 19, Mississippi River: Transactions of the American Fisheries Society, v. 102, p. 378-383.
- Juettner, F., 1988, Motor-boat-derived volatile organic compounds (VOC) in lake water: Zeitschrift fuer Wasser und Abwasser Forschung Zwabaq, v. 21, no. 2, p. 36-39.
- Junemann, P.M., 1951, Some sedimentary studies of the Lodi Shale in western Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin, 29 p.
- Kahl, R., 1991, Restoration of canvasback migrational staging habitat in Wisconsin—A research plan with implications for shallow lake management: Minnesota Department of Natural Resources Technical Bulletin 172, p. 1-47.
- Kalnicky, R.A., 1976, Recreation use of small streams in Wisconsin: Wisconsin Department of Natural Resources Technical Bulletin no. 95, 20 p.
- Kammer, J.A., and Smith, J.A., 1988, Collection and analysis of unsaturated-zone soil gas for volatile organic compounds, *in* U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the Technical Meeting, Phoenix, Arizona, September, 1989: U.S. Geological Survey Water-Resources Investigations Report 88-4220, p. 617-623.
- Kammerer, P.A., Jr., 1981, Ground-water quality atlas of Wisconsin: Wisconsin Geological and Natural History Survey Information Circular 39, 39 p.
- _____, 1984, An overview of ground-water-quality data in Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 83-4239, 58 p.
- _____, 1987, Wisconsin ground water quality: U.S. Geological Survey Open-File Report 87-762, 7 p.
- _____, 1995, Ground-water flow and quality in Wisconsin's shallow aquifer system: U.S. Geological Survey Water-Resources Investigations Report 90-4171, 42 p.
- Kammerer, P.A., Jr., Lidwin, R.A., Mason, J.W., and Narf, R.P., 1983, Aquatic biology in Nederlo Creek, southwestern Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 82-56, 27 p.
- Kanivetsky, R., 1978, Hydrogeologic map of Minnesota, bedrock Hydrogeology: Minnesota Geological Survey, State Map Series S-2, 2 sheets.
- _____, 1979, Hydrogeologic map of Minnesota, Quaternary hydrogeology: Minnesota Geological Survey, State Map Series S-3.
- _____, 1986, Major-constituent chemistry of selected Phanerozoic aquifers in Minnesota: Minnesota Geological Survey, Miscellaneous Map Series, Map M-61, 2 sheets.
- _____, 1988, Determination of hydraulic parameters of aquifers and confining beds: Hydrological Science and Technology Short Papers, v. 4, no. 1-4, p. 30-37.

- _____, 1989, Geologic atlas of Hennepin County, Minnesota—Bedrock hydrogeology: County Atlas Series Minnesota Geological Survey, 1 sheet.
- Kanivetsky, R., and Palen, Barbara, 1983, Ground-water recharge rates in Minnesota related to precipitation: Minnesota Geological Survey, 37 leaves
- Kanivetsky, R., and Walton, M., 1979, Hydrogeologic map of Minnesota, bedrock hydrogeology, Minnesota Geological Survey, State Map Series S-2, 11 p.
- Kansas Geological Society, 1935, Guidebook 9th annual field conference, Upper Mississippi River Valley, Iowa City, Iowa, to Duluth, Mississippi, August 25 to September 1: Kansas Geological Society, 471 p.
- Kelnhofner, G.J., Jr., 1968, Metropolitan planning and river basin planning—Some interrelationships: Water Resources Center Report, 218 p.
- Kemmis, T.J., 1980, Some aspects of the dynamics of the Des Moines glacial lobe as inferred from landform/sediment associations [abs.]: EOS, Transactions, American Geophysical Union, v. 61, no. 5, p. 50.
- Kerfoot, H.B., 1991, Subsurface partitioning of volatile organic compounds—effects of temperature and pore-water content: *Ground Water*, v. 29, no. 5, p. 678-684.
- Kiester, S.A., 1976, The mineralogy and sedimentology of the Cambrian strata of southeastern Minnesota: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Kim, K., Chu, C.S., Bowers, C.E., and Baker, D.G., 1974, Forecasting rainfall and snowmelt floods on upper midwest watersheds: University of Minnesota, St. Anthony Fall Hydraulic Laboratory Report 151, 145 p.
- Kindschi, G.A., ed., 1980, A compendium of mollusk (naiad) surveys taken from the Upper Mississippi River and major tributaries: U.S. Fish and Wildlife Service, Office of Endangered Species, Region 3, 268 p.
- King, J.S., 1968, Planning for multi-purpose development of water and related land resources in the Upper Mississippi River Basin, *in* International Conference on Water for Peace, v. 8, p. 445-454.
- King, K., 1985, Longitudinal zonation of the Minnesota River: University of Minnesota, St. Paul, Minnesota, Water Resources Research Center Report 6, 127 leaves.
- King, P.B. and Beikman, H.M., compilers, 1974, Geologic map of the United States: U.S. Geological Survey, scale 1:2,500,000, 2 sheets.
- Kirsch, N.A., Hanson, S.A., Renard, P.A., and Enblom, J.W., 1985, Biological survey of the Minnesota River: Minnesota Department of Natural Resources Special Publication 139, 85 p.
- Klaseus, T.G., Buzicky, G.C., and Schneider, E.C., 1988, Pesticides in groundwater—Survey of selected wells: Minnesota Department of Health, Minneapolis, Minnesota, 95 p.

- Klein, A.M., Hanson, S.M., and Cotter, J.F.P., 1990, The Alexandria Moraine, west-central Minnesota—an overridden (?) moraine complex [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 37.
- Kleinert, S.J., and Degurse, P.E., 1972, Mercury levels in Wisconsin fish and wildlife: Wisconsin Department of Natural Resources Technical Bulletin 52, p. 1-22.
- Kleinert, S.J., and Degurse, P.E., 1971, Mercury levels in fish from selected Wisconsin waters (A Preliminary Report): Wisconsin Department of Natural Resources Research Report 73, 16 p.
- Klemic, H., and Ohlson, J.M., 1983, Eau Claire Sandstone and Wonewoc Formation of Ostrom (1966), *in* Brown, B.A., Three billion years of geology—Field trip through the Archean, Proterozoic, Paleozoic, and Pleistocene geology of the Black River Falls area of Wisconsin: Wisconsin Geological and Natural History Survey Field Trip Guide Book 9, p. 49-50.
- Kliest, J.J.G., 1993, VOC's and soil pollution, *in* Bloemen, H.J., and Burn, J., eds., Volatile organic compounds in the environment (1st ed.): Chapman and Hall, Glasgow, United Kingdom, 290 p.
- Kline, D.R., and Golden, J.L., 1979, Analysis of the Upper Mississippi River commercial fishery, *in* J.L. Rasmussen, ed., A compendium of fishery information on the Upper Mississippi River: Upper Mississippi River Conservation Committee, Rock Island, Illinois, p. 82-117.
- Knopf, R.C., Lime, D.W., 1984, A recreation manager's guide to understanding river use and users: University of Minnesota North Central Forest Experiment Station General Technical Report WO-38, 37 p.
- Knopp, T.B., 1979, The Kettle—Minnesota's first wild river—Its use and user preferences: University of Minnesota Agricultural Experiment Station Forestry Series no. 28, 35 p.
- Knox, J.C., 1977, Human impacts on Wisconsin stream channels: *Annals of the Association of American Geographers*, v. 67, no. 3, p. 323-342.
- _____, 1985, Pleistocene drainage incision in the Upper Mississippi River Valley Driftless area [abs.], Geological Society of America, 98th annual meeting, Orlando, Florida, Abstracts with Programs: Geological Society of America, v. 17, no. 7, p. 631.
- _____, 1988, Climatic influence on Upper Mississippi River Valley floods, *in* Flood Geomorphology: John Wiley and Sons, New York, p. 279-300.
- _____, 1989, Long and short-term episodic storage and removal of sediment in watersheds of southwestern Wisconsin and northwestern Illinois, *in* Sediment and the Environment—Proceedings of a symposium held in Baltimore, Maryland: International Association of Hydrological Sciences 184, p. 157-164.
- Knox, J.C., Bartlein, P.J., Hirschboeck, K.K., and Muckenhirn, R.J., 1975, The response of floods and sediment yields to climatic variation and land use in the Upper Mississippi River Valley: University of Wisconsin Institute for Environmental Studies, Madison, Wisconsin, 76 p.

- Komor, S.C., 1992, Nitrate in Minnesota sand-plain aquifers [abs.], Joint Spring Meeting of American Geophysical Union, Canadian Geophysical Union, and Mineralogical Society of America, Montreal, Canada, May 12-15, 1992, Proceedings: American Geophysical Union, p. 125.
- _____, 1994, Geochemistry and hydrology of a calcareous fen within the Savage Fen wetlands complex, Minnesota, USA: *Geochimica et Cosmochimica Acta*, v. 58, no. 16, p. 3353-3367.
- _____, 1994, Geochemistry and hydrology of Savage Fen, a calcareous fen in the Minnesota River Valley [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 9.
- Komor, S.C., and Anderson, H.W., Jr., 1993, Nitrogen isotopes as indicators of nitrate sources in Minnesota sand-plain aquifers: *Ground Water*, v. 31, no. 2, p. 260-270.
- Komor, S.C., and Emerson, D.G., 1992, Atrazine and bromide movement through the unsaturated sand plains at sites in Minnesota and North Dakota [abs.]: 1992 North Dakota Water Quality Symposium, Bismarck, North Dakota, March 25-26, 1992, Proceedings: North Dakota State University Extension Service.
- _____, 1994, Movements of water, solutes, and stable isotopes in the unsaturated zones of two sand plains in the Upper Midwest: *Water Resources Research*, v. 30, no. 2, p. 253-267.
- Komor, S.C., and Magner, J.A., 1995, Chemical and isotopic investigations of relations between nitrate in ground water and water sources used by riparian trees in southern Minnesota [abs.]: 1995 Spring Meeting American Geophysical Union, v. 76, no. 17, p. 5111.
- Kontis, A.L., and Mandle, R.J., 1980, Data-base system for northern Midwest regional aquifer-system analysis: U.S. Geological Survey Water- Resources Investigations Report 80-104, 27 p.
- Korschgen, C.E., George, L.S. and Green, W.L., 1988, Feeding ecology of canvasbacks staging on Pool 7 of the Upper Mississippi River, in Weller, M.W., ed., *Waterfowl in winter*: University of Minnesota Press, Minneapolis, Minnesota, p. 237-250.
- Korschgen, C.E., Jackson, G.A., Muessig, L.F., and Southworth, D.C., 1987, Sedimentation in Lake Onalaska, navigation pool 7, Upper Mississippi River, since impoundment: *Water Resources Bulletin*, v. 23, no. 2, p. 221-226.
- Koth, M.A., 1989, How clean is the river? An examination of the water quality of the Upper Mississippi River, in Dymek, R.F., and Shelton, K.L., Geological Society of America 1989 annual meeting, St. Louis, Missouri, November 6-9, 1989: Geological Society of America, v. 21, no. 6, p. 305.
- Kótaizs, D., and Sparta, C., 1993, VOC's and water pollution. in Bloemen, H.J., and Burn, J., eds., *Volatile organic compounds in the environment* (1st ed.): Chapman and Hall, Glasgow, United Kingdom, 290 p.
- Krabbenhoft, D.P., and Krohelski, J.T, 1992, Data on water quality, lake sediment, and lake-level fluctuation, St. Croix Indian Reservation, Wisconsin, 1981-87: U. S. Geological Survey Open-File Report 92-26, 53 p.

- Kroening, S.E., 1994, Total phosphorus trends in the Upper Mississippi Basin: Master's Thesis, University of Minnesota, Minneapolis, Minnesota, 220 p.
- Krohelski, J.T., Ellefson, B.R., and Storlie, C.A., 1987, Estimated use of ground water for irrigation in Wisconsin, 1984: U.S. Geological Survey Water-Resources Investigations Report 86-4079, 12 p.
- Kropf, E.P., Craddock, J.P., and Wirth, K.R., 1993, Calcite-bearing pseudotachylite in Archean granulite grade rocks of the Minnesota River Valley terrane [abs], American Geophysical Union 1993 fall meeting, San Francisco, California: American Geophysical Union v. 74 (43 Suppl), p. 577.
- Krosch, H.F., 1969, Winter water temperatures and ice cover on Lake St. Croix in the vicinity of the Allen S. King Power Plant: Minnesota Department of Natural Resources Special Publications 77, 1 leaf.
- Krug, W.R., 1976, Simulation of streamflow of Flambeau River at Park Falls, Wisconsin, to define low-flow characteristics: U.S. Geological Survey Water-Resources Investigations 76-116, 14 p.
- Krug, W.R. and Simon, B.D., 1991, Wisconsin floods and droughts, *in* Paulson, R.W., Chase, E.B., Roberts, R.S., and Moody, D.W., eds., National Water Summary 1988-1989—Hydrologic Events and Floods and Droughts: U.S. Geological Survey Water-Supply Paper 2375, p. 567-574.
- Krumholz, D.J., 1987, Upper Mississippi River channel maintenance plan, beneficial and productive use of the dredged material, *in* Inland waterways—Proceedings of a national workshop on the beneficial uses of dredged material, St. Paul, Minnesota, October 27-30, 1987: U.S. Army Corps of Engineers Technical Report D-88-8, p. 192-198.
- Kucera, T.A., and Peterson, A.R., 1980, Fish and wildlife resources of the Mississippi River from Lake Itasca to Lake Winnibigoshish: Minnesota Department of Natural Resources Special Publication 129, 83 p.
- Kuehn, J.H., 1961, A biological reconnaissance of the Upper St. Croix River: Minnesota Department of Natural Resources Investigative Report no. 239, 21 p.
- Kuehn, J.H., Niemuth, W., and Peterson, A.R., 1961, A biological reconnaissance of the Upper St. Croix River: Minnesota Department of Conservation and Wisconsin Department of Conservation Investigations Report 239, 25 p.
- Kuehnast, E.L., Baker, D.G., and Enz, J.W., 1975, Climate of Minnesota, Part VIII—Precipitation Patterns in the Minneapolis-St. Paul metropolitan area and surrounding counties: Agricultural Experiment Station, University of Minnesota, Bulletin 301, 36 p.
- Kuehnast, E.L., Baker, D.G., and Zandlo, J.A., 1982 Climate of Minnesota Part XIII—Duration and depth of snow cover: Minnesota Agricultural Experiment Station Technical Bulletin 333, 23 p.
- Kurtz, V.E., 1949, Ironton and Lower Franconia of southeast Minnesota: Master's thesis, University of Minnesota, Minneapolis, Minnesota, unknown p.
- Kuska, J.J., 1974, St. Croix-Namekagon River resource inventory: University of Minnesota Agricultural Experiment Station Miscellaneous Report 122, 23 p.

- Kyle, M., 1992, Volatile organic compound emissions from municipal wastewater treatment facilities—Part I. Impacts, sources and emission mechanisms (The first in a two part series dealing with VOC air emissions from POTW's): *Water Pollution Control Association of Pennsylvania Magazine*, v. 2, no. 2, p. 31-35.
- LaBaugh, J.W., Groschen, G.E., and Winter, T.C., 1981, Limnological and geochemical survey of Williams Lake, Hubbard County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 81-41, 38 p.
- Lambert, J.W., and Hougland, R.W., 1975, The economic impact of waterborne transportation on the Upper Mississippi River Basin: Upper Mississippi Waterway Association, 197 p.
- Lamb, M.S., and Etheridge, L.T., 1991, Sediment management on the Mississippi, *in* Fan, S.S., Kuo, Y.H., Proceedings of the Fifth Federal Interagency Sedimentation Conference, Las Vegas, Nevada, March 18-21, 1991, p. 1.1-1.8.
- Landon, M.K., and Delin, G.N., 1995, Ground-water quality in agricultural areas, Anoka Sand Plain aquifer, east-central Minnesota, 1984-90: U.S. Geological Survey Water-Resources Investigations Report 95-4024, 25 p.
- Landon, M.K., Delin, G.N., Guo, Lifeng, Regan, C.P., Anderson, J.L., and Dowdy, R.H., 1992, Ground-water quality at the Management Systems Evaluation Area near Princeton, Minnesota, 1991 [abs.]: Annual Midwest Ground Water Conference, 37th, Souix Falls, South Dakota, October 14-16, 1992 [Proceedings], p. 30.
- Landon, M.K., Delin, G.N., Guo, Lifeng, Regan, C.P., Lamb, J.A., Dowdy, R.H., and Anderson, J.L., 1993, Occurrence of agricultural chemicals in ground water at the Princeton, Minnesota Management Systems Evaluation Area: Agricultural Research to Protect Water Quality, Minneapolis, Minnesota, February 21-24, 1993, Proceedings: Soil and Water Conservation Society, p. 434-438.
- Landon, M.K., Delin, G.N., Komor, S.C., and Regan, C.P., 1994, Stable isotopes and major anions as tracers of recharge water to a sand and gravel aquifer, central Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 73, no. 44, p. 277.
- Landon, M.K., Delin, G.N., Lamb, J.A., Anderson, J.L., and Dowdy, R.H., 1994, Impacts of farming systems on ground-water quality at the Princeton, Minnesota, Management Systems Evaluation Area (MSEA) 1991-1992 [abs.]: *Minnesota Water '94—Managing Minnesota's Rivers and Watersheds*, Minneapolis, Minnesota April 21-22, 1994 [Proceedings], p. 6.
- Landon, M.K., Delin, G.N., Lamb, J.A., Dowdy, R.H., and Anderson, J.L., 1993, Effects of farming systems on ground water quality at the Princeton, Minnesota Management Systems Evaluation Area, 1991 [abs.], *in* Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado: U.S. Geological Survey Open-File Report 93-454, p. 63.

- _____, 1994, Effects of farming systems on concentrations of nitrate in ground water at the Princeton, Minnesota Management Systems Evaluation Area (MSEA), 1991-1992 [abs.]: EOS, Transactions, American Geophysical Union, v. 75, no. 19, p. 157.
- Landon, M.K., Delin, G.N., Lamb, J.A., and Guo, Lifeng, 1993, Ground-water quality at the Management Systems Evaluation Area (MSEA) near Princeton, Minnesota, 1991: U.S. Geological Survey Open-File Report 93-43, 8 p.
- _____, 1993, Ground-water quality at the Management Systems Evaluation Area (MSEA) near Princeton, Minnesota, 1991: U.S. Geological Survey Open-File Report 93-80, 2 p.
- Landon, M.K., and Hult, M.F., 1991, Evolution of physical properties and composition of a crude oil spill, in Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting, Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 641-645.
- _____, 1992, Source mass balance calculated from changes in physical properties and composition of spilled crude oil in the subsurface near Bemidji, Minnesota: EOS, Transactions, American Geophysical Union, v. 73, no. 14, p. 132-133.
- _____, 1993, Source mass balance calculated from changes on composition of spilled crude oil in the subsurface near Bemidji, Minnesota [abs.], in Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 105.
- Langton, J.E., 1978, Soil survey of St. Croix County, Wisconsin: University of Wisconsin, Madison, Wisconsin, 145 p.
- Larson, S.P., 1976, An appraisal of ground water for irrigation in the Appleton area, west-central Minnesota: U.S. Geological Survey Water-Supply Paper 2039-B, 34 p.
- Larson, S.P., Mann, W.B., IV, Steele, T.D., and Susag, R.H., 1974, Time-trend and river-reach assessments in water quality of the Mississippi River, Minneapolis-St. Paul, metropolitan area, Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 55, no. 12, p. 1114.
- _____, 1976, Graphic and analytical methods for assessments of stream-water quality—Mississippi River in the Minneapolis-St. Paul metropolitan area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 76-94, 55 p.
- Larson, S.P., McBride, M.S., and Wolf, R.J., 1975, Digital models of a glacial outwash aquifer in the Pearl-Sallie Lakes area, west-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 75-40, 39 p.
- Larson-Higdem, D.C., 1976, Map showing altitude of the bedrock surface in Minnesota: U.S. Geological Survey Open-File Report 76-788, 1 sheet.

- Larson-Higdem, D.C., 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: U.S. Geological Survey Open-File Report 75-342, 33 p.
- Lathrop, R.C., 1989, Mercury levels in walleyes from Wisconsin lakes of different water and sediment chemistry characteristics: Wisconsin Department of Natural Resources Technical Bulletin no. 163, 40 p.
- Latkovitch, V.J., 1979, Flood of July 5-7, 1978 on the South Fork Zumbro River at Rochester, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 79-1583, 1 sheet.
- _____, 1979, Hydrologic data for floods of July 1978 in southeast Minnesota and southwest Wisconsin: U.S. Geological Survey Open-File Report 79-1166, 29 p.
- Lastrup, M.S., and Lowenberg, C.D., 1994, Development of a systemic land cover/land use data base for the Upper Mississippi River System derived from Landsat Thematic Mapper satellite data: Environmental Management Technical Center Report LTRMP 94-T001, 103 p.
- Lawrence, C.L., and Ellefson, B.R., 1979, Water use in Wisconsin: U.S. Geological Survey Open-File Report 82-444, 98 p.
- Lawrence, C.L., Ellefson, B.R. and Cotter, R.D., 1984, Public-supply pumpage in Wisconsin in 1979: U.S. Geological Survey Open-File Report 83-931, 40 p.
- Lawrenz, R.W., 1985, The response of invertebrates in temporary vernal wetlands to Altosid® SR-10 as used in mosquito abatement programs: *Journal of the Minnesota Academy of Science*, v. 50, no. 3, p. 31-34.
- Leach, J.A., and Magner, J.A., 1992, Wetland drainage impacts within the Minnesota River Basin: *Currents*, v. 2, p. 3-10.
- Leete, J.H., 1991, Ground-water quality and management in Minnesota: *Journal of the Minnesota Academy of Science*, v. 56, no. 1, p. 34-43.
- Leich, B.A., 1961, Geohydrology of the Jordan aquifer in the Minneapolis-St. Paul area, Minnesota: Minnesota Conservation Department, Division of Waters Technical Paper 2, 24 p.
- Leier, P.J., and Perkins, D.I., 1982, Thermometry and barometry of granulite facies rocks from the Minnesota River valley[abs]: *EOS, Transactions, American Geophysical Union*, v. 63, no. 45, p. 1151.
- Leigh, D.S., 1994, Roxana Silt of the Upper Mississippi River Valley; lithology, source, and paleoenvironment: *Geological Society of America Bulletin*, v. 106, no. 3, p. 430-442.
- Leighton, M.M., 1946, Geological implications of the loesses of the Upper Mississippi River Valley region [abs.]: *Geological Society of America Bulletin*, v. 57, no. 12, p. 1213.
- _____, 1965, The stratigraphic succession of Wisconsin loesses in the Upper Mississippi River valley: *Journal of Geology*, v. 73, no. 2, p. 323-345.

- Lennox, D.H., Maathuis, H., and Pederson, D., 1988, Region 13, western glaciated plains. *in* Back, W., Rosenshein, J.S., and Seaber, P.R., Hydrogeology: U. S. Geological Survey, Reston, Va, v. O-2, p. 115-128.
- Lewis, L.R., 1970, Marginal costs of alternative levels of water quality in the Upper Mississippi River: Water Resources Research Center Bulletin 25, 59 p.
- Li, C., and Voudrias, E.A., 1993, Effect of organic carbon on the uptake of benzene vapor by soil: Environmental Technology, v. 14, no. 2, p. 189-194.
- Lidiak, E.G., 1974, Magnetic characteristics of some Precambrian basement rocks: Geomagnetic Anomalies, Rock Magnetism and Petrography, v. 40, no. 4, p. 549-564.
- Liesch, B.A., 1961, Geohydrology of the Jordan aquifer in the Minneapolis-St. Paul area, Minnesota: Minnesota Department of Conservation, Division of Waters Technical Paper 2, 24 p.
- Liesch, B.A., and Norvitch, R.F., 1963, Geology and ground-water conditions in the Chisholm-Dewey Lake area, St. Louis County, Minnesota: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 8 p.
- Lillie, R.A., and Mason, J.W., 1983, Limnological characteristics of Wisconsin lakes: Wisconsin Department of Natural Resources Technical Bulletin no. 138, 116 p.
- Lillie, R.A., and Schlessler, R.A., 1993, Macroinvertebrate populations. *in* Graczyk, D. J., Surface water hydrology and quality, and macroinvertebrate and small mouth bass populations in four stream basins in southwestern Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 93-4024, p. 34-55.
- Lindgren, R.J., 1990, Simulation of ground-water flow in the Prairie du Chien-Jordan and overlying aquifers near the Mississippi River, Fridley, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 90-4165, 152 p.
- _____, 1995, Hydrogeology and ground-water flow in the drift Platteville aquifer system, St. Louis Park, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 94-4204, 79 p.
- Lindholm, G.F., 1968, Geology and water resources of the Hibbing area, northeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-280, 3 sheets, scale 1:24,000.
- _____, 1970, An appraisal of ground water for irrigation in the Wadena area, central Minnesota: U.S. Geological Survey Water-Supply Paper 1983, 56 p.
- _____, 1980, Ground-water appraisal of sand plains in Benton, Sherburne, Stearns, and Wright Counties, central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-1285, 103 p.
- Lindholm, G.F., Ericson, D.W., Broussard, W.L., and Hult, M.F., 1979, Water resources of the St. Louis River watershed, northeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-586, 3 sheets.

- Lindholm, G.F., Farrell, D.F., and Helgesen, J.O., 1974, Water resources of the Crow River watershed, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-528, 3 sheets, scale 1:500,000.
- Lindholm, G.F., Helgesen, J.O., Broussard, W.L., and Ericson, D.W., 1974, Water resources of the Snake River watershed, east-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-488, 3 sheets.
- 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: U.S. Geological Survey Hydrologic Investigations Atlas HA-490, 3 sheets, scales 1:250,000 and 1:500,000.
- Lindholm, G.F., Helgesen, J.O., and Ericson, D.W., 1976, Water resources of the Fork River watershed, north-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-549, 2 sheets, scale 1:500,000.
- Lindholm, G.F., Oakes, E.L., Ericson, D.W., and Helgesen, J.O., 1972, Water resources of the Crow Wing River watershed, central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-380, 4 sheets, scale 1:250,000.
- Lindholm, G.F., and Norvitch, R.F., 1976, Ground water in Minnesota: U.S. Geological Survey Open-File Report 76-354, 100 p.
- _____, 1976, Remote sensing as an aid in water-resources studies in Minnesota: U.S. Geological Survey Open-File Report 76-213, 63 p.
- Linskov, K.L., 1975, Data summary of June-July 1975 floods in eastern North Dakota and northwestern Minnesota: U.S. Geological Survey Open-File Report 75-565, 15 p.
- _____, 1977, Low-flow characteristics of Minnesota streams: U.S. Geological Survey Water-Resources Investigations Report 77-48, 197 p.
- Linsley, R.K., Kohlor, M.A., Paulhus, J.L.H., 1982, Hydrology for Engineers (3rd ed.): McGraw-Hill, Inc., New York, NY, 508 p.
- Lively, R.S., 1990, Radium geochemistry and current research on radium in the Mt. Simon/Hinckley aquifer of southern Minnesota [abs.]: Minnesota Water 1990—Facing the environmental challenges of the 1990's, St. Paul, Minnesota, p. 71.
- Lively, R.S., Alexander, E.C., Jr., and Milske, J., 1981, A late Pleistocene chronologic record in southeastern Minnesota, *in* Beck, B.F., Proceedings of the 8th international congress of speleology, Bowling Green, Kentucky, July 18-24, 1981, v. 8, p. 623-626.
- Lively, R.S., Bettis, E.A., III, Hallberg, G.R., and Hobbs, H., 1987, An exposure of the Sangamon soil in southeastern Minnesota: Proceedings of the Iowa Academy of Science, v. 94, no. 4, p. 111-115.

- Lively, R.S., Jameson, R., Alexander, E.C., Jr., and Morey, G.B., 1992, Radium in the Mt. Simon-Hinkley aquifer, east-central and southeastern Minnesota: Information Circular Minnesota Geological Survey, 58 p.
- Lively, R.S., and Morey, G.B., 1980, Hydrogeochemical distribution of uranium and radon in east-central Minnesota [abs.], Sixth annual Midwest American Geophysical Union meeting, De Kalb, Illinois, September 18-19, 1980: American Geophysical Union, v. 61, no. 48, p. 1192.
- Loftenius, C., and Hon, R., 1990, Assessment of radon emanation from early Paleozoic sedimentary rocks in Minnesota and Wisconsin [abs.], American Geophysical Union 1990 fall meeting, San Francisco, California, December 3-7, 1990: American Geophysical Union, v. 71, no. 43, p. 1717.
- Lorenz, D.L., 1990, A method for describing stream-drainage system topology in a geographic information system [abs.], in Balthrop, B.H., and Baker, E.G., compilers, U.S. Geological Survey National Computer Technology Meeting-Program and abstracts, San Antonio, Texas, May 7-11, 1990: U.S. Geological Survey Open-File Report 90-161, 22 p.
- Lorenz, D.L., and Payne, G.A., 1989, Selected data describing stream subbasins in the Redwood River Basin, southwestern Minnesota: U.S. Geological Survey Open-File Report 89-405, 5 p.
- _____, 1991, Selected data for stream subbasins in the Le Sueur River Basin, south-central Minnesota: U.S. Geological Survey Open-File Report 91-62, 8 p., 1 sheet, scale 1:100,000.
- _____, 1991, Selected data for stream subbasins in the Watonwan River Basin, south-central Minnesota: U.S. Geological Survey Open-File Report 91-61, 7 p., 1 sheet, scale 1:100,000.
- _____, 1992, Physical characteristics of stream subbasins in the Blue Earth River Basin, south-central Minnesota and north-central Iowa: U.S. Geological Survey Open-File Report 91-512, 10 p., 1 sheet, scale 1:100,000.
- _____, 1994, Physical characteristics of stream subbasins in the Pomme de Terre River Basin, west-central Minnesota: U.S. Geological Survey Open-File Report 93-47, 8 p., 1 sheet, scale 1:100,000.
- Lorenz, D.L., Sanocki, C.A., and Winterstein, T.A., 1994, Physical characteristics of stream subbasins in the Lac qui Parle River Basin, southwest Minnesota and eastern South Dakota: U.S. Geological Survey Open-File Report 93-46, 12 p., 1 sheet, scale 1:100,000.
- Lorenz, D.L., and Stark, J.R., 1987, Evaluation of gradient-control options for contaminated ground water in the St. Peter aquifer, St. Louis Park, Minnesota [abs.], in Zaporozec, A., ed., Annual Midwest Ground Water Conference, 32nd, Madison, Wisconsin, October 28-30, 1987 [Proceedings].
- _____, 1990, Simulation of ground-water flow in the St. Peter aquifer in an area contaminated by coal-tar derivatives, St. Louis Park, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 90-4150, 37 p.
- Lorenz, D.L., and Trotta, L.C., 1991, Preparation and comparison of maps showing the depth to water table, Dakota County, Minnesota: U.S. Geological Survey Open-File Report 91-245, 2 p.

- Lower Minnesota River Watershed District, 1970, The effectiveness of flood control structures of the lower Minnesota River watershed district: Lower Minnesota River Watershed District, 136 p. [Available from the National Technical Information Service, Springfield, Va 22161, PB-196.]
- Lubinski, K.S., Carmody, G., Wilcox, D., and Drazkowski, B., 1991, Development of water level regulation strategies for fish and wildlife, Upper Mississippi River System: Regulated Rivers Research and Management, v. 6, no. 2, p. 117-124.
- Luepke, G., 1993, Economic heavy minerals in glaciofluvial sediments of Minnesota: U.S. Geological Survey Open-File Report 90-345, 11p.
- Lung, W.S., and Larson, C.E., 1992, Water-quality modeling of the Upper Mississippi River and Lake Pepen, *in* Journal of Environmental Engineering, October 1995, p. 691-699.
- Lund, E.H., 1956, Igneous and metamorphic rocks of the Minnesota River Valley: Geological Society of America Bulletin, v. 67, no. 11, p. 1475-1490.
- Luoma, S.N., 1984, Contaminants in the Upper Mississippi River—Summary and conclusions, *in* Contaminants in the Upper Mississippi River—Proceedings of the 15th Annual Meeting of the Mississippi River Research Consortium: Butterworth, Publishers, Boston, Massachusetts, p. 345-356.
- Luttenton, M.R., and Rada, R.G., 1986, Effects of disturbance on epiphytic community architecture: Journal of Phycology, v. 22, no. 3, p. 320-326.
- Lykins, R.W., and Baier, J.H., 1990, Point-of-use/point-of-entry systems for removing volatile organic compounds from drinking water, *in* Significance and treatment of volatile organic compounds in water supplies: Lewis Publishers, Inc., Chelsea, Michigan, p. 393-419.
- Lyons, C.T., and Norton, W.R., 1972, Data report for the Upper Mississippi River Basin, prepared for the Environmental Protection Agency Systems Development Branch: Water Resources Engineers, August 1972, 48 p.
- Maass, R.S., Van-Schmus, W.R., and Medaris, L.G., Jr., 1978, Deformational history of lower and middle Precambrian basement rocks in central Wisconsin [abs.], 1977 annual meeting of the American Geophysical Union, West Lafayette, Indiana, September 26-28, 1977: American Geophysical Union, v. 59, no. 4, p. 227.
- MacGregor, M., 1995, Mississippi headwaters guide book: Mississippi Headwaters Board, Walker, Minnesota, 79 p.
- Mack, F.J., 1967, Sedimentation in the Upper Mississippi River Basin, *in* Soil and America's future—Soil Conservation Society of America, 22nd annual meeting, Des Moines, Iowa, p. 95-102.
- _____, 1969, Report on streambank erosion study in the Upper Mississippi River Basin: 24th Soil Conservation Society of America Proceedings, p. 22-26.
- _____, 1970, Sediment yields in the Upper Mississippi River Basin, *in* Beard, L.R., Proceedings of a seminar on sediment transport in rivers and reservoirs, Davis, California, April 7-9, 1970: U.S. Army Corps of Engineers Hydrologic Engineering Center Paper no. 4, 10 p.

- Mackay, D., and Shiu, W.Y., 1990, Physical-chemical properties and fate of volatile organic compounds—An application of the fugacity approach, *in* Significance and treatment of volatile organic compounds in water supplies: Lewis Publishers, Inc., Chelsea, Michigan, p. 183-204.
- MacKay, R.J., 1984, Life cycles of *Hydropsyche viola*, *H. slossonae*, and *Cheumatopsyche pettiti* (Trichoptera: Hydropsychidae) in a spring-fed stream in Minnesota: American Midland Naturalist, v. 115, p.19-24.
- Maclay, R.W., 1963, Evaluation of ground water near Stephen, Minnesota: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 24 p.
- _____, 1966, Reconnaissance of the geology and ground-water resources in the Aurora area, St. Louis County, Minnesota: U.S. Geological Survey Water-Supply Paper 1809-U, 20 p.
- Maclay, R.W., Bidwell, L.E., and Winter, T.C., 1969, Water resources of the Buffalo River watershed, west-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-307, 3 sheets, scale 1:250,000.
- 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: U.S. Geological Survey Hydrologic Investigations Atlas HA-272, 4 sheets, scale 1:250,000.
- Maclay, R.W., Winter, T.C., and Pike, G.M., 1965, Water resources of the Middle River watershed, northwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-201, 3 sheets, scale 1:250,000
- Maderak, M.L., 1963, Quality of waters, Minnesota—A compilation, 1955-62: Minnesota Department of Conservation, Division of Waters Bulletin 21, 104 p.
- _____, 1964, Relation of chemical quality of water to recharge to the Jordan Sandstone in the Minneapolis-St. Paul area, Minnesota: U.S. Geological Survey Professional Paper 501-C, p. C176-C179.
- _____, 1965, Chemical quality of ground water in the Minneapolis-St. Paul area, Minnesota: Minnesota Department of Conservation, Division of Waters Bulletin 23, 44 p.
- Maertz, D.E., 1995, Water resources investigations in Wisconsin: U.S. Geological Survey Open-File Report 95-328, 84 p.
- Magner, J.A., and Alexander, S.C., 1993, The Minnesota River Basin—A hydrogeologic overview: Minnesota Pollution Control Agency, 21 p.
- Maguire, R.J., 1991, Kinetics of pesticide volatilization from the surface of water: Journal of Agricultural and Food Chemistry, v. 39, no. 9, p. 1674-1678.
- Maier, W.J., Gast, R.G., Anderson, C.T., and Nelson, W.W., 1976, Carbon contents of surface and underground waters in south-central Minnesota: Journal of Environmental Quality, v. 5, no. 2, p. 124-128.

- Mandle, R.J. and Konitz, A.L., 1992, Simulation of regional ground-water flow in the Cambrian-Ordovician aquifer system in the northern Midwest, United States: U.S. Geological Survey Professional Paper 1405-C, 97 p.
- Mann, W.B., IV, 1971, Flow characteristics of Minnesota streams: Minnesota Department of Natural Resources Technical Paper 4, 265 p.
- Mann, W.B., IV, and Collier, C.R., 1970, A proposed streamflow data program for Minnesota: U.S. Geological Survey Open-File Report, 75 p.
- Mann, W.B., IV, and McBride, M.S., 1972, The hydrologic balance of Lake Sallie, Becker County, Minnesota: U.S. Geological Survey Professional Paper 800-D, p. 189-191.
- Markussen, J.V., and Wilhelms, S.C., 1987, Scour protection for locks and dams 2-10, Upper Mississippi River: Army Engineer Waterways Experiment Station, Vicksburg, Massachusetts, 52 p. [Available from the National Technical Information Service, Springfield, Virginia, 22161, Hydraulic Model Investigation Technical Report HL-87-4]
- Marsh, P.C., and Waters, T.F., 1980, Effects of agricultural drainage development on the benthic invertebrates in undisturbed downstream reaches: Transactions of the American Fisheries Society, v. 109, p. 213-223.
- Martin, D.P., Meyer, G., Cartwright, D.F., Lawler, T.L., Pastika, T., Jirsa, M.A., Boerboom, T.J., and Streitz, A.R., 1989, Regional geochemistry survey of glacial drift drill samples over Archean granite-greenstone terrane in the Effie area, northern Minnesota: Minnesota Department of Natural Resources, Division of Minerals, 382 p.
- Maschwitz, D.E., 1984, Establishment of an ammonia effluent limitation for the Twin Cities metro plant, contaminants in the Upper Mississippi River. *in* Weiner, J.G., Anderson, R.V., and McConville, D.R., Contaminants in the Upper Mississippi River—Proceedings of the 15th Annual meeting of the Mississippi River Consortium, La Crosse, Wisconsin, April 14-15, 1982, p. 261-278.
- Mason, J.A., Nater, E.A., and Hobbs, H.C., 1994, Transport direction to Wisconsin loess in southeastern Minnesota: Quaternary Research, v. 41, no. 1, p. 44-51.
- Mason, J.W., Lyons, J.D., and Kerr, R.A., 1993, Smallmouth bass populations, *in* Graczyk, D.J., Surface water hydrology and quality, and macroinvertebrate and small mouth bass populations in four stream basins in southwestern Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 93-4024, p. 56-67.
- Mater, W.J., McConnell, H.L., and Controy, L.E., 1974, A survey of organic carbon constituents in natural fresh waters: University of Minnesota Department of Civil and Mineral Engineering, Minneapolis; Office of Water Research and Technology, Washington, D.C., 12 p.
- Mathiak, H.A., 1979, A river survey of the unionid mussels of Wisconsin, 1973-1977: Sand Shell Press, Horicon, Wisconsin, 75 p.

- Matsch, C.L., 1983, River Warren, the southern outlet to glacial Lake Agassiz. *in* Teller, J.T., and Clayton, L., Glacial Lake Agassiz, University of Manitoba, Department of Earth Science, Winnipeg, Manitoba, Canada: Special Paper Geological Association of Canada, v. 26, p. 231-244.
- _____, 1987, Retreat of the southern margin of the Laryngitic ice sheet [abs.], International Union for Quaternary Research, XIIth International Congress, Ottawa, Ontario, July 31-August 9, 1987—Program and abstracts, p. 221.
- Matsch, C.L., and Schneider, A.F., 1986, Stratigraphy and correlation of the glacial deposits of the glacial lobe complex in Minnesota and northwestern Wisconsin. *in* Sibrava, V., Bowen, D.Q., and Richmond, G.M., Quaternary glaciations in the Northern Hemisphere: Quaternary Science Reviews, v. 5, p. 59-64.
- Matthai, H.F., 1956, Index of surface-water records to September 30, 1955, Part 5. Hudson Bay and Upper Mississippi River Basins: U. S. Geological Survey Circular 385, 26 p.
- Matthews, W.J., 1988, North American prairie streams as systems for ecological study: Journal of the North American Benthological Society, v. 7, no. 4, p. 387-409.
- Mauck, W.L., and Olson, L.E., 1977, Polychlorinated biphenyls in adult mayflies (*Hexagenia bilineata*) from the Upper Mississippi River: Bulletin of Environmental Contamination and Toxicology, v. 17, no. 4, p. 387-390.
- Mazzullo, J.H., and Ehrlich, R., 1987, The St. Peter Sandstone of southeastern Minnesota—Mode of deposition. *in* Sloan, R.E., Middle and Late Ordovician lithostratigraphy and biostratigraphy of the Upper Mississippi River Valley: Minnesota Geological Survey Report of Investigations 35, p. 44-50.
- McBeath, M.K.M., Gilbertson, L.A., Whelan, P.M., and Cotter, J.F.P., 1991, Characteristics and provenance of an intertill sand and implications for the origin of the Minnesota River Valley boulder pavement [abs.], Geological Society of America, North Central Section, 25th annual meeting, Toledo, Ohio, April 18-19, 1991: Geological Society of America, v. 23, no. 3, p. 47.
- McBride, M.S., 1975, Ground water for irrigation in the Viking Basin, west-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 75-23, 48 p.
- _____, 1976, Hydrology of lakes in the Minneapolis-St. Paul metropolitan area—A summary of available data: U.S. Geological Survey Water-Resources Investigations Report 76-85, 317 p.
- McBride, M.S., and Pfannkuch, H.O., 1975, The distribution of seepage within lakebeds: U.S. Geological Survey Journal of Research, v. 3, no. 5, p. 505-512.
- McCarthy, K.A., and Johnson, R.L., 1993, Transport of volatile organic compounds across the capillary fringe: Water Resources Research, v. 29, no. 6, p. 1675-1683.
- McConville, D.R. 1969, Macroinvertebrates of the Mississippi River in the Monticello Region: Master's Thesis, St. Cloud University, 85 p.
- _____, 1995, GIS Application—Spatial surveying of point data for myriophyllum investigations: National Biological Service, Environmental Management Technical Center, Onalaska, Wisconsin, LTRMP 95-P004, 21 p.

- McFarland, B.L., and O'Reilly, K.T., 1992, Environmental impact and toxicological characteristics of calcium magnesium acetate, *in* Chemical Deicers and the Environment: Lewis Publishers, Boca Raton, Florida, p. 194-227.
- McGuinness, C.L., 1964, Generalized map showing annual runoff and productive aquifers in the conterminous United States: U.S. Geological Survey Hydrologic Investigations Atlas HA-194, 1 sheet, scale 1:5,000,000.
- McHenry, J.R., Ritchie, J.C., and Cooper, C.M., 1980, Rates of recent sedimentation in Lake Pepin: Water Resources Bulletin, v. 16, no. 6, p. 1049-1056.
- McHenry, J.R., Ritchie, J.C., Cooper, C.M., and Verdon, J., 1982, Recent rates of sedimentation in the Mississippi River, *in* Wiener, J.G., Anderson, R.V., and McConville, D.R., ed., Contaminants in the Upper Mississippi River, Proceedings of the 15th annual meeting of the Mississippi River Consortium, LaCrosse, Wisconsin, April 14-15, 1982, p. 99-117.
- McHenry, J.R., Ritchie, J.C., and Verdon, J., 1976, Sedimentation rates in the Upper Mississippi River, *in* Symposium on Inland Waterways for Navigation, Flood Control and Water Diversions, v. 2, p. 1339-1349.
- McIntosh, W.L., and Eister, M.F., 1972, Geologic map index of Minnesota Part B, 1953-1970: U.S. Geological Survey Minnesota Geologic Map Index, 1 sheet.
- McKinley, J.P., Jenne, E.A., and Smith, R.W., 1988, Experimental interaction of heated ground water with Galesville Sandstone [abs.], American Geophysical Union, 1988 fall meeting, San Francisco, California, December 6-11, 1988: American Geophysical Union, v. 69, no. 44, p. 1185-1186.
- McSwiggen, P.L., Morey, G.B., and Weiblen, P.W., 1981, Uranium in lower Proterozoic, apatite-bearing rock of east-central Minnesota [abs.], Geological Society of America, 94th annual meeting, Cincinnati, Ohio, November 2-5, 1981, Abstracts with Programs: Geological Society of America, v. 13, no. 7, p. 508.
- Meeks, Y.J., 1986, Hydrogeology of the Twin Cities Basin with numerical emphasis on the Mount Simon-Hinckley Aquifer: Doctoral thesis, Stanford University of California, 118 p.
- Melcher, N.B., and Parrett, C., 1993, 1993 Upper Mississippi River floods: *Geotimes*, v. 38, no. 12, p. 15-17.
- Merriam, L.C., Jr., and Knopp, T.B., 1977, The complex uses of an accessible river—The Kettle of Minnesota, recreation and research symposium, Minneapolis, Minnesota, January 24, 1977: USDA Forest Service, St. Paul, Minnesota, NC 28, p. 312-319.
- Merritt, R.H., 1984, The Corps, the environment, and the Upper Mississippi River Basin: U.S. Army Corps of Engineers, Washington, DC, 119 p.
- Metropolitan Area Advisory Committee, 1979, Final future conditions report for the Mississippi and Minnesota Rivers in the Twin Cities metropolitan area: Minnesota Pollution Control Agency, 114 p.

- _____, 1979, Final present conditions report for the Mississippi and Minnesota Rivers in the Twin Cities metropolitan area: Minnesota Pollution Control Agency, 79 p.
- Metropolitan Council of the Twin Cities Area, 1969, Agencies and organizations concerned with the major river corridors in the Twin Cities metropolitan area—Appendix B of the major river corridor study: Metropolitan Council of the Twin Cities Area, 250 p.
- _____, 1969, Inventory of physical features and abilities within the major river corridors of the Twin Cities metropolitan area—Appendix A to the major river corridor study: Metropolitan Council of the Twin Cities Area, 45 p.
- _____, 1970, Major river corridors report draft for discussion purposes: Metropolitan Council of the Twin Cities Area, 124 p.
- _____, 1975, Water-quality management plan for the Twin Cities metropolitan area, Revised 1979: Metropolitan Council of the Twin Cities Area, 708 p.
- _____, 1978, Leachate generation potential from landfills in the Twin Cities metropolitan area: Metropolitan Council of the Twin Cities Area.
- _____, 1978, Assessment of water pollution from river dredging activities: Metropolitan Council of the Twin Cities Area, 69 p.
- _____, 1978, Water pollution from urban runoff: Metropolitan Council of the Twin Cities Area, 76 p.
- _____, 1979, Water pollution from nonpoint sources, an assessment and recommendations: Metropolitan Council of the Twin Cities Area, 194 p.
- _____, 1981, Draft water-resources management development guide, Part 2. Surface-water management—Nonpoint-source pollution and stormwater runoff: Metropolitan Council of the Twin Cities Area Publication No. 62-81-025B, 121 p.
- _____, 1989, Assessment of lake use-impairment in the Twin Cities metropolitan area: Metropolitan Council of the Twin Cities Area, 590-89-130, 12 p.
- _____, 1992, Twin Cities Metropolitan Area water supply—A plan for action: Metropolitan Council of the Twin Cities Area 590-92-025, 72 p.
- Metropolitan Drainage Commission of Minneapolis and St. Paul, 1928, Second annual report, sewage disposal of Minneapolis, St. Paul, and contiguous areas: Metropolitan Drainage Commission of Minneapolis and St. Paul, 127 p.
- Metropolitan Waste Control Commission, 1975, Statement on state of Minnesota Pollution Control Agency proposed regulation WPL 18, hearing April 29, 1975: Metropolitan Waste Control Commission, 22 p.
- _____, 1976, Combined sewer overflows: Metropolitan Waste Control Commission.
- _____, 1976, Development program 1977-1981: Metropolitan Waste Control Commission, 215 p.

- _____, 1977, Baseline environmental inventory, Twin Cities metropolitan area: Metropolitan Waste Control Commission, 426 p.
- _____, 1980, Environmental impact statement: 201 Summary Report Series, v. 9, 35 p.
- _____, 1983, 1982 river quality data report: Metropolitan Waste Control Commission no. QC 82-63, 463 p.
- _____, 1982, 1982 river quality data report, appendix volume 1: Metropolitan Waste Control Commission no. QC 81-48, 314 p.
- _____, 1982, 1981 river quality data report, appendix volume 2: Metropolitan Waste Control Commission no. QC 81-48, 233 p.
- _____, 1984, 1983 river quality data report: Metropolitan Waste Control Commission no. QC 83-76, 399 p.
- _____, 1986, 1984 river quality data report: Metropolitan Waste Control Commission no. QC 84-98, 441 p.
- _____, 1987, 1986 toxicity-testing report: Metropolitan Waste Control Commission no. QC 86-134, 136 p.
- _____, 1988, 1987 river quality data report: Metropolitan Waste Control Commission no. QC 87-154, 450 p.
- _____, 1989, 1988 river quality data report: Metropolitan Waste Control Commission no. QC 88-169, 441 p.
- _____, 1990, 1989 river quality data report: Metropolitan Waste Control Commission no. QC 89-206, 453 p.
- _____, 1992, 1990 river quality data report: Metropolitan Waste Control Commission no. QC 88-169, 450 p.
- _____, 1993, Mississippi River phosphorus study report—Cooperative study phosphorus study data report, volume 1: Metropolitan Waste Control Commission, 576 p.
- _____, 1993, Mississippi River phosphorus study report—Point and nonpoint source contributions: Metropolitan Waste Control Commission, St. Paul, Minnesota, 66 p.
- _____, 1993, Mississippi River phosphorus study report—River and lake sediment: Metropolitan Waste Control Commission, St. Paul, Minnesota, variously paged.
- _____, 1993, Mississippi River phosphorus study report—Summary and recommendations: Metropolitan Waste Control Commission, St. Paul, Minnesota, 43 p.
- _____, 1993, Mississippi River phosphorus study report—Water quality of the Mississippi River and its tributaries (1976-91): Metropolitan Waste Control Commission, St. Paul, Minnesota, 18 p.
- _____, 1993, Mississippi River phosphorus study report—Water quality inputs for WASP models of the Upper Mississippi River: Metropolitan Waste Control Commission, St. Paul, Minnesota, 91 p.

- _____, 1993, Mississippi River phosphorus study section 10—Cooperative study phosphorus study data report, volume II: Metropolitan Waste Control Commission, 337 p.
- _____, 1993, Mississippi River phosphorus study section 11—Special studies summary: Metropolitan Waste Control Commission, 129 p.
- _____, 1994, 1991 River water-quality-data report: Metropolitan Waste Control Commission Report QC-91-274, St. Paul, Minnesota, 496 .
- _____, 1994, 1992 river quality data report: Metropolitan Waste Control Commission no.QC 92-284, 473 p.
- _____, 1994, Water quality analysis of the lower Minnesota River and selected tributaries: River (1976-1991) and nonpoint source (1989-92) monitoring: Metropolitan Waste Control Commission, St. Paul, Minnesota, v. 1, 142 p.
- _____, 1994, 1992 water-quality summary report: Metropolitan Waste Control Commission, St. Paul, Minnesota, 52 p.
- _____, 1994, Water quality analysis of the lower Minnesota River and selected tributaries: river (1976-91) and nonpoint source (1989-92) monitoring: Metropolitan Waste Control Commission, St. Paul, Minnesota, v. 1, 142 p.
- Metz, M.A., Meyer, D.P., Rogers, M.R., Thorne, R.E., and Anderson, G.G., 1994, The influence of basement block tectonics on ice thrust Wadena Drift in the southern St. Croix Moraine, Stearns County, Minnesota [abs.], Geological Society of America, North Central Section, 27th annual meeting, Kalamazoo, Michigan, April 28-29, 1994, Abstracts with Programs: Geological Society of America, v. 26, no. 5, p. 54-55.
- Meyer, G.N., 1983, Pre-Wisconsinan tills of west-central Minnesota, *in* Craddock, J.C., Geological Society of America, North Central Section, 17th annual meeting, Madison, Wisconsin, April 28-29, 1983, Abstracts with Programs: Geological Society of America, v. 15, no. 4, p. 262.
- _____, 1985, Quaternary geologic map of the Minneapolis-St. Paul urban area, Minnesota: U.S. Geological Survey Miscellaneous Map Series M-54,.
- _____, 1985, The Wadena Till revisited—Some new ideas about an old till [abs.], Geological Society of America, North Central Section, 19th annual meeting, De Kalb, Illinois, April 25-26, 1985, Abstracts with Programs: Geological Society of America, v. 17, no. 5, p. 318.
- _____, 1986, Subsurface till stratigraphy of the Todd County area, central Minnesota: Report of Investigations Minnesota Geological Survey 34, 40 p.
- Meyer, G.N., and Hobbs, H.C., 1989, Geologic atlas of Hennepin County, Minnesota—Surficial geology: County Atlas Series Minnesota Geological Survey C-4, plate 3.
- Meyer, G.N., and Jannis, M.A., 1984, Aggregate resources inventory, Twin Cities metropolitan area, Minnesota: Information Circular Minnesota Geological Survey 20, 16 p.

- Meyer, G.N., and Swanson, L., eds. 1992, Geologic atlas, Ramsey County, Minnesota: Minnesota Geological Survey County Atlas C-7, 10 plates.
- Michael, L.C., Pellizzari, E.D., and Norwood, D.L., 1991, Application of the master analytical scheme to the determination of volatile organics in wastewater influents and effluents: *Environmental Science and Technology*, v. 25, no 1, p. 150-155.
- Mickelson, D.M., Knox, J.C., and Clayton, L., 1982, Glaciation of the Driftless Area—An evaluation of the evidence, *in* Knox, J.C., Quaternary history of the Driftless Area, with special papers: Field Trip Guide Book, 5, 155-169.
- Midwest Planning and Research, Inc., 1966, A survey and recreational analysis of 24 rivers in Minnesota: Midwest Planning and Research, Inc. [Available from the Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]
- Midwest Research Institute, 1976, Water pollution control act of 1972—Environmental impact assessment—Upper Mississippi River Basin: Midwest Research Institute, Minneapolis, Minnesota, 322 p.
- Midwest Research Institute, North Star Research Division, 1976, Water pollution Control Act of 1972, Environmental impact assessment, Upper Mississippi River Basin: National Commission on Water Quality, Washington, D.C., 341 p.
- Millar, J.G., 1986, Special applications and concepts—The Upper Mississippi River on-site inspection team—A process that works, *in* Beneficial uses of dredged material, proceedings of the first interagency workshop, October 7-9, 1986, Pensacola, Florida: Fish and Wildlife Service Technical Report no. D-81-1, p. 221-225.
- Miller, A.C., compiler. 1982, Report of freshwater mollusks workshop, May 19-20, 1981: Army Engineer Waterways Experiment Station, Vicksburg, Massachusetts, Final Report, 192 p.
- Miller, A.C., 1988, Mussel fauna associated with wing dams in Pool 7 of the Mississippi River: *Journal of Freshwater Ecology*, v. 4, no. 3, p. 299-302.
- Miller, A.C., Payne, B.S., Naimo, T.J., and Russell-Hunter, W.D., 1987, Gravel bar mussel communities—A community model: U.S. Army Engineer Waterways Experiment Station Technical Paper EL-87-13, 71 p.
- Miller, A.C., Whiting, R., and Wilcox, D.B., 1989, Evaluation of a skimmer dredge for collecting freshwater mussels: *Journal of Freshwater Ecology*, v. 5, no. 2, p. 151-154.
- Miller, M.B., Cooper, T.H., and Rust, R.H., 1993, Differentiation of an eluvial fragipan from dense glacial till in northern Minnesota: *Soil Science Society of America Journal*, v. 57, no. 3, p. 787-796.
- Miller, R.T., 1981, Hydrologic data for the Pelican River Sand-Plain aquifer, western Minnesota: U.S. Geological Survey Open-File Report 80-695, 86 p.
- _____, 1982, Appraisal of the Pelican River Sand-Plain aquifer, western Minnesota: U.S. Geological Survey Open-File Report 82-347, 44 p.

- _____, 1983, Aquifer thermal-energy storage in the Franconia-Ironton-Galesville aquifer, St. Paul, Minnesota: U. S. Geological Survey Professional Paper 1375, p. 152-153.
- _____, 1984, Anisotropy in the Ironton and Galesville Sandstones near a thermal-energy-storage well, St. Paul, Minnesota: *Ground Water*, v. 22, no. 5, p. 532-537.
- _____, 1984, Determination of hydraulic conductivity in three dimensions and its relation to dispersivity in ground-water contamination by crude oil at the Bemidji, Minnesota research site. *in* Hult, M.F., ed., Ground-water contamination by crude oil at the Bemidji, Minnesota research site, U.S. Geological Survey toxic waste ground-water contamination study: U.S. Geological Survey Water-Resources Investigations Report 84-4188, p. 49-64.
- _____, 1984, Preliminary modeling of an aquifer thermal-energy storage system: U.S. Geological Survey Open-File Report 84-811, 47 p.
- _____, 1985, Preliminary modeling of an aquifer thermal-energy storage system, *in* Subitzky, Seymour, ed., Selected papers in hydrologic sciences: U.S. Geological Survey Water-Supply Paper 2270, p. 1-19.
- _____, 1986, Thermal-energy storage in a confined sandstone aquifer at St. Paul, Minnesota, *in* Carter, L.M.H., ed., U.S. Geological Survey Research on Energy Resources—1986: U.S. Geological Survey Circular 974, p. 41-42.
- _____, 1989, Cyclic injection, storage, and withdrawal of heated water in a sandstone aquifer at St. Paul, Minnesota—Field observations, preliminary model analysis and aquifer thermal energy efficiency: U.S. Geological Survey Open-File Report 89-261, 97 p.
- Miller, R.T., and Delin, G.N., 1993, Field observations, preliminary model analysis, and aquifer thermal efficiency—Cyclic injection, storage and withdrawal of heated water in a sandstone aquifer at St. Paul, Minnesota: U.S. Geological Survey Professional Paper 1530-A, 55 p.
- _____, 1994, Cyclic injection, storage, and withdrawal of heated water in a sandstone aquifer at St. Paul, Minnesota—Analysis of thermal data and nonisothermal modeling of short-term test cycles: U.S. Geological Survey Open-File Report 93-435, 70 p.
- Miller, W.A., and Straka, G.C., 1969, Graphs of ground-water levels in Minnesota, 1962-1966: U.S. Geological Survey Open-File Report, 54 p.
- Miller, W.H., 1918, 1850 census for St. Croix County, Wisconsin with historic sketch: St. Croix County Historical Society, Hudson, Wisconsin., 6 p.
- Miller, W.R., Ficklin, W.H., and McHugh, J.B., 1991, Hydrogeochemical exploration in areas of thin glacial overburden, northeastern Minnesota, *in* Good, E.E., Slack, J.F., and Kotra, R.K., U.S. Geological Survey research on mineral resources, Reno, Nevada, February 11-14, 1991, p. 55-60.
- Mills, H.B., Starrett, W.C., and Bellrose, F.C., 1966, Man's effect on the fish and wildlife of the Illinois River, *in* Illinois Natural History Survey Biological Notes, p. 1-24.

Minnesota Agricultural Statistics Service, 1994, Minnesota Agricultural Statistics 1994, St. Paul, Minnesota, 99 p.

Minnesota Board of Health, and Wisconsin Board of Health, 1935, The pollution of the St. Croix River from the dam at St. Croix Falls to the junction with the Mississippi River: Minnesota Department of Conservation, 19 leaves.

Minnesota Department of Conservation, 1959, Hydrologic atlas of Minnesota: Minnesota Department of Conservation Bulletin 10, (former name of Minnesota Department of Natural Resources) 188 p.

_____, 1962, Hydrologic atlas of Minnesota—A study guide: Minnesota Department of Conservation Bulletin 16, (former name of Minnesota Department of Natural Resources) 28 p.

_____, 1964, Game and fish values of the Mississippi River between the Rum River at Anoka and the Chippewa River below Lake Pepin, (former name of Minnesota Department of Natural Resources) 17 p.

Minnesota Department of Health, 1928, Report of the investigations of pollution of the Mississippi River, Minneapolis-St. Paul to LaCrosse: Minnesota Department of Health.

_____, 1933, Report of special investigation of the pollution of the Mississippi River, May and June, 1933: Minnesota Department of Health.

_____, 1985, Feasibility of community-wide epidemiologic studies of drinking water and health, St. Louis Park and New Brighton: Minnesota Department of Health, Minneapolis, Minnesota, 170 p.

_____, 1985, Volatile organic survey of community water supplies: Minnesota Department of Health, Minneapolis, Minnesota, 22 p.

_____, 1985, Volatile organic survey of community water supplies, report to the Legislative Commission on Minnesota Resources: Minnesota Department of Health, Minneapolis, Minnesota, 23 p.

_____, 1988, Noncommunity public water supply survey for volatile organic chemicals: Minnesota Department of Health, Minneapolis, Minnesota, 21 leaves.

_____, 1989, Water supply monitoring near metropolitan solid waste disposal facilities: Minnesota Department of Health, Minneapolis, Minnesota, variously paged.

_____, 1993, Minnesota Department of Health Chemical laboratory handbook: Minnesota Department of Health, Public Health Laboratory Division, Chemical Laboratory, Minneapolis, Minnesota, 32 p.

_____, 1994, Minnesota Fish Consumption Advisory: Minnesota Department of Health, Minneapolis, Minnesota, 88 p.

Minnesota Department of Natural Resources, 1961, Water resources of the Minneapolis-St. Paul metropolitan area: Minnesota Department of Conservation, Division of Waters Bulletin 11, 52 p.

_____, 1969, A study of the proposed Afton State Park: Minnesota Department of Natural Resources, 10 leaves.

- _____, 1974, Inventory of state water and related land-resources information systems: Minnesota Department of Natural Resources, 226 p.
- _____, 1974, Upper St. Croix resource management plan: Minnesota Department of Natural Resources, 225 p.
- _____, 1979, Management plan for Afton State Park: Minnesota Department of Natural Resources, 152 p.
- _____, 1979, Management plan for Interstate State Park: Minnesota Department of Natural Resources, 110 p.
- _____, 1984, Official list of endangered, threatened and special concern plants and animals and checklist of endangered and threatened animal and plant species of Minnesota: Minnesota Department of Natural Resources, 14 p.
- _____, 1984, Water surface use in the seven-county Metropolitan Area: Minnesota Department of Natural Resources, 116 p.
- _____, 1989, Drought of 1988: Division of Waters 500-1/89, St. Paul, Minnesota, 46 p.
- _____, 1991, Criteria and guidelines for assessing geological sensitivity of ground-water resources in Minnesota: Minnesota Department of Natural Resources, 122 p.
- Minnesota Outdoor Recreation Resources Commission, 1965, The Minnesota River valley: Minnesota Outdoor Recreation Resources Commission, 82 p.
- Minnesota Department of Transportation, 1977, 1977-78 Official Transportation Map Minnesota, 1 map.
- _____, 1983, 1983-84 Official Highway Map Minnesota, 1 map.
- Minnesota Pollution Control Agency, 1968, Memorandum on the waste assimilation capacity of the lower 30 miles of the Minnesota River: Minnesota Pollution Control Agency.
- _____, 1969, Memorandum on the waste assimilation capacity of the Mississippi River in the Twin Cities metropolitan area: Minnesota Pollution Control Agency, 57 p.
- _____, 1972, Memorandum on the water quality of the Mississippi River in the vicinity of Minneapolis-St. Paul metropolitan plant discharge, June 5-9, 1972: Minnesota Pollution Control Agency, Mimeographed.
- _____, 1972, Memorandum on survey of polychlorinated biphenyls in waters of the Twin Cities metropolitan area: Minnesota Pollution Control Agency.
- _____, 1972, Memorandum on survey of polychlorinated biphenyl's in waters of the Twin Cities metropolitan area.
- _____, 1975, Load allocation study—Minneapolis-St. Paul metropolitan Mississippi water-quality segment: Minnesota Pollution Control Agency, 33 p.

- _____, 1975, Preliminary report on the polychlorinated biphenyls in the Mississippi River and Lake Pepin: Minnesota Pollution Control Agency, 12p.
- _____, 1975, St. Croix River Basin Water Quality Management Basin Plan: Minnesota Pollution Control Agency.
- _____, 1976, 1976 Minnesota Water Quality Inventory: Minnesota Pollution Control Agency, 139 p.
- _____, 1976, Draft water-quality task group technical report for the Minneapolis-St. Paul metropolitan area level B study: Upper Mississippi River Basin Commission, Water Quality Task Group, 108 p.
- _____, 1977, A comparison of the water-quality behavior of the Minnesota River, August 19-24, 1974, with predictions of the stream-water-quality model, QUAL-II: Minnesota Pollution Control Agency, 77 p.
- _____, 1979, Biological monitoring program—A compilation of biological data for 1976 and 1977: Minnesota Pollution Control Agency, 98 p.
- _____, 1981, Biological monitoring program, Minnesota streams—An assessment of biological data for 1977, 1978, and 1979: Minnesota Pollution Control Agency, 88 p.
- _____, 1981, Ammonia effluent limitation for the metropolitan wastewater treatment plant, Minneapolis-St. Paul, Minnesota—A part of the Mississippi River waste load allocation study: Minnesota Pollution Control Agency, 32 p.
- _____, 1981, Biological monitoring program, Minnesota streams—An assessment of biological data for 1977, 1978, and 1979: Minnesota Pollution Control Agency, 88 p.
- _____, 1981, Mississippi River Waste Load Allocation Study, St. Paul, Minnesota: Minnesota Pollution Control Agency, 147 p.
- _____, 1985, Lower Minnesota River water load allocation study, St. Paul, Minnesota: Minnesota Pollution Control Agency, 190 p.
- _____, 1986, Ground water in Minnesota—A user's guide to understanding Minnesota's ground water resource: Minnesota Pollution Control Agency, 47 p.
- _____, 1989, Review of water quality conditions in Lake Pepin for the summer of 1988—Working paper: Minnesota Pollution Control Agency, variously paged.
- _____, 1989, Ground-water contamination susceptibility in Minnesota: Minnesota Pollution Control Agency, 1 sheet.
- _____, 1989, Review of water quality conditions in Lake Pepin for the summer of 1988: Minnesota Pollution Control Agency, 51 p.
- _____, 1990, Minnesota water quality, water years 1988-1989—The 1990 report to the congress of the United States: Minnesota Pollution Control Agency, 220 p.

- _____, 1992, Mississippi River phosphorus study report—Study plan: Minnesota Pollution Control Agency, variously paged.
- _____, 1993, Mississippi River phosphorus study report—Lake Pepin water quality (1976-1991): Minnesota Pollution Control Agency, 105 p.
- _____, 1993, Mississippi River phosphorus study report—Lake Pepin and Mississippi River BATHTUB modeling: Minnesota Pollution Control Agency, 62 p.
- _____, 1994 Minnesota River assessment project reports, v. III, Biological and toxicological assessment: Minnesota Pollution Control Agency, variously paged.
- _____, 1994, Minnesota River Assessment Project Report: Minnesota Pollution Control Agency, 15 p.
- _____, 1994, Minnesota River Assessment Project Reports, v. II, Physical and chemical assessment, variously paged.
- _____, 1994, Minnesota River Assessment Project Reports, v. I, Legislative Commission on Minnesota Resources work plan and project summary: Minnesota Pollution Control Agency, variously paged.
- _____, 1994, Minnesota River Assessment Project Reports, v. IV, Land use assessment, variously paged: Minnesota Pollution Control Agency, variously paged.
- Minnesota State Planing Agency, 1977. Inventory of aerial photography and other remotely sensed imagery of Minnesota: Minnesota State Planing Agency, Environmental Flaming Division, 99 p.
- _____, 1981, Catalog of water-data sources in Minnesota—SWIM. Systems for Water-Information Management: Minnesota State Planning Agency, Land Management Information Center, 50 p.
- Minnesota Water Pollution Control Commission, n.d., Report on investigations of the Mississippi River from the mouth of the Rum River to the mouth of the St. Croix River, July and August 1960 and August and September 1961: Minnesota Department of Health.
- _____, no date, Report on investigation of the lower Minnesota River and tributaries from Carver Rapids to the mouth, August 1963 to February 1964: Minnesota Department of Health, 164 p.
- _____, 1964, Summary report on the pollution status of the Mississippi River and major tributaries from the mouth of the Rum River to the outlet of Lake Pepin: Minnesota Department of Health, 57 p.
- Minnesota Water Resources Council, 1975, Water information systems catalog: Minnesota Water Resources Council 1, 197 p.
- Minnesota-Wisconsin Boundary Area, 1990, 1989 recreational boating study lower St. Croix National Scenic Riverway, Mississippi River pools 2-10: Minnesota-Wisconsin Boundary Area Commission, Hudson, Wisconsin, variously paged.
- Minnesota-Wisconsin PCB Interagency Task Force, 1975, Preliminary report on the polychlorinated biphenyls in the Mississippi River and Lake Pepin: 13 p.

- _____, 1976, Polychlorinated biphenyls (PCB's) in the Upper Mississippi River Basin, 55 p.
- Minor, J.M., Caron, L.M., and Meyer, M.P., 1977, Upper Mississippi River habitat inventory between Hastings, Minnesota, and Guttenberg, Iowa, *in* University of Minnesota, Institute of Agriculture, Forestry, and Home Economics Research Report 77-7, 18 p.
- Mississippi River Coordination Commission, National Park Service, and United States Department of the Interior, 1994, Comprehensive Management Plan—Mississippi National River and Recreation Area, 115 p.
- Mississippi River Marine Cumulative Impacts Task Force, 1990, Cumulative impacts analysis of proposed recreational marine expansions, pools 2,3 upper 4, Mississippi River: Mississippi River Marine Cumulative Impacts Task Force, 31 p.
- Mitton, G.B., 1991, Water-quality data for Sauk Lake and tributaries near Sauk Center, Minnesota, 1988-89: U.S. Geological Survey Open-File Report 91-456, 57 p.
- Moecher, D.P., Perkins, D.I., Leier-Englehardt, P.J., and Medaris, L.G., Jr., 1986, Metamorphic conditions of late Archean high-grade gneisses, Minnesota River Valley, USA: *Canadian Journal of Earth Sciences*, v. 23, no. 5, p. 633-645.
- Moen, C.T., Scarnecchia, D.L., and Ramsey, J.S., 1992, Paddlefish movements and habitat use in Pool 13 of the Upper Mississippi River during abnormally low river stages and discharges: *North American Journal of Fisheries Management*, v. 12, no. 4, p. 744-751.
- Mohring, E.H., 1987, The effects of lake level lowering on lake-ground water interaction at School Section Lake, Stearns County, Minnesota [abs.], Geological Society of America, North Central Section, 21st annual meeting with the North Central Section of the Paleontological Society, Great Lakes Section, Society of Economic Paleontologists and Mineralogists and the Association for Women Geoscientists, St. Paul, Minnesota, April 30-May 1, 1987, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 235.
- Moline, R.T., 1974, The citizen and water management—An atlas of water attitudes in southern Minnesota: Gustavus Adolphus College, St. Peter, Minnesota, 68 p.
- Mooers, H.D., 1987, Spatial and temporal variations in glacial process—A late-Wisconsin record from Minnesota, *in* Dickinson, W.R., Geological Society of America 1987 annual meeting and exposition, Phoenix, Arizona, October 26-29, 1987, Abstracts with programs: Geological Society of America, v. 19, no. 7, p. 776.
- _____, 1989, On the formation of the tunnel valleys of the Superior Lobe, central Minnesota: *Quaternary Research*, v. 32, no. 1, p. 24-35.
- _____, 1990, Discriminating texturally similar tills in central Minnesota by graphical and multivariate techniques: *Quaternary Research*, v. 34, no. 2, p. 133-147.
- _____, 1990, Ice-marginal thrusting of drift and bedrock—Thermal regime, subglacial aquifers, and glacial surges: *Canadian Journal of Earth Sciences*, v. 27, no. 6, p. 849-862.

- Mooers, H.D., and Alexander, E.C., Jr., 1994, Contribution of spray irrigation of wastewater to groundwater contamination in the karst of southeastern Minnesota, USA: *Applied Hydrogeology*, v. 2, no. 1, p. 34-43.
- Mooers, H.D., Johnson, M.D., and Matsch, C.L., 1992, Contributions of glacial meltwater to the Upper Mississippi River system from the Des Moines and Superior lobes and glacial lakes Agassiz and Duluth [abs.], Geological Society of America, 1992 annual meeting, Cincinnati, Ohio, Abstracts with programs: Geological Society of America, v. 24, no. 7, p. 273.
- Mooers, H.D., and Schulte, P.M., 1993, A landform-based approach to the estimation of recharge in a complex glacial sedimentary setting [abs.], Geological Society of America, 1993 annual meeting, Boston, Massachusetts, Abstracts with programs: Geological Society of America, v. 25, no. 6, p. 38.
- Moore, I.D., Larson, C.L., 1979, Effects of drainage projects on surface runoff from small depressional watersheds in the North Central Region: University of Minnesota Water Resources Research Center Bulletin 99, 225 p.
- Moore, I.E., Larson, C.L., 1980, Hydrologic impact of draining small depressional watersheds: *Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers*, v. 106, no. IR4, p. 345-363.
- Moran, V.M., Abron, L.A., and Weinberger, L.W., 1992, Comparison of conventional and alternative deicers—An environmental impact perspective, *in* *Chemical deicers and the environment*: Lewis Publishers, Boca Raton, Florida, p. 341-361.
- Morehouse, D.F., 1969, Precise stratigraphic control of solutional activity in the Galena Formation, Upper Mississippi River Valley: *National Speleological Society Bulletin*, v. 31, no. 2, p. 40.
- Morey, G.B., 1976, The basis for a continental drilling program in Minnesota: *Minnesota Geological Survey Information Circular 11*, 25 p.
- _____, 1972, Minnesota River Valley, *in* Sims, P.K., and Morey, G.B., eds., *Geology of Minnesota—A centennial volume*: Minnesota Geological Survey, p. 260-261.
- _____, 1979, Field trip guidebook for the Precambrian geology of east-central Minnesota: *Minnesota Geological Survey Guidebook 12*, 38 p.
- Morey, G.B., and Lively, R.S., 1980, Detailed geochemical survey for east-central Minnesota, geology and geochemistry of selected uranium targets: *Minnesota Geological Survey*, 121 p.
- Morey, G.B., and Ojakangas, R.W., 1982, Keweenaw sedimentary rocks of eastern Minnesota and northwestern Wisconsin, *in* Wold, R.J., and Hinze, W.J., *Geology and tectonics of the Lake Superior Basin*: *Memoirs Geological Society of America* 156, p. 135-146.
- Moriarty, J.J., 1988, Minnesota county biological survey—1988 herpetological surveys: *Minnesota Department of Natural Resources Biological Report no. 9*, 43 leaves.
- Morrison, B.C., 1968, Stratigraphy of the Eau Claire Formation (Upper Cambrian) of west-central Wisconsin: *Mater's thesis*, University of Wisconsin, Madison, Wisconsin.

- Mossler, J.H., 1983, Paleozoic lithostratigraphy of southeastern Minnesota: Minnesota Geological Survey Miscellaneous Map Series M-51.
- _____, 1985, Sedimentology of the Middle Ordovician Platteville Formation, southeastern Minnesota: Report of Investigations Minnesota Geological Survey 33, 27 p.
- _____, 1987, Paleogeography along western Hollandale embayment (Minnesota) during early and middle Dresbachian (Late Cambrian) [abs.], Geological Society of America, North Central Section, 21st annual meeting with the North Central Section of the Paleontological Society, Great Lakes Section, Society of Economic Paleontologists and Mineralogists and the Association for Women Geoscientists, St. Paul, Minnesota, April 30-May 1, 1987, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 235.
- _____, 1987, Paleozoic lithostratigraphic nomenclature for Minnesota: Report of Investigations Minnesota Geological Survey, 36 p.
- _____, 1992, Sedimentary rocks of Dresbachian age (Late Cambrian), Hollandale Embayment, southeastern Minnesota: Report of Investigations Minnesota Geological Survey, 69 p.
- Moyle, J.B., 1940, A biological survey of the Upper Mississippi River system: Minnesota Department of Conservation Fisheries Research Unit, Investigational Report no. 10, 69 p.
- _____, 1956, Relationships between the chemistry of Minnesota surface waters and wildlife management: Journal of Wildlife Management, v. 20, no. 3, p. 303-320.
- Moyle, J.B., and Skrypek, J.L., 1969, Levels of DDT, DDE, and aldrin in the muscle and brain tissue of some Minnesota fishes, 1962-1967: Minnesota Department of Conservation, Division of Game and Fish, Special Publications, 59, 15 p.
- Mudrey, M.G., Jr., LaBarge, G.A., Myers, P.E., and Cordua, W.S., 1987, Bedrock geology of Wisconsin: Wisconsin Geological and Natural History Survey Map 87-11a, 2 sheets.
- Mueller, L., 1993, Winged mapleleaf mussel and Higgins' eye pearly mussel freshwater mussels threatened with extinction: Minnesota Department of Agriculture, 19 p.
- Munson, M., 1986, Aging of the baby-boom generation in the Twin Cities Metropolitan Area: Metropolitan Council of the Twin Cities Area 310-86-013.
- Murchie, G., 1947, Saint Croix—the sentinel river: Sloan and Pearce, New York, 281 p.
- Murphy, R.W.L., 1984, Effects of flow and bank material on meander migration in alluvial rivers, *in* Elliott, C.M., River meandering: U.S. Army Corps of Engineers, Vicksburg, Mississippi, p. 770-782.
- Murray, H.H., 1993, Geology, mineralogy, and physical properties of Minnesota kaolins [abs.], Geological Society of America, North Central Section, 27th annual meeting, Rolla, Missouri, March 29-30, 1993, Abstracts with Programs: Geological Society of America, v. 25, no. 3, p. 69.
- Myers, M.D., 1981, The stratigraphy and sedimentology of the upper Wonewoc Formation—A critique of the Ironton Member: Master's thesis, University of Wisconsin, Madison, Wisconsin.

- Myette, C.F., 1980, Hydrologic budget for Eagle Lake near Willmar, Minnesota: U.S. Geological Survey Open-File Report 80-163, 13 p.
- _____, 1982, Baseline water-quality data for sand-plain aquifers in Hubbard, Morrison, Otter Tail, and Wadena Counties, Minnesota: U.S. Geological Survey Open-File Report 82-909, 112 p.
- _____, 1984, Appraisal of water from surficial-outwash aquifers in Todd County and parts of Cass and Morrison Counties, central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 83-4156, 43 p.
- _____, 1984, Ground-water-quality appraisal of sand-plain aquifers in Hubbard, Morrison, Otter Tail, and Wadena Counties, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4080, 49 p.
- _____, 1986, Hydrogeology of sand-plain aquifers in Carlton, Kanabec, and Pine Counties, east-central Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4334, 66 p.
- _____, 1991, Hydrology, water quality, and simulation of ground-water flow at a taconite tailings basin near Keewatin, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 88-4230, 61 p.
- Nakato, T., 1981, Sediment-budget study for the Upper Mississippi River, GREAT II Reach: University of Iowa Institute of Hydraulic Research, 111 p.
- Nakato, T., and Vadnal, J., 1978, Assessment of available field sedimentation data for GREAT-II watershed: University of Iowa Institute of Hydraulic Research 216, 72 p.
- NALCO Environmental Sciences, 1978, Report to U.S. Army Corps of Engineers Rock Island District, Rock Island, Illinois-Fish and Wildlife Management Work Group literature, GREAT River Study: 600 p.
- Nalepa, T.F., 1994, Decline of native unionid bivalves in Lake St. Clair after infestation by the zebra mussel, *Dreissena polymorpha*: Canadian Journal of Fisheries and Aquatic Sciences, v. 51, p. 2227-2233.
- Namkung, E., and Rittmann, B.E., 1987, Estimating volatile organic compound emissions from publicly owned treatment works: Journal Water Pollution Control Federation, v. 59, no. 7, p. 670-678.
- Nanda, S.K., and Baker, R.M., 1984, Experience in channel maintenance in Upper Mississippi River, in Elliott, C.M., River meandering: U.S. Army Corps Engineers, Vicksburg, Mississippi, p. 471-482.
- Nataraja, M.S., and Cook, B.E., 1983, Increase in SPT N-values due to displacement piles: Journal of Geotechnical Engineering, v. 109, no. 1, p. 108-113.
- National Biocentric, Inc., 1979, A baseline inventory of the aquatic community in the Mississippi River: Metropolitan Waste Control Commission, 203 p.
- National Park Service, 1971, St. Croix National Scenic Riverway master plan: National Park Service, 50 p.
- _____, 1973, Scenic river study of the lower St. Croix River: National Park Service, 105 p.

- _____, 1976, Lower St. Croix National Scenic Riverway final master plan: National Park Service, Washington, DC, 79 p.
- _____, 1979, The Kettle River—A wild and scenic river study: National Park Service, Washington, DC, 141 p.
- Neely, W.B., Blau, G.E., and Alfrey, T., 1976, Mathematical models predict concentration-time profiles resulting from chemical spill in river: *Environmental Science Technology*, v. 10, p. 72-76.
- Nelson, L., and Brown, R.G., 1983, Streamflow and water-quality data for wetland inflows and outflows in the Twin Cities metropolitan area, Minnesota 1981-82: U.S. Geological Survey Open-File Report 83-543, 182 p.
- Nelson, S.L., Sutley, S.J., and Tripp, R.B., 1992, Chemical and mineralogical analyses and geological characteristics of heavy minerals from glaciofluvial sediments in Minnesota: Minnesota Department of Natural Resources, 100 p.
- Nesbit, R.C., 1973, Wisconsin—A history: University Press, Madison, Wisconsin, 573 p.
- Newman, R.M., Waters, T.F., 1984, Size-selective predation on *Gammarus pseudolimnaeus* by trout and sculpins in Valley Creek, Minnesota: *Ecology*, v. 65, p. 1535-45.
- Nicollet, J.N., 1843, Report intended to illustrate a map of the hydrographical basin of the Upper Mississippi River (List of fossils belonging to the several formations alluded to in the report; arranged according to localities): U.S. 26th Congressional 2nd session, S doc 237, 170 p.
- Nielsen, D.N., 1977, Impact of channel dredging on backwater sedimentation in the Weaver Bottoms, Pool 5, Upper Mississippi River [abs.], Geological Society of America, North Central Section, 11th annual meeting, Carbondale, Illinois, Abstracts with programs: Geological Society of America, v. 9, no. 5, p. 637.
- Nielsen, D.N., Rada, R.G., and Smart, M.M., 1984, Sediments of the Upper Mississippi River—Their sources, distribution, and characteristics, in Wiener, J.G., Anderson, R.V., and McConville, D.R., ed., *Contaminants in the Upper Mississippi River*: Butterworth Publishers, Stoneham, Massachusetts, p. 67-98.
- Nielsen, B.V., and Weiblen, P.W., 1980, Mineral and rock compositions of mafic enclaves in the Morton Gneiss, in Morey, G.B., Hanson, G.N., *Selected studies of Archean gneisses and lower Proterozoic rocks, southern Canadian Shield*: Minnesota Geological Survey Special Paper Geological Society of America 182, p. 95-103.
- Nord, R.C., 1967, A compendium of fishery information on the Upper Mississippi River: Upper Mississippi River Coordination Commission Special Publication, 238 p.
- Nordin, C.F., and Skinner, J.V., 1977, Sediment sampling for deep fast currents, in *International Association for Hydraulic Research, 17th, Baden Baden, Germany, August 14-19, 1977 [Proceedings]*, p. 606-609.

- Norelius, T.A., 1962, Pioneer traces in and near the Chisago Lakes area: Croixside Press, Stillwater, Minnesota, 35 p.
- Norrgard, R., and Wallace, K., 1979, Minnesota valley wildlife refuge/recreation area resource catalog: Minnesota Department of Natural Resources, Minnesota River valley project, 393 p.
- Northern States Power Company, 1970, Wild waters of the St. Croix—A plan for preservation and management, and addendum: St. Croix Task Force, Minneapolis, Minnesota, 55 p.
- Norton, A.R., 1982, Quaternary geology of the Itasca-St. Croix moraine interlobate area, north-central Minnesota: Master's thesis, University of Minnesota, Duluth, Minnesota, 119 p.
- _____, 1983, Supraglacial and proglacial sedimentation associated with the Itasca and St. Croix moraine interlobate area, north-central Minnesota, *in* Craddock, J.C., Geological Society of America, North Central Section, 17th annual meeting, Madison, Wisconsin, April 28-29, 1983, Abstracts with Programs: Geological Society of America, v. 15, no. 4, p. 251.
- Norton, W.R., 1974, Final report for the Upper Mississippi River Basin model project: U.S. Environmental Protection Agency Water Planning Division, Planning Assistance Branch, 269 p.
- _____, 1974, Model validation and sensitivity analysis for the Upper Mississippi River Basin: Water Resources Engineers.
- _____, 1974, Report on the water quality behavior of the Upper Mississippi River, August 14-23, 1973: Water Resources Engineers.
- _____, 1974, Supplemental simulations for the Upper Mississippi River Basin, 1964-1965: Water Resources Engineers.
- Norvitch, R.F., 1960, Ground water in alluvial channel deposits, Nobles County, Minnesota: Minnesota Department of Conservation, Division of Waters Bulletin 14, 23 p.
- _____, 1962, Geology of the Vermillion end moraine, Nett Lake Indian Reservation, Minnesota: U.S. Geological Survey Professional Paper 450-D, p. D130-D132.
- _____, 1963, Reconnaissance geology and hydrology on the Nett Lake Indian Reservation, Minnesota: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 35 p.
- _____, 1964, Geology and ground-water resources of Nobles County and part of Jackson County, Minnesota: U.S. Geological Survey Water-Supply Paper 1749, 70 p.
- Norvitch, R.F., Ross, T.G., and Brietkrietz, Alex, 1973, Water resources outlook for the Minneapolis-St. Paul metropolitan area, Minnesota: Metropolitan Council of the Twin Cities area, 219 p.
- Norvitch, R.F., and Walton, M.S., eds., 1979, Geologic and hydrologic aspects of tunneling in the Twin Cities area, Minnesota: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-1157, 7 sheets, scale 1:24,000 and 1:48,000.

- Norvitch, R.F., Schneider, Robert, and Godfrey, R.G., 1963, Geology and hydrology of the Elk River, Minnesota, nuclear reactor site: U.S. Geological Survey Bulletin 1133-C, 25 p.
- North Star Research Institute, 1973, Environmental impact assessment of the northern section of the Upper Mississippi River, Minneapolis: Prepared for the U.S. Army Corps of Engineers, St. Paul District, 14 volumes.
- Nosek, J.A., and Faber, R.A., Weiner, J.G., Anderson, R.V., and McConville, D.R., eds., 1984, Polychlorinated biphenyls and organochlorine insecticides in great blue heron and great egret eggs from the Upper Mississippi River, *in* Contaminants in the Upper Mississippi River—Proceedings of the 15th Annual Meeting of the Mississippi River Research Consortium: Butterworth Publishers, Stoneham, Massachusetts, p. 241-260.
- Novitzki, R.P., 1979, Streamflow estimates in selected Wisconsin streams: U. S. Geological Survey Open-File Report 79-1282, 11 p.
- _____, 1982, Hydrology of Wisconsin wetlands: Wisconsin Geological and Natural History Survey Information Circular 40, 22 p.
- Novitzki, R.P., VanVoast, W.A., and Jerabek, L.A., 1969, Water resources of the Yellow Medicine River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-320, 3 sheets, scale 1:250,000.
- Oakes, E.L., 1964, Bedrock topography of the eastern and central Mesabi Range, northeastern Minnesota: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-389, 4 sheets.
- _____, 1970, Geology and ground-water resources of the Grand Rapids area, north-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-322, 2 sheets, scale 1:48,000.
- Oakes, E.L., and Bidwell, L.E., 1968, Water resources of the Mississippi headwaters watershed, north-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-278, 4 sheets, scale 1:250,000.
- Oberts, G.L., and Hartsoe, J.A., 1989, Surface water management—Precipitation frequency analysis for the Twin Cities metro area, update: Metropolitan Council of the Twin Cities Area, 58 p. [Available from Metropolitan Council Data Center, 230 E. 5th Str., St. Paul, Minnesota 55101.]
- Oberts, G.L., Wotzka, P.J., and Hartsoe, J.A., 1989, The water-quality performance of select urban runoff treatment systems: Metropolitan Council of the Twin Cities Area 590-89-062a, 81 p.
- Odom, I.E., 1978, Lithostratigraphy and sedimentology of the Lone Rock and Mazomanie Formations, Upper Mississippi River Valley, *in* Odom, I.E., Lithostratigraphy, petrology, and sedimentology of Late Cambrian Early Ordovician rocks near Madison, Wisconsin: Field Trip Guide Book 3, p. 91-96.
- Oh, J., 1992, Sinkhole sediments in the Wisconsin Driftless Area karst: Doctoral thesis, University of Wisconsin, Milwaukee, Wisconsin, 213 p.

- Ohl, L., 1992, Historical trends in the trophic state of Lake Pepin: Department of Biology, University of Wisconsin, Eau Claire, 13 p.
- Ojakangas, R.W., and Matsch, C.L., 1982, Minnesota's geology: University of Minnesota Press, Minneapolis, Minnesota.
- _____, 1982, Minnesota's geology: University of Minnesota Press, Minneapolis, Minnesota, 255p.
- Ojakangas, R.W., and Morey, G.B., 1982, Keweenaw sedimentary rocks of the Lake Superior region—A summary, *in* Wold, R.J., and Hinze, W.J., *Geology and tectonics of the Lake Superior Basin*: Geological Society of America, v. 156, p. 157-164.
- _____, 1982, Proterozoic sedimentary rocks, *in* Wold, R.J., Hinze, W.J., *Geology and tectonics of the Lake Superior Basin*: Geological Society of America, v. 156, p. 83-84.
- Olcott, P.G., 1992, Ground-water atlas of the United States, Segment 9, Iowa, Michigan, Minnesota, and Wisconsin: U.S. Geological Survey Hydrologic Investigations Atlas 730-J, 31 p.
- Olsen, B.M., and Mossler, J.H., 1982, Geological map of Minnesota—Depth to bedrocks: Minnesota Geological Survey State map series S-12.
- Olson, K.N., and Meyer, M.P., 1976, Assessment of Upper Mississippi River flood-plain changes with sequential aerial photography: *Photographic Engr. and Remote Sensing*, v. 42, p. 829.
- _____, 1976, Vegetation, land, and water surfaces changes in the upper navigable portion of the Mississippi River Basin over the period 1939-1973: University of Minnesota, Institute of Agriculture, Forestry, and Home Economics, Remote Sensing Laboratory, Research Report no. 76-4, 225 p.
- Omernik, J.M., 1987, Aquatic ecoregions of the conterminous United States: *Annual Association of American Geographers*, v. 77, p. 118-125
- Omernik, J.M., and Gallant, A.L., 1988, Ecoregions of the Upper Midwest states: U.S. Environmental Protection Agency, EPA/600/3-88/037, 56 p.
- Opler, P.A., 1993, Proceedings of the symposium on restoration planning for the rivers of the Mississippi River Ecosystem: National Biological Survey Biological Report 19, 22 p.
- Osgood, R.A., 1989, An evaluation of the effects of watershed treatment systems on the summertime phosphorus concentration in metropolitan area lakes: Metropolitan Council of the Twin Cities Area, 40 p. [Available from Metropolitan Council Data Center, 230 E. 5th Str., St. Paul, Minnesota 55101.]
- _____, 1989, An evaluation of lake and stream monitoring programs in the Twin Cities metropolitan area: Metropolitan Council of the Twin Cities Area 590-89-128, 46 p.
- _____, 1989, A study of the water quality of 20 metropolitan area lakes: Metropolitan Council of the Twin Cities Area 590-89-129, 90 p.
- _____, 1991, A 1990 study of the water quality of 21 metropolitan area lakes St. Paul: Metropolitan Council of the Twin Cities area 590-90-182, 91 p.

- Ostendorf, D.W., Pollock, S.J., De-Cheke, M.E., and Palaia, T.A., 1993, Aerobic degradation of calcium magnesium acetate in roadside soils—Field simulations from soil microcosms: *Journal of Environmental Quality*, v. 22, no. 2, p. 299-304.
- Ostrom, M.E., 1987, Late Cambrian Eau Claire Formation at Strum, Wisconsin, *in* Biggs, D.L., North central section of the Geological Society of America, v. 3, p. 183-184.
- _____, 1987, The Mount Simon Formation at Eau Claire, Wisconsin, *in* Biggs, Donald L., North Central Section of the Geological Society of America, v. 3, 179-182.
- Oulgout, B., 1984, Preliminary groundwater study and use of resistivity sounding for determining some hydrologic parameters of glacial outwash in Clear Lake, Sherburne County, Minnesota: Master's thesis, University of Minnesota, Duluth, Minnesota, 223 p.
- Owen, R., 1952, Memorandum on a survey of the Mississippi River from above the Minneapolis water works intake to below Minneapolis at the Ford Dam, December 17, 1951 to January 17, 1952: Minnesota Department of Health, Division of Water Pollution Control, mimeographed.
- Owens, S.M., 1985, Stratigraphy and sedimentology of flat-pebble conglomerates of the upper Lone Rock Formation (Upper Cambrian), western Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin, 125 p.
- Padgham, H.F., 1987, Controlled flow management helps avert overflows, saves money: *Water Engineering and Management*, v. 134, no. 9, p. 38-40.
- Page, G.W., 1988, Municipal responses to volatile organic compounds in Wisconsin ground water: *Water Resources Bulletin*, v. 24, no. 4, p. 847-854.
- _____, 1988, Water system responses to toxic contamination of groundwater supplies. [Available from the National Technical Information Services, Springfield, Va, 22161 as PB88-223524, 26 p.]
- Paily, P.P., Su, T.Y., Gisquinta, A.R., and Kennedy, J.F., 1976, The thermal regimes of the Upper Mississippi and Missouri Rivers: University of Iowa Institute of Hydraulic Research, Iowa City, Iowa, Report No. 182, 407 p.
- Palen, B.M., Kanivetsky, R., and Christopher, R.A., 1993, Water-table hydrogeology, *in* Meyer, G.N. and Falteisek, J. eds., Regional hydrogeologic assessment Anoka Sand Plain—Anoka, Chisago, Isanti, and Sherburne Counties, Minnesota: Minnesota Department of Natural Resources, Regional Hydrogeologic Assessment RHA-1, plate 1, 1 sheet, 1:200,000.
- Parham, W.E., and Hogberg, R.K., 1964, Kaolin clay resources of the Minnesota River Valley, Brown, Redwood and Renville Counties—A preliminary report: Minnesota Geological Survey Report Investigations 3, 43 p.
- Parrett, C., Melcher, N.B., and James, R.W., 1993, Flood discharges in the Upper Mississippi River Basin, 1993: U.S. Geological Circular 1120-A, 14 p.
- Pastor, E.F., and Frick, D.R., 1992, Considerations in selecting indicator parameters for the statistical evaluation of ground-water quality, *in* Current Practices in Ground Water and Vadose Zone Investigations. Stp 118, p. 411-426.

- Patterson, G.L., 1990, Ground-water levels and quality at Crex Meadows Wildlife Area, Burnett County, Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 89-4129, 19 p.
- Patterson, G.L., and Zaporozec, A., 1988, Analysis of water-level fluctuations in Wisconsin wells: Wisconsin Geological and Natural History Survey Information Circular 63, 38 p.
- Patterson, J.L., and Gamble, C.R., 1968, Magnitude and frequency of floods in the United States, Part 5. Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 1678, 546 p.
- Paulhus, J.L.H., 1971, The March-April 1969 snowmelt floods in the Red River of the North, Upper Mississippi River, and Missouri Basins: National Oceanic and Atmospheric Administration Technical Report NWS 13, 92 p.
- Payne, G.A., 1977, Baseline water quality of Long Meadow Lake, Ponds AP-9 and AP-10 and Black Dog Creek, Hennepin and Dakota Counties, Minnesota: U.S. Geological Survey Open-File Report 77-424, 56 p.
- _____, 1979, Water-quality reconnaissance of lakes in Voyageurs National Park, Minnesota: U.S. Geological Survey Open-File Report 79-556, 40 p.
- _____, 1980, Baseline water quality of Schmidt, Hornbeam, and Horseshoe Lakes, Dakota County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-3, 38 p.
- _____, 1983, Streamflow and suspended-sediment transport in Garvin Brook, Winona County, southeastern Minnesota—Hydrologic data for 1982: U.S. Geological Survey Open-File Report 83-212, 22 p.
- _____, 1989, Flow characteristics of the Clearwater River and tributaries from Clearbrook to Plummer, northwestern Minnesota: U.S. Geological Survey Water-Resources Investigations Report 89-4045, 25 p.
- _____, 1991, Sediment, nutrients, and oxygen-demanding substances in the Minnesota River: Selected water-quality data, 1989-90: U.S. Geological Survey Open-File Report 91-498, 37 p.
- _____, 1993, Sources and transport of sediment, nutrients, and oxygen-demanding substances in the Minnesota River Basin, 1989-92: U.S. Geological Survey Water-Resources Investigations Report 93-4232, 71p.
- _____, 1994, Ground-water base flow to the Upper Mississippi River upstream of the Minneapolis-St. Paul area, Minnesota during July 1988, *in* Water Available from the Mississippi River at Minneapolis and Other Upstream Minnesota Locations During Low-Flow Conditions: U.S. Army Corps of Engineers, p. C1-C36.
- _____, 1994, Sources and transport of sediment, nutrients, and oxygen-demanding substances in the Minnesota River Basin, 1989-92: U.S. Geological Survey Water-Resources Investigations Report 93-4232, 71 p.

- _____, 1995, Ground-water baseflow to the Upper Mississippi River upstream of the Minneapolis area Minnesota during July 1988: U.S. Geological Survey Open-File Report 94-478, 28 p.
- Payne, G.A., Ayers, M.A., and Brown, R.J., 1982. Quality of runoff from small watersheds in the Twin Cities metropolitan area, Minnesota Hydrologic data for 1980: U.S. Geological Survey Open-File Report 82-504, 289 p.
- Pearson, W.R., and Cin, D.E., 1976, The great river study—A new perspective in river management [Upper Mississippi River], in Symposium on Inland Waterways for Navigation, Flood Control and Water Diversions (3rd ed.), v. 1, p. 536-551.
- Peck, J.H., and Smart, M.M., 1985, Bibliography to Upper Mississippi River aquatic and wetland plant literature: Proceedings of the Iowa Academy of Science, v. 92, no. 2, p. 78-84.
- _____, 1986, An assessment of the aquatic and wetland vegetation of the Upper Mississippi River: Hydrobiologia, v. 136, p. 57-76.
- Peddicord, R., Tatem, H., Gibson, A., and Pedron, S., 1980, Biological assessment of Upper Mississippi River sediments: U.S. Army Corps of Engineers Waterways Experimental Station, Vicksburg, Mississippi, Miscellaneous Paper EL-80-5, 82 p.
- Pellett, S., Bigley, D.V., and Grimes, D.J., 1983, Distribution of *Pseudomonas aeruginosa* in a riverine ecosystem: Applied and Environmental Microbiology, v. 45, no. 1, p. 328-332.
- Penman, J.T., 1987, Neoboreal climatic influences on the late Prehistoric agricultural groups in the Upper Mississippi River Valley [abs.]: International Union for Quaternary Research, 12th international congress, Ottawa, Ontario, Program and abstracts, p. 240.
- Pennington, C.H., Baker, J.A., and Bond, C.L., 1983, Fishes of selected aquatic habitats on the lower Mississippi River, Vicksburg, Mississippi: U.S. Army Corps of Engineers Technical Report E-83-2, 96 p.
- Pereira, W.E., Rostad, C.E., Garbarino, J.R., and Hult, M.F., 1983, Ground-water contamination by organic bases derived from coal-tar wastes: Environmental Toxicology and Chemistry, v. 2, p. 283-294.
- Perkins, D., and Chipera, S.J., 1985, Garnet-orthopyroxene-plagioclase-quartz barometry—Refinement and application to the English River Subprovince and the Minnesota River Valley: Contributions to Mineralogy and Petrology, v. 89, no. 1, p. 69-80.
- Perlinger, J.A., Almendinger, J.E., Urban, N.R., and Eisenreich, S.J., 1987, Groundwater geochemistry of aquifer thermal energy storage; long-term test cycle: Water Resources Research, v. 23, no. 12, p. 2215-2226.
- Peterjohn, B.G., 1994, The North American breeding bird survey: Birding, v. 26, p. 386-398.
- Petersen, L.R., 1982, Evaluations of waterfowl production areas in Wisconsin: Wisconsin Department of Natural Resources Technical Bulletin no. 135, 32 p.

- Peterson, A.R., 1964, Distribution and relative abundance of fishes in the St. Croix River impoundment at Taylors Falls from 1959-63: Minnesota Department of Natural Resources Special Publication 80, 9 leaves.
- Peterson, D.E., and Jaske, R.T., 1968, A test simulation of potential effects of thermal power plants on streams in the Upper Mississippi River Basin: Battelle Memorial Institute Pacific Northwest Laboratory Report 999, 75 p.
- _____, 1970, Potential thermal effects of an expanding power industry—Upper Mississippi River Basin: Research and Development Report, Bnwl, 1405(70), 94 p.
- Peterson, T.A., Armstrong, D.A., Stark, J.R., and Hansen, D.S., 1995, Spatial variability of streambed properties related to stream-channel geomorphology and baseflow of a gaining stream in glaciated north-central Minnesota: Water Resources at Risk, Denver, Colorado, May 14-18, 1995, p. LL141-LL153.
- Petrosky, C.E., Waters, T.F., 1975, Annual production by the slimy sculpin population in a small Minnesota trout stream: American Fisheries Society, v. 104, p. 237-44.
- Petshow, G., 1972, Water Quality of the Apple River: Wisconsin Department of Natural Resources, 13 p.
- Pfaender, F.K., 1990, Biological transformations of volatile organic compounds in groundwater, *in* Significance and Treatment of Volatile Organic Compounds in Water Supplies: Lewis Publishers, Inc., Chelsea, Michigan, p. 205-226.
- Phillips, G.L., Eminson, D.F., and Moss, B., 1978, A mechanism to account for macrophyte decline in progressively eutrophicated freshwaters: Aquatic Botany, v. 4, p. 103-126.
- Phillips, G.L., Schmid, W.D., and Underhill, J.C., 1982, Fishes of the Minnesota Region: University of Minnesota Press, Minneapolis, Minnesota, 248 p.
- Piatt, J.J., Eisenreich, S.J., Barkhus, D.A., and Capel, P.D., 1993, Sorption of polycyclic aromatic hydrocarbons to aquifer materials containing low-organic carbon content from Bemidji, Minnesota [abs.], *in* Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 129.
- Pierce, R.B., 1980, Upper Mississippi River wing dam notching—The prenotching fish study: Master's thesis, University of Wisconsin, Stevens Point, Wisconsin, 269 p.
- Pincince, A.B., 1991, Transfer of oxygen and emissions of volatile organic compounds at clarifier weirs: Research Journal of the Water Pollution Control Federation, v. 63, no. 2, p. 114-119.
- Pitlo, J.M., 1989, Walleye spawning habitat in Pool 13 of the Upper Mississippi River: North American Journal of Fisheries Management, v. 9, no. 3, p. 303-308.
- Placet, M., and Streets, D.G., 1988, Historical and future emissions of acidic deposition precursors from man-made sources, 4 p. [Available from the National Technical Information Service, Springfield, Va 22161 as DE88010024]

- Plaza, E., Hultman, B., and Trela, J., 1990, Effect of easily degradable carbon sources on nitrogen removal efficiency: *Water Science and Technology*, v. 22, no. 7, p. 281-282.
- Plimmer, J.R., 1990, Pesticide loss to the atmosphere: *American Journal of Industrial Medicine*, v. 18, no. 4, p. 461-466.
- Poff, N.L., Allan J.D., 1995, Functional organization of stream fish assemblages in relation to hydrologic variability: *Ecology*, v. 76, no. 2, p. 606-627.
- Pollock, S.J., 1992, Remediating highway deicing salt contamination of public and private water supplies in Massachusetts, *in* *Chemical Deicers and the Environment*: Lewis Publishers, Boca Raton, Florida, p. 519-538.
- Porcher, E., 1989, Ground-water contamination susceptibility in Minnesota, revised ed.: Minnesota Pollution Control Agency, 36 p.
- Powers, E.H., 1932, Paleozoic stratigraphy and structure in the valleys of Willow and Apple Rivers, Wisconsin: Master's thesis, University of Iowa, unknown p.
- Preud'homme, E.B., and Stefan, H.G., 1992, Errors related to random stream temperature data collection in Upper Mississippi River Watershed: *Water Resources Bulletin*, v., 28, no. 6, p. 1077-1082.
- Pride, D.E., 1966, Size and heavy mineral studies of the New Richmond Sandstone of Lower Ordovician age (Wisconsin, Illinois, Iowa, and Minnesota): Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Prior, C.H., 1949, Magnitude and frequency of floods in Minnesota: Minnesota Department of Conservation, Division of Waters Bulletin 1, 128 p.
- Prior, C.H., and Hess, J.H., 1961, Floods in Minnesota magnitude and frequency: Minnesota Department of Conservation, Division of Waters Bulletin 12, 142 p.
- Prior, C.H., Schneider, Robert, and Durum, W.H., 1953, Water resources of the Minneapolis-St. Paul area, Minnesota: U.S. Geological Survey Circular 274, 49 p.
- Proctor, B., 1993, Characterization of sediments settleable solids and water quality of stormwater runoff in the Minnesota River watershed: Water Resources Center, Mankato State University, Mankato, Minnesota, variously paged.
- Prout, H.A., 1851, Description of a new graptolite found in the Lower Silurian rocks near the Falls of the St. Croix River: *American Journal of Science*, v. 2, no. 11, p. 187-191.
- Pruett, R.J., 1993, A mineralogical and geochemical comparison between several primary and sedimentary kaolins of North America: Doctoral thesis, Indiana University, Bloomington, Illinois, 250 p.
- Putnam, R.D., 1975, Trace metal emissions from a wastewater treatment plant: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, 101 p.

- Quade, H.W., 1978, County drainage ditches in south-central Minnesota—A unique riparian ecosystem, *in* Strategies for Protection and Management of Floodplain Wetlands and Other Riparian Ecosystems, Callaway Gardens, Georgia, December 11-13, 1978, p. 400-410.
- Quade, H.W., 1981, County drainage ditches in south-central Minnesota—Their nature and effects, *in* Richardson, B., Selected Proceedings of the Midwest Conference on Wetland Values and Management, St. Paul, Minnesota, June 17-19, 1981, p. 165-179.
- Quade, H.W., Boyum, K.W., Braaten, D.O., Gordon, D., Pierce, C.L., 1980, The nature and effects of county drainage ditches in south-central Minnesota: Water Resources Research Center Bulletin 105, University of Minnesota, Minneapolis, Minnesota, 121 p.
- Quinn, J.J., Barnes, R.J., and Mooers, H.D., 1992, A three-dimensional geostatistical analysis of glacial-drift aquifers and aquitards[abs.]: Geological Society of America, v. 24, no. 7, p. 252-253.
- Rabideau, A.J., Weber, A.S., and Matsumoto, M.R., 1987, Impact of calcium magnesium acetate road deicer on POTW operation: Journal of Water Resources Planning and Management, v. 113, no. 2, p. 311-315.
- Rada, R.G., Bailey, P.A., and Powell, D.E., 1984, Lake Pepin—A sink for metals (Cd, Cr, Cu, Pb, and Zn) discharged into the Upper Mississippi River[abs.], American Geophysical Union, 1984 fall meeting, San Francisco, California, December 3-7, 1984: American Geophysical Union, v. 65, no. 45, p. 888.
- Rada, R.G., Wiener, J.G., Bailey, P.A., Powell, D.E., 1990, Recent influxes of metals into Lake Pepin, a natural lake on the Upper Mississippi River: Archives of Environmental Contamination and Toxicology, v. 19, no. 5, p. 712-716.
- Rademacher, J.M., 1964, Report on pollution of the waters of the Upper Mississippi River and its significant tributaries, Minneapolis-St. Paul metropolitan area, Minnesota-Wisconsin: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Water Supply and Pollution Control, Region V, Chicago, 68 p.
- Rainwater, F.H., 1962, Stream composition of the conterminous United States: U.S. Geological Survey Hydrologic Investigations Atlas HA-61, 3 sheets.
- Rasmussen, J.B., Rowen, D.J., Lean, D.R.S., Carey, J.H., 1990, Food chain structure in Ontario lakes determines PCB levels in lake trout (*Salvelinus namaycosti*) and other pelagic fish: Canadian Journal of Fisheries and Aquatic Sciences, v. 47, p. 2030-2038.
- Rasmussen, J.L., 1979, A compendium of fishery information on the Upper Mississippi River: Upper Mississippi River Coordination Commission, 2nd ed. 259 p.
- Rassam, G.N., 1967, Studies on the Platteville Formation (Middle Ordovician) of Minnesota, Iowa, and Wisconsin: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, 173 p.
- Ratner, D., and Rohr, B., 1981, Erosional features of the Cannon River Wilderness Park, Minnesota[abs.], Geological Society of America, North Central Section 15th annual meeting, Ames, Iowa, April 30-May 1, 1981, Abstracts with Programs: Geological Society of America, v. 13, no. 6, 313 p.

- Read, R.H., 1976, Endangered and threatened vascular plants in Wisconsin: Wisconsin Department of Natural Resources Technical Bulletin no. 92, 58 p.
- _____, 1976, Natural areas inventory of west-central Wisconsin: Wisconsin Department of Natural Resources, 43 p.
- Reed, L.W., Hunt, G.T., Maisel, B.E., Hoyt, M., and Keefe, D., 1990, Baseline assessment of PCDDs/PCDFs in the vicinity of the Elk River, Minnesota generating station: *Chemosphere*, v. 21, no. 1, p. 159-171.
- Reeder, H.O., 1966, Fourteen maps of parts of the ground-water reservoir in the Minneapolis-St. Paul metropolitan area: U.S. Geological Survey Open-File Maps.
- _____, 1969, Ground water for irrigation in the Perham area, Otter Tail County, west-central Minnesota: U.S. Geological Survey Open-File Report, 56 p.
- _____, 1972, Availability of ground water for irrigation from glacial outwash in the Perham area, Otter Tail County, Minnesota: U.S. Geological Survey Water-Supply Paper 2003, 45 p.
- Reeder, H.O., and Norvitch, R.F., 1974, Hydrogeologic reconnaissance of ground-water pollution in the Pine Bend area, Dakota County, Minnesota: U.S. Geological Survey Open-File Report, 27 p.
- Reeder, H.O., Wood, W.W., Ehrlich, G.G., and Sun, R.J., 1976, Artificial recharge through a well in a fissured carbonate rock, West St. Paul, Minnesota: U.S. Geological Survey Water-Supply Paper 2004, 80 p.
- Reedstrom, D.C., 1964, A biological reconnaissance of the Snake River: Minnesota Department of Conservation Division of Game and Fish Investigational Report no. 275, 61 p.
- Regard, R.O., 1976, An alternative for rates of production of planktonic algae in a river for use in QUAL-II: Metropolitan Waste Control Commission, 10 p.
- Regard, R.O., Combs, W.S., Jr., and Settles, J.C., 1978, Planktonic algae, photosynthesis, and oxygen in the Mississippi River at Minneapolis and St. Paul, Minnesota: University of Minnesota, Department of Ecology and Behavioral Biology, Minneapolis, Minnesota, 54 p.
- Reid, D.F., 1974, The Quaternary geology of the Lake Johanna region, west-central Minnesota: Master's thesis, University of Minnesota, Duluth, Minnesota, 79 p.
- Reid, F.A., Kelley, J.R., Taylor, T.S., and Fredrickson, L.H., 1989, Upper Mississippi River Valley wetlands—Refuges and moist-soil impoundments, *in* Smith, L.M., Pederson, R.L., and Kaminski, R.M., ed., *Habitat management for migrating and wintering waterfowl in North America*, p. 181-202.
- Reinecke, K. J., Kaminski, R.M., Moorhead, D.J., Hodges, J.D., and Nassar, J.R., 1989, Mississippi Alluvial Valley, *in* Smith, L.M., and Kaminski, R.M., ed., *Habitat management for migrating and wintering waterfowl in North America*, p. 203-247.
- Reinhard, E.G., 1930, The plankton ecology of the Upper Mississippi River (Minneapolis to Winona): Doctoral thesis, University of Minnesota, Minneapolis, Minnesota.

- Resource and Community Development Interdisciplinary Seminar of 1981, 1981, Urban impacts on the Minnesota River Valley National Wildlife Refuge: University of Minnesota, 113 p.
- Reuter, G.R., 1993, Use of rock reinforcement during excavations near existing foundations at the Minneapolis-St. Paul International Airport: Bulletin of the Association of Engineering Geologists, v. 30, no. 2, p. 137-164.
- Revesz, Kinga, Copen, T., Baedecker, M.J., and Hult, M.F., 1993, Use of carbon and hydrogen stable isotopes to investigate the production and fate of methane at a toxic waste site, Bemidji, Minnesota [abs.], in Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 128.
- Richards, C., Host, G.E. and Arthur, J.S., 1993, Identification of predominant environmental factors structuring stream macroinvertebrate communities within a large agricultural stream catchment: Freshwater Biology, v. 29: p. 285-294.
- Richardson, L.A.H., 1993, A summary of 1991 winter water quality characteristics at the pool 8 islands habitat rehabilitation and enhancement project, Upper Mississippi River System: National Biological Survey, Onalaska, Wisconsin, 11 p.
- Rickert, D.A., and Spieker, A.M., 1972, Real-estate lakes: U.S. Geological Survey Circular 601-G, 19 p.
- Rinaldo-Lee, M.B., 1978, Hydrogeology and computer model of the Bass Lake Area, St. Croix County, Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Rinella, J.F., McKenzie, S.W., Crawford, J.K., Foreman, W.T., and Gates, P.M., 1992, Surface-water-quality assessment of the Yakima River Basin, Washington—Pesticide and other trace-organic compound data for water, sediment, soil, and aquatic biota, 1987-91: U.S. Geological Survey Open-File Report 92-644, 154 p.
- Ritchie, J.C., 1988, Organic matter content in sediments of three navigation pools along the Upper Mississippi River: Journal of Freshwater Ecology, v. 4, no. 3, p. 343-349.
- Ritchie, J.C., and McHenry, J.R., 1985, A comparison of three methods for measuring recent rates of sediment accumulation: Water Resources Bulletin, v. 21, no. 1, p. 99-103.
- Riverfront Planning Team of Minneapolis Planning and Development, 1972, Mississippi/Minneapolis—A plan and program for riverfront development: Minneapolis Riverfront Planning Team, 130 p.
- Robbins, S.D., 1961, Shorebirds in St. Croix County: Passenger Pigeon, v. 23, no. 2, p. 63-64.
- Roberts, N.A., and Fried, J.A., 1985, Historical reconstruction of the riverfront—Stillwater, Washington County, Minnesota: U.S. Army Corps of Engineers, 197 p.
- Robinson, A., and Marks, R., 1994, Restoring the big river—A Clean Water Act blueprint for the Mississippi: Izaak Walton League and Natural Resources Defence Council, 53 p.

- Robinson, J.W., 1970, The 1969 Upper Mississippi River dredge spoil survey from Hastings, Minnesota to Cairo, Illinois: Missouri Department of Conservation. [Available From National Technical Information Service, Springfield, Va, 22161, as COM 72-10044, 157 p.]
- Rockford Map Publishers, 1972, Atlas and plat book, Chisago County, Minnesota: Rockford Map Publishers, Rockford, Illinois.
- _____, 1973, Atlas and plat book, Pine County, Minnesota: Rockford Map Publishers, Rockford, Illinois.
- _____, 1985, St. Croix County atlas and plat book Rockford Map Publishers, Rockford, Illinois.
- Rodis, H.G., 1961, Availability of ground water in Lyon County, Minnesota: U.S. Geological Survey Circular 444, 7 p.
- _____, 1961, Geology and occurrence of ground water in Lyon County, Minnesota: U.S. Geological Survey Open-File Report, 43 p.
- _____, 1961, Interpretation of geologic and ground-water conditions from field data in Lyon County, Minnesota: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 22 p.
- _____, 1961, Use of water-well data in interpreting occurrence of aquifers in northeastern Lyon County, Minnesota: Geological Society of America Bulletin, v. 72, p. 1275-1278.
- _____, 1963, Geology and occurrence of ground water in Lyon County, Minnesota: U.S. Geological Survey Water-Supply Paper 1619-N, 41 p.
- Rodis, H.G., and Schneider, Robert, 1960, Occurrence of ground waters of low hardness and of high chloride content in Lyon County, Minnesota: U.S. Geological Survey Circular 423, 3 p.
- Rogers, H.R., Crathorne, B., and Watts, C.D., 1992, Sources and fate of organic contaminants in the Mersey Estuary—Volatile organohalogen compounds: Marine Pollution Bulletin, v. 24, no. 2, p. 82-91.
- Rogers, J.D., and Armbruster, J.T., 1990, Low flows and hydrologic droughts, *in* Wolman, M.G., and Riggs, H.C., eds., Surface water hydrology, Boulder, Colorado, Geological Society of America, The Geology of North America, v. O-1, p. 121-130
- Rolling, R., and Melchior, R.C., 1986, Till stratigraphy of north-central Minnesota [abs.], 54th annual spring meeting of the Minnesota Academy of Sciences: Journal of the Minnesota Academy of Science, v. 51, no. 3, p. 19.
- Rook, J.J., 1974, Formation of haloforms during chlorination of natural water: Journal of Water Treatment Examination, v. 23, p. 234.
- Ropes, L.H., 1969, Ground-water resources of the St. James area, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-334, 1 sheet, scale 1:62,500.

- Rose, D.L., and Schroeder, M.P., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of volatile organic compounds in water by purge and trap capillary gas chromatograph/mass spectrometry: U.S. Geological Survey Open-file Report 94-708, 26 p.
- Rose, W.J., 1992, Sediment transport, particle sizes, and load in lower reaches of the Chippewa, Black, and Wisconsin Rivers in western Wisconsin: U.S. Geological Survey Water-Resources Investigations Report 90-4124, 38 p.
- _____, 1993, Water and phosphorus budgets and trophic state, Balsam Lake, northwestern Wisconsin, 1987-1989: U.S. Geological Survey Water-Resources Investigations Report 91-4125, 28 p.
- Rosenberg, G.D., and Henschen, M.T., 1984, Effects of pollution on growth of midwestern mussel shells: Water Resources Research Center Technical Report 168, 13 p. [Available from the National Technical Information Service, Springfield, Va 22161 as PB85-225878/AS.].
- Rosenberry, D.O., Sturrock, A.M., Scarborough, J.L., and Winter, T.C., 1988, Climatic data for Williams Lake, Hubbard County, Minnesota: U.S. Geological Survey Open-File Report 88-89, 42 p.
- _____, 1988, Climatic data for Williams Lake, Hubbard County, Minnesota, 1988: U.S. Geological Survey Open-File Report 88-304, 38 p.
- Rosenfelt, E., ed., 1977, Washington—A history of the Minnesota County: Croixside Press for the Washington County Historical Society, Stillwater, Minnesota.
- Ross, M.J., and Siniff, D.B., 1980. Spatial distribution and temperature selection of fish near the thermal outfall of a power plant during fall, winter, and spring: U.S. Environmental Protection Agency, EPA-600/3-80-009, 129 p. [Available from the National Technical Information Service, Springfield, Va, 22161 as PB80-148703.]
- Rostvedt, J.O., 1970, Summary of floods in the United States during 1965: U.S. Geological Survey Water-Supply Paper 1850-E, 110 p.
- Ruddy, B.C., and Hitt, K.J., 1990, Summary of selected characteristics of large reservoirs in the United States and Puerto Rico, 1988: U.S. Geological Survey Open-File Report 90-163, 295 p.
- Ruhe, R.V., 1973, Background of model for loess-derived soils in the Upper Mississippi River Basin: Soil Science, v. 115, no. 3, p. 250-253.
- Ruhl, J.F., 1987, Hydrogeologic and water-quality characteristics of glacial-drift aquifers in Minnesota: U.S. Geological Survey Water-Resources Investigations Report 87-4224, 3 sheets.
- _____, 1987, Water-quality characteristics in glacial-drift aquifers in Minnesota [abs.]: Annual Meeting of Geological Society of America, North Central Section, 21st, St. Paul, Minnesota, April 30-May 1, 1987, Proceedings: Geological Society of America, p. 241.
- _____, 1989, Flow of ground water through fractured carbonate rocks in the Prairie du Chien-Jordan aquifer, southeastern Minnesota: U.S. Geological Survey Open-File Report 89-253, 2 p.

- _____, 1989, Water resources of the White Earth Indian Reservation, northwestern Minnesota: U.S. Geological Survey Water-Resources Investigations Report 89-4074, 73 p.
- _____, 1994, Nitrate-N concentration distribution and the presence of selected pesticides in the surficial sand aquifer of the Straight River Basin, north-central Minnesota, 1991-93 [abs.]: Midwest Ground-Water Conference, 39th, Bismarck, North Dakota, October 16-18, 1994 [Proceedings], p. 28.
- _____, 1994, Quality of ground water around Vadnais Lake and in Lambert Creek watershed, and interaction of ground water with Vadnais Lake, Ramsey County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 94-4062, 59 p.
- _____, 1995, Presence, distribution, and potential sources of nitrate and selected pesticides in the surficial aquifer along the Straight River in north-central Minnesota, 1992-93: U.S. Geological Survey Water-Resources Investigations Report 95-4151, 24 p.
- Ruhl, J.F., and Wolf, R.J., 1983, Hydrogeologic and water-quality characteristics of the St. Peter aquifer, southeast Minnesota: U.S. Geological Survey Water-Resources Investigations Report 83-4200, 2 plates.
- _____, 1984, Hydrogeologic and water quality characteristics of the Upper Carbonate aquifer, southeastern Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4150, 2 sheets.
- Ruhl, J.F., Wolf, R.J., and Adolphson, D.G., 1982, Hydrogeologic and water-quality characteristics of the Ironton-Galesville aquifer, southeast Minnesota: U.S. Geological Survey Water-Resources Investigations Report 82-4080, 2 sheets.
- _____, 1983, Hydrogeologic and water-quality characteristics of the Prairie du Chien-Jordan aquifer, southeast Minnesota: U.S. Geological Survey Water-Resources Investigations Report 83-4045, 2 sheets.
- Runkel, A.C., 1992, Deposition of the Upper Cambrian Jordan Sandstone, Upper Mississippi River Valley region [abs.], Geological Society of America 1992 annual meeting, Cincinnati, Ohio, October 26-29, 1992: Geological Society of America, v. 24, no.7, p. 350.
- _____, 1994, Deposition of the Uppermost Cambrian (Croixan) Jordan Sandstone, and the nature of the Cambrian-Ordovician boundary in the Upper Mississippi River Valley: Geological Society of America Bulletin, v. 106, no. 4, p. 492-506.
- Sabeh, Y., and Narasiah, K.S., 1992, Degradation rate of aircraft deicing fluid in a sequential biological reactor: Water Science and Technology, v. 26, p. 9-11.
- Sabel, G.V., and Clark, T.P., 1985, Ground water quality monitoring program—An appraisal of Minnesota's ground water quality, 1985: Minnesota Pollution Control Agency, 49 p.
- Sabel, G.V., and Porcher, E., 1987, Ground water quality monitoring program—An appraisal of Minnesota's ground water quality, 1987: Minnesota Pollution Control Agency, 134 p.
- Saboe, C.W., 1973, Flooded area of Stillwater, Minnesota: U.S. Geological Survey Open-File Report, 6 p.

- Sanocki, C.A., 1995, Physical characteristics of stream subbasins in the Cottonwood River Basin, southwestern Minnesota: U.S. Geological Survey Open-File Report 95-333, 14 p., 1 sheet.
- _____, 1995, Physical characteristics of stream subbasins in the Upper Minnesota River Basin, west-central Minnesota, northeastern South Dakota, and southeastern North Dakota, U.S. Geological Survey Open-File Report 95-162, 16 p., 1 sheet, scale 1:100,000.
- _____, 1995, Physical characteristics of stream subbasins in the Cottonwood River Basin, southwestern Minnesota: U.S. Geological Survey Open-File Report 95-333, 14 p., 1 sheet, scale 1:100,000.
- Sanocki, C.A., and Krumrie, J.R., 1994, Physical characteristics of stream subbasins in the Chippewa River Basin, west-central Minnesota: U.S. Geological Survey Open-File Report 94-488, 16 p., 1 sheet, scale 1:100,000.
- Sansome, C.J., 1983, Minnesota underfoot—A field guide to the state's outstanding geologic features: Voyageur Press, Minneapolis, Minnesota.
- Sardeson, F.W., 1924, Type outcrops of Minnesota River Valley: *Pan American Geologist*, v. 41, no. 2, p. 107-122.
- _____, 1933, Glacial diversion of Cannon River in Minnesota: *Pan American Geologist*, v. 59, no. 4, p. 259-268.
- _____, 1933, Glacial diversion of Mississippi River in Minnesota: *Pan American Geologist*, v. 59, no. 3, p. 177-189.
- _____, 1936, Pleistocene St. Croix River: *Pan American Geologist*, v. 65, no. 3, p. 189-208.
- _____, 1939, Old Blue River and upper drainage in Tertiary times: *Pan American Geologist*, v. 71, no. 3, p. 183-193.
- Savina, M., Rodgers, D., and Jacobson, R., 1980, Outwash deposits of central Dakota County, Minnesota [abs.], Geological Society of America, North Central Section, 14th annual meeting, Bloomington, Indiana, April 10-11, 1980: *Geological Society of America*, v. 12, no. 5, p. 255.
- Scherer, H.P., 1970, A fish study on the Mississippi River at Monticello, Minnesota: Master's thesis, St. Cloud State College, St. Cloud, Minnesota, 75 p.
- Scherz, J.P., and Teppen, T., 1979, Analyzing river turbidity plumes with aerial photos—Appendix 2, Effects of clamshell (mechanical) dredging and disposal on water quality of the Upper Mississippi River: Great River Environmental Action Team (GREAT D, Water Quality Work Group), 19 p.
- Shiozawa, D.K., 1978, The habitat preferences, seasonal drift and abundance of stream microcrustacea. St. Paul, Minnesota: Doctoral thesis, University of Minnesota, St. Paul, Minnesota.
- Schlosser, I.J., and Ebel, K.K., 1989, Effects of flow regime and cyprinid predation on a headwater stream: *Ecological Monographs*, v. 59, no. 1, p. 41-57.

- Schlotthauer, J., 1994, GWMAP field sampling protocol, Revision 2.0: Minnesota Pollution Control Agency, 15 p.
- Schmidt, K., 1995, The distribution and status of paddlefish (*Polyodon spathula*) in Minnesota: North American Native Fishes Association, 22 p.
- Schneider, A.F., 1987, Studies of the Quaternary history of Minnesota, with emphasis on contributions of H.E. Wright, Jr. [abs.], Geological Society of America, North Central Section, 21st annual meeting with the North Central Section of the Paleontological Society, Great Lakes Section, Society of Economic Paleontologists and Mineralogists and the Association for Women Geoscientists, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 242.
- Schneider, R., 1947, Ground-water conditions and problems in the Upper Mississippi River Embayment: *Economic Geology*, v. 42, no 7, p. 626-633.
- _____, 1958, Correlation of ground-water levels and air temperatures in the winter and spring in Minnesota: Minnesota Department of Conservation, Division of Waters Technical Paper 1, 17 p.
- _____, 1962, An application of thermometry to the study of ground water: U.S. Geological Survey Water-Supply Paper 1544-B, 16 p.
- Schneider, R., and Rodis, H.G., 1959, Aquifers in meltwater channels along the southwest flank of the Des Moines Lobe, Lyon County, southwestern Minnesota [abs.]: Geological Society of America, v. 70, no. 12, p. 1671.
- _____, 1961, Aquifers in melt-water channels along the southwest flank of the Des Moines lobe, Lyon County, Minnesota: U.S. Geological Survey Water-Supply Paper 1539-F, 10 p.
- Schneider, W.J., 1970, Hydrologic implications of solid-waste disposal: U.S. Geological Survey Circular 601-F, 10 p.
- Schneider, W.J., Rickert, D.A., and Spieker, A.M., 1972, Role of water in urban planning and management: U.S. Geological Survey Circular 601-H, 10 p.
- Schneider, W.J., and Spieker, A.M., 1969, Water for the cities—The outlook: U.S. Geological Survey Circular 601-A, 6 p.
- Schoenberg, M.E., 1981, Evaluation of geohydrologic data using a ground-water-flow model of the Twin Cities metropolitan area, Minnesota [abs.], Annual Meeting, 94th, Cincinnati, Ohio, November 2-5, 1981, Proceedings: Geological Society of America, p. 548.
- _____, 1981, Seasonal versus long-term potentiometric-level variations in the Mount Simon-Hinckley and Prairie du Chien-Jordan aquifers, Twin Cities metropolitan area [abs.], Midwest Meeting of the American Geophysical Union, Minneapolis, Minnesota, September 17-18, 1981, Proceedings: American Geophysical Union, p. 613.

- _____, 1982, Seasonal versus long-term variations in potentiometric levels in the Mount Simon-Hinckley and Prairie du Chien-Jordan aquifers, Twin Cities metropolitan area, Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 63, no. 33, p. 613.
- _____, 1982, Water-level changes in major aquifers of the Twin Cities metropolitan area: Geological Survey Research, v. 1375, p. 87.
- _____, 1984, Water levels and water-level changes in the Prairie du Chien-Jordan and Mount Simon-Hinckley aquifers, Twin Cities metropolitan area, Minnesota, 1971-80: U.S. Geological Survey Water-Resources Investigations Report 83-4237, 23 p.
- _____, 1987, Effects of future ground-water withdrawals on water levels in the Twin Cities aquifer system, Minnesota [abs.], Annual Meeting of the Geological Society of America, North Central Section, 21st, St. Paul, Minnesota, April 30-May 1, 1987, Proceedings: Geological Society of America, p. 242-243.
- _____, 1987, Relation between predevelopment hydraulic heads and present-day water quality in the Twin Cities aquifer system, Minnesota [abs.], in Zaporozec, A., ed., Annual Midwest Ground Water Conference, 32nd, Madison, Wisconsin, October 28-30, 1987 [Proceedings].
- _____, 1988, Influence of a buried valley on the hydraulic connection between the bedrock aquifer and the Mississippi River in an alluviated glacial-lake spillway near Minneapolis, Minnesota [abs.], Geological Society of America 1988 centennial celebration, Denver, Colorado, October 31 - November 3, 1988: Geological Society of America, v. 20, no. 7, p. 174.
- _____, 1989, Factors affecting water-supply potential of the Twin Cities metropolitan area aquifer system: Journal of the Minnesota Academy of Science, v. 55, no. 1, p. 38-47.
- _____, 1989, Relation of ground-water flow in bedrock aquifers and the Mississippi and Minnesota Rivers, Minneapolis and St. Paul area, Minnesota: U.S. Geological Survey Open-File Report 89-268, 2 p.
- _____, 1990, Effects of present and projected ground-water withdrawals on the Twin Cities aquifer system, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 90-4001, 165 p.
- _____, 1994, Characterization of ground-water discharge from bedrock aquifers to the Mississippi and Minnesota Rivers at three areas, Minneapolis-St. Paul area, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 94-4163, 45 p.
- Schoenberg, M.E., and Guswa, J.H., 1981, Evaluating ground-water data by a flow model of the Twin Cities metropolitan area, Minnesota [abs.], Midwest Meeting of the American Geophysical Union, Minneapolis, Minnesota, September 17-18, 1981, Proceedings: American Geophysical Union, p. 8.
- _____, 1982, Evaluating ground-water data by a flow model of the Twin Cities metropolitan area, Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 63, no. 33, p. 612.

- Schoenberg, M.E., and Mitton, G.B., 1990, Monthly mean discharge at and between selected streamflow-gaging stations along the Mississippi, Minnesota and St. Croix Rivers, 1932-1987: U.S. Geological Survey Open-File Report 90-186, 36 p.
- Schomaker, J.H., and Lime, D.W., 1988, Identifying critical issues in recreation planning and management—Improving the management-research partnership: *Water Resources Bulletin*, v. 24, no. 3, p. 593-598.
- Schoolcraft, H.R., 1834, Narrative of an expedition through the Upper Mississippi River to Itasca Lake: Harper, New York, NY, 307 p.
- _____, 1855, Summary narrative of an exploratory expedition to the source of the Mississippi River in 1820: Lippincott, Grambo, and Co., Philadelphia, Penn., 596 p.
- Schottler, S.P., Eisenreich, S.J., and Capel, P.D., 1990, Hydrologic and chemical controls on atrazine and alachlor in the Minnesota River [abs.]: *EOS, Transactions, American Geophysical Union*, v. 71, no. 43, p. 1330.
- _____, 1991, Relations between water discharge and herbicide concentration in the Minnesota River, Minnesota, in Mallard, G.E., and Aronson, D.A., eds., U.S. Geological Survey Toxic Substances Hydrology Program—Proceedings of the technical meeting Monterey, California, March 11-15, 1991: U.S. Geological Survey Water-Resources Investigations Report 91-4034, p. 338-342.
- Schroepfer, G.J., and others, 1958, Pollution and recovery characteristics of the Mississippi River in three parts—Volume 1, Part 1, An analysis of available data for the period 1926-1955: University of Minnesota Department of Civil Engineering, Sanitary Engineering Report 110-S, 217 p.
- Schroepfer, G.J., Susag, R.H., and others, 1961, Pollution and recovery characteristics of the Mississippi River—Volume 1, Part 3, Minneapolis-St. Paul Sanitary District: University of Minnesota Department of Civil Engineering, 302 p.
- Schulz, K.J., 1982, Magnesian basalts from the Archaean terrains of Minnesota, in Arndt, N.T., and Nisbet, E.G., Komatiites: Max Planck Institute of Chemistry, Mainz, Federal Republic of Germany, p. 171-186.
- Schultz, M., and Comerton, L.J., 1974, Effect of aircraft deicer on airport storm runoff: *Journal of the Water Pollution Control Federation*, v. 46, no. 1, p. 173-180.
- Schulze, P.A., and Capel, P.D., 1989, Utility and limitations of immunoassay tests as a field screening method for triazine herbicides [abs.], in Pederson, G.L., and Smith, M.M., compilers, U.S. Geological Survey Second National Symposium on Water Quality—Abstracts of the technical sessions, Orlando, Florida, November, 12-17, 1989: U.S. Geological Survey Open-File Report 89-409, p. 86.
- Schulze, P.A., Capel, P.D., Squillace, P.J., and Helsel, D.R., 1993, A laboratory and field evaluation of a portable immunoassay test for triazine herbicides in environmental water samples: *International Journal of Environmental Analytical Chemistry*, v. 53, p. 307-319.

- Schweitzer, R.R., 1932, Artesian water for Minneapolis, Minnesota: Layne-Northwest Co., Milwaukee, Wisconsin, 85 p.
- Scott, J.C., 1990, Computerized stratified random site-selection approaches for design of a ground-water-quality sampling network: U.S. Geological Survey Water-Resources Investigations Report 90-4101, 109 p.
- Scott, M.R., Rotter, R.J., and Salter, P.F., 1985, Transport of fallout plutonium to the ocean by the Mississippi River: *Earth and Planetary Science Letters*, v. 75, no. 4, p. 321-326.
- Seaberg, J.K., 1985, Geohydrologic interpretation of glacial geology near Williams Lake, central Minnesota, with emphasis on lake-groundwater interaction: Master's thesis, University of Minnesota, Minneapolis, Minnesota, 141p.
- _____, 1987, A comparison of calculated and laboratory intrinsic permeabilities for glacial outwash materials [abs.], Geological Society of America, North Central Section, 21st annual meeting with the North Central Section of the Paleontological Society, Great Lakes Section, Society of Economic Paleontologists and Mineralogists and the Association for Women Geoscientists, St. Paul, Minnesota, Abstracts with Programs: Geological Society of America, v. 19, no. 4, p. 244.
- Sefton, D.F., 1977, Productivity and biomass of vascular hydrophytes on the Upper Mississippi River, *in* Wetlands—Ecology, values, and impacts. Proceedings of the Waubesa Conference on Wetlands, Madison, Wisconsin, June 2-5, 1977, p. 53-61.
- Setterholm, D.R., and Heine, J.J., 1992, Kaolinitic clays of the Minnesota River Valley and southwestern Minnesota: Guidebook Series Minnesota Geological Survey 19, 12 p.
- Settles, J.C., Megard, R.O., and Krivit, D.A., 1979, Effect of temperature on the photosynthetic production of oxygen by algae—Draft report: University of Minnesota Department of Ecology and Behavioral Biology, 9 p.
- Shelby, B., 1989, Comparative analysis of crowding in multiple locations: Results from fifteen years of research: *Leisure Sciences*, v. 11, no. 4, p. 269-91.
- Sherman, H., 1976, Bayport—Three little towns on the St. Croix, 1842-1976: Star-Observer Publishing Co., Hudson, Wisconsin, 75 p.
- Shiozawa, D.K., 1978, The habitat preferences, seasonal drift and abundance of stream microcrustacea. St. Paul, Minnesota: Doctoral thesis, University of Minnesota, St. Paul, Minnesota.
- _____, 1985, The seasonal community structure and drift of microcrustaceans in Valley Creek, Minnesota: *Canadian Journal of Zoology*, v. 64, p. 1655-64.
- Shurr, G.W., Heine, J.J., Tozer, M.K., and Victory, D.A., 1991, Geology of meridian aggregates quarry as it relates to Cretaceous clay resources in central Minnesota, *in* Hauck, S.A., Heine, J.J., Regional and local geologic, mineralogic, and geochemical controls of industrial clay grades in the Minnesota River valley and the meridian aggregates quarry, St. Cloud, Minnesota: University of Minnesota at Duluth, Natural Resources Research Institute, Duluth, Minnesota, p. 94-165.

- Siegel, D.I., 1984, Chloride budget for the Mississippi River headwaters to mouth: *Water Resources Bulletin*, v. 20, no. 2, p. 503-509.
- _____, 1987, Geochemical facies and mineral dissolution, Bemidji, Minnesota research site. *in* Franks, B.J., ed., U.S. Geological Survey program on toxic waste—ground-water contamination—Proceedings of the third technical meeting, Pensacola, Florida, March 23-27, 1987: U.S. Geological Survey Open-File Report 87-109, p. C13-C15.
- _____, 1989, Geochemistry of the Cambrian-Ordovician aquifer system in the northern midwest United States: U.S. Geological Survey Professional Paper 1405-D, 76 p.
- Siegel, D.I., Kontis, A.L., and Mandel, R.J., 1981, The chemical evolution of water quality in the Cambrian-Ordovician aquifer, north-central United States 1981 [abs.], Midwest Meeting of the American Geophysical Union, Minneapolis, Minnesota, September 17-18, 1981, Proceedings: American Geophysical Union, p. 8.
- _____, 1982, The chemical evolution of water quality in the Cambrian-Ordovician aquifer, north-central United States [abs.]: *EOS, Transactions, American Geophysical Union*, v. 63, no. 33, p. 612.
- _____, 1982, Geochemical evidence for Pleistocene glacial meltwater recharge to the Cambrian-Ordovician aquifer in the north-central United States [abs.]: *Geological Society of America Abstracts with Programs* 1982, v. 14, no. 5, p. 288.
- _____, 1984, Isotopic evidence for glacial meltwater recharge to the Cambrian-Ordovician aquifer, north-central United States: *Quaternary Research*, v. 22, no. 3, p. 328-335.
- Siegel, D.I., and Winter, T.C., 1980, Hydrologic setting of Williams Lake, Hubbard County, Minnesota: U.S. Geological Survey Open-File Report 80-403, 56 p.
- Silberman, E., and Stephan, H.R., 1964, Effects of condenser cooling water discharge from projected Allen S. King generating plant on water temperatures in Lake St. Croix, Minneapolis, Minnesota: University of Minnesota St. Anthony Falls Hydraulic Laboratory Report 76, variously paged. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota 55155.]
- Sills, R.D., and Blakeslee, P.A., 1992, Environmental impact of deicers in airport stormwater runoff, *in* *Chemical Deicers and the Environment*: Lewis Publishers, Boca Raton, Florida, p. 323-340.
- Simons, D.B., Chen, Y.H., and Schumm, S.A., 1977, A geomorphic study of the Upper Mississippi River [abs.], Geological Society of America, North Central Section, 11th annual meeting, Carbondale, Illinois, April 28-29, 1977: Geological Society of America, v. 9, no. 5, p. 651-652.
- Sims, P.K., 1990, Geologic map of Precambrian rocks of Eau Claire and Green Bay 1 degree x 2 degree quadrangles, central Wisconsin: U.S. Geological Survey Miscellaneous Investigations Series I-925.
- Sims, P.K., and Morey, G.B., eds., 1972, *Geology of Minnesota—A centennial volume*: Minnesota Geological Survey, 632 p.

- Sinning, J.A., and Zimmerman, B.M., 1979, Evaluation of navigation effects on the biological components of the Upper Mississippi River aquatic ecosystem: Prepared by Ecology Consultants, Inc., Fort Collins, Colorado for Upper Mississippi River Basin Commission, 36 p.
- Skinner, J.V., 1968, Field test results of the Model B panametrics radioisotope gage for monitoring suspended-sediment concentration in rivers and streams: Federal Inter-Agency Sedimentation Project, 37 p.
- _____, 1986, Sampling suspended sediment in ice-covered rivers, *in* International Northern Research Basins Symposium, 6th, Michigan Technology University, January 26-30, 1986 [Proceedings], p. 105-108.
- Skrypek, J.L., 1966, Analysis of physical and biological changes at selected sampling stations in the Mississippi River: Minnesota Department of Conservation, Division of Game and Fish.
- _____, 1969, Differences in the composition of the fish population in Pool 2 and other areas of the Mississippi River as related to waste from the Twin Cities metropolitan area, 1964: Minnesota Department of Conservation, Division of Game and Fishes, Section of Technical Services, Investigational Report no., 307, 17 p.
- Sleep, B.E., and Sykes, J.F., 1993, Compositional simulation of groundwater contamination by organic compounds, 2. Model applications: *Water Resources Research*, v. 29, no. 6, p. 1709-1718.
- Sloan, R.E., 1986, Tectonics, biostratigraphy and lithostratigraphy of the Mohawkian and Cincinnati of the Upper Mississippi River Valley, *in* Heimlich, R.A., Geological Society of America, North Central Section, 20th annual meeting, Kent, Ohio, April 24-25, 1986, Abstracts with Programs: Geological Society of America, v. 18, no. 4, p. 324.
- Sloan, R.E., and Kolata, D.R., 1987, The Middle and Late Ordovician strata and fossils of southeastern Minnesota, *in* Balaban, N.H., Field trip guidebook for the Upper Mississippi River Valley, Minnesota, Iowa, and Wisconsin: Guidebook Series Minnesota Geological Survey 15, p. 70-96.
- Sloan, R.E., Kolata, D.R., Witzke, B.J., and Ludvigson, G.A., 1987, Description of major outcrops in Minnesota and Iowa, *in* Sloan, R.E. Middle and Late Ordovician lithostratigraphy and biostratigraphy of the Upper Mississippi River Valley: Report of Investigations Minnesota Geological Survey 35, p.197-231.
- Smith, C.J., Payne, G.A., and Ternes, L.H., 1990, Effects of impoundments on water quality of streams in the Coteau des Prairie—Upper Minnesota River Basin: U.S. Geological Survey Water-Resources Investigations Report 90-4033, 67 p.
- _____, 1990, Hydrologic and water-quality data for streams and impoundments in the Coteau des Prairie—Upper Minnesota River Basin: U.S. Geological Survey Open-File Report 88-84, 43 p.
- Smith, G.L., 1990, Dolomitization of the Lower Ordovician Prairie du Chien Group in southern Wisconsin and southeastern Minnesota—A case for confined and unconfined aquifer systems [abs.], American Association of Petroleum Geologists annual convention, San Francisco, California, June 3-6, 1990: American Association of Petroleum Geologists Bulletin, v. 74, no. 5, p. 766.

- _____, 1991, Sequence stratigraphy and diagenesis of the Lower Ordovician Prairie du Chien Group on the Wisconsin Arch and in the Michigan Basin: Doctoral thesis, University of Wisconsin, Madison, Wisconsin, 276 p.
- Smith, G.L., Byers, C.W., and Dott, R.H., Jr., 1993, Sequence stratigraphy of the Lower Ordovician Prairie du Chien Group on the Wisconsin Arch and in the Michigan Basin: American Association of Petroleum Geologists Bulletin, v. 77, no. 1, p. 49-67.
- Smith, S.A., Joseph, R., and Beck, J.R., 1992, Inhalation of volatile chemicals from residential use of contaminated water, *in* Superfund Risk Assessment in Soil Contamination Studies, STP 1158, p. 138-150.
- Smith, S.E., 1991, Water-quality indicators in the Prairie du Chien-Jordan aquifer, southeastern Minnesota: U.S. Geological Survey Open-File Report 91-480, 2 p.
- _____, 1992, Water-quality indicators in the Prairie du Chien-Jordan aquifer, southeastern Minnesota [abs.]: Annual Midwest Ground-Water Conference, 37th, Souix Falls, South Dakota, October 14-16, 1992 [Proceedings], p. 41.
- _____, 1993, Hydrogeologic data collected from a crude oil spill site near Bemidji, Minnesota, 1983-91: U.S. Geological Survey Open-File Report 93-496, 158 p.
- _____, 1994, Water-quality along selected flow paths in the Prairie du Chien-Jordan aquifer, southeastern Minnesota [abs.]: Geological Society of America Abstracts with Programs, v. 26, no. 5, p. 61-62.
- Smith, S.E., and Hult, M.F., 1993, Crude-oil spill research project near Bemidji, Minnesota—A bibliography, 1984-1994: U.S. Geological Survey Open-File Report 93-373, 15 p.
- Smith, S.E., and Ruhl, J.F., 1995, Presence and distribution of nitrate and selected pesticides in surficial-sand aquifers and selected lakes, 1993-94, East Otter Tail County, Minnesota: U.S. Geological Survey Open-File Report 95-116, 18 p.
- Smithson, S.B., Hawman, R.B., Humphreys, M.C., and Karl, J., 1988, Seismic reflection studies in the Archean of Minnesota [abs.], American Geophysical Union, 1988 fall meeting, San Francisco, California: American Geophysical Union, v. 69, no. 44, p. 1314.
- Sohmer, S.H., and Sefton, D.F., 1978, The reproductive biology of *Nelumbo pentapetala* (Nelumbonaceae) on the Upper Mississippi River—The insects associated with the transfer of pollen: Brittonia, July/Sept, v. 30, no. 3, p. 355-364.
- Soong, T.W., and Bhowmik, N.G., 1991, Two-dimensional hydrodynamic modeling of a reach of the Mississippi River in Pool 19, *in* Hydraulic Engineering, Proceedings of the 1991 National Conference: American Society of Civil Engineers, New York, New York, p. 900-905.
- Soper, E.K., 1914, The buried rock surface and pre-glacial river valleys of Minneapolis and vicinity: Master's thesis, University of Minnesota, Minneapolis, Minnesota.

- Sorensen, J.A., Glass, G.E., Schmidt, K.W., Huber, J.K., and Rapp, G.R., 1990, Airborne mercury deposition and watershed characteristics in relation to mercury concentrations in water sediment, plankton, and fish of 80 northern Minnesota lakes: *Environmental Sciences and Technology*, v. 24, no. 11, p. 1716-1731.
- Soukup, W.G., 1980, Ground-water appraisal in northwestern Big Stone County, west-central Minnesota: U.S. Geological Survey Open-File Report 80-568, 41 p.
- 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: U.S. Geological Survey Water-Resources Investigations Report 84-4086, 63 p.
- South Dakota Department of Environmental Protection, 1976, Comprehensive water quality management for the State of South Dakota, 303(E) Basin Plan for the Minnesota River Basin: South Dakota Department of Environmental Protection, 161 p.
- Southard, R., 1993, Flood volumes in the Upper Mississippi River Basin, April 1 through September 30, 1993: U.S. Geological Survey Circular 1120-H, 32 p.
- Southern Minnesota River Basin Commission, 1977, Minnesota River Basin report: Southern Minnesota River Basin Commission, variously paged.
- Southwick, D.L., 1993, Possible suture origin for a low-grade mafic belt within the Minnesota River Valley subprovince (Archean), Southwest Minnesota [abs.], Geological Society of America, 1993 annual meeting, Boston, Massachusetts, October 25-28, 1993, Abstracts with programs: *Geological Society of America*, v. 25, no. 6, p. 235.
- Southwick, D.L., Setterholm, D.R., Runkel, A.J., Patterson, C.J., and Chandler, V.W., 1993, Scientific test drilling, 1989-1992—Descriptions and interpretations pertinent to the bedrock geology and Quaternary hydrogeology of southwestern Minnesota: Minnesota Geological Survey Information Circular 39, 63 p.
- Sparks, R.E., 1975, Environmental inventory and assessment of navigation pools 24, 25, and 26, Upper Mississippi and lower Illinois Rivers—An electrofishing survey of the Illinois River. [Available from the National Technical Information Service, Springfield, Va. 22161 as AD-A020 069, 122 p.]
- _____, 1984, Role of contaminants in the decline of the Illinois River—Implications for the Upper Mississippi River, *in* Contaminants in the Upper Mississippi River—Proceedings of the 15th annual meeting of the Mississippi River Research Consortium, Butterworth, Boston, p. 25-66.
- Spencer, K.J., and Hanson, G.N., 1984, Pb, Nd isotope and REE constraints on east-central Minnesota Proterozoic granites—Evidence for newly derived crustal components: American Geophysical Union 1984 annual meeting, Washington, DC, April 17, 1984: *American Geophysical Union*, v. 65, no. 15, p. 292.

- Spong, R.C., 1993, Structural and base level controls on the development of adjacent karst groundwater regimes in Fillmore County, Minnesota, *in* Garklavs, George, Minnesota Academy of Science 61st annual meeting, Duluth, Minnesota, April 30-May 1, 1993: Journal of the Minnesota Academy of Science, v. 57, no. 2, p. 27.
- Sprafka, M.J., Evaluation of heavy metal loadings at the Metropolitan Wastewater Treatment Plant: Metropolitan Council of Wastewater Services, 52 p.
- Stafford, C.R., Leigh, D.S., and Asch, D.L., 1992, Prehistoric settlement and landscape change on alluvial fans in the Upper Mississippi River Valley: *Geoarchaeology*, v. 7, no. 4, p. 287-314.
- Stark, J.R., 1977, Surficial geology and ground-water geology of the Babbitt-Kawishiw area, northeastern Minnesota with planning implications: Master's thesis, University of Wisconsin, Madison, Wisconsin, unknown p.
- Stark, J.R., 1992, Stream-aquifer relations in along the Straight River, Becker and Hubbard Counties, Minnesota [abs.]: Annual Midwest Ground Water Conference, 37th, Sioux Falls, South Dakota, October 14-16, 1992 [Proceedings], p. 36.
- _____, 1994, National Water-Quality Assessment Program for the Upper Mississippi River Basin: U.S. Geological Survey Open-File Report 94-101, 2 p.
- _____, 1994, Plans for a water quality assessment of the Upper Mississippi River Basin [abs.]: Annual Meeting of the Mississippi River Research Consortium, 26th, LaCrosse, Wisconsin, April 28-29, 1994 [Proceedings], p. 18.
- _____, 1994, Plans for water-quality assessment of the Upper Mississippi River Basin [abs.]: Sustaining the Ecological Integrity of Large Floodplain Rivers Application of Ecological Knowledge to River Management, LaCrosse, Wisconsin, July 12-15, 1994 [Proceedings], p. 157.
- _____, 1994, Upper Mississippi River Basin water quality assessment [abs.]: Minnesota Water '94—Managing Minnesota's Rivers and Watersheds, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 16.
- Stark, J.R., Armstrong, D.S., and Zwilling, D.R., 1994, Stream-aquifer interactions in the Straight River area, Becker and Hubbard Counties, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 94-4009, 83 p.
- Stark, J.R., and Brown, R.G., 1987, Hydrologic interactions in a wetland in Minnesota and Wisconsin [abs.]: Annual Meeting of the Geological Society of America, North Central Section, 21st, St. Paul, Minnesota, April 30-May 1, 1987, Proceedings: Geological Society of America, p. 247-248.
- _____, 1987, Hydrology and water quality of a wetland used to receive wastewater effluent, St. Joseph, Minnesota, *in* National Wetland Symposium, Chicago, Illinois, September 16-18, 1987, Proceedings: Association of State Wetland Managers, Inc., p. 197-204.

- Stark, J.R., Busch, J.P., and Deters, M.H., 1991, Hydrogeology and water quality of glacial-drift aquifers in the Bemidji-Bagley area, Beltrami, Clearwater, Cass, and Hubbard Counties, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 89-4136, 135 p.
- Stark, J.R., and Hult, M.F., 1985, Ground-water flow in the Prairie du Chien-Jordan aquifer related to contamination by coal-tar derivatives, St. Louis Park, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4087, 57 p.
- _____, 1985, Simulation of ground-water flow in the Prairie du Chien-Jordan aquifer and relation to ground-water contamination by coal-tar derivatives, St. Louis Park, Minnesota [abs.]: Annual Midwest Ground Water Conference, 30th, St. Paul, Minnesota, October 23-25, 1985 [Proceedings], p. 14.
- _____, 1985, Simulation of ground-water flow in the Prairie du Chien-Jordan aquifer and relation to ground-water contamination by coal-tar derivatives, St. Louis Park, Minnesota: National Water Well Association Conference Exposition, Worthington, Ohio, August 19-20, 1985, *in* Proceedings: National Water Well Association, p. 290-310.
- Stark, J.R., and Payne, G.A., 1988, A comparison of hydrologic budgets of two wetlands in Minnesota and Wisconsin [abs.], Annual Conference—Water for the Years Ahead, Quality and Quantity—1990 and Beyond, 24th, Milwaukee, Wisconsin, November 6-8, 1988, Proceedings: American Water Resources Association, p. 32.
- 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: U.S. Geological Survey Water-Resources Investigations Report 87-4115, 48 p.
- Stark, J.R., and Zwilling, D.R., 1989, Effects of ground-water withdrawal for irrigation and quality of Straight River, north-central Minnesota [abs.], Annual Midwest Ground Water Conference, 34th, Kalamazoo, Michigan, October 18-20, 1987, Proceedings: Western Michigan University, p. 11.
- _____, 1989, Effects of ground-water withdrawals for irrigation on the quality of the Straight River, north-central Minnesota: U.S. Geological Survey Open-File Report 89-252, 2 p.
- _____, 1990, Effects of ground-water withdrawal for irrigation and quality of Straight River, north-central Minnesota [abs.], Transferring Models to Users, Denver, Colorado, November 4-9, 1990, Proceedings: American Water Resources Association, p. 1.
- Stauffer, C.R., and Thiel, G.A., 1934, Jordan-Oneota contact along the Minnesota River: Geological Society of America Proceedings, 1933, p. 109.
- Stefan, H.G., and Anderson, K.J., 1980, Wind-driven flow in Mississippi River impoundment: Journal of the Hydraulics Division, Proceedings of the American Society of Civil Engineers, v. 106, no. HY9, p. 1503-1520.

- Stefan, H.G, and Combs, W.S., Jr., 1977, Dissolved oxygen and water temperature studies in pool no. 2 of the Upper Mississippi River, *in* Proceedings Congress in Denmark, 1977, Part 3. Internationale Vereinigung fur Theoretische und Angewandte Limnologie, v. 20, p. 1744-1751.
- Stefan, H.G, and Demetracopoulos, A., 1979, A model for water circulation and solute transport in pool no. 2 of the Mississippi River. [Available from the National Technical Information Service, Springfield, Va 22161 as PB80-134695 85 p.]
- Stefan, H., Ford, D.E., and Gulliver, J.S., 1975, Observations of cooling water discharge effects on ice covers and dissolved oxygen levels in selected Minnesota streams and lakes: University of Minnesota, St. Anthony Falls Hydraulic Laboratory, Project Report no. 155, 96 p.
- Stefan, H., and Nguyen, C.V., 1976, Waste heat dissipation and effluent water temperatures from Black Dog Lake: University of Minnesota, St. Anthony Falls Hydraulic Laboratory, Project report no. 162, 64 p.
- Stefan, H.G., and Riley, M.J., 1985, Mixing of a stratified river by barge tows: *Water Resources Research*, v. 21, no. 8, p. 1085-1094.
- Stefan, H., and Wood, Addison, 1976, Field investigations of water temperature stratification and wind effects on dissolved oxygen in pool No. 2 of the Mississippi River: University of Minnesota, St. Anthony Falls Hydraulic Laboratory, Project Report no. 163, 116 p.
- Steiner, C.S., and Grothe, D., Flow-through bioassay of St. Paul ammonia products, division on N-Ren Corporation, Pine Bend, Minnesota-July 23-27, 1976: U.S. Environmental Protection Agency, Central Regional Laboratory, Chicago, 26 p.
- Steingraeber, M.T., Schwartz, T.R., Wiener, J.G., and Lebo, J.A., 1994, Polychlorinated biphenyl congeners in emergent mayflies from the Upper Mississippi River: *Environmental Science and Technology*, v. 28, p. 707-714
- Steinheimer, T.R., and Ondrus, M.G., 1990, Liquid chromatographic determination of atrazine and its degradation products in water: U.S. Geological Survey Water-Resources Investigations Report 89-4193, 23 p.
- Steinhilber, W.L., and Young, H.L., 1979, Plan of study for the Northern Midwest Regional Aquifer-System Analysis: U.S. Geological Survey Water-Resources Investigations 79-44, 20 p.
- Sterling, R.L., Nelson, C.R., and Yardley, D.H., 1978, Mined space in the Twin Cities geology, *in* Stauffer, T., Space construction underground: University of Missouri, Kansas City, Missouri, p. 332-336.
- Stern, E.M., 1983, Depth distribution and density of fresh water mussels unionidae collected with scuba from the lower Wisconsin and St. Croix Rivers: *Nautilus*, v. 97, no. 1, p. 36-42.
- Stern, T.W., 1964, Isotopic ages of zircon and allanite from the Minnesota River Valley and La Sal Mountains, Utah: *EOS, Transactions, American Geophysical Union*, v. 45, no. 1, p. 116.
- Sternberg, R.B., 1971. Upper Mississippi River habitat classification survey, Hastings, Minnesota to Alton Illinois: Upper Mississippi River Coordination Commission, Fish Research Section, 18 leaves.

- Stevens, L.R., 1992, High-resolution microprobe analysis of late-glacial organic varves in Minnesota [abs.]: American Quaternary Association, 12th biennial meeting, Davis, California, August 24-26, 1992, Program and abstracts, p. 58.
- Stewart, J., 1978, Daily feeding chronology of young smallmouth bass in the Snake River, Minnesota: Master's thesis, University of Minnesota, St. Paul, Minnesota.
- Stoner, J.D., 1985, Simulation of ground-water flow near a former wood-treating waste site in Fridley, Minnesota—Part II. A practical application of an analytic-element model [abs.]: Annual Midwest Ground Water Conference, 30th, St. Paul, Minnesota, October 23-25, 1985 [Proceedings], p. 18.
- Stoner, J.D., Lorenz, D.L., Wiche, G.J., and Goldstein, R.M., 1993, Red River of the North Basin, Minnesota, North Dakota, and South Dakota: Water Resources Research Bulletin, v. 29, no. 4, p. 575-615.
- Stoner, J.D., and Schoenberg, M.E., 1989, Preliminary evaluation of effects of ground-water withdrawals on Mississippi River flow near the Twin Cities metropolitan area, Minnesota [abs.], Water supply issues in the Metropolitan Twin Cities area—Planning for the Future Droughts and Population Growth, St. Paul, Minnesota, October 25, 1988, Proceedings: Minnesota Water Resources Research, p. 5-6.
- Stoner, J.D., and Streitz, A.R., 1987, Locating confined aquifers in glacial drift with seismic reflection methods, western Minnesota [abs.], Annual Meeting of the Geological Society of America, North Central Section, 21st, St. Paul, Minnesota, April 30-May 1, 1987: Geological Society of America, p. 248.
- Stout, G.E., ed., 1974, Proceedings of the workshop on research needs related to water for energy: University of Illinois, Water Resource Center, 297 p.
- Strachan, W.M.J., and Eisenreich, S.J., 1990, Mass balance accounting of chemicals in the Great Lakes, *in* Long Range Transport of Pesticides: Crc Press, Inc., Boca Raton, Florida, p. 291-301.
- Straka, G.C., and Miller, W.A., 1963, Graphs of ground-water levels in Minnesota, 1957-1961: Minnesota Department of Conservation, Division of Waters Bulletin 18, 58 p.
- Straka, G.C., and Schneider, Robert, 1957, Graphs of ground water levels in Minnesota through 1956: Minnesota Department Conservation, Division of Waters Bulletin 9, 42 p.
- Streiff, J.E., 1981, Afton—A Minnesota State park development project reconnaissance survey: University of Minnesota, Minneapolis, Minnesota, 28 leaves. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]
- _____, 1981, Banning—A Minnesota State park development project reconnaissance survey: University of Minnesota, Minneapolis, Minnesota, 10 leaves. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]
- _____, 1981, St. Croix—A Minnesota State park forest management project survey (for Parks Division, Minnesota DNR): University of Minnesota, Minneapolis, Minnesota, 16 leaves. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]

- Strutynsky, A.I., and Salney, T.J., 1992, Use of piezometric cone penetration testing and penetrometer ground water sampling for volatile organic contaminant plume detection, *in* Current Practices in Ground Water and Vadose Zone Investigations, STP 118, p. 199-214.
- Sturrock, A.M., Rosenberry, D.O., and Winter, T.C., 1987, Climatic data for Williams Lake, Hubbard County, Minnesota, 1985: U.S. Geological Survey Open-File Report 86-607, 40 p.
- Sturrock, A.M., Rosenberry, D.O., Engelbrecht, L.G., Gothard, W.A., and Winter, T.C., 1984, Climatic data from Williams Lake, Hubbard County, Minnesota, 1983: U.S. Geological Survey Open-File Report 84-247, 41 p.
- Sturrock, A.M., Rosenberry, D.O., Scarborough, J.L., and Winter, T.C., 1986, Climatic data for Williams Lake, Hubbard County, Minnesota, 1984: U.S. Geological Survey Open-File Report 86-64, 62 p.
- Suess, K.L., and Thompson, G.M., 1989, Use of soil gas investigations to detect groundwater and soil contamination, *in* Proceedings of the FOCUS Conference on Eastern Regional Ground Water Issues, October 17-19, 1989, Kitchener, Ontario, p. 55-61.
- Sugden, D.E., and John, B.S., 1976, *Glaciers and landscape*: Edward Arnold, London, 376 p.
- Surber, T., 1920, A preliminary catalogue of the fishes and fishlike vertebrates of Minnesota—Biennial report: State Game and Fish Commission, 92 p.
- Sutherland, J.L., 1986, Stratigraphy and sedimentology of the Upper Cambrian Lone Rock Formation, western Wisconsin—Focus on the Reno Member: Master's thesis, University of Wisconsin, Madison, Wisconsin, 81p.
- Swain, E.B., and Helwig, D.D., 1989, Mercury in fish from northeastern Minnesota lakes—Historical trends, environmental correlates, and potential sources: *Journal of the Minnesota Academy of Science*, v. 55, p. 103-109.
- Swain, E.B., Engstrom, D.R., Brigham, M.E., Henning, T.A., and Brezonik, P.L., 1992, Increasing rates of atmospheric mercury deposition in midcontinental North America: *Science*, v. 257, p. 784-787.
- Swanson, L., and Meyer, G.N., eds., 1990, *Geologic atlas, Washington County, Minnesota*: Minnesota Geological Survey County Atlas C-5, 7 plates.
- Swanson, S.D., and Sohmer, S.H., 1978, The vascular flora of Navigation Pool 8 of the Upper Mississippi River. *Proceedings of the Iowa Academy of Science*, v. 85, no. 2, p. 45-61.
- Swenson, W.A., Heberling, G.D., Orr, D.J., and Simonson, T.D., 1989, Fishery resource of the Upper Mississippi River and relationship to stream discharge: *Journal of the Minnesota Academy of Science*, v. 55, no. 1, p. 144-149.
- Sykora, A.K., 1994, Jointing in the Ordovician Platteville Formation on either side of the Hudson-Afton Horst in Wisconsin and Minnesota [abs.], Geological Society of America, North Central Section, 27th annual meeting, Kalamazoo, Michigan, April 28-29, 1994, Abstracts with Programs: Geological Society of America, v. 26, no. 5, p. 63.

- Tanck, G.S., 1977, A paleoenvironmental interpretation of the Upper Cambrian Galesville Sandstone of south-central and west-central Wisconsin: Master's thesis, University of Wisconsin, Madison, Wisconsin.
- Tancrede, M.V., Yanagisawa, Y., Vroblesky, D.A., and Lorah, M.M., 1990, Analytical method to determine Henry's Law constant for selected volatile organic compounds at concentrations and temperatures corresponding to tap water use: *Journal of the Air and Waste Management Association*, v. 40, no. 12, p. 1658-1663.
- Tao, P.C., and Delleur, J.W., 1976, Multistation, multiyear synthesis of hydrologic time series by disaggregation: *Water Resources Research*, v. 12, no. 6, p. 1303-1312.
- Taylor, W.W., LaBaugh, J.W., Freeberg, M.H., and Dowling, D.C., 1965, Hydrology of melt-water channels in southwestern Minnesota: U.S. Geological Survey Water-Supply Paper 1809-K, 11 p.
- _____, 1985, Fishery survey and related limnological conditions of Williams Lake, Hubbard County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4145, 25 p.
- Teller, J.T., 1981, The catastrophic draining of Glacial Lake Agassiz [abs.], Geological Society of America, 94th annual meeting, Cincinnati, Ohio, November 2-5, 1981, Abstracts with Programs: Geological Society of America, v. 13, no. 7, p. 565.
- _____, 1987, Deglacial chronology along the southwestern Laurentide ice sheet and the initiation of Lake Agassiz [abs.]: International Union for Quaternary Research, 12th International Congress, Ottawa, Ontario, July 31-August 9, 1987, p. 275.
- _____, 1988, Lake Agassiz and its contribution to flow through the Ottawa-St. Lawrence system, *in* Gadd, N.R., The late Quaternary development of the Champlain Sea Basin: Geological Survey of Canada, Ottawa, Ontario, Special Paper 35, p. 281-289.
- Teller, J.T., and Clayton, L., 1982, Late-glacial surging of the Des Moines and Red River lobes, *in* Nriagu, J.O., and Troost, R., 11th International Congress on Sedimentology, Hamilton, Ontario, August 22-27, 1982, p. 78.
- Theil, P., 1982, A survey of unionid mussels in the Upper Mississippi River, Pools 3-11: Wisconsin Department of Natural Resources Technical Bulletin 124, 24 p.
- Thelin, G.P. and Pike, R.J., 1991, Landforms of the conterminous United States - A digital shaded-relief portrayal: U.S. Geological Survey Miscellaneous Investigation Series Map I-2206.
- Thomas, H.E., and Schneider, W.J., 1970, Water as an urban resource and nuisance: U.S. Geological Survey Circular 601-D, 9 p.
- Thomas, R.D., 1989, Epidemiology and toxicology of volatile organic chemical contaminants in water absorbed through the skin: *Journal of the American College of Toxicology*, v. 8, no. 5, p. 779-795.
- Thompson, D.H., and Landin, M.C., 1978, An aerial survey of waterbird colonies along the Upper Mississippi River and their relationship to dredged material deposits: U.S Army Corps of Engineers Waterways Experiment Station, Environmental Laboratory Publication D-78-13, 96 p.

- Thompson, G.L., 1949, Depositional patterns in sinuous melt-water channel deposits near Marshall, Lyon County, Minnesota and their hydrologic significance: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 24 p.
- _____, 1965, Hydrology of melt-water channels in southwestern Minnesota: U.S. Geological Survey Water-Supply Paper 1809-K, 11 p.
- Thompson, G.P., Christman, R.F., and Johnson, J.D., 1987, Chlorination of aquatic fulvic acid and natural waters—Additional by-products: Water Chlorination—Chemistry, Environmental Impact and Health Effects, v. 6, p. 3-8.
- Thomsen, K.O., 1989, Vertical characterization of VOC contamination and hydrogeologic parameters in remedial investigations, *in* Proceedings of the Third National Outdoor Action Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods: National Water Well Association, Dublin, Ohio, p. 95-107.
- Tinker, J.R., Jr., 1987, Nitrate and tetrachloroethylene contamination in Mill Run Subdivision, Eau Claire County, Wisconsin, *in* Zaporozec, A., 32nd Annual Midwest Ground Water Conference, Madison, Wisconsin, October 28-30, 1987, p. 32.
- _____, 1990, Groundwater monitoring—Volatile organic chemicals beneath unsewered subdivision: *Journal of Environmental Health*, v. 53, no. 2, p. 26-28.
- _____, 1991, An analysis of nitrate-nitrogen in ground water beneath unsewered subdivisions: *Ground Water Monitoring Review*, v. 11, no. 1, p. 141-150.
- Todd, J.H., 1942, A contribution to the study of Pleistocene history of the Upper Mississippi River: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, unknown p.
- Tolman, A.L., 1988, Predicting and tracing low level volatile contaminants—A case study, *in* Proceedings of the Focus Conference on Eastern Regional Ground Water Issues, Stanford, Connecticut, September 27-29, 1988, p. 121-134.
- Tornes, L.H., 1980, Preimpoundment water quality of the Wild Rice River, Norman County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-79, 36 p.
- _____, 1981, Quality of surface water before implementation of a flood-control project in Chaska, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 81-83, 53 p.
- _____, 1986, Suspended sediment in Minnesota streams: U.S. Geological Survey Water-Resources Investigations Report 85-4312, 33 p.
- _____, 1989, Effect of urban runoff on the water quality of lakes in Eagan, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 86-4331, 64 p.
- Tornes, L.H., and Brigham, M.E., 1994, Agricultural chemicals in streams of the Red River of the North drainage basin [abs.]: *Minnesota Water '94—managing Minnesota's rivers and watersheds*, Minneapolis, Minnesota, April 21-22, 1994 [Proceedings], p. 3.

- _____, 1994, Nutrients, suspended sediment, and pesticides in waters of the Red River of the North Basin, Minnesota, North Dakota, and South Dakota, 1970-90: U.S. Geological Survey Water-Resources Investigations Report 93-4231, 62 p.
- _____, 1995, Pesticide amounts are small in streams in the Red River of the North Basin, 1993-94: U.S. Geological Survey Open-File Report 95-283, 2 p.
- Tornes, L.H., and Have. M.R., 1980, Water quality of four lakes in Lakeville, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 80-66, 51 p.
- Tornes, L.H., Lorenz, D.L., Brigham, M.E., and Stoner, J.D., 1992, Plans for a water-quality assessment of the Red River of the North Basin, Minnesota, North Dakota, and South Dakota [abs.], Minnesota Water '92—Sustaining Water Resources in the '90's and Beyond, Minneapolis, Minnesota, Proceedings: University of Minnesota Water-Resources Research Center.
- Tornes, L.H., Puckett, L.J., Stoner, J.D., and Brigham, M.E., 1994 The effect of riparian wetlands in reducing nitrate nitrogen from a sand and gravel aquifer to a stream [abs.], American Geophysical Union 1994 Fall Meeting, San Francisco, California, December 5-9, 1994, Proceedings: American Geophysical Union, p. 261.
- Toth, T.A., 1991, Paleogeographical interpretation of Late Cretaceous, kaolinite-rich sediments of the Minnesota River Valley, Redwood, Renville, Brown, and Nicollet Counties, Minnesota, *in* Hauck, S.A., and Heine, J.J., Regional and local geologic, mineralogic, and geochemical controls of industrial clay grades in the Minnesota River Valley and the Meridian aggregates quarry, St. Cloud, Minnesota: University of Minnesota, Duluth, Minnesota, p. 1-93.
- Trewartha, G.T., and Smith, G.H., 1941, Surface configuration of the driftless cuestaform hill land (Upper Mississippi River Valley): Association of American Geographers Annals, v. 31, no. 1, p. 25-45.
- Troelstrup, N.H., and Foley, J.L., 1991, Examination of mussel growth and shell chemistry as indicators of water quality within the lower St. Croix National Scenic Riverway: Legislative Commission on Minnesota Resources Work Element B5, 70 p.
- Troelstrup, N.H. Jr., Foley, J.L., Engstrom, D.R., and Queen, L.P., 1993, A short paleolimnological history of two riverine impoundments on the St. Croix River: Minnesota Legislative Commission on Minnesota Resources Work Element B3, 79 p.
- Troelstrup, N.H., Jr., and Perry, J.A., 1989, Water quality in southeastern Minnesota streams—Observations along a gradient of land use and geology: Journal of Minnesota Academy of Science, v. 55, no. 1, p. 6-13.
- _____, 1991, An examination of large woody debris accumulations in the lower St. Croix National Scenic Riverway: Legislative Commission on Minnesota Resources Work Element B4, 49 p.
- _____, 1991, Changing patterns of water quality and biology within the lower St. Croix National Scenic Riverway: Legislative Commission on Minnesota Resources Work Element B2 and B6., 162 p.

- Trotta, L.C., 1985, The potential for contamination of ground water based on hydrogeology—A geographic information system application [abs.]: Annual Midwest Ground Water Conference, 30th, St. Paul, Minnesota, October 23-25, 1985 [Proceedings], p. 19.
- _____, 1987, Ground-water withdrawals in Minnesota [abs.], in Zaporozec, A., ed., Annual Midwest Ground Water Conference, 32nd, Madison, Wisconsin, October 28-30, 1987 [Proceedings].
- _____, 1988, Aggregation of Minnesota water-use data and transfer of data to the National water-use data system—Procedures and programs: U.S. Geological Survey Open-File Report 87-40, 71 p.
- _____, 1988, Inventory of interbasin water transfer in Minnesota, in Symposium on Water Use Data for Water Resources Management, Bethesda, Maryland, August 1988, Proceedings: American Water Resources Association, p. 93-105.
- _____, 1988, Inventory of interbasin water transfers in Minnesota: U.S. Geological Survey Open-File Report 88-466, 14 p.
- _____, 1988, Sources of water-use data in Minnesota: U.S. Geological Survey Open-File Report 87-544, 2 p.
- _____, 1988, Water use for aquaculture in Minnesota, 1984: U.S. Geological Survey Water-Resources Investigations Report 88-4159, 6 p.
- _____, 1990, Automation of data systems—Minnesota's approach for water-use data, in Wiltshire, D.A., ed., Selected papers in applied computer sciences 1990: U.S. Geological Survey Bulletin 1908, p. F1-F4.
- _____, 1990, Minnesota water supply and use, in Carr, J.E., Chase, E.B., Paulson, R.W., and Moody, D.W., compilers, National Water Summary 1987: U.S. Geological Survey Water-Supply Paper 2350, p. 313-320.
- _____, 1991, Water use in Minnesota, 1985: State of Minnesota Department of Natural Resources Water Use Map Series, 1 sheet.
- _____, 1995, Estimates of self-supplied commercial ground-water use in rural east-central Minnesota: Minnesota Ground-Water Association Newsletter, v. 13, no. 14, p. 8.
- _____, 1996, Water use in Minnesota, 1990: State of Minnesota Department of Natural Resources Water-Use Map Series, 1 sheet.
- Trotta, L.C., and Cotter, R.D., 1973, Depth to bedrock in Wisconsin: University of Wisconsin—Extension Geological and Natural History Survey, 1 sheet, 1:1, 000,000.
- Trotta, L.C., and Horn, M.A., 1990, Importance of return flow as a component of water use: U.S. Geological Survey Open-File Report 90-179, 2 p.

- Trotta, L.C., and Lorenz, D.L., 1993, Comparison of maps showing the depth to water table (Dakota County, Minnesota) prepared by traditional GIS methods [abs.], Geographic Information Systems and Water Resources, Mobile, Alabama, March 14-17, 1993. Proceedings: American Water Resources Association, p. 52.
- Trowbridge, A.C., 1936, Cenozoic history of Upper Mississippi River: Pan American Geologist, v. 65, no. 4, p. 317.
- Tureson, F., 1978, A creel census and water-surface-use study of the Mississippi River from the Coon Rapids Dam to the mouth of Minnesota River, May 8 to September 30, 1976: Minnesota Department of Natural Resources, Division of Fish and Wildlife, Section of Fisheries, Fish Management Report no. 3, 39 p.
- Twin Cities-Upper Mississippi River Project, 1965, Report on hydrographic studies of the Mississippi, Minnesota, and St. Croix Rivers: U.S. Department of Health, Education, and Welfare, Federal Water Pollution Control Administration, 70 p.
- _____, 1966, Appendix to report on biological investigations of the Mississippi, Minnesota, and St. Croix Rivers: U.S. Department of Interior, Federal Water Pollution Control Administration, 29 tables.
- _____, 1966, Report on biological investigations of the Mississippi, Minnesota, and St. Croix Rivers: U.S. Department of the Interior, Federal Water Pollution Control Administration, 41 p.
- _____, 1966, A report on pollution of the Upper Mississippi River and major tributaries: U.S. Department of the Interior, Federal Water Pollution Control Commission, 305 p.
- _____, 1974, Summary and pollution abatement recommendations for the Upper Mississippi River and major tributaries: Federal Water Pollution Control Administration, St. Paul, 60 p.
- Uhlman, K., 1992, Groundwater dating locates VOC source: Environmental Protection Enpret, v. 3, no. 9, p. 56-59.
- Underhill, J.C., 1957, The distribution of Minnesota darters and late Pleistocene glaciation: Minnesota Museum of Natural History Occasional Paper 7, 45 p.
- _____, 1989, The distribution of Minnesota fishes and late Pleistocene glaciation: Journal of the Minnesota Academy of Science. v. 55, no. 1, p. 32-37.
- U.S. Army Corps of Engineers, 1931, Silting investigations on Lake St. Croix: U.S. Army Corps of Engineers, 14 maps.
- _____, 1935, Report on sedimentary characteristics of the Upper Mississippi River.
- _____, 1939, Permeability tests on St. Peter Sandstone specimens: U.S. Army Corps of Engineers, 49 p.
- _____, 1965, An investigation of thermal pollution in streams, supplemental report No. 1: U.S. Army Corps of Engineers, 50 p.

- _____, 1968, Flood plain information, Crow River, Rockford, Minnesota: U.S. Army Corps of Engineers, 46 p.
- _____, 1968, Flood plain information, south fork of the Crow River, Delano, Minnesota: U.S. Army Corps of Engineers, 54 p.
- _____, 1968, Mississippi River from Cassville, Wisconsin, to mile 300: U.S. Army Corps of Engineers, Washington, DC, 128 p.
- _____, 1968, St. Croix River Basin map: U.S. Army Corps of Engineers, St. Paul, Minnesota, M33-S-10/7.
- _____, 1968, Wild Rice River, Minnesota: U.S. Army Corps of Engineers, Washington, DC, 229 p.
- _____, 1969, Master regulation manual for Mississippi River nine-foot channel navigation projects: U.S. Army Corps of Engineers, 13 volumes.
- _____, 1969, Mississippi River flood plain information, Cassville, Wisconsin: U.S. Army Corps of Engineers Flood Plain Report, 60 p.
- _____, 1969, Report on stream bank erosion study of the Upper Mississippi River region (in compliance with section 210, 1968 Rivers and Harbors Act): 98 p.
- _____, 1970, Flood plain information, Minnesota River, Granite Falls, Minnesota: U.S. Army Corp of Engineers Flood Plain Report, 44 p.
- _____, 1970, Flood plain information-south fork of the Crow River, Hutchinson, Minnesota: U.S. Army Corps Of Engineers Flood Plain Report, 43p.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix a—History of investigation, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 2, p. A1-A61.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix b—Aesthetic and cultural values, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 2, p. B1-B374.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix c—Climatology and meteorology, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 3, p. C1-C56.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix d—Surface water hydrology, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 3, p. D1-D113.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix g—Fluvial sediment, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 3, p. G1-G100.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix i—Flood control, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 5, p. I1-I225.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix j—Navigation, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 5, p. J1-J115.

- _____, 1970, Upper Mississippi River comprehensive basin study, appendix o—State and Federal water laws, policies, and programs. *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, Report, v. 7, 559 p.
- _____, 1970, Upper Mississippi River comprehensive basin study, appendix p—Economic base study and projections. *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 8, 194 p.
- _____, 1971, Small-boat harbor, Mississippi River at Pepin, Wisconsin (final environmental impact statement): U.S. Army Corps of Engineers, 31 p.
- _____, 1971, Water resources development in Minnesota: U.S. Army Corps of Engineers, North-Central Division, 51 p.
- _____, 1971, Water resources development in Wisconsin: U.S. Army Corps of Engineers, 55 p.
- _____, 1971, Zumbro River, Minnesota, Kellogg to mouth, Wabasha County, Minnesota (final environmental impact statement): U.S. Army Corps of Engineers, 48 p.
- _____, 1972, Minnesota River, Minnesota, Mankato—North Mankato—Le Hillier flood control, phase 1 (final environmental statement): U.S. Army Corps of Engineers, 46 p., 2 maps.
- _____, 1973, Flood plain information—Minnesota River and tributaries, Mankato, North Mankato, Le Hillier: U.S. Army Corps of Engineers, St. Paul, Minnesota, 43 p.
- _____, 1973, Flood Plain Information—Snake River, City of Warren, Minnesota. Prepared for the City of Warren, Minnesota, September: U.S. Army Corps of Engineers, St. Paul, Minnesota, 34 p.
- _____, 1973, Meramec Park Lake, Upper Mississippi River Basin, Meramec River, Missouri, vol i-ii (final environmental impact statement): U.S. Army Corps of Engineers, St. Louis, Missouri, ES-MO-73-1552-F-1-2, 1028 p.
- _____, 1974, Final environmental impact statement, operation, and maintenance of 9-foot navigation channel, Upper Mississippi River, head of navigation to Guttenberg, Iowa: U.S. Army Corps of Engineers, 648 p.
- _____, 1974, Flood plain information—Mississippi River-Sauk River-Watab River, vicinity of St. Cloud, Minnesota: U.S. Army Corps of Engineers, 23 p.
- _____, 1975, Flood plain information—Mississippi River and Ripple River, Aitkin, Minnesota: U.S. Army Corps of Engineers, St. Paul, Minnesota, 33 p.
- _____, 1975, Special Flood Hazard Information: Clearwater Creek, Rice Creek Watershed, Centerville, Lino Lakes, Hugo, Minnesota: U.S. Army Corps of Engineers, St. Paul, Minnesota, 50 p.
- _____, 1976, Minnesota River at Chaska, Minnesota: U.S. Army Corps of Engineers, Washington, DC, 272 p.
- _____, 1976, Mississippi River at La Crosse, Wisconsin: U.S. Army Corps of Engineers, Washington, DC, 407 p.

- _____, 1977, Water resources development in Wisconsin: U.S. Army Corps of Engineers, St. Paul, Minnesota, 122 p.
- _____, 1978, Summary report of fish and wildlife habitat changes resulting from the construction of a nine-foot channel in the Upper Mississippi River, Minnesota River, St. Croix River, and Illinois Waterway: U.S. Army Corps of Engineers, North Central Division.
- _____, 1979, Minnesota—Water resources development: U.S. Army Corps of Engineers, St. Paul, Minnesota, 138 p.
- _____, 1979, Water withdrawal and discharge data for the Minnesota River: Minnesota Department of Natural Resources, 42 p.
- _____, 1981, 1981-1985 navigation, public notice of channel maintenance dredging, 64 p.
- _____, 1981, Flood Control Minnesota River, Minnesota, Mankato-North Mankato-LeHillier—Design Memorandum no. 8, Part I (Location Study): U. S. Army Corps of Engineers, St. Paul, Minnesota, 294 p.
- _____, 1984, St. Croix River reconnaissance report: U.S. Army Corps of Engineers, St. Paul, Minnesota, 185 p.
- _____, 1986, St. Croix River draft feasibility report and environmental assessment: U.S. Army Corps of Engineers, St. Paul, Minnesota, 231 p.
- _____, 1990, Mississippi River headwaters lakes in Minnesota—Low flow review: U.S. Army Corps of Engineers, variously paged.
- _____, 1993, Water supply and spill response management for the Mississippi River upstream of the Twin Cities: U.S. Army Corps of Engineers, St. Paul, Minnesota 119 p.
- U.S. Bureau of Census, 1991, Census of Population and Housing, 1990—Public Law (P.L.) 94-171, data from compact disk ROM (Iowa, Minnesota, North Dakota, South Dakota, and Wisconsin), Washington DC.
- U.S. Bureau of Mines, 1970, Upper Mississippi River comprehensive basin study, appendix f—Mineral resources, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 3, p. F1-F122.
- U.S. Bureau of Outdoor Recreation, 1977, Upper Mississippi River, Minnesota—Wild and scenic river study, 215 p.
- U.S. Bureau of Sport Fisheries and Wildlife, 1970, Upper Mississippi River comprehensive basin study, appendix l—Fish and wildlife resources, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 6, p. L1-L103.
- U.S. Congress, 1971, Frio River, Three Rivers, Texas; Mississippi River at Winona, Minnesota—Survey resolutions, Hearing Subcommittee on Flood Control and Internal Development Commission on Public Works: U.S. House of Representatives, 92nd Congress, July 27, 1971, 21p.

- U.S. Department of Agriculture, Natural Resources Conservation Service, 1994, State soil geographics data base (STATSGO) data use information: Miscellaneous Publication 1492, 88 p.
- U.S. Department of Health, Education, and Welfare, Public Health Service, Region VI, 1963, Water-resources study, Mississippi River headwaters reservoirs, Minnesota: U.S. Army Corps of Engineers, St. Paul District, 69 p.
- U.S. Department of Health, Education, and Welfare, 1964, Conference in the matter of pollution of the interstate waters of the Upper Mississippi River, St. Paul, Minnesota, February 8, 1964: 6 volumes.
- U.S. Environmental Protection Agency, 1980, 208 data clearinghouse: 303 p.
- _____, 1981, Final environmental impact statement; Bemidji wastewater treatment system, Beltrami County, Minnesota: U.S. Environmental Protection Agency, Chicago, Illinois, Region V, 144 p.
- _____, 1981, Environmental impact statement, St. Croix, Wisconsin and Taylors Falls, Minnesota, wastewater treatment systems: U.S. Environmental Protection Agency, 144 p.
- _____, 1986, Quality criteria for water 1986 (Gold Book): U.S. Environmental Protection Agency, Office of Water Regulations and Standards, 440/5-86-001.
- _____, 1987, Superfund Record of Decision—FMC Corp., Minnesota: U.S. Environmental Protection Agency EPA/ROD/R05-87/059, 677 p.
- _____, 1987, Superfund Record of Decision—New Brighton/Arden Hills/TCAAP, Minnesota: U.S. Environmental Protection Agency EPA/ROD/R05-87/058, 75 p.
- _____, 1988, Secondary maximum contaminant levels (Section 143.3 of Part 143, National Secondary Drinking-Water Regulations), U.S. Code of Federal Regulations, title 40, parts 100 to 149, revised as of July 1, 1988, p. 608.
- _____, 1988, Superfund Record of Decision—Mid-State Disposal Landfill, Wisconsin: U.S. Environmental Protection Agency EPA/ROD/R05-88/076, 55 p.
- _____, 1988, Superfund Record of Decision—Croyden TCE Spill, Pennsylvania: U.S. Environmental Protection Agency EPA/ROD/R03-89/066, 55 p.
- _____, 1988, Superfund Record of Decision—Eau Claire Municipal Well, Wisconsin: U.S. Environmental Protection Agency EPA/ROD/R06-88/064, 46 p.
- _____, 1988, Superfund Record of Decision—Long Prairie, Minnesota: U.S. Environmental Protection Agency EPA/ROD/R05-88/066, 58 p.
- _____, 1988, Superfund Record of Decision—Oak Grove Landfill, Minnesota: U.S. Environmental Protection Agency EPA/ROD/R06-88/074, 61 p.
- _____, 1988, Superfund Record of Decision—South Andover, Minnesota: U.S. Environmental Protection Agency EPA/ROD/R05-88/065, 16 p.

- _____, 1994, National primary drinking water standards: U.S. Environmental Protection Agency EPA 810-F-94-001A, 4 p.
- _____, 1994, Drinking water regulations and health advisories: U.S. Environmental Protection Agency, 18 p.
- _____, 1994, 1992 toxics release inventory, public data release: U.S. Environmental Protection Agency, EPA 745-R-94-001, 372 p.
- _____, 1995, Drinking water regulations and health advisories: U.S. Environmental Protection Agency, 11 p.
- U.S. Federal Water Pollution Control Administration, 1968, Pollution of the interstate and intrastate waters of the Upper Mississippi River and its tributaries (Minnesota and Wisconsin): Proceedings of the Federal Water Pollution Control Administration, February 1- March 1 and 20, 1967, Mpls, Minnesota, 313 p.
- _____, 1969, Gross radioactivity in surface waters of the United States, February 1969: Radiological Health Data and Reports, v. 10, no. 9, p. 394-395.
- _____, 1970, Clean water for mid-America: Federal Water Pollution Control Administration, Chicago, Illinois, PB-241 292, 30 p.
- _____, 1970, Progress evaluation meeting in the matter of the interstate and intrastate waters of the Upper Mississippi River and its tributaries, states of Wisconsin and Minnesota [Proceedings], 346 p.
- U.S. Fish and Wildlife Service, 1976, Fish and wildlife technical report: Upper Mississippi River Basin Commission Fish and Wildlife Task Group, Minneapolis-St.Paul Area Level B Study, 254 p.
- _____, 1992, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12: U.S. Fish and Wildlife Service.
- U.S. Geological Survey, 1910, Surface water supply of the United States, 1907-08, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 245, 133 p.
- _____, 1911, Surface water supply of the United States, 1909, Part 5, Hudson Bay and Upper Mississippi River Basin. U.S. Geological Survey Water Supply Paper 265, 231 p.
- _____, 1912, Surface water supply of the United States, 1910, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 285, 318 p.
- _____, 1914, Surface water supply of the United States, 1912, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 325, 193 p.
- _____, 1915, Surface water supply of the United States, 1913, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 355, 177 p.
- _____, 1915, Surface water supply of the United States, 1914, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 385, 247 p.

- _____, 1917, Surface water supply of the United States, 1915, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 405, 215 p.
- _____, 1918, Surface water supply of the United States and Hawaii, 1916, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 435, 207 p.
- _____, 1919, Surface water supply of the United States and Hawaii, 1917, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 455, 207 p.
- _____, 1921, Surface water supply of the United States and Hawaii, 1918, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 475, 153 p.
- _____, 1923, Surface water supply of the United States and Hawaii, 1919-20, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 505, 287 p.
- _____, 1924, Surface water supply of the United States and Hawaii, 1921, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 525, 191 p.
- _____, 1925, Surface water supply of the United States and Hawaii, 1922, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 545, 197 p.
- _____, 1926, Surface water supply of the United States and Hawaii, 1923, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 565, 199 p.
- _____, 1928, Surface water supply of the United States and Hawaii, 1924, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 585, 185 p.
- _____, 1929, Surface water supply of the United States and Hawaii, 1925, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 605, 179 p.
- _____, 1930, Surface water supply of the United States and Hawaii, 1926, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 625, 170 p.
- _____, 1931, Surface water supply of the United States and Hawaii, 1927, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 645, 115 p.
- _____, 1931, Surface water supply of the United States and Hawaii, 1928, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 665, 109 p.
- _____, 1932, Surface water supply of the United States, 1930, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 700, 149 p.
- _____, 1932, Surface water supply of the United States and Hawaii, 1929, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 685, 147 p.
- _____, 1933, Surface water supply of the United States, 1931, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 715, 172 p.
- _____, 1933, Surface water supply of the United States, 1932, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 730, 206 p.

- _____, 1935, Surface water supply of the United States, 1933, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 745, 220 p.
- _____, 1936, Surface water supply of the United States, 1934, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 760, 250 p.
- _____, 1936, Surface water supply of the United States, 1935, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 785, 283 p.
- _____, 1938, Surface water supply of the United States and Hawaii, 1936, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Water-Supply Paper 805, 288 p.
- _____, 1938, Surface water supply of the United States and Hawaii, 1937, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper, 825, 334 p.
- _____, 1940, Surface water supply of the United States and Hawaii, 1938, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 855, 350 p.
- _____, 1941, Surface water supply of the United States and Hawaii, 1939, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 875, 405 p.
- _____, 1942, Surface water supply of the United States and Hawaii, 1940, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 895, 340 p.
- _____, 1943, Surface water supply of the United States and Hawaii, 1941, Part 5, Hudson Bay and Upper Mississippi River Basin. U.S. Geological Survey Supply Paper 925, 404 p.
- _____, 1945, Surface water supply of the United States and Hawaii, 1943, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 975, 412 p.
- _____, 1946, Surface water supply of the United States, 1944, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 1005, 422 p.
- _____, 1948, Surface water supply of the United States, 1945, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water Supply Paper 1035, 468 p.
- _____, 1949, Surface water supply of the United States and Hawaii, 1946, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1055, 471 p.
- _____, 1950, Surface water supply of the United States, 1947, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1085, 479 p.
- _____, 1950, Surface water supply of the United States, 1948, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1115, 464 p.
- _____, 1951, Index of surface-water records, Part 5, Hudson Bay and Upper Mississippi River Basins, to September 30, 1950: U.S. Geological Survey Circular 113, 22 p.
- _____, 1951, Surface-water supplies of the Mesabi Iron Range: Minnesota Department of Conservation, Division of Waters Bulletin 5, 117 p.

- _____, 1951, Surface water supply of the United States, 1949, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1145, 511 p.
- _____, 1952, Surface water supply of the United States, 1950, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1175, 533 p.
- _____, 1953, Floods of 1950 in the Upper Mississippi River and Lake Superior Basins in Minnesota. U.S. Geological Survey Water-Supply Paper 1137-G, p.791-895.
- _____, 1953, Surface water supply of the United States, 1951, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 1208, 543 p.
- _____, 1954, Surface water supply of the United States, 1952, Part 5, Hudson Bay and Upper Mississippi River Basin: U.S. Geological Survey Water-Supply Paper 1278, 539 p.
- _____, 1955, Floods of 1952 in the basins of the Upper Mississippi River and Red River of the North: U.S. Geological Survey Water-Supply Paper 1260-C, p. 303-529.
- _____, 1955, Quality of surface waters of the United States, 1950, Parts 5-6, Hudson Bay and Upper Mississippi River Basin, and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1187, 478 p.
- _____, 1955, Surface water supply of the United States, 1953, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1278, 539 p.
- _____, 1956, Quality of surface waters of the United States, 1951, Parts 5-6, Hudson Bay and Upper Mississippi River Basin, and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1198, 586 p.
- _____, 1956, Surface water supply of the United States, 1954, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1338, 555 p.
- _____, 1957, Quality of surface waters of the United States, 1952, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper, Supply Paper 1251, 478 p.
- _____, 1957, Surface water supply of the United States, 1955, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1388, 548 p.
- _____, 1958, Quality of surface waters of the United States, 1953, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1291, 472 p.
- _____, 1958, Quality of surface waters of the United States, 1954, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1351, 283 p.
- _____, 1958, Quality of surface waters of the United States, 1956, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1438, 575 p.

- _____, 1958, Surface water supply of the United States, 1956, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1438, 575 p.
- _____, 1959, Chemical analysis of surface waters, Minnesota, October 1956 to September 1958: Unpublished report on file with U.S. Geological Survey in Mounds View, Minnesota, 16 p.
- _____, 1959, Quality of surface waters of the United States, 1955, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1401, 305 p.
- _____, 1959, Quality of surface waters of the United States, 1957, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1508, 624 p.
- _____, 1959, Surface water supply of the United States, 1957, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water Supply Paper 1508, 624 p.
- _____, 1961, Surface water supply of the United States, 1959, Part 5, Hudson Bay and Upper Mississippi River Basins. U.S. Geological Survey Water Supply Paper 1628, 562 p.
- _____, 1962, Quality of surface waters of the United States, 1958, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1572, 365 p.
- _____, 1962, Surface water supply of the United States, 1960, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 1708, 588 p.
- _____, 1964, Compilation of records of surface waters of the United States, October 1950 to September 1960, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 1728, 576 p.
- _____, 1964, Quality of surface waters of the United States, 1962, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1943, 413 p.
- _____, 1964, Water-quality records in Michigan and Wisconsin: U.S. Geological Survey Open-File Report, 61 p.
- _____, 1965, Preliminary map of the conterminous United States showing depth to and quality of shallowest ground water containing more than 1,000 parts per million dissolved solids: U.S. Geological Survey Hydrologic Investigations Atlas HA-199, 31 p., 2 sheets.
- _____, 1965, Quality of surface waters of the United States, 1959, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1643, 247 p.
- _____, 1966, Quality of surface waters of the United States, 1960, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1743, 278 p.

- _____, 1966, Quality of surface waters of the United States, 1961, Parts 5-6, Hudson Bay and Upper Mississippi River Basins and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1883, 315 p.
- _____, 1966, Quality of surface waters of the United States, 1963, Parts 5-6, Hudson Bay and Upper Mississippi River Basin and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1949, 411 p.
- _____, 1968, Surface water supply of the United States, 1958, Part 5, Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 1558, 638 p.
- _____, 1969, Quality of surface waters of the United States, 1964, Parts 5 and 6, Hudson Bay and Upper Mississippi River Basins, and Missouri River Basin. U.S. Geological Survey Water-Supply Paper 1956, 462 p.
- _____, 1970, National Atlas of the United States of America: U.S. Geological Survey, Washington DC , 417 p.
- _____, 1970, Quality of surface waters of the United States, 1965, Parts 5 and 6, Hudson Bay and Upper Mississippi River Basins and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1963, 548 p.
- _____, 1971, Preliminary map of probable well yields from bedrock in Wisconsin: U.S. Geological Survey Open File Report 71-50, 1 map.
- _____, 1971, Preliminary map of probable well yields from glacial deposits in Wisconsin: U.S. Geological Survey Open File Report 71-51, 1 map.
- _____, 1971, Quality of surface waters of the United States, 1966, Parts 5 and 6, Hudson Bay and Upper Mississippi River Basins, and Missouri River Basin. U.S. Geological Survey Water-Supply Paper 1993, 666 p.
- _____, 1971, Quality of surface waters of the United States, 1967, Parts 5 and 6, Hudson Bay and Upper Mississippi River Basins, and Missouri River Basin. U.S. Geological Survey Water-Supply Paper 2013, 585 p.
- _____, 1971, Surface water supply of the United States, 1961-65, Part 5, Hudson Bay and Upper Mississippi River Basins; Volume 2, Upper Mississippi River Basin above Keokuk, Iowa: U.S. Geological Survey Water-Supply Paper 1914, 750 p.
- _____, 1971, Surface water supply of the United States 1961-65, Part 5, Hudson Bay and Upper Mississippi River Basins; Volume 1, Hudson Bay Basin: U.S. Geological Survey Water-Supply Paper 1913, 407 p.
- _____, 1973, Quality of surface waters of the United States, 1968, Parts 4 and 5, St. Lawrence River Basin and Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 2094, 293 p.
- _____, 1973, Surface water supply of the United States, 1966-70, Part 5, Hudson Bay and Upper Mississippi River Basins—Vol. 3, Upper Mississippi River Basin below Kooky, Iowa: U.S. Geological Survey Water-Supply Paper 2115, 607 p.

- _____, 1973, Water resources of the Wisconsin St. Croix River Basin: U.S. Geological Survey Hydrologic Investigations Atlas HA-451.
- _____, 1974, Quality of surface waters of the United States, 1969, Parts 4 and 5, St. Lawrence River Basin and Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 2144, 367 p.
- _____, 1975, Quality of surface waters of the United States, 1970, Parts 4 and 5, St. Lawrence River Basin, and Hudson Bay and Upper Mississippi River Basins: U.S. Geological Survey Water-Supply Paper 2154, 482 p.
- _____, 1976, Hydrologic unit map-1974, State of Minnesota: U.S. Geological Survey, 1 sheet, scale 1:500,000.
- _____, 1976, Surface water supply of the United States, 1966-70, Part 5, Hudson Bay and Upper Mississippi River Basins—Volume 1. Hudson Bay Basin: U.S. Geological Survey Water-Supply Paper 2113, 425 p.
- _____, 1976, Surface water supply of the United States, 1966-70, Part 5, Hudson Bay and Upper Mississippi River Basins—Volume 2. Upper Mississippi River Basin above Keokuk, Iowa: U.S. Geological Survey Water-Supply Paper 2115, 785 p.
- _____, 1976, Hydrologic unit map-1974, State of Minnesota: U.S. Geological Survey, 1 sheet, scale 1:500,000.
- _____, 1977, Ground-water levels in the United States, 1972-74—North-central states: U.S. Geological Survey Water-Supply Paper 2163, 89 p.
- _____, 1978, Water Resources Data for Minnesota, water year 1977—Volume 2. Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-77-2, 426 p.
- _____, 1979, Water Resources Data for Minnesota, water year 1978—Volume 2. Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-78-2, 425 p.
- _____, 1980, Water Resources Data for Minnesota, water year 1979—Volume 2. Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-79-2, 432 p.
- _____, 1981, Water Resources Data for Minnesota, water year 1980—Volume 2. Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-80-2, 435 p.
- _____, 1982, Water resources data for Minnesota, water year 1981—Volume 2. Upper Mississippi and Missouri River Basins: U.S. Geological Survey Water-Data Report MN-81-2, 502 p.
- _____, 1984, Ground-water contamination by crude petroleum at the Bemidji, Minnesota research site—Compilation of resource documents and project plan March 1984: U.S. Geological Survey, variously paged.
- _____, 1984, National water summary 1983—Hydrologic events and issues: U.S. Geological Survey Water-Supply Paper 2250, 243 p.

- _____, 1985, National water summary 1984—Hydrologic events, selected water-quality trends, and ground-water resources: U.S. Geological Survey Water-Supply Paper 2275, 467 p.
- _____, 1986, National water summary 1985—Hydrologic events and surface-water resources: U.S. Geological Survey Water-Supply Paper 2300, 506 p.
- _____, 1988, National water summary 1986—Hydrologic events, selected water-quality trends, and ground-water quality: U.S. Geological Survey Water-Supply Paper 2325, 569 p.
- _____, 1989, Water resources data, Minnesota, water year 1988, Volume 1. Great Lakes and Souris-Red-Rainey River Basins: U.S. Geological Survey Water-Data Report MN-89-1, 126 p.
- _____, 1990, The effects of the 1988 drought on the water resources of Wisconsin: U.S. Geological Survey Open-File Report 90-149, 2 p.
- _____, 1990, National water summary 1987—Hydrologic events and water supply and use: U.S. Geological Survey Water-Supply Paper 2350, 553 p.
- _____, 1990, USGeoData 1:250,000 and 1:100,000 scale land use and land cover maps digital data.
- _____, 1993, Quality of surface waters of the United States, 1966, Parts 5 and 6, Hudson Bay and Upper Mississippi River Basins, and Missouri River Basin: U.S. Geological Survey Water-Supply Paper 1993, 666 p.
- U.S. Office of Technology Assessment, 1987, Managing industrial effluents, *in* Wastes in the marine environment: Office of Technology Assessment OTA-0-334, p. 178-205.
- U.S. Public Health Service, 1953, A comprehensive program for water pollution control for the St. Croix River Basin: U.S. Public Health Service, 8 p. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]
- _____, 1953, Upper portion Upper Mississippi River drainage basin—A cooperative State-Federal report on water pollution: Upper Mississippi River and Great Lakes Drainage Basins Office, Chicago, Illinois, 90 p.
- _____, 1955, A comprehensive water pollution control program for the lower portion Upper Mississippi River Basin developed by the state water pollution control agencies of Iowa, Minnesota, and Wisconsin: U.S. Public Health Service, Division of Water Supply, Cincinnati, Ohio, 76 p.
- _____, 1963, Water pollution surveillance system, Upper Mississippi River Basin: U.S. Public Health Service, Division of Water Supply and Pollution Control, Washington, D.C., 121 p.
- U.S. Soil Conservation Service, 1970, Upper Mississippi River comprehensive basin study, appendix n—Agriculture, *in* Upper Mississippi River Comprehensive Basin Study Coordination Commission, v. 6, p. N1-N210.
- _____, 1972, Soils of the St. Croix Riverway Project: U.S. Soil Conservation Service, 74 p.
- _____, 1974, Report of the Vermillion River, flood hazard study, Dakota County, Minnesota: U.S. Soil Conservation Service, St. Paul, Minnesota, 26 p.

- _____, 1974, Report on water and related land resources—Southeast Wisconsin Rivers Basin, Wisconsin-Illinois-Michigan: U.S. Soil Conservation Service, 279 p.
- _____, 1978, Minnesota River Basin: USDA summary report/prepared by Soil Conservation Service, Forest Service, Economics, Statistics, and Cooperatives Service, Washington, DC, 65 leaves.
- University of California. 1986, Pollutants in the air and acids in the rain—Influences on our natural environment and a challenge for every industrial society, *in* Acid Rain 1986—A handbook for states and provinces: Proceedings of Wingspread Conference, September 23-25, 1986, St. Paul, Minnesota, p. 19-50.
- University of Minnesota, 1974, A study of Minnesota forests and lakes using data from earth resources technology satellites, 24 month progress report: University of Minnesota, Space Sciences Center, 240 p.
- _____, 1974, Prehistoric archaeological sites in Minnesota State Parks: University of Minnesota Archaeological Laboratory, 100 leaves. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota 55155.].
- _____, 1975, Proceedings of conference on 'trends in water management': University of Minnesota, Water Resources Research Center Bulletin 80, 49 p.
- _____, 1979, Analysis of the lower St. Croix River Valley, Hudson, Wisconsin-Stillwater, Minnesota: University of Minnesota. Minneapolis, Minnesota, 213 p.
- _____, 1980, St. Croix River Valley design experience—Selected highlights: University of Minnesota, Minneapolis, Minnesota, 40 leaves. [Available from Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota.]
- Upham, W., 1899, The geology of Aitkin County, Cass County, and of the part of Crow Wing County northwest of the Mississippi River, of the region around Red Lake and southward to White Earth: Minnesota Geological Survey Final Report 4, p. 25-81.
- _____, 1906, Glacial and modified drift on the Mississippi Valley from Lake Itasca to Lake Pepin: Minnesota Academy of Science, v. 4, p. 299-305.
- Upper Mississippi River Basin Commission, 1976, Upper Mississippi River Basin Commission: Upper Mississippi River Basin Commission, 22 p.
- _____, 1977, Level B-technical paper—Water Quality: Upper Mississippi River Basin Commission.
- _____, 1978, Minneapolis-St. Paul water and land-future perspectives and plans, Level B study report and environments impact statement: Upper Mississippi River Basin Commission, 164 p.
- _____, 1981, Draft comprehensive master plan for the management of the Upper Mississippi River system: Upper Mississippi River Basin Commission, 181 p.
- _____, 1982, Comprehensive master plan for the management of the Upper Mississippi River system, Minneapolis, Minnesota: Upper Mississippi River Basin Commission, 193 p.

- Upper Mississippi River Basin Coordinating Committee, 1970, Upper Mississippi River comprehensive Basin study, St. Paul, Minnesota: U.S. Army Corps of Engineers, variously paged.
- _____, 1972, Upper Mississippi River comprehensive basin study: Upper Mississippi River Basin Commission, 9 volumes.
- Upper Mississippi River Comprehensive Basin Study Coordinating Committee, 1970, Upper Mississippi River Comprehensive Basin Study, appendix k—Recreation, *in* Upper Mississippi River Comprehensive Basin Study Coordinating Committee Report, v. 6, p. K1-K126.
- _____, 1972, Upper Mississippi River Comprehensive Basin study: Upper Mississippi River Comprehensive Basin Study Coordinating Committee, v. I, 133 p.
- Upper Mississippi River Comprehensive Basin Study Coordinating Committee, 1972, Upper Mississippi River Comprehensive Basin Study, appendix q—Framework for development, *in* Upper Mississippi River Comprehensive Basin Study Coordinating Committee, v. 9, 306 p.
- Upper Mississippi River Conservation Commission, 1977, PCB pollution in the Upper Mississippi River: Upper Mississippi River Conservation Commission, Ad Hoc PCB Committee Report, 13 p.
- Upper Mississippi River Conservation Committee, 1983, Distribution and relative abundance of Upper Mississippi River fishes, 19 p.
- Van Loon, L.S., McCown, D.L., and Ditmars, J.D., 1982, Sampling and detection of tagged dredged material, p. 31-109. [Available from the National Technical Information Service, Springfield, Va 22161 as DE82016056.]
- VanVoast, W.A., 1969, Ground water for irrigation near Lake Emily, Pope County, west-central Minnesota: U.S. Geological Survey Open-File Report, 29 p.
- _____, 1969, Profiles of regional ground-water flow in glacial deposits in Minnesota based on existing well data, *in* Annual Engineering Geology and Soils Engineering Symposium, 7th, Moscow, Idaho [Proceedings], p. 84-100.
- _____, 1971, Ground water for irrigation in the Brooten-Belgrade area, west-central Minnesota: U.S. Geological Survey Water-Supply Paper 1899-E, 24 p.
- VanVoast, W.A., Broussard, W.L., and Wheat, D.E., 1972, Water resources of the Minnesota River-Hawk Creek watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-391, 3 sheets, scale 1:250,000.
- VanVoast, W.A., Jerabek, L.A., and Novitzki, R.P., 1970, Water resources of the Redwood River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-345, 3 sheets.
- Verschueren, Karel, 1983, Handbook of environmental data on organic chemicals: Van Nostrand Reinhold, New York, New York, 1310 p.

- Vežina, R., 1965, Nevers Dam—The lumberman's dam: St. Croix Standard Press, St. Croix Falls, Wisconsin.
- Vick, T.D., Cowan, C.A., and Packer, D.J., 1983, Buried bedrock topography of the Cannon River system around Northfield, Minnesota: *Journal of the Minnesota Academy of Science*, v. 48, no. 2, p. 19-23.
- Vick, T.D., Greilich, G., and Seltzer, G.O., 1980, Seismic survey of buried bedrock topography in the Cannon River Valley: *Journal of the Minnesota Academy of Science*, v. 46, no. 3, p. 6-9.
- Viste, D.R., 1979, Hydrogeologic impact of ash disposal from coal-fired power plants on the Upper Mississippi River, in Giddings, T., National Water Well Association, Ground Water Technology Division, Technical Education Session, Oklahoma, City, Oklahoma: *Ground Water*, v. 17, no. 5, p. 498-499.
- Vitrac, M.A., Lancelot, J., and Allegre, C.J., 1977, U-Pb ages on single zircons from the early Precambrian rocks of West Greenland and the Minnesota River Valley: *Earth Planet Science Letters*, v. 35, no. 3, p. 449-453.
- Waelti, J.J., 1974, Flood control, navigation, and other alternative water resources policies in Minnesota. [Available From The National Technical Information Service, Springfield, Va, 22161 as PB-235 821, 25 p.]
- Waelti, J.J. and Lewis, R.C., 1971, The water quality controversy in Minnesota and the marginal costs of alternative levels of water quality in the Upper Mississippi River. [Available from the National Technical Information Service, Springfield, VA 22161 as PB-202 783]
- Wahl, K.L., Vining, K.C., and Wiche, G.J., 1993, Precipitation in the Upper Mississippi River Basin, January 1 through July 31, 1993: U.S. Geological Survey Circular 1120-B, 13 p.
- Walker, J.F., 1993 Techniques for detecting effects of urban and rural land-use practices on stream-water chemistry in selected watersheds in Texas, Minnesota, and Illinois: U.S. Geological Survey Open-File Report 93-130, 16 p.
- Wallace, McHarg, Roberts, and Todd, Consultants, 1969, Final Report, An ecological study of the Twin Cities metropolitan area: Metropolitan Council of the Twin Cities Area, 106 p.
- Walsh, J.F., 1992, Tritium in groundwater as a tool to estimate well vulnerability: Minnesota Department of Health, 128 p.
- Walsh, J.F., Wheeler, B.J., Olsen, B.M., and Klaseus, T.G., 1993, Pesticides and their breakdown products in Minnesota groundwater: Minnesota Department of Health, 20 p.
- Walton, B.T., Hendricks, M.S., Anderson, T.A., and Talmage, S.S., 1989, Treatability of hazardous chemicals in soils—Volatile and semivolatile organics, 286 p.[Available from the National Technical Information Service, Springfield, Va 22161 as DE89-016892]
- Walton, M., 1984, A geologically deep target for relatively shallow core drilling in the Minnesota River valley [abs.], American Geophysical Union 1984 fall meeting, San Francisco, California, December 3-7, 1984: *American Geophysical Union*, v. 65, no. 45, p. 1101-1102.

- Walton, W.C., 1975, Minnesota's water resources—A primer: Water Resources Research Center Public Report Series Number 2, University of Minnesota, Minneapolis, Minnesota, 33 p.
- _____, 1978, Comprehensive analysis of water-table aquifer test data: *Ground Water*, v. 16, no. 5, p. 311-317.
- Wanty, R.B., Tuttle, M.L., Landon, M.K., Delin, G.N., and Bohlke, J.K., 1993, Geochemistry of nitrogen in a farmed watershed near Princeton, Minnesota [abs.], in Morganwalp, D.W., and Aronson, D.A., compilers, U.S. Geological Survey Toxic Substances Hydrology Program—Abstracts of the technical meeting, Colorado Springs, Colorado, September 20-24, 1993: U.S. Geological Survey Open-File Report 93-454, p. 93.
- Ware, G.W., ed., 1994, *Reviews of environmental contamination and toxicology*: Springer-Verlag, v. 140, 221 p.
- Warne, S.A., 1978, Map showing low-flow frequency of Minnesota streams: U.S. Geological Survey Open-File Report 78-132, 1 sheet.
- Warren, G.K., 1868, On certain physical features of the Upper Mississippi River: *American Naturalist*, v. 2, p. 497-502.
- _____, 1875, An essay concerning important physical features exhibited in the valley of the Minnesota River and upon their signification: U.S. 43rd congress, 2nd Session, H Ex Doc. 6-23, 22 p.
- Water Resources Council, 1979, Upper Mississippi River Basin Commission—Public Participation in Upper Mississippi River System Master Plan (New Rule): *Federal Register*, v. 44, no. 50, p. 14537-14539.
- Water Resources Engineers, 1974, Final report for the Upper Mississippi River Basin model project.
- _____, 1975, NCWQ-Section II, Upper Mississippi River Basin final report: Presented to the National Commission on Water Quality, 123 p.
- _____, 1975, Water Quality Analysis, Upper Mississippi River Basin, in National Commission on Water Quality, Washington, DC, Report NCWQ 75/64, 106 p.
- Water Resources Research Center, 1992, Mississippi River phosphorus study report—Literature reviews and abstracts of articles, variously paged.
- Waters, T.F., 1962, Diurnal periodicity in the drift of stream invertebrates: *Ecology*, v. 43, p. 316-20.
- _____, 1977, *The streams and rivers of Minnesota*: University of Minnesota Press, Minneapolis, Minnesota, 373 p.
- _____, 1983, Annual production by *Gammarus pseudolimnaeus* among substrate types in Valley Creek, Minnesota: *American Midland Naturalist*, v. 112, p. 95-102.

- _____, 1983, Replacement of brook trout by brown trout over 15 years in a Minnesota stream: Transactions of the American Fisheries Society, v. 112, p. 137-46.
- Waters, T.F., and Holt, C.S., 1968, Effect of light intensity on the drift of stream invertebrates: Ecology, v. 48, p. 225-34.
- Waters, T.F., and Hokenstrom, J.C., 1980, Annual production and drift of the stream amphipod *Gammarus pseudolimnaeus* in Valley Creek, Minnesota: Limnological Oceanography, v. 25, p. 700-710.
- Waters, T.F., and MacKay, R.J., 1986, Effects of small impoundments on hydropsychid caddisfly production in Valley Creek, Minnesota: Ecology, v. 67, p. 1680-1686.
- Weiblen, P.W., 1982, Field trip guidebook for the Precambrian terrane of the Minnesota River valley: Guidebook Series Minnesota Geological Survey 14, 25 p.
- Weiblen, P.W., Schulz, K.J., and Nielsen, B.V., 1976, Compositional variations of Minnesota River Valley amphibolites [abs.]: 22nd annual institute on Lake Superior geology, St. Paul, Minnesota, May 3-7, 1976, p. 68.
- Weir, D.J., 1979, Archaeological investigations of the St. Croix National Scenic Riverway, Minnesota and Wisconsin: Master's thesis, Michigan State University, Lansing, Michigan, 250 leaves.
- Wells, J.V.B., 1959, Compilation of records of surface waters of the United States through September 1950, Part 5. Hudson Bay and Upper Mississippi River Basins: U. S. Geological Survey Water-Supply Paper 1308, 708 p.
- Welsh, J.L., 1976, Petrology of the Archaean gneisses of the northwest corner of the Sacred Heart Pluton; Minnesota River Valley, Minnesota [abs.]: 22nd annual institute on Lake Superior geology, St. Paul, Minnesota, May 3-7, 1976, p. 70.
- _____, 1976, Petrology of the northwest margin of the Sacred Heart Pluton and adjacent Archaean gneisses from the Minnesota River Valley; Redwood and Yellow Medicine Counties, Minnesota: Masters thesis, University of Minnesota, Duluth, Minnesota, 100 p.
- Wershaw, R.L., Fishman, M.J., Grabbe, R.R., and Lowe, L.E., 1987, Methods for determination of organic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water Resources Investigations, book 5 chapter A3, 80 p.
- Westerhoff, G.P., and Uhl, V.W., Jr., 1982, Control Measures for Groundwater VOC'S: Water/Engineering and Management, v. 129, no. 8, p. 30-33.
- Wheeler, S., 1965, Crisis on the St. Croix. St. Paul, Minnesota: Unpublished paper on file with Macalester College, St. Paul, Minnesota, 12 leaves.
- Whiting, R.J., 1982, Experience of the St. Paul District, Corps of Engineers, with State Coordination of Dredging Activities, *in* Proceedings of a Seminar on Attaining Water Quality Goals through Water Management Procedures, February 17-18, 1982, Dallas, Texas: U.S. Army Corps of Engineers, Committee on Water Quality, p. 143-149.
- Wicks, J.L., 1930, Pollution of the Upper Mississippi River: Transactions American Fisheries Society, v. 60, p. 286-296.

- Wiele, S., and Mooers, H.D., 1989, Glacial River Warren—Steady-state and peak discharge, *in* Dymek, R.F., and Shelton, K.L., Geological Society of America, 1989 annual meeting, St. Louis, Missouri, November 6-9, 1989: Geological Society of America, v. 21, no. 6, p. A60.
- Wiener, J.G., Anderson, R.V., and McConville, D.R., 1984, Contaminants in the Upper Mississippi River, *in* Proceedings of the 15th annual meeting of the Mississippi River Research Consortium, v. 15, p. 368.
- Wiener, J.G., Jackson, G.A., May, T.W., and Cole, B.P., 1984, Longitudinal distribution of trace elements (As, Cd, Cr, Hg, Pb, and Se) in fishes and sediments in the Upper Mississippi River, *in* Wiener, J.G., Anderson, R.V., and McConville, D.R., ed., Contaminants in the Upper Mississippi River, Proceedings of the 15th annual meeting of the Mississippi River Research Consortium, La Crosse, Wisconsin, April 14-15, 1982: Butterworth Publishers, Stoneham, Massachusetts, p. 139-170.
- Williams, D.D., 1978, *Aspidogaster conchicola* in St. Croix River, Wisconsin clams: Proceedings of the Helminthol Society of Washington, v. 45, no. 2, p. 257-258.
- Williams, I., Cordua, W., Bauer, E., Hampton, A., Jensema, S., Key, L., Koehler, S., Koepke, R., Kovatch, E., Paulson, K., Yerbich, D., and Witthuhn, K., 1987, Some aspects of the geology of Pierce and St. Croix Counties: Annual University of Wisconsin System Undergraduate Geology Field Conference, v. 19, 60 p.
- Williams, J.D., Warren, M.L., Jr., Cummings, K.S., Harris, J.L., and Neves, R.J., 1993, Conservation status of freshwater mussels of the United States and Canada: Fisheries, v. 18, p. 6-22.
- Williams, L.G., 1962, Plankton population dynamics: Public Health Publication no. 663, Supplement 2.
- _____, 1964, Possible relationships between plankton-diatom species numbers and water-quality estimates: Ecology, v. 45, no. 4, p. 809-823.
- _____, 1966, Dominant planktonic rotifers of major waterways of the United States: Limnology and Oceanography, v. 11, p. 83-91.
- _____, 1972, Plankton diatom species biomasses and the quality of American rivers and the Great Lakes: Ecology, v. 11, p. 83-91.
- Williams, L.G., and Scott, C., 1962, Principal diatoms of major waterways of the United States: Limnology and Oceanography, v. 7, no. 3, p. 365-379.
- Wilson, W.E., 1976, Trace element geochemistry and geochronology of early Precambrian granulite facies metamorphic rocks near Granite Falls in the Minnesota River Valley: Doctoral thesis, University of Minnesota, Minneapolis, Minnesota, 150 p.
- Wilson, W.E., and Martha, V.R., 1976, Rb-Sr geochronology and trace element geochemistry of granulite facies rocks near Granite Falls, in the Minnesota River Valley, *in* 22nd annual institute on Lake Superior geology, St. Paul, Minnesota, May 3-7, 1976, v. 22, p. 69.
- Winfrey, K.E., 1989, Depositional environments of the St. Peter Sandstone of the upper Midwest: Master's thesis, University of Wisconsin, Madison, Wisconsin, 114 p.

- Winslow, J.C., Trippler, D.J., Peissig, L.R., Schilling, J.G., and Nutter, J., 1977, Minnesota Water Quality—A Report to the Congress of the United States by the State of Minnesota Pursuant to Section 305(b) of the Federal Water Pollution Control Act: Minnesota Pollution Control Agency, 45 p.
- Winter, B.L., and Johnson, C.M., 1993, Two Precambrian sources for the Ordovician St. Peter Sandstone of the Great Lakes region—Pb isotope evidence [abs.], Geological Society of America, 1993 annual meeting, Boston, Massachusetts, October 25-28, 1993: Geological Society of America, v. 25, no. 6, p. 322.
- Winter, T.C., 1971, Sequence of glaciation in the Mesabi-Vermillion Iron Range area, northeastern Minnesota: U.S. Geological Survey Professional Paper 750-C, p. C82-C88.
- _____, 1972, An approach to the design of statewide or regional ground water information systems: Water Resources Research, v. 8, no. 1, p. 222-230.
- _____, 1973, Hydrogeology of glacial drift, Mesabi Iron Range, northeastern Minnesota: U.S. Geological Survey Water-Supply Paper 2029-A, 23 p.
- _____, 1974, The natural quality of ground water in Minnesota: Minnesota Department of Natural Resources Bulletin 26, 25 p.
- _____, 1984, Reply to comment by M.P. Anderson, and J.A. Munter on, "the interaction of lakes with variably saturated porous media.": Water Resources Research, v. 20, no. 8, p. 1166.
- Winter, T.C., Bidwell, L.E., and Maclay, R.W. 1969, Water resources of the Otter Tail River watershed, west-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-296, 4 sheets.
- Winter, T.C., Cotter, R.D., and Young, H.L., 1973, Petrography and stratigraphy of glacial drift, Mesabi-Vermillion Iron Range area, northeastern Minnesota: U.S. Geological Survey Bulletin 1331-C, 41 p.
- Winter, T.C., and Norvitch, R.F., 1972, Field trip guidebook for hydrogeology of the Twin Cities Artesian Basin: Minnesota Geological Survey Guidebook 8, 35 p.
- Winter, T.C., and Pfannkuch, H.O., 1976, Hydrogeology* of a drift-filled bedrock valley near Lino Lakes, Anoka County, Minnesota: U.S. Geological Survey Journal of Research, v. 4, no. 3, p. 267-276.
- Winter, T.C., and Woo, M.K., 1990, Hydrology of lakes and wetlands, *in* Wolman, M.G., and Riggs, H.C., eds., Surface water hydrology, Boulder, Colorado, Geological Society of America, The Geology of North America, v. O-1, p. 159-187.
- Winter, T.C., and Wright, H.E., Jr., 1977, Paleohydrologic phenomena recorded by lake sediments: EOS, Transactions, American Geophysical Union, v. 58, no. 4, p. 188-195.
- Winterstein, T.A., 1982, Annotated report and data inventory for the Mississippi and Minnesota Rivers, Minneapolis-St. Paul metropolitan area: U.S. Geological Survey Open-File Report 82-869, 99 p.
- Winterstein, T.A., Payne, G.A., Miller, R.A., and Stark, J.R., 1993, Selected basin characteristics and water-quality data for the Minnesota River Basin: U.S. Geological Survey Open-File Report 93-164, 100 p.

- Wisconsin Department of Natural Resources, 1961, Surface water resources of Polk County: Wisconsin Department of Natural Resources, 145 p.
- _____, 1961, Surface water resources of St. Croix County: Wisconsin Department of Natural Resources, 51 p.
- _____, 1966, Surface water resources of Burnett County: Wisconsin Department of Natural Resources, 166 p.
- _____, 1969, Surface water resources of Sawyer County: Wisconsin Department of Natural Resources, 214 p.
- _____, 1970, Surface water resources of Bayfield County: Wisconsin Department of Natural Resources, 372 p.
- _____, 1971, Surface water resources of Pierce County: Wisconsin Department of Natural Resources, 49 p.
- _____, 1972, St. Croix River pollution investigation survey: Wisconsin Department of Natural Resources.
- _____, 1972, Surface water resources of Douglas County: Wisconsin Department of Natural Resources, 165 p.
- _____, 1976, Environmental impact statement for the proposed development, management and continued acquisition of the St. Croix River State Forest, Burnette and Polk Counties, Wisconsin: Wisconsin Department of Natural Resources, 112 p.
- _____, 1976, Surface water resources of Washburn County: Wisconsin Department of Natural Resources, 273 p.
- _____, 1980, The St. Croix River Basin water-quality management plan: Wisconsin Department of Natural Resources, 269 p.
- _____, 1989, Endangered and threatened species list: Wisconsin Department of Natural Resources, 28 p.
- _____, 1991, Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP), 1991-96: Wisconsin Department of Natural Resources, 312 p.
- _____, 1993, Mississippi River phosphorus study report: quality assurance/quality control report: Wisconsin Department of Natural Resources, 43 p.
- _____, 1994, Effects of flow regulation and restriction of passage due to hydroelectric project operation on the structure of fish and invertebrate communities in Wisconsin's large river systems: Wisconsin Department of Natural Resources Bureau of Research Technical Proposal, 48 p.
- _____, 1994, St. Croix Basin water quality management plan: Wisconsin Department of Natural Resources Publication 270-94-REV, Madison, Wisconsin, 269 p.
- Wisconsin Geological and Natural History Survey, 1987, Groundwater contamination susceptibility in Wisconsin: Wisconsin Geological and Natural History Survey, 1 sheet.

- Witzke, B.J., 1990, Regional facies and sedimentation of the St. Peter-Glenwood depositional cycle (Ordovician), Iowa and adjacent areas [abs.], Geological Society of America, North Central Section, 24th annual meeting, Macomb, Illinois, April 26-27, 1990, Abstracts with Programs: Geological Society of America, v. 22, no. 5, p. 49.
- Wlosinski, J.H., and Hill, L., 1995, Analysis of water level management on the Upper Mississippi River: National Biological Service, Environmental Management Technical Center, Onalaska, Wisconsin, LTRMP 95-T001, 43 p.
- Wolf, R.J., 1976, Buried aquifers in the Brooten-Belgrade and Lake Emily areas, west-central Minnesota—Factors related to developing water for irrigation: U.S. Geological Survey Water-Resources Investigations Report 76-100, 72 p.
- Wolf, R.J., Ruhl, J.F., and Adolphson, D.G., 1983, Hydrogeologic and water-quality characteristics of the Mount Simon-Hinckley aquifer, southeast Minnesota: U.S. Geological Survey Water-Resources Investigations Report 83-4031, 2 sheets.
- Wood, B.D., 1916, Stream-gaging stations and publications relating to water resources, 1885-1913: U.S. Geological Survey Water Supply Paper 340, 195 p.
- Wood, P.R., Lang, R.F., and Payan, I.L., 1985, Anaerobic transformation, transport, and removal of volatile chlorinated organics in ground water. *in* Ground Water Quality, John Wiley and Sons, New York, NY, p. 493-511.
- Wood, W.W., 1976, Guidelines for collections and field analysis of ground-water samples for selected unstable constituents: U.S. Geological Survey Techniques of Water Resources Investigations, book 5, chapter A3, 24 p.
- Wooden, J.L., Goldich, S.S., and Ankenbauer, G.N., 1975, 3600-m.y.-old tonalitic gneiss near Delhi, Minnesota: Geological Society of America, Abstracts with Programs, v. 7, no. 7, p. 1322.
- Wooden, J., Grant, J.A., and Nyquist, L.E., 1977, A metasedimentary-amphibolitic-trondhjemitic gneiss complex within the Morton Gneiss, Minnesota River Valley, Minnesota [abs.], Geological Society of America, 90th annual meeting, Seattle, Washington, November 7-9, 1977: Geological Society of America, v. 9, no. 7, p. 1234-1235.
- Woodward, D.G., 1982, Effects of the Mississippi River system on ground-water flow in southeastern Minnesota [abs.], Annual Meeting of Mississippi River Research Consortium, 15th, LaCrosse, Wisconsin, April 14-16, 1982, Proceedings: Mississippi River Research Consortium, p. 38.
- Woodward, D.G., 1982, Northern Midwest (Minnesota) RASA Study: U.S. Geological Survey Professional Paper 1375, 107 p.
- _____, 1984, Areal lithologic changes in bedrock aquifers in southeastern Minnesota as determined from natural-gamma borehole logs methods. *in* Nielsen, D.M., and Curl, Mary, eds., Conference on Surface and Borehole Geophysical Investigations, San Antonio, Texas, February 7-9, 1984, Proceedings: National Water Well Association/Environmental Protection Agency, p. 788-800.

- _____, 1984, Minnesota ground-water resources, *in* U.S. Geological Survey National Water Summary 1984: U.S. Geological Survey Water-Supply Paper 2275, p. 261-268.
- _____, 1984, The study of buried drift aquifers in Minnesota by seismic geophysical methods: U.S. Geological Survey Open-File Report, 2 p.
- _____, 1985, Seismic-refraction study of suspected drift-filled bedrock valleys in Ramsey County, Minnesota: U.S. Geological Survey Water-Resources Investigations Report 85-4107, 20 p.
- _____, 1985, Trends in municipal-well installations and aquifer utilization in southeastern Minnesota, 1880-1980: U.S. Geological Survey Water-Resources Investigations Report 83-4222, 99 p.
- _____, 1986, Hydrogeologic framework and properties of regional aquifers in the Hollandale Embayment, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-677, 2 sheets, scales 1:1,000,000 and 1:2,000,000.
- Woodward, D.G., and Anderson, H.W., Jr., 1986, Hydrogeologic and water-quality characteristics of the Cretaceous aquifer, southwestern Minnesota: U.S. Geological Survey Water-Resources Investigations Report 84-4153, 2 plates.
- Woodward, D.G., and Delin, G.N., 1982, Potentiometric surface of regional aquifers in the Hollandale Embayment, southeastern Minnesota [abs.]: EOS, Transactions, American Geophysical Union, v. 63, no. 33, p. 612
- Workman, L.E., 1935, Mississippi Valley geologic cross section: Kansas Geological Society Guidebook 9th Annual Field Conference, p. 362-372
- Wright, H.E., Jr., 1972, Quaternary history of Minnesota, *in* Sims, P.K., and Morey, G.B., eds., *Geology of Minnesota—A centennial volume*: Minnesota Geological Survey, p. 515-546.
- _____, 1990, Geologic history of Minnesota rivers: Minnesota Geological Survey Educational Series, 20 p.
- _____, 1993, History of the landscape in the Itasca region, *in* Bradbury, J., Platt, D., and Walter E., Elk Lake, Minnesota—Evidence for rapid climate change in the north-central United States: Special Paper Geological Society of America, v. 276, p. 7-17.
- Young H.L., 1992, Hydrology of the Cambrian-Ordovician aquifer system in the Northern Midwest, United States: U.S. Geological Survey Professional Paper 1405-B, 99 p.
- _____, 1992, Summary of ground-water hydrology of the Cambrian-Ordovician aquifer system in the Northern Midwest, United States: U.S. Geological Survey Professional Paper 1405-A, 55 p.
- Young, H.L., and Borman, R.G., 1973, Water resources of Wisconsin, Trempealeau-Black River Basin: U.S. Geological Survey Hydrologic Investigations Atlas HA-474, 4 sheets, scale 1:1,000,000.
- Young, H.L., and Hindall, S.M., 1972, Water resources of Wisconsin, Chippewa River Basin: U.S. Geological Survey Hydrologic Investigations Atlas HA-386, 4 sheets, scale 1:1,000,000.

- _____, 1973, Water resources of Wisconsin, St. Croix River Basin: U.S. Geological Survey Hydrologic Investigations Atlas HA-451, 4 sheets, scale 1:1,000,000.
- Young, K.B., 1963, Flow characteristics of Wisconsin streams: U. S. Geological Survey Open-File Report, 151 p.
- Yu, J.K., 1984, Landfill and the high yield wells of Eau Claire-Mt. Simon Aquifer—A Wisconsin case study, *in* Moreland, J.A., Van Voast, W.A., Abstracts from the 13th annual Rocky Mountain ground water conference: Special Publication State of Montana Bureau of Mines and Geology, v. 91, p. 41-42.
- Zachmann, B., 1984, A river classification system: Minnesota Department of Natural Resources shoreland update project report no. 5, 84 p.
- Ziegler, S.R., and Sohmer, S.H., 1977, The flora of dredged materials sites in navigation pool 8 of the Upper Mississippi River. [Available from the National Technical Information Service, Springfield, Va, 22161 as AD-A050 778, 97 p.]
- Zischke, J.A., Ericksen, G., Waller D., and Bellig, R., 1993, Analysis of benthic macroinvertebrate communities in the Minnesota river watershed: Department of Biology, St. Olaf College, Northfield, Minnesota.
- Zwilling, D., Rongitch, B., 1987, Understanding ground water level trends—A key to managing water use: Minnesota Department of Natural Resources, 50 p.

General Hydrology

- Anderson, H.W., Jr., Broussard, W.L., Farrell, D.F., and Felsheim, P.E., 1976, Water resources of the Rock River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-555, 3 sheets, scale 1:250,000.
- Anderson, H.W., Jr., Farrell, D.F., and Broussard, W.L., 1974, Water resources of the Blue Earth River watershed, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-525, 3 sheets, scale 1:500,000.
- _____, 1974, Water resources of the lower Minnesota River watershed, south-central Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-526, 3 sheets, scale 1:500,000.
- Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Felsheim, P.E., 1974, Water resources of the Cannon River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-522, 3 sheets, scales 1:250,000 and 1:500,000.
- Anderson, H.W., Jr., Farrell, D.F., Broussard, W.L., and Hult, M.F., 1975, Water resources of the Zumbro River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-543, 3 sheets, scale 1:250,000.
- Anderson, R.C., 1986, Preglacial drainage in the Upper Mississippi Valley Region [abs.]: The Geological Society of America, 99th Annual Meeting of the Geological Society of America, v. 18, no. 6, p. 527.
- Andrews, W.J., 1995, Volatile organic compounds in surface and ground water in the Upper Mississippi River Basin, Minnesota and Wisconsin, 1978-94 [abs.]: 40th Annual Midwest Ground Water Conference, Columbia, Missouri, October 16-18, 1995, p. 24.
- Andrews, W.J., Fallon, J.D., and Kroening, S.E., 1995, Water-quality assessment of the Upper Mississippi River Basin, Minnesota and Wisconsin—Presence and distribution of volatile organic compounds in surface and ground water, 1978-94: U.S. Geological Survey Water-Resources Investigations Report 95-4216, 39 p.
- Baker, R.W., 1986, Evidence for an early Pleistocene minimum age for the Upper Mississippi Valley [abs.], 99th annual meeting of the Geological Society of America. Abstracts with programs: Geological Society of America, v. 18, no. 6, p. 533.
- Bidwell, L.E., Winter, T.C., and Maclay, R.W., 1970, Water resources of the Red Lake River watershed, northwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-346, 4 sheets, scales 1:500,000 and 1:250,000.
- Broussard, W.L., Anderson, H.W., Jr., and Farrell, D.F., 1973, Water resources of the Cottonwood River watershed, southwestern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-466, 3 sheets.
- Broussard, W.L., Farrell, D.F., Anderson, H.W., Jr., and Felsheim, P.E., 1975, Water resources of the Root River watershed, southeastern Minnesota: U.S. Geological Survey Hydrologic Investigations Atlas HA-548, 3 sheets, scale 1:250,000.
- Brown, R.F., and Cotter, R.D., 1963, Water and the Minnesota Iron Range: U.S. Geological Survey, 16 p.