Basin Hydrology

USGS Surface-Water Data for the Nation Website. http://waterdata.usgs.gov/nwis/sw

Minnesota Department of Natural Resources, GIS Data Deli Website. http://ftp.dnr.state.mn.us/

- Greg Spoden; Minnesota Department of Natural Resources Division of Waters State Climatology Office.
- *Guidelines for Determining Flood Flow Frequency*, Bulletin #17B, U.S. Water Resources Council, Sept. 1981

USGS National Land Cover Database, 1992. <u>http://seamless.usgs.gov</u>, <u>http://landcover.usgs.gov/natllandcover.html</u>

Point Sources

- Boyle, W.C., Siegrist, R.L., and Saw, C.C. "Treatment of Residential Grey Water with Intermittent Sand Filtration." University of Wisconsin. D. Reidel Publishing Company, 1982.
- Ligman, K., Hutzler, N., and Boyle, W.C.. *Household Wastewater Characterization*. The Journal of the Environmental Engineering Division. ASCE Feb.1974.
- Metcalf and Eddy, Inc. 2001. Wastewater Engineering Treatment, Disposal and Reuse. Third Edition. McGraw-Hill Publishing Company. New York.
- Siegrist, R., Witt, M., and Boyle, W.C. "Characteristics of Rural Household Wastewater." *The Journal of the Environmental Engineering Division*. ASCE, June 1976.
- SRI, International. 2002. Chemical Economics Handbook CEH Marketing Research Report Industrial Phosphates. (Proprietary Information).
- Strauss, Martin. "Human Waste (Extreta and Wastewater) Reuse." EAW AG/SANDEC, August 2000.

Cropland and Pasture Runoff

- Alexander, E. C. and S. Magdalene. 1998. Final report on Minnesota River surface tile inlet research: Monitoring component. Dept. Geology and Geophysics, Univ. Minnesota. Minneapolis, MN.
- Birr, A.S., and D.J. Mulla. 2001. Evaluation of the Phosphorus Index in Watersheds at the Regional Scale. J. of Environ. Qual. 30: 2018-2025.
- Birr, A. S. and D. J. Mulla. 2002. Relationship between lake and ground water quality patterns and Minnesota agroecoregions. Hydrological Sci. Tech. 18(1-4):31-41.
- Birr, A. S., P. Bierman, D. J. Mulla, N. C. Hansen, P. Bloom, and J. F. Moncrief. Comparison of matrix and pathway versions of the phosphorus site index. Annual Meeting Soil Science Society of America. Indianapolis, IN. Nov. 13, 2002.
- Brown, J.R. 1998. Recommended Chemical Soil Test Procedures for the North Central Region. North Central Regional Research Publication No. 221 (Revised). Missouri Agric. Exp. Stn. SB 1001.

- Daniel, T. C., A. N. Sharpley, D. R. Edwards, R. Wedepohl, and J. L. Lemunyon. 1994. Minimizing surface water eutrophication from agriculture by phosphorus management. J. Soil Water Conserv. Suppl. 49: 30-38.
- Environmental Systems Research Institute, Inc (ESRI). 2000. ArcView Version 3.1. Redlands, CA.
- Gburek, W. J., A. N. Sharpley, L. Heathwaite, and G. J. Fohan. 2000. Phosphorus management at the watershed scale: A modification of the phosphorus index. J. Environ. Qual. 29(1):130-144.
- Ginting, D., J. F. Moncrief, S. C. Gupta, and S. D. Evans. 1998. Corn yield, runoff and sediment losses from manure and tillage systems. J. Environ. Qual. 27:1396-1402.
- Ginting, D., J. F. Moncrief, and S. C. Gupta. 2000. Runoff, solids and contaminant losses into surface tile inlets draining lacustrine depressions. J. Environ. Qual. 29:551-560.
- Hansen, N.C., A.Z.H. Ranaivoson, J.F. Moncrief, J.J. Xia, E. Dorsey, and S.C. Gupta. 2001. Acceleration of adoption of best management practices for reducing agricultural nonpoint source pollution using a paired watershed technique to support an educational effort. Metropolitan Council, Natural Resource Division, St. Paul, MN.
- Hatch, L. K., A. P. Mallawatantri, D. Wheeler, A. Gleason, D. J. Mulla, J. A. Perry, K. W. Easter, P. Brezonik, R. Smith, and L. Gerlach. 2001. Land management at the major watershed agroecoregion intersection. J. Soil Water Conservation 56:44-51.
- Heiskary, S. A. and C. B. Wilson. 1994. Phosphorus export coefficients and the Reckhow-Simpson spreadsheet: Use and application in routine assessments of Minnesota Lakes. Minnesota Pollution Control Agency Nonpoint Source Section. St. Paul, MN
- Heiskary, S.A., and C.B. Wilson. 2000. Minnesota Lake Water Quality Assessment Data: 2000 Minnesota Pollution Control Agency Environmental Outcomes Division Environmental Monitoring and Analysis Section. St. Paul, MN.
- Lemunyon, J.L., and R.G. Gilbert. 1993. The concept and need for a phosphorus assessment tool. J. Prod. Agric. 6:483-486.
- Lorenz, D.L., G.H. Carlson, and C.A. Sanocki. 1997. Techniques for estimating peak flow on small streams in Minnesota. Water-Resources Investigations Report 97-4249. USGS, Denver, CO.
- Midwest Planning Service-Livestock Waste Subcommittee. 1985. Livestock waste facilities handbook. Midwest Planning Serv. Rep. MWPS-18. 2nd ed. Iowa State Univ., Ames.
- Minnesota Department of Transportation. 1999. State of Minnesota base map. Office of Land Management Surveying and Mapping Section, St. Paul, MN.
- Minnesota Department of Agriculture. 1997. Total fertilizer and nutrients by county. Agronomy and Plant Protection Division. St. Paul, MN.
- Minnesota Pollution Control Agency. 1994. Minnesota River Assessment Project Report. Vol. IV. Land Use Assessment. MPCA, St. Paul, MN
- Mulla, D.J. 2003. Unpublished.
- Munyankusi, Emmanuel. 1999. Tillage and timing of manure application impacts on water quality in karst terrains. Thesis (Ph. D.)--University of Minnesota, St. Paul, MN.
- National Agricultural Statistics Service. 1999. 1997 Census of Agriculture: Minnesota state and county data [Online]. Vol. 1, Geographic Area Series Part 23. Available at http://usda.mannlib.cornell.edureports/census/ac97amn.pdf (verified 16 May 2001).

- Randall, G. W., T. K. Iragavarapu, and M. A. Schmitt. 2000. Nutrient losses in subsurface drainage water from dairy manure and urea applied for corn. J. Environ. Qual. 29: 1244-1252.
- Renard, K. G. and J. R. Freimund. 1994. Using monthly precipitation data to estimate the R-factor in the revised USLE. J. Hydrol. 157(1-4): 287-306.
- Schmitt, M.A. 1999. Manure management in Minnesota. Minn. Ext. Serv. FO-3553-C, Revised 1999. Univ. of Minn College of Agric., St. Paul.
- SERA-17. 2004. Threshold Soil Phosphorus Levels: Important for Water Quality, Nutrient Management Planning, and Permitting. http://www.soil.ncsu.edu/sera17/issues.htm
- Sharpley, A. N., S. C. Chapra, R. Wedepohl, J. T. Sims, T. C. Daniel, and K. R. Reddy. 1994. Managing agricultural phosphorus for protection of surface waters: Issues and options. J. Environ. Qual. 23: 437-451.
- Soranno, P. A., S. L. Hubler, S. R. Carpenter and R. C. Lathrop. 1996. Phosphorus loads to surface waters: A simple model to account for spatial pattern of land use. Ecol. Appl. 6(3): 865-878.
- Sharpley, A.N., T.C. Daniel, and D.R. Edwards. 1993. Phosphorus movement in the landscape. J. Prod. Agric. 6:492-500.
- U.S. Department of Agriculture (USDA). 1975. Minnesota Field Office Technical Guide. Section III. Natural Resources Conserv. Serv., St. Paul, MN.
- U.S. Department of Agriculture (USDA). 1991. State soil geographic data base (STATSGO): Data users guide. Natural Resources Conserv. Serv. Miscellaneous Publication No. 1492, Natural Resources Conserv. Serv., Fort Worth, TX.
- U.S. Environmental Protection Agency (USEPA). 1994. 1:250,000 Scale quadrangles of landuse/landcover GIRAS spatial data in the conterminous United States [Online]. Available at http://www.epa.gov/ngispgm3/nsdi/projects/giras.htm (verified 16 May 2001).
- U.S. Geological Survey (USGS). 1999. National atlas of the United States: Streams and waterbodies [Online]. Available at http://www-atlas.usgs.gov/hydrom.html (verified 16 May 2001).
- Wischmeier, W.H., and D.D. Smith. 1978. Predicting rainfall erosion losses. USDA-Sci and Educ. Admin. Agric. Handbook No. 537, Washington, DC.

Feedlot Runoff

- Midwest Plan Service. 2000. Manure Characteristics. MWPS-18 Section 1. Iowa State University. 23 pp.
- Minnesota Department of Agriculture. 2003. Feedlot financial needs assessment report for 2004. Minnesota Dept. of Agriculture, St. Paul, MN. Draft December 17, 2003.
- Mulla, D.J., A.S. Birr, G. Randall, J. Moncrief, M. Schmitt, A. Sekely, and E. Kerre. 2001. Technical Work Paper – Impacts of Animal Agriculture on Water Quality. University of Minnesota Dept. of Soil, Water and Climate. Prepared for the Environmental Quality Board and the Citizen Advisory Committee for the Generic Environmental Impact Statement on Animal Agriculture. 171 pp.
- Young, Robert A., Michael A. Otterby, and Amos Roos. 1982. An Evaluation System to Rate Feedlot Pollution Potential. Agricultural Research Service ARM-NC-17. 78 pp.

Atmospheric Deposition

- Axler, R.P., Rose, C. and C.A. Tikkanen. 1994. Phytoplankton nutrient deficiency as related to atmospheric nitrogen deposition in northern Minnesota acid-sensitive lakes. Canadian Journal of Fisheries and Aquatic Science: 51:1281-1296.
- Brook, J.R., Dann, T.F. and R.T. Burnett. 1997. *The relationship among TSP, PM10, PM2.5, and inorganic constituents of atmospheric particulate matter at multiple Canadian locations.* Journal of the Air & Waste Management Association: 47:2-19.
- Brunner, U. and R. Bachofen. 2000. *Phosphorus cycle: Significance of atmospheric inputs*. Scope Newsletter, N°37-06/2000. 2p.
- Dixon, L.K., Heyl, M.G. and S.Murray. 1998. Interpretation of bulk atmospheric deposition and stormwater quality data in the Tampa Bay region. Tampa Bay Regional Planning Council, St. Petersburg, Fl 33702. Tampa Bay Estuary Program Report No. 04-98. Mote Marine Laboratory Technical Report No. 602. 70 p. + appendices.
- Engstrom, D.R. 2003. *Phosphorus in precipitation study, 1999 2001. Unpublished data.* St. Croix Watershed Research Station, Science Museum of Minnesota.
- Likens, G.E., Bormann, F.H., Hedin, L.O., Driscoll, C.T. and J.S. Eaton. 1990. Dry deposition of sulfur: a 23-yr record for the Hubbard Brook Forest Ecosystem. Tellus. 42B: 319-329.
- Lindbergh, S.E., Lovett, G.M., Richter, D.D. and D.W. Johnson. 1986. Atmospheric deposition and canopy interaction of major ions in a forest. Science 231:141-145
- Mau, D.P. and V.G. Christensen. 2001. Reservoir sedimentation studies to determine variability of phosphorus deposition in selected Kansas watersheds. U.S. Geological Survey, Water Resources Investigations Report. 9 p.
- Meyers, T.P. 2003. Personal communication regarding particle size fractions and associated deposition velocities, based on a recent study in Florida. September 15, 2003.
- Miller, S.M., Sweet, C.W., DePinto, J.V. and K.C. Hornbuckle. 2000. Atrazine and nutrients in precipitation: Results from the Lake Michigan Mass Balance Study. Environmental Science and Technology: 34:55-61.
- NOAA-ARL (National Oceanic and Atmospheric Administration, Air Resources Laboratory). 2003. *The atmospheric integrated monitoring network (AIRMon)*. Fact Sheet. 4 p.
- Pratt, G.C., Orr, E.J., Bock, D.C., Strassman, R.L., Fundine, D.W., Twaroski, C.J., Thornton, J.D. and T.P. Meyers. 1996. *Estimation of dry deposition of inorganics using filter pack data and inferred deposition velocity*. Environmental Science and Technology: 30:2168-2177.
- Robertson, D.M. 1996. Sources and transport of phosphorus in the western Lake Michigan drainages. U.S. Geological Survey, Fact Sheet FS-208-96. 4 p.
- Rose, W.J. 1993. Water and phosphorus budgets and trophic state, Balsam Lake, northwestern Wisconsin. U.S. Geological Survey Water-Resources Investigations Report 91-4125. 28 p.
- Swain, E. 2003. Personal communication regarding sample-by-sample regression using total phosphorus from the special phosphorus in precipitation study and NADP calcium.
- Vermont Agency of Natural Resources and New York State Department of Environmental Conservation. 2002. *Lake Champlain phosphorus TMDL*. Vermont Agency of Natural Resources, Dept. of Environmental Conservation, Waterbury VT. September 2002.
- Verry, E.S. and D.R. Timmons. 1977. *Precipitation nutrients in the open and under two forests in Minnesota*. Canadian Journal of Forest Research: 7:112-119.

Wilson, B. 2003. Personal communication on atmospheric deposition estimates used by the Minnesota Pollution Control Agency in previous watershed modeling. Sept. 4, 2003. Northern one-half to one-third of MN: 15 kg/km²·yr⁻¹
Central: 30+ kg/km²·yr⁻¹
Southern part of MN with wind erosion: 30 - 40 kg/km²·yr⁻¹

Deicing Agents

- Alger, R.G., Adams, E.E. and Beckwith, J.P. 1993. Development of Anti-Icing Technology -Chemical Treatment - Controlled Access Highway, Strategic Highway Research Program -National Research Council.
- Barr Engineering Company. 1993. Phosphorus Reduction Study for the Twin Cities Metropolitan Area. Prepared for the Minnesota Pollution Control Agency.
- Biesboer, David and Robert Jacobson. 1993. Screening and Selection of Salt Tolerance in Native Warm Season Grasses. Minnesota Department of Transportation, Report 94-11.
- City of Minneapolis and Minneapolis Park and Recreation Board. 2003. NPDES Stormwater Management Program and Annual Report. Prepared by Minneapolis Public Works Department in compliance with NPDES Permit No. MN0061018
- Duluth Streams.org. 2003. Road Salt: Can we have safe roads and healthy streams? <u>http://www.duluthstreams.org/understanding/impact_salt.html</u>
- Environment Canada and Health Canada. 2001. Priority Substances List Assessment Report Road Salts. Environment Canada and Health Canada, Hull, Québec. <u>http://www.ec.gc.ca/substances/ese/eng/psap/final/roadsalts.cfm</u>
- Fischel, Marion. 2001. Evaluation of Selected Deicers Based on a Review of the Literature. Report No. CDOT-DTD-R-2001-15. Prepared for Colorado Department of Transportation. The SeaCrest Group, Louisville, CO. <u>http://www.dot.state.co.us/Publications/PDFFiles/deicers.pdf</u>
- Goldman, C.R. and Hoffman, R.W. 1975. A study of the influence of highway deicing agents on the aquatic environment in the Lake Tahoe basin and drainages along Interstate 80. Ecological Associates Report, California Department of Transportation. Cited in: Environment Canada and Health Canada, 2001.
- Hanes, R.E., L.W. Zelazny and R.E. Blaser. 1970. Effects of deicing salts on water quality and biota; literature review and recommended research. National Cooperative Highway Research Program, Report 91.
- Levelton Engineering Ltd. 2000. Anti Icers Chemical Analysis and Toxicity Test Results. Prepared for the Insurance Corporation of British Columbia, Kamloops, BC.
- Levelton Engineering Ltd. 1999. Freezgard Zero Chemical and Toxicity Testing. Prepared for the Insurance Corporation of British Columbia, Kamloops, BC.
- Levelton Engineering Ltd. 1998. Liquid Road deicing Environmental Impact. Prepared for the Insurance Corporation of British Columbia, Kamloops, BC.
- Lewis, W.M., Jr. 1999. Studies of environmental effects of magnesium chloride deicer in Colorado. Prepared for the Colorado Department of Transportation, Denver, CO.
- Lord, B.N. 1988. Program to Reduce Deicing Chemical Usage. Design of Urban Runoff Quality Controls.

- Mangold, T. 2000. Road Salt Use for Winter Maintenance: A Review of Impacts, Alternatives, and Recommendations for the St. Paul Campus Stormwater Management Plan. Prepared for NRES5061, St. Paul MN.
- Minnesota Legislative Auditor. 1995. Snow and Ice Control: A Best Practices Review. Report #95-06. Office of the Legislative Auditor, State of Minnesota. St. Paul, MN.
- MnDOT. Undated. How does Mn/DOT set targets for snow & ice removal? <u>http://www.dot.state.mn.us/dashboards/snowandice.html</u>
- MnDOT, 2003a. Sand, Salt and Brine Usage Coverage Rates by Lane Miles Only. Work Management System Report PS1A6.
- MnDOT Office of Maintenance, 2003, Winter Maintenance Material Usage Reports for 2000-2001, 2001-2002, and 2002-2003. Electronic worksheets provided by Steve (Rocky) Haider, Maintenance Business Planning Administrator.
- MnDOT Office of Transportation Data & Analysis. 2002. Statewide Mileage and Lane Miles.

Report 1: By County / Route System and by Route System Only

- Report 2: By Construction District / Metro Division and Route System (Trunk Highways)
- Report 3: —By County/City/Route System —By City only —By Route System Only
- Report 4: By County / Surface Type and by Surface Type only

http://www.dot.state.mn.us/tda/reports/mileage_lanemiles.html

- Oberts, G.L. 1986. Pollutants Associated with Sand and Salt Applied to Roads in Minnesota. Water Resources Bulletin, 22(3):479-483.
- Ohrel, R.L. 2000. Rating deicing agents: salt still stands firm. (Watershed Protection Techniques 1(4):217-220). In: Schueler, T.R. and H.K. Holland. 2000. The Practice of Watershed Protection. The Center for Watershed Protection.
- Pacific Northwest Snowfighters. 2002. Snow and ice control chemical products specifications and testing protocols for the PNS Association of British Columbia, Idaho, Montana, Oregon and Washington. <u>http://www.wsdot.wa.gov/partners/pns/pdf/PNS_SPECS_2002_FINAL.pdf</u>
- Public Sector Consultants. 1993. The Use of Selected Deicing Materials on Michigan Roads: Environmental and Economic Impacts. Prepared for the Michigan Department of Transportation. <u>http://www.michigan.gov/documents/toc-deice_51451_7.pdf</u>
- Ramsey-Washington Metro Watershed District. 1999. RWMWD City Street Management Database Fall 1999. Electronic graphic file document.
- SRF Consulting Group, 1998. Salt Solutions Statewide Salt and Sand Reduction. Prepared for the Minnesota Department of Transportation Evaluation Report MN/RC – 1988-20. St. Paul, MN. Trost, S.E., Heng, F.J., and Cussler, E.L., 1988, Chemistry of Deicing Roads - Penetrating the Ice. Minnesota Department of Transportation UM-TOC-25; MN/RC-88/6.
- Tierney, J. and Silver, C. 2002. Scientific Guidance on Lower-Phosphorus Roadway De-icers. New York State Attorney General's Office, Albany NY.
- Trost, S.E., Heng, F.J., and Cussler, E.L., 1988, Chemistry of Deicing Roads Penetrating the Ice. Minnesota Department of Transportation UM-TOC-25; MN/RC-88/6.
- U.S. Department of Transportation Federal Highway Administration, 1996. Manual of Practice for Effective Anti-icing Program: A Guide for Highway Winter Maintenance Personnel. Electronic

Version of Publication No. FHWA-RD-95-202. http://www.fhwa.dot.gov/reports/mopeap/mop0296a.zip

- U.S. Environmental Protection Agency. 2002. Managing Highway Deicing to Prevent Contamination of Drinking Water. Source Water Protection Practices Bulletin. EPA 816-F-02-019. US EPA Office of Water, Washington, D.C.
- U.S. Environmental Protection Agency. 1999. Storm Water Management Fact Sheet Minimizing Effects from Highway Deicing. EPA 832-F-99-016. US EPA Office of Water, Washington, D.C. http://www.epa.gov/owm/mtb/ice.pdf
- University of New Hampshire, 1996. Manual of practice for Anti-icing of Local Roads. Technology Transfer Center, University of New Hampshire, Durham NH.
- Vasek, R. 2003. Personal communication. October 21, 2003.
- Warrington, P. D., 1998. Roadsalt and Winter Maintenance for British Columbia Municipalities. British Columbia Ministry of Water, Land and Air Protection, Water Quality Section, Vancouver, BC. <u>http://wlapwww.gov.bc.ca/wat/wq/bmps/roadsalt.html#table%202</u>
- Watson, L. 2003. Street management literature review, analysis and BMP recommendations report. Ramsey-Washington Metro Watershed District Report for the Development of a District-wide Street Management for Water Quality Program Plan.
- Weber, A. 2003. Personal communication. October 2003.

Streambank Erosion

- Bauer, D.W. 1998. *Streambank erosion and slumping along the Blue Earth River*. M.S. Thesis. University of Minnesota. St. Paul, MN.
- Colby, B.R. 1964. *Discharge of sands and mean-velocity relationships in sand-bed streams*. U.S. Geological Survey Professional Paper 462-A.
- Environmental Quality Board (EQB). 2002. FINAL Animal Agriculture Generic Environmental Impact Statement (GEIS). Minnesota Planning Agency.
- Federal Emergency Management Agency (FEMA). 1999. *Riverine Erosion Hazard Areas— Mapping Feasibility Study*. Technical Services Division. Hazards Study Branch.
- Federal Interagency Stream Restoration Working Group (FISRWG). 2001. Stream Corridor Restoration: Principles, Processes, and Practices. GPO Item No. 0120-A; SuDocs No. A 57.6/2:EN3/PT.653.
- Glysson, G.D. 1987. *Sediment-Transport Curves*. Technical Services Division. Hazards Study Branch. U.S. Geological Survey. Open-File Report 87-218. Reston, Virginia.
- Lane, E.W. 1955. *The importance of fluvial morphology in hydraulic engineering*. ASCE Proceedings. 81(745):1-17.
- Luttenegger, A.J. 1987. In Situ Shear Strength of Friable Loess. *In:* Loess and Environment. M. Pesci (Editor). Catena Supplement 9:27-34.
- Magner, J., Feist, M. and S. Niemela. 2003. *The USDA clean sediment TMDL procedure applied in southern Minnesota*. 2003 Proceedings of AWRA Agricultural Hydrology and Water Quality.

Mulla, D.J. 2003. Personal Communication.

- Natural Resources Conservation Service. 1996. Erosion Sedimentation Sediment Yield Report, Thief and Red Lake Rivers Basin, Minnesota.
- Natural Resources Conservation Service and U.S. Forest Service. 1998a. *Erosion and Sedimentation in the Nemadji River Basin*. Nemadji River Basin Project.
- Natural Resources Conservation Service and U.S. Forest Service. 1998b. Bear Creek Watershed, Watershed Plan and Environmental Assessment. Public Law 83-566.
- Natural Resources Conservation Service, U.S. Forest Service and Minnesota Pollution Control Agency. 1996. *Watershed Plan and Environmental Assessment*. Whitewater River Watershed Project.
- Odgaard, A.J. 1984. *Bank Erosion Contribution to Stream Sediment Load*. Iowa Institute of Hydraulic Research. The University of Iowa. IIHR Report No. 280.
- Riedel, M.S., Verry, E.S. and K.N. Brooks. 2002. Land use impacts on fluvial processes in the Nemadji River watershed. Hydrological Science and Technology. 18(1-4):197-205.
- Sekely, A.C., Mulla, D.J. and D.W. Bauer. 2002. Streambank slumping and its contribution to the phosphorus and suspended sediment loads of the Blue Earth River, Minnesota. Journal of Soil and Water Conservation. 57(5):243-250.
- Simon, A. 1989a. *The discharge of sediment in channelized alluvial streams*. Water Resources Bulletin. 25(6): 1177-1188.
- Simon, A. 1994. Gradation Processes and Channel Evolution in Modified West Tennessee Streams: Process, Response, and Form. U.S. Geological Survey Professional Paper 1470.
- Simon, A., Dickerson, W., and A. Heins. 2003. Suspended-sediment transport rates at the 1.5-year recurrence interval for ecoregions of the United States: transport conditions at the bankfull and effective discharge? Geomorphology: Article in Press.
- Simon, A., and C.R. Hupp. 1986. Channel evolution in modified Tennessee channels. Fourth Federal Interagency Sedimentation Conference. Las Vegas, Nevada. March 24-27, 1986. Vol.2, pp. 5-71 to 5-82.
- Simon, A., R. Kuhnle, S. Knight, and W. Dickerson. 2001. "Reference" and enhanced rates of suspended-sediment transport for use in developing clean-sediment TMDL's: Examples from Mississippi and the Southeastern United States. USDA-Agricultural Research Service, National Sedimentation Laboratory.
- Simon, A., and M. Rinaldi. 2000. *Channel instability in the loess area of the Midwestern U.S.* Journal of the American Water Resources Association. 36(1): 133-150.
- Syvitski, J.P., Morehead, M.D., Bahr, D.B. and T. Mulder. 2000. *Estimating fluvial sediment transport: The rating parameters*. Water Resources Research. 36(9):2747-2760.
- Tetra Tech, Inc. 2002. *Minnesota River Basin Model: Model Calibration and Validation Report* (*Revised Draft*). Prepared for the Minnesota Pollution Control Agency.
- Thoma, D.P. 2003. *Management impacts and remote sensing applications for water quality assessment*. PhD Thesis. University of Minnesota, Minneapolis, Minnesota.
- Tornes, L.H. 1986. *Suspended sediment in Minnesota streams*. U.S. Geological Survey. Water-Resources Investigations Report 85-4312. St. Paul, MN.
- Turcios, L.M. and J.R. Gray. 2001. U.S.Geological Survey sediment and ancillary data on the world wide web. Seventh Federal Interagency Sedimentation Conference. Reno, NV.

Wolman, M.G. and J.P. Miller. 1960. *Magnitude and frequency of forces in geomorphic processes*. Journal of Geology. 68(1):54-74.

ISTS/Unsewered Communities

- Barr Engineering Company (Barr). 2003. Detailed Assessment of Phosphorus Sources to Minnesota Watersheds—Point Sources Technical Memorandum. Prepared for Minnesota Pollution Control Agency.
- ENSR. 2003. Inputs of phosphorus to aquatic systems from machine dishwashing detergents: an analysis of measured and potential loading. Prepared for the Soap and Detergent Association.
- Kellogg, D.Q., L. Joubert, and A. Gold. 1995. MANAGE: a Method for Assessment, Nutrientloading, and Geographic Evaluation of nonpoint pollution. Draft Nutrient Loading Component. University of Rhode Island, Kingston, RI.
- Metropolitan Council, 1997. Boundaries of the sewersheds for the Twin Cities metropolitan area. Downloaded from http://www.datafinder.org/
- Minnesota Department of Transportation, Basemap. Civil Townships, Municipalities. Downloaded from http://www.dot.state.mn.us/tda/basemap/index.html
- MPCA. 1994. *Minnesota River Assessment Project (MRAP) Report.* Report to the Legislative Commission on Minnesota Resources.
- MPCA. 2002a. Regional Total Maximum Daily Load Evaluation of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin in Minnesota.
- MPCA. 2002b. Spreadsheet showing 2002 reported values for ISTS for all LUGs which have an ISTS ordinance.
- MPCA. 2003a. Spreadsheet listing unsewered communities in Minnesota.
- MPCA. 2003b. Implementation Plan. Regional Total Maximum Daily Load Study of Fecal Coliform Bacteria Impairments in the Lower Mississippi River Basin of Southeast Minnesota.
- Reckhow, K.H. and J.T. Simpson. 1980. A procedure using modeling and error analysis for the prediction of lake phosphorus concentration from land use information. Can.J.Fish.Aq.Sci. 37(9): 1439-1448.
- Tetra Tech, Inc. 2002. *Minnesota River Basin Model, Model Calibration and Validation Report*. Prepared for Minnesota Pollution Control Agency.
- Unites States Census Bureau. 1990. Census of Population and Housing.
- Unites States Census Bureau. 2000. Census of Population and Housing.
- United States Environmental Protection Agency (EPA). 2002. Oniste Wastewater Treatment Systems Manual. Office of Water, Office of Research and Development. EPA/625/R-00/008.
- Viraraghavan, T. and R.G. Warnock. 1975. *Treatment efficiency of a septic tile system*. In Proc. National Home Sewage Disposal Symposium, ASAE., St. Joseph, MI. pp. 48-57.

Non-Agricultural Rural Runoff

- Almendinger, J.E., Schottler, S.P. and Thommes, K.E. 1999. Monitoring and modeling Valley Creek Watershed: 3. Surface-water hydrology. Final project Report to the Legislative Commission on Minnesota Reosurces. St. Croix Watershed Research Station, Science Museum of Minnesota.
- Bailey, R.G. 1980. Description of ecoregions of the United States. U.S. Department of Agriculture, Miscellaneous Publication No. 1391.
- Bannerman, R.T. 2003. Personal communications, October 7, 2003.
- Barr Engineering Company. 2003a. Draft Detailed Assessment of Phosphorus Sources to Minnesota Watersheds – Urban Runoff. Prepared for the Minnesota Pollution Control Agency.
- Barr Engineering Company. 2003b. Draft Basin Hydrology Technical Memorandum. Prepared for the Minnesota Pollution Control Agency
- Beaulac, M. N., and Reckhow, K. H. 1982. An examination of land use-nutrient export relationships. Water Resour. Bull. 18(6):1013-24.
- Binkley, D. 2001. Patterns and processes of variation in nitrogen and phosphorus concentrations in forested streams. National Council for Air and Stream Improvement, Technical Bulletin #836. Research Triangle Park, NC.
- Birr, A.S. and Mulla, D.J. 2001. Evaluation of the phosphorus index in watersheds at the regional scale. J. Environ. Qual. 30:2018-2025.
- Boelter, D.H. and Verry, E.S. 1977. Peatland and water in the northern Lake States. General Technical Report NC-31, US Department of Agriculture Forest Service, St. Paul, MN.
- Borkholder, B.D., A.J. Edwards, and D.J. Vogt. 1999. Biological, physical, and chemical characteristics of the Cloquet River from the Island Lake Dam to the St. Louis River, 1996 1998. Fond du Lac Reservation Resource Management Technical Report, No. 26. Cloquet, MN.
- Bourne, A., N. Armstrong, and G. Jones. 2002. A preliminary estimate of total nitrogen and total phosphorus loading to streams in Manitoba, Canada. Water Quality Management Section. Manitoba Conservation Report No. 2002 04.
- Brooks, K.N., Ffolliott, P.F., Gregersen, H.M. and DeBano. L.F. 2003. *Hydrology and the Management of Watersheds, Third Edition*. Iowa Sate Press, Ames. IA.
- Bundy, L.G. 1998. A Phosphorus Budget for Wisconsin Cropland. A report submitted to The Wisconsin Department of Natural Resources & the Wisconsin Department of Agriculture, Trade & Consumer Protection. Prepared by the Department of Soil Science, University of Wisconsin. <u>http://ipcm.wisc.edu/pubs/pdf/pbudget.pdf</u>
- Brye, K.R., Norman, J.M., and Gower, S.T. 2002. The fate of nutrients following three- and six-year burn intervals in a tallgrass prairie restoration in Wisconsin. Am. Midl. Nat. 148:28-42.
- Brye, K.R., Andraski, T.W., Jarrell, W.M., Bundy, L.G. and Norman, J.M. 2002. Phosphorus leaching from a restored tallgrass prairie and corn agroecosystems. J. Environ. Qual. 31 :769-781
- Brye, K.R., Norman, J.M., Bundy, L.G. and Gower, S.T. 2000. Water-budget evaluation of prairie and maize ecosystems. Soil. Sci. Soc. Am. J. 64:715-724.
- Burke, I. C., Schimel, D. S., Yonker, C. M., Parton, W. J., Joyce, L. A. and Lauenroth, W.K. 1990. Regional modeling of grassland biogeochemistry using GIS. Landscape Ecology 4:45-54.

- Cammermeyer. J., Conrecode, P., Hansen, J., Kwan, P. and Maupin, M., 1999. Phosphorus Flux Spatial Model Group. Student Paper - Urbanization, Water Resources & Lake Water Quality in the Seattle area. University of Washington CEWA 599/ZOO 572. http://courses.washington.edu/cewa599c/paper2.html
- Chambers, P. A and A. R. Dale. 1997. Contribution of industrial, municipal, agricultural and groundwater sources to nutrient export, Athabasca, Wapiti and Smoky rivers, 1980 to 1993. Northern River Basins Study, Edmonton AB.
- Clark, G. M., Mueller, D. K. and Mast, M.A. 2000. Nutrient concentrations and yields in undeveloped stream basins of the United States. Journal of the American Water Resources Association 36(4):849-860. <u>http://water.usgs.gov/nawqa/nutrients/pubs/awra_v36_no4/report.pdf</u>
- Cleseri N. L., S. J. Curran, and R. I. Sedlak 1986a. Nutrient loads to Wisconsin lakes: Part I. Nitrogen and P-export coefficients. Water Resour. Bull. 22(6):983-990.
- Cleseri N. L., S. J. Curran, and R. I. Sedlak 1986b. Nutrient loads to Wisconsin lakes: Part II. Relative importance of nutrient sources. Water Resour. Bull. 22(6):991-1000.
- Cole, J.T., Baird, J.H., Basta, N.T., Huhnke, R.L., Strom, D.E., Johnson, G.V., Payton, M.D., Smolen, M.D., Martin, D.L., and Cole, J.C. 1997. Influence of buffers on pesticide and nutrient runoff from Bermudagrass turf. J. Environ. Qual. 26:1589-1598.
- Correll, D. L., Jordan, T.E. and Weller, D.E. 1999. Transport of nitrogen and phosphorus from Rhode River watersheds during storm events. Wat. Res. Research 35(8):2513–2521.
- Corsi, S.R., Graczyk, D.J., Owens, D.W. and Bannerman, R.T. 1997. Unit-area loads of suspended sediment, suspended solids, and total phosphorus from small watersheds in Wisconsin. USGS Fact Sheet FS-195-97.
- Devito, K.J., I.F. Creed. R.L. Rothwell and E.E. Prepas. 2000. Landscape controls on phosphorus loading to boreal lakes: implications for future impacts of forest harvesting. Canadian Journal of Fisheries and Aquatic Sciences 57(10):1977-1984.
- Dodds, W.K., Blair, J.M., Henebry, G.M., Koelliker, J.K., Ramundo, R., Tate, C.M. 1996. Nitrogen transport from tallgrass prairie watersheds. Journal of Environmental Quality 25:973-981.
- Dunne, T., J. Agee, S. Beissinger, W. Dietrich, D. Gray, M. Power, V. Resh, and D. Rodrigues. 2001. A scientific basis for the prediction of cumulative watershed effects. University of California, Wildland Resources Center, Berkeley, CA.
- Fallon, J.D. and McNellis, R.P. 2000. Nutrients and suspended sediment in snowmelt runoff from part of the Upper Mississippi River Basin, Minnesota and Wisconsin, 1997. USGS Water Resource Investigation Report 00-4165. Mounds View, MN.
- Fisher, T.R., Lee, K.Y., Berndt, H., Benitez, J.A. and Norton, M.M., 1998. Hydrology and chemistry of the Choptank river basin. Water Air and Soil Pollution 105: 387–397.
- Frink, C.R. 1991. Estimating nutrient exports to estuaries. Journal of Environmental Quality 20:717-724.
- Heiskary, S.A., Wilson, C.B. and Larsen, D.P. 1987. Analysis of regional patterns in lake water quality: Using ecoregions for lake management in Minnesota. Lake and Reservoir Management 3:337-344.
- Hernandez, M., W.G. Kepner, D.J. Semmens, D.W. Ebert, D.C. Goodrich and S.N. Miller. 2003. Integrating a landscape/hydrologic analysis for watershed assessment. The First Interagency conference on Research in the Watersheds. October 2003, Benson, AZ.

- Hewlett, J.D. and J.D. Helvey. 1975. Effects of forest clear-felling on the storm hydrograph. Water Resources Research 6(3):768-782.
- Holechek, J.L., R.D. Piper and C.H. Herbal. 1995. Range management: principles and practices. 2nd edition. Prentice Hall, Englewood Cliffs, New Jersey.
- Johnes, P.J. 1996. Evaluation and management of the impact of land use change on the nitrogen and phosphorus load delivered to surface waters: the export coefficient modeling approach. Journal of Hydrology 183:323-349.
- Johnson, L.B. and Gage, S.H., 1997. Landscape approaches to the analysis of aquatic ecosystems. Freshwater Biology 37:113-132. <u>http://colargol.ibg.uit.no/biologi/botanikk/lennart/GIS-kurs/pdf/Artkl9.pdf</u>
- Johnson, L.B., Richards, C., Host, G. and Arthur, J.W., 1997. Landscape influences on water chemistry in Midwestern stream ecosystems. Freshwater Biology 37:193-208. <u>http://landscape.forest.wisc.edu/courses/readings/Johnson_etal1997.pdf</u>
- Jones, K.B., Neale, A.C., Nash, M.S., van Remortel, R.D., Wickham, J.D., Riitters, K.H. and O'Neill, R.V. 2001. Predicting nutrient and sediment loadings to streams from landscape metrics: A multiple watershed study from the United States Mid-Atlantic Region. Landscape Ecology 16: 301-312.
- Knighton, M.D and Steigler, J.H. 1980. Phosphorus releases following clearcutting of a black spruce fen and a black spruce bog. In: 6th International Peat Congress. 577-583.
- Lassevils, J.F. and Berrux, D. 2000. Sources of phosphorus to surface waters: comparing calculated with measured P loadings for three French Rivers. Prepared for CEEP by Geoplus Consultants, Drome, France.
- Leach, M.K. and Givnish, T.J. 1999. Gradients in the composition, structure, and diversity of remnant oak savannas in southern Wisconsin. Ecological Monographs 69(3):353-374.
- Leete, J.H. (1986). Sediment and phosphorus load to streamflow from natural and disturbed watersheds in northeastern Minnesota. Ph.D. Thesis, University of Minnesota, Minneapolis, MN.
- Martin, C.W. J.W. Hornbeck, G.E. Likens and D.C. Buso. 2000. Impacts of intensive harvesting on hydrology and nutrient dynamics of northern hardwood forests. Canadian Journal of Fisheries and Aquatic Sciences 57(S2):19-29.
- Mattson, M.D. and R.A. Isaac. 1999. Calibration of phosphorus export coefficients for total maximum daily loads of Massachusetts lakes. Journal of Lake and Reservoir Management 15(3):209-219.
- McCollor, S. and Heiskary, S. 1993. Selected water quality characteristics of minimally impacted streams from Minnesota's seven ecoregions. Minnesota Pollution control Agency, Water Quality Division, St. Paul, MN.
- McDowell, R., Sharpley, A., and Folmar, G., 2001. Phosphorus export from an agricultural watershed: Linking source and transport mechanisms, J. Environ. Qual. 30:1587-1595. <u>http://jeq.scijournals.org/cgi/reprint/30/5/1587.pdf</u>
- McFarland, A.M.S. and L.M. Hauck. 2001. Determining nutrient export coefficients and source loading uncertainty using in-stream monitoring data. Journal of the American Water Resources Association. 37:223-236.
- McFarland, A.M.S. and L.M. Hauck. 1998. Determining nutrient contribution by land use for the Upper North Bosque River Watershed. Texas Institute foe Applied Environmental Research, Stephenville, TX.

- McMahon, G., Gregonis, S.M., Waltman, S.W., Omernik, J.M., Thorson, T.D., Freeouf, J.A., Rorick, A.H., and Keys, J.E. 2001. Developing a spatial framework of common ecological regions for the conterminous United States. Environmental Management. 28:3, 293-316.
- Meeuwig, J.J. and R.H. Peters Circumventing phosphorus in lake management: a comparison of chlorophyll *a* predictions from land-use and phosphorus-loading models. Canadian Journal of Fisheries and Aquatic Sciences (53):1795-1806
- Menzel, R.G., Rhoades, E.D., Olness, A.E. and Smith, S.J. 1978. Variability of annual nutrient and sediment discharges in runoff from Oklahoma cropland and rangeland. J. Environ. Qual. 7:401-406.
- Metcalfe, R.A. and Butle, J.M. 1999. Semi-disturbed water balance dynamics in a small boreal forest basin. Journal of Hydrology 226:66-87.
- Metropolitan Council Environmental Services. 2003. Metropolitan Council Environmental Services 2001 Stream Monitoring Report. Metropolitan Council Environmental Services, Environmental Quality Assurance Department, St. Paul MN.
- Meyer, J.L. and G.E. Likens. 1979. Transport and transformation of phosphorus in a forest stream ecosystem. Ecology 60(6):1255-1269.
- Minnesota Department of Natural Resources. 1993. Minnesota's Native Vegetation: A Key to Natural Communities (Version 1.5). MN DNR, Natural Heritage Program. St. Paul, MN. <u>http://files.dnr.state.mn.us/ecological_services/nhnrp/nckey.pdf</u>
- Minnesota Pollution Control Agency. 2003. Comparison of typical Minnesota water quality conditions. Water Quality/Surface Water #1.02, July 2003. Minnesota Pollution Control Agency, St. Paul, MN. <u>http://www.pca.state.mn.us/publications/wq-s1-02.pdf</u>
- Minnesota Pollution Control Agency. 2003a. An assessment of representative Lake Superior basin tributaries 2002. Minnesota Pollution Control Agency, St. Paul, MN
- Naiman, R.J. and Descamps, H. 1997. The ecology of interfaces: Riparian zones. Annual Review of ecology and Systematics 28:621-658.
- National Council for Air and Stream Improvement, Inc. (NCASI). 1994. Forests as non-point sources of pollution and effectiveness of best management practices. Technical Bulletin No. 672. Research Triangle Park, NC: National Council for Air and Stream Improvement, Inc. http://www.ncasi.org/forestry/research/watershed/tb672.pdf
- Novotny, V. and G. Chesters. 1989. Delivery of sediment and pollutants from nonpoint sources: A water quality perspective. Journal of Soil and Water Conservation 44:568-576.
- Olness A., Rhodes, E.D., Smith S.J. and Menzel, R.G. 1980. Fertilizer nutrient losses from rangeland watersheds in central Oklahoma. J. Environ. Quality 9(1):81-85.
- Omernik, J. M. 1977. The influence of land use on stream nutrient levels. United States Environmental Protection Agency, Ecol. Res. Series. EPA-600/3-7-104.
- Omernik, J. M. 1977. Nonpoint source-stream nutrient level relationships: a nationwide study. U.S. United States Environmental Protection Agency, Ecol. Res. Series. EPA-600/3-77-105.
- Omernik, J. M. 1987. Ecoregions of the conterminous United States. Annals of the Association of American Geographers 77:118-125.
- Omernik, J. M. 1995. Ecoregions: A spatial framework for environmental management. In: Davis, W.S. and Simon, T.P. 1995. Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making. CRC Press, Inc. Boca Raton, Florida.

- Omernik, J.M., 2000, Draft aggregations of Level III eco-regions for the National Nutrient Strategy. National Health and Environmental Effects Research Laboratory, U.S. Environmental Protection Agency. <u>http://www.epa.gov/ost/standards/ecomap.html</u>.
- Omernik, J.M. and Bailey, R.G. 1997. Distinguishing between watersheds and ecoregions. Journal of the American Water Resources Association. 33:5. pp. 935-949.
- Omernik, J.M. and A.L. Gallant. 1988. Ecoregions of the upper Midwest States. USEPA, ERL, Corvallis, OR. EPA/ 600/3-88/037
- Osborne, L.L. and Kovacic, D.D. 1993. Riparian vegetated buffer strips in water-quality restoration and stream management. Freshwater Biology 29:243-258.
- Panuska, John C. and Richard A. Lillie. 1995. Phosphorus loadings from Wisconsin watersheds: Recommended phosphorus export coefficients for agricultural and forested watersheds. Research Management Findings, Number 38. Wisconsin Department of Natural Resources.
- Perkins, W. W., Welch, E. B., Frodge, J. and Hubbard, T. 1997. A zero degree of freedom total phosphorus model; 2. Application to Lake Sammamish, Washington. Lake and Reservoir Management Volume 13(2):131-141.
- Peterjohn, W.T. and D.L. Correll. 1984. Nutrient dynamics in an agricultural watershed: observations on the role of a riparian forest. Ecology 65(5):1466-1475.
- Reckhow, K.H., M.N. Beaulac, and J.T. Simpson. 1980. Modeling phosphorus loading and lake response under uncertainty: A manual and compilation of export coefficients. U.S. Environmental Protection Agency, Washington, D.C. EPA 440/5-80-011.
- Richards, C., Johnson, L.B. and Host, G.E. 1996. Landscape-scale influences on stream habitats and biota. Canadian Journal of Fish. Aqaut. Sci. 53(Suppl. 1):295-311.
- Richards, C., White, M., Axler, R., Hershey, A. and Schomberg, J. 2001. Simulating effects of landscape composition and structure on stream water quality in forested watersheds. Verh. Internat. Limnol. 27:3561-3565.
- Roberson, T., L.G. Bundy, and T. W. Andraski, 2003. Phosphorus runoff losses from alfalfa. 2003 Wisconsin Fertilizer, Aglime, and Pest Management Conference. <u>http://www.soils.wisc.edu/extension/FAPM/2003proceedings/Bundy-2.pdf</u>
- Robertson, D. M. and E. D. Roerish, Influence of various water quality sampling strategies on load estimates for small streams, Water Resour. Res., 35(12), 3747-3759, 1999.
- Robertson, D. M. and Richards, K. D., 2000. Influence of different temporal sampling strategies on estimating loads and maximum concentrations in small streams. Conference Proceedings NWQMC National Monitoring Conference. http://www.nwqmc.org/2000proceeding/papers/pap_porterfield.pdf
- Roth, N.E., Allan, J.D. and Erickson, D.L. 1996. Landscape influences on stream biotic integrity assessed at multiple spatial scales. Landscape Ecology 11(3):141-156.
- Sartz, R.S. 1969. Effects of watershed cover on overland flow from a major storm in southwestern Wisconsin. Research Note NC-82, US Department of Agriculture Forest Service, St. Paul, MN.
- Sartz, R.S. 1971. Storm flow form dual-use watersheds in south-western Wisconsin. Research Paper NC-69, US Department of Agriculture – Forest Service, St. Paul, MN. <u>http://www.ncrs.fs.fed.us/pubs/rp/rp_nc069.pdf</u>
- Sartz, R.S., Curtis, W.R. and Tolsted, D.N. 1977. Hydrology of small watersheds in Wisconsin's Driftless Area. Water Resourc. Res. 13(3):524-530.

- Sartz, R.S. and Tolsted, D.N. 1976. Snowmelt runoff from planted conifers in southwestern Wisconsin. Research Note NC-205, US Department of Agriculture – Forest Service, St. Paul, MN.
- Schmitt, T.J., Dosskey, M.G. and Hoaglund, K.D. 1999. Filter Strip performance and processes for different vegetation, widths, and contaminants. J. Environ. Quality 28:1479-1489.
- Scott, C.A., Walter, M.F., Nagle, G.N., Walter, M.T., Sierra, N.V. and Brooks, E.S. 2001. Residual phosphorus in runoff from successional forest on abandoned agricultural land: 1. Biogeochemical and hydrologic process. Biogeochemistry 55:293-309.
- Sharpley, A.N., T.C. Daniel, and D.R. Edwards. 1993. Phosphorus movement in the landscape. J. Prod. Agric.6:492-500.
- Seltzer, N. and D. Wang. 2000. The importance of hydric soils and near-lake areas as phosphorus source areas in the Lake Champlain Basin: Evidence from a landscape-scale model. University of Vermont, School of Natural Reosurces.
- Shjeflo, J.B. 1968. Evapotranspiration and the water budget of prairie potholes in North Dakota. Geological Survey Professional Paper 585-B.
- Singer, M.J., and R.H. Rust. 1975. Phosphorus in surface runoff from a deciduous forest. J. Environ. Qual. 4:307-311.
- Soil Conservation Service, 1986. Urban Hydrology for Small Watersheds. Technical Release 55. US Department of Agriculture, Soil Conservation Service Engineering Division.
- Soranno, P.A., S.L. Hubler, S.R. Carpenter, and R.C. Lathrop. 1996. Phosphorus loads to surface waters: a simple model to account for spatial pattern. Ecological Applications 6(3):865-878.
- St. Onge, P.D., J. Klaff, R. Carignan and R.H. Peters. (in press). The forest is more than trees: The effect of clear cutting on whole-lake hypolimnetic oxygen deficits in remote Canadian Shield lakes. Canadian Journal of Fisheries and Aquatic Sciences. Manuscript submission.
- Stark, J.R., P.E. Hanson, R.M. Goldstein, J.D. Fallon, A.L. Fong, K.E. Lee, S.E. Kroening, and W.J. Andrews. 1999. Water quality in the Upper Mississippi River Basin, Minnesota, Wisconsin, South Dakota, Iowa, and North Dakota, 1995–98. USGS Water Resources Circular 1211. <u>http://water.usgs.gov/pubs/circ/circ1211/pdf/circular1211.pdf</u>
- Steegen, A., Govers, G., Takken, I. Nachtergaele, J., Poesen, J. and Merckx, R. 2001. Factors controlling sediment and phosphorus export from two Belgian agricultural catchments. J. Environ. Qual. 30:1249-1258.
- Tester, J.R. 1995. Minnesota's Natural Heritage. University of Minnesota Press, Minneapolis, MN.
- Timmons, D.R., and Holt, R.F. 1977. Nutrient losses in surface runoff from a native prairie. Journal of Environmental Quality 4(6): 369-73.
- Tornes, L.H., Brigham, M.E. and Lorenz, D.L. 1997. Nutrients, suspended sediment, and pesticides in streams of the Red River of the North Basin, Minnesota, North Dakota, and South Dakota, 1993-1995. U.S. Geological Survey Water-Resources Investigations Report 97-4053. Mounds View, MN.
- Tufford, D.L., H.N. McKellar, Jr., and J.R. Hussey. 1998. In-stream nonpoint source nutrient prediction with land-use proximity and seasonality. Journal of Environmental Quality 27:100-111.

- US Army Corps of Engineers. 2001. The WES handbook on water quality enhancement techniques for reservoirs and tailwaters. US Army Engineer Research and Development Center, Waterways Experiment Station Vicksburg, MS.
- US EPA. 2000a. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VI Corn Belt and Northern Great Plains. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-008.
- US EPA. 2000b. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VII - Mostly Glaciated Dairy Region. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-009.
- US EPA. 2000c. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VIII Nutrient Poor Largely Glaciated Upper Midwest and Northeast. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-010.
- U.S. EPA. 2000d. Nutrient Criteria Technical Guidance Manual: Lakes and Reservoirs, U.S. Environmental Protection Agency, Washington, DC. EPA-822-B00-001.
- U.S. EPA. 2000e. Nutrient Criteria Technical Guidance Manual: Rivers and Streams, U.S. Environmental Protection Agency, Washington, DC. EPA-822-B00-002.
- Vaithiyanathan, P., and D.L. Correll. 1992. The Rhode River Watershed: Phosphorus distribution and export in forest and agricultural soils. J. Environ. Qual. 21:280-288.
- Valley Branch Watershed District. 2002. Valley Creek Subwatershed Plan. Developed by the Valley Branch Subwatershed Advisory Committee.
- Verry, E.S. 1976. Estimating water yield difference between hardwood and pine forests: an application of net precipitation data. Research Paper NC-128, US Department of Agriculture – Forest Service, St. Paul, MN.
- Verry, E.S. 1969. Water storage and related physical characteristics of four mineral soils in north central Minnesota. Research Note NC-78, US Department of Agriculture – Forest Service, St. Paul, MN.
- Vogelmann, J.E., S.M. Howard, L. Yang, C.R. Larson, B.K. Wylie, N. Van Driel, 2001. Completion of the 1990s National Land Cover Data Set for the Conterminous United States from Landsat Thematic Mapper Data and Ancillary Data Sources. Photogrammetric Engineering and Remote Sensing, 67:650-652. <u>http://landcover.usgs.gov/nationallandcover.asp</u>
- Wickham, James D.; Wade, Timothy G.; Riitters, Kurt H.; O'Neill, R.V.; Smith, Jonathan H.; Smith, Elizabeth R.; Jones, K.B.; Neale, A.C, 2003. Upstream-to-downstream changes in nutrient export risk. Landscape Ecology 18:195-208. <u>http://www.srs.fs.usda.gov/pubs/ja/ja_wickham003.pdf</u>
- Wilson, C.B. 2003. Personal communications, various dates October 2003. Minnesota Pollution Control Agency.
- Wilson, C.B. and Walker, Jr., W.W. 1989. Development of lake assessment methods based upon the aquatic ecoregion concept. Lake and Reservoir Management 5(2):11-22.
- Winter, T.C., and Carr, M.R., 1980, Hydrologic setting of wetlands in the Cottonwood Lake area, Stutsman County, North Dakota: U.S. Geological Survey Water-Resources Investigations 80-99
- Winter, T.C., Rosenberry, D.O., Buso, D.C. and. Merk, D.A. 2001. Water source to four U.S. wetlands: Implications for wetland management. Wetlands 21(4):462-473.

- Winter, T.C. and Rosenberry, D.O. 1995. The interaction of ground water with prairie pothole wetlands in the Cottonwood Lake area, east-central North Dakota. Wetlands 15(3):193-211.
- Winter, T.C. and Rosenberry, D.O. 1998. Hydrology of prairie pothole wetlands during drought and deluge: a 17-year study of the Cottonwood Lake wetland complex in North Dakota in the perspective of longer term measured and proxy hydrologic records. Climatic Change 40:189-209.
- Wotzka, P.J. 2003. Personal communications, various dates October 2003. Minnesota Department of Agriculture.
- Worrall, F. and T.P. Burt. 1999. The impact of land-use change on water quality at the catchment scale: the use of export coefficient and structural models. *Journal of Hydrology*. 221(1): 5-90.
- York M. T. Auer, S. M. Doeer, S. W. Effler and E. M. Owens, 1997. A zero degree of freedom total phosphorus model; 1. Development for Onondaga Lake, New York. Lake and Reservoir Management Volume 13(2):118-130.
- Zapp, M.J. and Almendinger, J.E. 2001. Nutrient dynamics and water quality of Valley Creek, a high-quality trout stream in southeastern Washington County. Final Project Report to the Valley Branch Watershed District.
- Zielinski, J. 2002. Watershed Vulnerability Analysis. Center for Watershed Protection, Ellicott City, MD.

Urban Runoff

- Bannerman, R.T., A.D. Legg, and S.R. Greb, 1996. Quality of Wisconsin Stormwater, 1991-94. Open-File Report 96-458. US Geological Survey, Madison, WI.
- Bannerman, R.T., K. Baun, and M. Bohn, 1983. Evaluation of urban nonpoint source pollution management in Milwaukee County, Wisconsin. Prepared for US EPA Region V by the Wisconsin Department of Natural Resources, Madison, WI.
- Bannerman, R.T., R. Dodds, D. Owens, and P. Hughes, 1992. Sources of pollutants in Wisconsin stormwater. Wisconsin Department of Natural Resources, Madison, WI.
- Barr Engineering Company. 1992. Minneapolis Chain of Lakes Clean Water Partnership Project -Stormwater Monitoring Study. Prepared for the Minneapolis Park and Recreation Board.
- Barr Engineering Company. 2003a. Detailed Assessment of Phosphorus Sources to Minnesota Watersheds Non-Agricultural Rural Runoff. Prepared for the Minnesota Pollution Control Agency.
- Barr Engineering Company. 2003b. Basin Hydrology Technical Memorandum. Prepared for the Minnesota Pollution Control Agency
- Barr Engineering Company. 2003d. Water quality and sediment composition study of the Lake Madison Watershed and Bourne Slough. Prepared for the Lake County Watershed Improvement Project, Madison, SD.
- Barr Engineering Company. 2003e. Tanners Lake CIP Performance Evaluation. Prepared for Ramsey-Washington Metro Watershed District.

- Barr Engineering Company. 1993. Diagnostic/feasibility study of water quality problems and restorative measures for Tanner's Lake. Prepared for the Ramsey Washington Metro Watershed District.
- Barten, J. 1995. Quantity and quality of runoff from four golf courses in the twin cities metropolitan area. Suburban Hennepin Regional Park District. Report to the Legislative Commission on Minnesota Resources.
- Barten, J., 1994. Fish Lake Pond monitoring results. Report prepared for the Elm Creek Watershed Management Commission. Hennepin Parks, Maple Plain, MN.
- Barth, C.A., 1995. Nutrient movement from the lawn to the stream. Watershed Protection Techniques 2(1):239-246
- Barth, C.A., 1995a. The peculiarities of perviousness. Watershed Protection Techniques 2(1):233-238.
- Beaulac, M. N., and Reckhow, K. H. 1982. An examination of land use-nutrient export relationships. Water Resour. Bull. 18(6):1013-24.
- Booth, D. B. 2000. Forest cover, impervious surface are, and the mitigation of urbanization impacts in King County, Washington. Center for Urban Water Resources Management, University of Washington, Seattle, WA.
- Brach, J., 1989. Protecting Water Quality in Urban Areas. Report prepared for the Minnesota Pollution Control Agency.
- Brezonik, P.L., R.A. Osgood, L. Olmanson, E. Day, L. Hatch, J. Doyle, J.A. Perry, M. Bauer, E. MacBeth, and T. Anderle. 2002. Cumulative Impacts of Development on Lakes in the North Central Hardwood Forest Ecoregion of Minnesota: An Exploratory Study. University of Minnesota, Water Resources Center Technical Report 144.
- Brooks, K.N., Ffolliott, P.F., Gregersen, H.M. and DeBano. L.F. 2003. Hydrology and the Management of Watersheds, Third Edition. Iowa Sate Press, Ames. IA.
- Brush, S.W., M.E. Jennings, P.J. Young and H.C. McWreath, 1994. NPDES monitoring -- Dallas-Fort Worth, Texas Area. In: B. Urbonas, 1994. Stormwater NPDES Related Monitoring Needs Conference Proceedings. Engineering Foundation Conference, Crested Butte, CO.
- Brye, K.R., Norman, J.M., and Gower, S.T. 2002. The fate of nutrients following three- and six-year burn intervals in a tallgrass prairie restoration in Wisconsin. Am. Midl. Nat. 148:28-42.
- Brye, K.R., Norman, J.M., Bundy, L.G. and Gower, S.T. 2000. Water-budget evaluation of prairie and maize ecosystems. Soil. Sci. Soc. Am. J. 64:715-724.
- Cammermeyer. J., Conrecode, P., Hansen, J., Kwan, P. and Maupin, M., 1999. Phosphorus Flux Spatial Model Group. Student Paper - Urbanization, Water Resources & Lake Water Quality in the Seattle area. University of Washington CEWA 599/ZOO 572. http://courses.washington.edu/cewa599c/paper2.html
- Caraco, D., Claytor, R. and Zielinski, J. 1998. Nutrient Loading from Conventional and Innovative Site Development. Prepared for Chesapeake Research Consortium. Center for Watershed Protection, Ellicott City, MD.
- Cave, K.A. and L.A. Roesner, 1994. Overview of stormwater monitoring needs. In: B. Urbonas, 1994. Stormwater NPDES Related Monitoring Needs Conference Proceedings. Engineering Foundation Conference, Crested Butte, CO.

- Center for Watershed Protection. 2003. Impacts of Impervious Cover on Aquatic Systems. Watershed Protection Research Monograph No. 1. Center for Watershed Protection, Ellicott City, MD.
- Central Iowa Committee. 2002. Iowa Statewide Urban Design Standards Manual. Iowa State University, Center for Transportation Research, Ames, IA.
- City of Eagan. 1995. Diagnostic/feasibility study of Fish Lake, Eagan, MN.
- City of Minneapolis, 1992. NPDES Permit Application for discharges from Municipal Separate Storm Sewer Systems – Part 2. Prepared By Minneapolis Public Works Department for the Minnesota Pollution Control Agency.
- Clesceri N. L., S. J. Curran, and R. I. Sedlak 1986a. Nutrient loads to Wisconsin lakes: Part I. Nitrogen and P-export coefficients. Water Resour. Bull. 22(6):983-990.
- Clesceri N. L., S. J. Curran, and R. I. Sedlak 1986b. Nutrient loads to Wisconsin lakes: Part II. Relative importance of nutrient sources. Water Resour. Bull. 22(6):991-1000.
- Cole, J.T., Baird, J.H., Basta, N.T., Huhnke, R.L., Strom, D.E., Johnson, G.V., Payton, M.D., Smolen, M.D., Martin, D.L., and Cole, J.C. 1997. Influence of buffers on pesticide and nutrient runoff from Bermudagrass turf. J. Environ. Qual. 26:1589-1598.
- Correll, D. L., Jordan, T.E. and Weller, D.E. 1999. Transport of nitrogen and phosphorus from Rhode River watersheds during storm events. Wat. Res. Research 35(8):2513–2521.
- Corsi, S.R., Graczyk, D.J., Owens, D.W. and Bannerman, R.T. 1997. Unit-area loads of suspended sediment, suspended solids, and total phosphorus from small watersheds in Wisconsin. USGS Fact Sheet FS-195-97. US Geological Survey, Middleton, WI.
- Dane County Regional Planning Commission, 1992. Yahara-Monona Priority Watershed Plan. Madison, WI.
- Dindorf, C.J., 1992. Toxic and Hazardous Substances in Urban Runoff. Hennepin Conservation District, Minnetonka, MN.
- Driver, N.E. and Tasker, G.D. 1990. Techniques for estimation of storm-runoff loads, volumes, and selected constituent concentrations in urban watersheds in the United States. USGS Water-Supply Paper 2363.
- Dunne, T., J. Agee, S. Beissinger, W. Dietrich, D. Gray, M. Power, V. Resh, and D. Rodrigues. 2001. A scientific basis for the prediction of cumulative watershed effects. University of California, Wildland Resources Center, Berkeley, CA.
- Erdich, L.P. 1991. Characterization of urban runoff in the Fargo-Moorhead area. Masters Thesis, North Dakota State University, Fargo, ND.
- Fallon, J.D. and McNellis, R.P. 2000. Nutrients and suspended sediment in snowmelt runoff from part of the Upper Mississippi River Basin, Minnesota and Wisconsin, 1997. USGS Water Resource Investigation Report 00-4165. Mounds View, MN.
- Fossum, K.D. and McDoniel, D.S. 1998. Comparison of NPDES program findings for selected cites in the United States. USGS Fact Sheet FS-192-97.
- Frink, C.R. 1991. Estimating nutrient exports to estuaries. Journal of Environmental Quality 20:717-724.
- Heiskary, S.A., Wilson, C.B. and Larsen, D.P. 1987. Analysis of regional patterns in lake water quality: Using ecoregions for lake management in Minnesota. Lake and Reservoir Management 3:337-344.

Hensel, M. 2003. Personal communication. Barr Engineering Company.

- Holechek, J.L., R.D. Piper and C.H. Herbal. 1995. Range management: principles and practices. 2nd edition. Prentice Hall, Englewood Cliffs, New Jersey. 526p.
- Horner, R.R., 1992. Water quality criteria/pollutant loading estimation/treatment effectiveness estimation. In: R.W. Beck and Associates. Covington Master Drainage Plan. King County Surface Water Management Division, Seattle, WA.
- Johnson, L.B. and Gage, S.H., 1997. Landscape approaches to the analysis of aquatic ecosystems. Freshwater Biology 37:113-132. <u>http://colargol.ibg.uit.no/biologi/botanikk/lennart/GIS-kurs/pdf/Artkl9.pdf</u>
- Lassevils, J.F. and Berrux, D. 2000. Sources of phosphorus to surface waters: comparing calculated with measured P loadings for three French Rivers. Prepared for CEEP by Geoplus Consultants, Drome, France.
- Leete, J.H. 1986. Sediment and phosphorus load to streamflow from natural and disturbed watersheds in northeastern Minnesota. Ph.D. Thesis, University of Minnesota, Minneapolis, MN.
- Legg, A.D., R.T. Bannerman, and J. Panuska. 1996. Variation in the relation of rainfall to runoff from residential lawns in Madison, Wisconsin, July and August 1995. USGS Water-Resources Investigations Report 96-9194.
- Loehr, R.C., 1974. Characteristics and comparative magnitude of nonpoint sources. J. Water Pollution Control Fed. 46(8):1849-1872. (reported in Mulcahy, 1990).
- Marsalek, J., 1990. Evaluation of pollutant loads from urban nonpoint sources. Water Sci. Tech., 22(10/11):23-30.
- Marsalek, J., 1991. Pollutant loads in urban stormwater: Review of methods for planning level estimates. Water Resources Bulletin, 27(2):283-291.
- Mattson, M.D. and R.A. Isaac. 1999. Calibration of phosphorus export coefficients for total maximum daily loads of Massachusetts lakes. Journal of Lake and Reservoir Management 15(3):209-219.
- McFarland, A.M.S. and L.M. Hauck. 1998. Determining nutrient contribution by land use for the Upper North Bosque River Watershed. Texas Institute foe Applied Environmental Research, Stephenville, TX.
- McFarland, A.M.S. and L.M. Hauck. 2001. Determining nutrient export coefficients and source loading uncertainty using in-stream monitoring data. Journal of the American Water Resources Association. 37:223-236.
- Metropolitan Council. 2001. Minnesota Urban Small Sites BMP Manual. Prepared by Barr Engineering for Metropolitan Council – Environmental Services. St. Paul, MN
- Metropolitan Council Environmental Services. 2003. Metropolitan Council Environmental Services 2001 Stream Monitoring Report. Metropolitan Council Environmental Services, Environmental Quality Assurance Department, St. Paul MN.
- Minneapolis Park and Recreation Board, 1993. Minneapolis Chain of Lakes Clean Water Partnership Project Phase I – Diagnostic Report. Minneapolis Park & Recreation Board, Minneapolis, MN.
- Minneapolis Park and Recreation Board, 1997. Unpublished data.
- Minneapolis Park and Recreation Board, 2002. National Pollutant Discharge Elimination System (NPDES) Monitoring. In: 2001 Water Resources Report. Minneapolis Park & Recreation Board Environmental Operations, Minneapolis, MN.

- Minneapolis Park and Recreation Board, 2003a. National Pollutant Discharge Elimination System (NPDES) Monitoring. In: 2002 Water Resources Report. Minneapolis Park & Recreation Board Environmental Operations, Minneapolis, MN.
- Minneapolis Park and Recreation Board, 2003b. Unpublished monitoring data for the 2003 NPDES permit.
- Minnesota Pollution Control Agency. 2003. Comparison of typical Minnesota water quality conditions. Water Quality/Surface Water #1.02, July 2003. Minnesota Pollution Control Agency, St. Paul, MN. <u>http://www.pca.state.mn.us/publications/wq-s1-02.pdf</u>
- Minnesota Pollution Control Agency. 2003a. An assessment of representative Lake Superior basin tributaries 2002. Minnesota Pollution Control Agency, St. Paul, MN
- Mulcahy, J.P., 1990. Phosphorus Export in the Twin Cities Metropolitan Area. Prepared for the Minnesota Pollution Control Agency by the Metropolitan Council of the Twin Cities Area, St. Paul, MN.
- Mulla, D. 2003. Detailed Assessment of Phosphorus Sources to Minnesota Watersheds Agricultural Runoff. Prepared for Barr Engineering Company and the Minnesota Pollution Control Agency.
- Naiman, R.J. and Descamps, H. 1997. The ecology of interfaces: Riparian zones. Annual Review of ecology and Systematics 28:621-658.
- Noonan, T., 1990. Personal communication. Ramsey County Department of Public Works. (reported in Mulcahy, 1990).
- Novotny, V., 1992. Unit pollutant loads. Water Environment & Technology, Jan. 92: 40-43.
- Novotny, V., and G. Chesters, 1989. Delivery of sediment and pollutants from nonpoint sources: A water quality perspective. Journal of Soil and Water Conservation, Nov/Dec 1989: 568-576.
- Oberts, G., 1983. Surface water management: Evaluation of Nationwide Urban Runoff Program. Metropolitan Council of the Twin Cities Area, St. Paul, MN.
- Oberts, G., 1990. Design considerations for management of urban runoff in wintry conditions. Proceedings: international conference on urban Hydrology Under Wintry Conditions. Narvik, Norway.
- Oberts, G., 1994. Influence of snowmelt dynamics on stormwater runoff quality. Watershed Protection Techniques 1(2):55-61.
- Oberts, G.L., 1985. Magnitude and problems of nonpoint pollution from urban and urbanizing areas. Symposium presentation – Nonpoint Pollution Abatement – Technical, Managerial and Institutional Problems and Solutions. Milwaukee, WI April 1985.
- Ohrel, R.L. 1995. Simple and complex stormwater pollutant load models compared. Watershed Protection Techniques 2(2):364-368.
- Omernik, J. M. 1977. Nonpoint source-stream nutrient level relationships: a nationwide study. U.S. United States Environmental Protection Agency, Ecol. Res. Series. EPA-600/3-77-105.
- Omernik, J. M. 1977. The influence of land use on stream nutrient levels. United States Environmental Protection Agency, Ecol. Res. Series. EPA-600/3-7-104.
- Omernik, J.M. and A.L. Gallant. 1988. Ecoregions of the upper Midwest States. USEPA, ERL, Corvallis, OR. EPA/ 600/3-88/037
- Omernik, J.M. and Bailey, R.G. 1997. Distinguishing between watersheds and ecoregions. Journal of the American Water Resources Association. 33:5. pp. 935-949.

- Omernik, J.M., 2000, Draft aggregations of level III eco-regions for the National Nutrient Strategy. National Health and Environmental Effects Research Laboratory, U.S. Environmental Protection Agency. <u>http://www.epa.gov/ost/standards/ecomap.html</u>.
- Osborne, L.L. and Kovacic, D.D. 1993. Riparian vegetated buffer strips in water-quality restoration and stream management. Freshwater Biology 29:243-258.
- Panuska, J.C. and Lillie, R.A. 1995. Phosphorus loadings from Wisconsin watersheds: Recommended phosphorus export coefficients for agricultural and forested watersheds. Research Management Findings, Number 38. Wisconsin Department of Natural Resources.
- Perkins, W. W., Welch, E. B., Frodge, J. and Hubbard, T. 1997. A zero degree of freedom total phosphorus model; 2. Application to Lake Sammamish, Washington. Lake and Reservoir Management Volume 13(2):131-141.
- Pitt, R., 1997. Storm water quality management through the use of detention basins. Class materials Earle Brown Center, University of Minnesota.
- Pitt, R., and J. McLean, 1986. Toronto area watershed management strategy study: Humber River pilot watershed project. Ontario Ministry of the Environment, Toronto, Ontario.
- Ponce, S.L., 1980. Statistical Methods Commonly Used in Water Quality Data Analysis. Watershed Systems Development Group Technical Paper WSDG-TP-00001. USDA, Fort Collins, CO.
- Ramsey County Public Works. Unpublished data.
- Ramsey Washington Metro Watershed Distinct. 2002. Unpublished Data.
- Ramsey Washington Metro Watershed District. 2003. Unpublished data.
- Rast, W. and G.F. Lee, 1983. Nutrient loading estimates for lakes. J. Env. Eng. Div. ASCE 109(2):502-517. (reported in Mulcahy, 1990).
- Reckhow, K.H., M.N. Beaulac, and J.T. Simpson. 1980. Modeling phosphorus loading and lake response under uncertainty: A manual and compilation of export coefficients. U.S. Environmental Protection Agency, Washington, D.C. EPA 440/5-80-011.
- Richards, C., Johnson, L.B. and Host, G.E. 1996. Landscape-scale influences on stream habitats and biota. Canadian Journal of Fish. Aqaut. Sci. 53(Suppl. 1):295-311.
- Robertson, D. M. and E. D. Roerish, Influence of various water quality sampling strategies on load estimates for small streams, Water Resour. Res., 35(12), 3747-3759, 1999.
- Robertson, D. M. and Richards, K. D., 2000. Influence of different temporal sampling strategies on estimating loads and maximum concentrations in small streams. Conference Proceedings NWQMC National Monitoring Conference. http://www.nwqmc.org/2000proceeding/papers/pap_porterfield.pdf
- Roth, N.E., Allan, J.D. and Erickson, D.L. 1996. Landscape influences on stream biotic integrity assessed at multiple spatial scales. Landscape Ecology 11(3):141-156.
- Sartz, R.S. 1969. Effects of watershed cover on overland flow from a major storm in southwestern Wisconsin. Research Note NC-82, US Department of Agriculture Forest Service, St. Paul, MN.
- Sartz, R.S., Curtis, W.R. and Tolsted, D.N. 1977. Hydrology of small watersheds in Wisconsin's Driftless Area. Water Resourc. Res. 13(3):524-530.
- Schmitt, T.J., Dosskey, M.G. and Hoaglund, K.D. 1999. Filter Strip performance and processes for different vegetation, widths, and contaminants. J. Environ. Quality 28:1479-1489.
- Schueler, T. R. 1996a. The compaction of urban soils: Watershed Protection Techniques 3(2):661-665.

- Schueler, T. R. 1996b. Can Urban soil compaction be reversed: Watershed Protection Techniques 3(2):666-669.
- Schueler, T. R. 1995. The peculiarities of perviousness: Watershed Protection Techniques 2(1):233-238.
- Schueler, T. R. 1994. Controlling urban runoff: A practical manual for planning and designing urban BMPs. Prepared for the Washington Metropolitan Council of Governments. Washington, DC.
- Schueler, T. R. 1994. The importance of imperviousness: Watershed Protection Techniques 1(3):100-111.
- Schueler, T.R. 1995. Site planning for urban stream protection. Prepared for the Washington Metropolitan Council of Governments. Washington, DC. Center for Watershed Protection, Ellicott City, MD.
- Schwartz, S.S. and Naiman, D.Q. 1999. Bias and variance of planning level estimates of pollutant loads. Water Resour. Res. 35(11):3475-3487.
- Scott, C.A., Walter, M.F., Nagle, G.N., Walter, M.T., Sierra, N.V. and Brooks, E.S. 2001. Residual phosphorus in runoff from successional forest on abandoned agricultural land: 1. Biogeochemical and hydrologic process. Biogeochemistry 55:293-309.
- Sharpley, A.N., T.C. Daniel, and D.R. Edwards. 1993. Phosphorus movement in the landscape. J. Prod. Agric.6:492-500.
- Singer, M.J., and R.H. Rust. 1975. Phosphorus in surface runoff from a deciduous forest. J. Environ. Qual. 4:307-311.
- Soil Conservation Service, 1986. Urban Hydrology for Small Watersheds. Technical Release 55. US Department of Agriculture, Soil Conservation Service Engineering Division.
- Soranno, P.A., S.L. Hubler, S.R. Carpenter, and R.C. Lathrop. 1996. Phosphorus loads to surface waters: a simple model to account for spatial pattern. Ecological Applications 6(3):865-878.
- Stark, J.R., P.E. Hanson, R.M. Goldstein, J.D. Fallon, A.L. Fong, K.E. Lee, S.E. Kroening, and W.J. Andrews. 1999. Water quality in the Upper Mississippi River Basin, Minnesota, Wisconsin, South Dakota, Iowa, and North Dakota, 1995–98. USGS Water Resources Circular 1211. <u>http://water.usgs.gov/pubs/circ/circ1211/pdf/circular1211.pdf</u>
- Steuer, J., W. Selbig, N. Hornewer, and J. Prey, 1997. Sources of contamination in an Urban Basin in Marquette, Michigan and an Analysis of Concentrations, Loads, and Data Quality. Water-Resources Investigation Report 97-4242. US Geological Survey, Middleton, WI.
- Swenson, J. 1998. Urban landscapes as a source of phosphorus in surface waters. Prepared for Metropolitan Council Environmental Services Division.
- Three River Park District, 2003. Unpublished data.
- Timmons, D.R., and Holt, R.F. 1977. Nutrient losses in surface runoff from a native prairie. Journal of Environmental Quality 4(6): 369-73.
- Tornes, L.H., Brigham, M.E. and Lorenz, D.L. 1997. Nutrients, suspended sediment, and pesticides in streams of the Red River of the North Basin, Minnesota, North Dakota, and South Dakota, 1993-1995. U.S. Geological Survey Water-Resources Investigations Report 97-4053. Mounds View, MN.
- United States Geological Survey, 1982. Quality of Runoff from Small Watersheds in the Twin Cities Metropolitan Area, Minnesota Hydrologic Data for 1980. Open File Report 82-504. St. Paul, MN.

- US Army Corps of Engineers. 2001. The WES handbook on water quality enhancement techniques for reservoirs and tailwaters. US Army Engineer Research and Development Center, Waterways Experiment Station Vicksburg, MS.
- US EPA, 1996. Protecting Natural Wetlands: A Guide to Stormwater Best Management Practices. United States Environmental Protection Agency, Office of Water, Washington, DC. EPA-843-B-96-001. <u>http://www.epa.gov/owow/wetlands/pdf/protecti.pdf</u>
- US EPA. 1986. Methodology for analysis of detention basins for control of urban runoff quality. Environmental Protection Agency, Office of Water. EPA-440-5-87-001.
- US EPA. 1997. Linear regression for nonpoint source pollution analyses. Environmental Protection Agency, Office of Water. EPA-841-B-97-007.
- US EPA. 2000a. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VI Corn Belt and Northern Great Plains. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-008.
- US EPA. 2000b. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VII - Mostly Glaciated Dairy Region. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-009.
- US EPA. 2000c. Ambient Water Quality Criteria Recommendations Information Supporting the Development of State and Tribal Nutrient Criteria: Lakes and Reservoirs in Nutrient Ecoregion VIII - Nutrient Poor Largely Glaciated Upper Midwest and Northeast. United States Environmental Protection Agency, Office of Water. EPA 822-B-00-010.
- US EPA. 2000d. Nutrient Criteria Technical Guidance Manual: Lakes and Reservoirs, U.S. Environmental Protection Agency, Washington, DC. EPA-822-B00-001.
- US EPA. 2000e. Nutrient Criteria Technical Guidance Manual: Rivers and Streams, U.S. Environmental Protection Agency, Washington, DC. EPA-822-B00-002.
- US EPA. 2001. National Menu of Best Management Practices for Storm Water Phase II. http://cfpub1.epa.gov/npdes/stormwater/menuofbmps/pdf/small_files/Main.pdf
- USGS. 1996. Water resources data Wisconsin Water Year 1996. U.S. Geological Survey Water-Data Report WI-96-1.
- Uttormark, P.D., J.D. Chapin, and K.M. Green, 1974. Estimating nutrient loadings of lakes from nonpoint sources. EPA-660/3/74-020. (reported in Mulcahy, 1990).
- Vaithiyanathan, P., and D.L. Correll. 1992. The Rhode River Watershed: Phosphorus distribution and export in forest and agricultural soils. J. Environ. Qual. 21: 280-288.
- Valley Branch Watershed District. 2002. Valley Creek Subwatershed Plan. Developed by the Valley Branch Subwatershed Advisory Committee.
- Vellanki, V.R. 1994. . Characterization of residential runoff in the Fargo. Masters Thesis, North Dakota State University, Fargo, ND.
- Vogelmann, J.E., S.M. Howard, L. Yang, C.R. Larson, B.K. Wylie, N. Van Driel, 2001. Completion of the 1990s National Land Cover Data Set for the Conterminous United States from Landsat Thematic Mapper Data and Ancillary Data Sources. Photogrammetric Engineering and Remote Sensing, 67:650-652. <u>http://landcover.usgs.gov/nationallandcover.asp</u>

- Walker, W.W. 1992. Analysis of 1990-1992 monitoring data from the Vadnais lakes diagnostic study. Prepared for the Board of Water Commissioners, St. Paul, MN.
- Walker, W.W. 1987. Phosphorus removal by urban detention basins. Proc. Lake and Reservoir Management Conference: Influence on Nonpoint Source Pollutants, Volume III.
- Walker, W. W. 1986. Empirical Methods for Predicting Eutrophication in Impoundments; Report 3, Phase III: Applications Manual. Technical Report E-81-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Walker, W.W. 1985. Analysis of 1984 monitoring data from the Vadnais lakes diagnostic study. Prepared for the Board of Water Commissioners, St. Paul, MN. (reported in Mulcahy, 1990).
- Walker, W.W. 1984. Watershed monitoring data from the Twin cities Area. Appendix A. Prepared for St. Paul Water Utility.
- Waschbusch, R.J., Selbig, W.R. and Bannerman, R.T. 1999. Sources of phosphorus in stormwater and street dirt from two urban residential basins in Madison, Wisconsin. 1994-95. USGS Water-Resources Investigation Report 99-4021.
- Wenck Associates, 1998. Lake Nokomis and Hiawatha Diagnostic-Feasibility Study; Diagnostic Study. Prepared for the Minnehaha Creek Watershed District.
- Wickham, James D.; Wade, Timothy G.; Riitters, Kurt H.; O'Neill, R.V.; Smith, Jonathan H.; Smith, Elizabeth R.; Jones, K.B.; Neale, A.C, 2003. Upstream-to-downstream changes in nutrient export risk. Landscape Ecology 18:195-208. <u>http://www.srs.fs.usda.gov/pubs/ja/ja_wickham003.pdf</u>
- Wilson, C.B. 2003. Personal communications, various dates October 2003. Minnesota Pollution Control Agency.
- Wilson, C.B. and Walker, Jr., W.W. 1989. Development of lake assessment methods based upon the aquatic ecoregion concept. Lake and Reservoir Management 5(2):11-22.
- Wilson, G.J., & P. Brezonik (1998). An analysis of urban stormwater quality from the Minneapolis Chain of Lakes watershed. In: E. Derby, J. Lee & D. Pilger (Eds.) Minneapolis Lakes and Parks—Special Session Proceedings. Sixteenth Annual North American Lakes Management Society International Symposium. Minneapolis, MN.
- Winter, J.G. and Duthie, H.C. 2000. Export coefficient modeling to assess phosphorus loading in an urban watershed. Journal of the American Water Resources Assn. 36(5):1053-1061.
- Worrall, F. and T.P. Burt. 1999. The impact of land-use change on water quality at the catchment scale: the use of export coefficient and structural models. Journal of Hydrology. 221(1): 5-90.
- Wotzka, P.J. 2003. Personal communications, various dates October 2003. Minnesota Department of Agriculture.
- York M. T. Auer, S. M. Doeer, S. W. Effler and E. M. Owens, 1997. A zero degree of freedom total phosphorus model; 1. Development for Onondaga Lake, New York. Lake and Reservoir Management Volume 13(2):118-130.
- Zapp, M.J. and Almendinger, J.E. 2001. Nutrient dynamics and water quality of Valley Creek, a high-quality trout stream in southeastern Washington County. Final Project Report to the Valley Branch Watershed District.
- Zielinski, J. 2002. Watershed Vulnerability Analysis. Center for Watershed Protection, Ellicott City, MD.

Bioavailability of Phosphorus

- Andraski, B.J., Mueller, D.H., and Daniel, T.C. 1985. Phosphorus losses in runoff as affected by tillage. *Soil Sci. Soc. Am. J.* 49:1523-1527.
- Asselman, N.E.W. 2000. Fitting and interpretation of sediment rating curves. *Journal of Hydrology*, 234; 228-248.
- Bannerman, R.T., Armstrong, D.E., Harris, R.F., and Holdren, C.C. 1975. Phosphorus release and uptake by Lake Ontario sediments. Ecol. Res. Ser. USEPA Rep. 660/3-750-066. U.S. Gov. Print. Office, Washington, DC.
- Breeuwsma A. and Silva, S. 1992. Phosphorus fertilization and environmental effects in the Netherlands and the Po region (Italy). Rep. 57. Agric. Res. Dep. The Winand Staring Center for Integrated Land, soil and Water Res., Wageningen, the Netherlands.
- Bierman, V.J. Jr., Dolan, D.M., Stoermer, E.F., Gannon, J.E., and Smith, V.E. 1980. The development and calibration of a spatially simplified multi-class phytoplankton model for Saginaw Bay, Lake Huron. Great Lakes Environmental Planning Study, Contribution No. 33.
- Caraco, N.F. 1995. Chapter 14: Influence Of Human Populations On Phosphorus Transfers To Aquatic Systems: A Regional Scale Study Using Large Rivers. In SCOPE 54: Phosphorus in the Global Environment Transfers, Cycles and Management. H. Tiessen (ed.), 1995, 480 pp, Wiley, U.K.
- Carignan, R. and Kalff, J. 1980. Phosphorus sources for aquatic weeds: Water or sediments? *Science*. 207:987-989.
- Carlisle, A., Brown, A.H.F. and White, E.J. 1966. The organic matter and nutrient elements in precipitation beneath sessile oak (Quercus petraea) canopy. *J. Ecol.* 54:87-98.
- Cowen, W.F. and Lee, G.F. 1976. Phosphorus available in particulate materials transported by urban runoff. J. Wat. Pollu. Control. Fed. 48:580-591.
- DePinto, J.V., Young, T.C., Martin. S.C. 1981. Algal-Availability of Phosphorus in Suspended Sediments from Lower Great Lakes Tributaries. J. Great Lakes Res. 7(3):311-325.
- DePinto, J.V., Young, T.C. and Salisbury, D.K. 1986. Impact of phosphorus availability on modeling phytoplankton dynamics. *Dutch Hydrobiological Bulletin* 20(1/2):225-243.
- DePinto, J.V., Young, T.C., Bonner, J.S., Rodgers, P.W. 1986. Microbial recycle of phytoplankton phosphorus. Can. J. Fish. Aquat. Sci. 43(2):336-342.
- Dolan, D.M., Yui, A.K., and Geist, R.D. 1981. Evaluation of River Load Estimation Methods for Total Phosphorus. *J. Great Lakes Res.* 7(3):207-214.
- Dorich, R.A., Nelson, D.W., and Sommers, L.E. 1980. Algal bioavailability of sediment phosphorus in drainage water of the Black creek watershed. *J. Environ. Qual.* 9:557-563.
- Dorich, R.A., Nelson, D.W., and Sommers, L.E. 1984. Algal availability of phosphorus in suspended stream sediments of varying particle size. *J. Environ. Qual.* 13:82-86.
- Dorich, R.A., Nelson, D.W., and Sommers, L.E. 1985. Estimating algal available phosphorus in suspended sediments by chemical extraction. *J. Environ. Qual.* 14:400-405.
- Engle, D.L. and Sarnelle, O. 1990. Algal use of sedimentary phosphorus from an Amazon floodplain lake: Implications for total phosphorus analysis in turbid waters. *Limnol. Oceanogr.* 35:483-490.
- Ekholm P. and Krogerus, K. 2003. Determining algal-available phosphorus of differing origin: routine phosphorus analyses versus algal assays. *Hydrobiolgia* 492: 29-42.

- Gaynor, J.D. and W.I. and Findlay. 1995. Soil and phosphorus loss from conservation and conventional tillage in corn production. *J. Environ. Qual.* 24:734-741.
- Golterman, H.L. 1977. Sediments as a source of phosphate for algal growth. In: Golterman, H.L. (Ed.) *Interactions Between Sediments and Fresh Water*. Symposium at Amsterdam, The Netherlands, 1976, pp. 286-293.
- Hanna, M. 1989. Biologically available phosphorus: Estimation and prediction using an anion-exchange resin. *Can. J. Fish. Aquat. Sci.* 46:638-643.
- Haygarth, P.M. and Jarvis, S.C. 1997. Soil derived phosphorus in surface runoff from grazed grassland lysimeters. *Water Res.* 11:140-148.
- Haygarth, P.M., Hepworth, L. and Jarvis, S.C. 1998. Forms of phosphorus transfer in hydrological pathways from soil under grazed pasture. *European J. Soil Sci.* 49:65-72.
- Haygarth, P.M. and Sharpley, A.N. 2000. Terminology for phosphorus transfer. J. Environ. Qual. 29:10-15.
- Hedley, M.J., Mortvedt, J.J., Bolan, N.S., and Syer, J.K. 1995. Chapter 5: Phosphorus Fertility Management in Agroecosystems. In SCOPE 54: Phosphorus in the Global Environment - Transfers, Cycles and Management. H. Tiessen ed., 1995, 480 pp, Wiley, U.K.
- Horowitz, A.J. 2002. The use of rating (transport) curves to predict suspended sediment concentration: A matter of temporal resolution. Turbidity and Other Sediment Surrogates Workshop, April 30-May 2, 2002, Reno, Nevada.
- Huettl, P.J., Wendt, R.C. and Corey, R.B. 1979. Prediction of algal-available phosphorus in runoff suspensions. *J. Environ. Qual.* 8:130-132.
- Jacoby, J.M., Lynch, D.D., Welch, E.B., and Perkins, M.S. 1982. Internal phosphorus loading in a shallow eutrophic lake. *Water Res.* 16:911-919.
- James, W.F., Barko, J.W., and Eakin, H.L. 2002. Labile and refractory forms of phosphorus in runoff of the Redwood River basin, Minnesota. *J. Freshwater Ecology*. 17(2):297-304.
- Kamprath, E.J. 1991. Appropriate measurements of phosphorus availability in soils of the semi-arid tropics. In: Johansen, C., Lee, K.K. and Saharwat, KL (Eds.) Phosphorus nutrition of grain legumines in the semi arid tropics. ICRISAT, India. pp. 23-31.
- Klapwijk, S.P., Kroon, J.M.W. and Meijer, M.L. 1982. Available phosphorus in lake sediments in the Netherlands. *Hydrobiologia*. 92:491-500.
- Larsen. D.P., Shults, D.W. and Malueg, K.W. 1981. Summer internal phosphorus supplies in Shagawa Lake, Minnesota. *Limnol. Oceanogr.* 26:740-753.
- Lee, G.F. 1973. Role of phosphorus in eutrophication and diffuse source control. Water Res. 7: 111-128.
- Lee, G.F., Jones, R.A., and Rast, W. 1980. Availability of phosphorus to phytoplankton and its implications for phosphorus management strategies, pp. 259-308. In Phosphorus Management Strategies for Lakes, R. C. Loehr, C. S. Martin, W. Rast (eds.), Ann Arbor Science Publ., Inc.
- Lennox, S.D., Foy, R.H., Smith, R.V. and Jordan, C. 1997. Estimating the contribution from agriculture to the phosphorus load in surface water. P. 55-75. In H. Tunney, O.T. Carton, P.C. Brookes, and A.E. Johnston (ed.) Phosphorus loss from soil to water. CAB Int. Press, Cambridge, UK.
- Lenz, B.N. 2001. Nutrient and Suspended-Sediment Concentrations and Loads, and Benthic-Invertebrate Data for Tributaries to the St. Croix River, Wisconsin and Minnesota, 1997-99. USGS Water-Resources Investigations Report 01-4162.

- Lenz, B.N. and Robertson, D.M. 2002. Response of the St. Croix River Pools, Wisconsin and Minnesota, to Various Phoshorus-Loading Scenarios. USGS Water-Resources Investigations Report 02-4181.
- Li, W.C., Armstrong, D.E., Williams, J.D., Harris, R.F. and Syers, J.K. (1972). Rate and extent of phosphate exchange in lake sediments. *Soil Sci. Soc. Am. Proc.* 36:279-285.
- Logan, T.J. 1977. Levels of plant available phosphorus in agricultural soils in the Lake Erie Drainage Basin. Lake Erie Wastewater Management Study Report. U.S. Army Engineer District, Buffalo.
- Logan, T.J. 1978. Chemical extraction as an index of bioavailability of phosphorus in Lake Erie basin suspended sediments. Lake Erie Wastewater Management Study Report. U.S. Army Engineer District, Buffalo.
- Logan, T.J., Oloya, T.O., and Yaksich, S.M. 1979. Phosphate characteristics and bioavailability of suspended sediments from streams draining into Lake Erie. *J. Great Lakes Res.* 5:112-123.
- Logan, T.J., Verhoff, F.H., and DePinto, J.V. 1979a. Biological availability of total phosphorus. Lake Erie Wastewater Management Study, U. S. Army Engineer District, Buffalo.
- Martin, Scott C., 1983. Bioavailability of Sediment Phosphorus Inputs to the Lower Great Lakes, Ph.D., Department of Civil and Environmental Engineering, Clarkson College of Technology (December, 1983).
- McDowell, R.W., Sharpley, A.N., Kleinman, P.J.A., and Gburek, W.J. 2001. Hydrological and source management of pollutants at the soil profile scale. In P.M. Haygarth and S.C. Jarvis (ed.) Agriculture, hydrology and water quality. CAB Int. Press, Oxon, England.
- McDowell, L.L., and McGregor, K.C. 1980. Nitrogen and phosphorus losses in runoff from no-till soybeans. *Trans. ASAE* 23:643-648.
- Miller, R.B. 1961. Chemical composition of rainwater at Taita, New Zealand, 1956-1958. *N.Z. J. Sci.* 4:844-853.
- Mueller, D.H., Wendt, R.C., and Daniel, T.C. 1984. Phosphorus losses as affected by tillage and manure application. *Soil Sci. Am. J.* 48:901-905.
- Murphy, T.J. and Doskey, P.V. 1975. Inputs of phosphorus from precipitation to Lake Michigan. U.S. EPA Report No. 600/3-75-005. Duluth, Minnesota.
- Murphy, J. and Riley, J.P. 1962. A modified single solution method for the determination of phosphate in natural waters. *Anal. Chim. Acta.* 27:31-36.
- Nurnberg, G.K., Dillon, P.J. and McQueen, D.J. 1986. Internal phosphorus load in an oligotrophic precambrian shield lake with an anoxic hypolimnion. *Can. J. Fish. Aquat. Sci.*, 43:574-580.
- Nurnberg, G. and Peters, R.H. 1984. Biological availability of soluble reactive phosphorus in anoxic and oxic freshwaters. *Can. J. Fish. Aquat. Sci.* 41:757-765.
- O'Connor, G.A., Sarkar, D., Graetz, D.A., and Elliott, H.A. 2002. Characterizing forms, solubility, bioavailabilities, and mineralization rates of phosphorous in biosolids, commercial fertilizers, and manures (Phase I). Water Environment Research Federation.
- Omerink, J.M. 1976. The influence of land use on stream nutrient levels. USEPA Ecological Research Series, EPA-600/3-76-014.
- Peters, R.H. 1977. Availability of atmospheric orthophosphate. J. Fish. Res. Bd. Can. 34:918-924.
- Pietilainen, O.P. and Rekolainen, S. 1991. Dissolved reactive and total phosphorus load from agricultural and forested basins to surface waters in Finland. *Aqua Fennica* 21, 127-136.

- Porcella, D.B., Kumazar, J.S. and Middlebrooks, E.J. 1970. Biological effects on sediment-water nutrient interchange. J. Sanit. Eng. Div., *Proc. Am. Soc. Civil Eng.* 96:911-926.
- Pote, D.H., Danile, T.C., Sharpley, A.N., Moore, P.A., Edwards, D.R., and Nichols, D.J. 1996. Relating extractable phosphorus to phosphorus losses in runoff. *Soil Sc. Sco. Am. J.* 60:855-859.
- Rigler, F.H. 1966. Radiobiological analysis of inorganic phosphorus in lake water. *Tech. Internat. Verein. Limnol.* 16:456-470.
- Rigler, F.H. 1968. Further observations inconsistent with the hypothesis that the molybdenum blue method measures orthophosphate in lake waters. *Limnol. Oceanogr.* 13:7-13.
- Ryszkowski, L. and Bartoszewicz, A. 1989. Impact of agricultural landscape structure on cycling of inorganic nutrients. In: Clarholm, M. and Bergstrom, L. (Eds.) Ecology of arable land. Kluwer Academic Publ., Dordrecht. pp. 241-246.
- Sagher, A., Harris, R.F., and Armstrong, D.E. 1975. Availability of sediment phosphorus to microorganisms. Water Res. Cent. Tech. Rep. WIS WRC 74-01. Univ. of Wisconsin, Madison.
- Sagher, A. 1976. Availability of soil runoff phosphorus to algae. Ph.D. dissertation, University of Wisc. Madison.
- Schindler, D.W. and Nighswander, J.E. 1970. Nutrient supply and primary production in Clear Lake, eastern Ontario. J. Fish. Res. Board Can. 27:260-262.
- Sharpley, A.N., Menzel, R.G., Smith, S.J., Rhoades, E.D., and Olness, A.E. 1981. The sorption of soluble phosphorus by soil material during transport in runoff from cropped and grassed watersheds. *J. Environ. Qual.* 10:211-215.
- Sharpley, A.N., Jones, C.A., Grey, C. and Cole, C.V. 1984. A simplified soil and plant phosphorus model II: Predication of labile, organic and sorbed phosphorus. *Soil Sci. Soc. Am. J.* 48:805-809.
- Sharpley, A.N., Smith, S.J., Menzel, R.G. and Westerman, R.L. 1985. The chemical composition of rain in the Southern Plains and its impact on soil and water quality. Oklahoma State Univ. Agric. Expt. Station Tech. Bull. T162.
- Sharpley, A.N., Smith, S.J., Jones, O.R., Berg, W.A., and Coleman, G.A. 1992. The transport of bioavailable phosphorus in agricultural runoff. *J. Environ. Qual.* 21:30-35.
- Sharpley, A.N., Hedley, M.J., Sibbesen, E., Hillbricht-Ilkowska, A., House, W.A., and Ryszkowski, L. 1995. Chapter 11: Phosphorus Transfers From Terrestrial To Aquatic Ecosystems. In SCOPE 54: Phosphorus in the Global Environment Transfers, Cycles and Management. H. Tiessen ed., 1995, 480 pp, Wiley, U.K.
- Sharpley, A.N., T.C. Daniel, J.T. Sims, and D.H. Pote. 1996. Determining environmentally sound soil phosphorus levels. *J. Soil Wat. Conserv.* 51:160-165.
- Sharpley, A.N., Beegle, D.G., Gburek., W.J., Weld, J. and Folmar, G. 1998. Modification and application of the phosphorus index screening tool it identify critical sources of phosphorus in the Upper Chesapeake Bay Watershed. Final Rep. To the Scientific and Technical Advisory Committee to the Chesapeake Bay Program. Chesapeake Bay Program. Annapolis, MD.
- Sharpley, A.N. and Tunney, H. 2000. Phosphorus research strategies to meet agricultural and environmental challenges of the 21st century. *J. Environ Qual.* 29:176-181.
- Simrad, R.R., Beauchemin, S. and Haygarth, P.M. 2000. Potential for preferential pathways for phosphorus transport. *J. Environ. Qual.* 29:97-105.
- Sonzogni, W.C., Chesters, G., Coote, D.R., Jeffs, D.N., Konard, J.C., Ostrry, R.C., and Robinson, J.B. 1980. Pollution from land runoff. *Environ. Sci. Technol.* 14:148-153.

- Syers, J.K., Harris, R.F., and Armstrong, D.E. 1973. Phosphate chemistry in lake sediments. J. Environ. *Qual.* 2:1-14.
- Szpakowska, B. and Zyczynska-Baloniak, I. 1989. The effect of environmental pollution on the migration of chemical compounds in water in a agricultural landscape. *Ecology International Bulletin.* 17:41-52.
- Tarapchak. S.J. and Rubitschum, C. 1981. Comparisons of soluble reactive phosphorus and orthophosphorus concentrations at an offshore station in southern Lake Michigan. J. Great Lakes Res. 7:290-298.
- Theis, T.L. and McCabe, P.J. 1978. Phosphorus dynamics in hypereutrophic lake sediments. *Water Res.*, 12:677-685.
- Vaithiyanathan, P. and Correll, D.L. 1992. The Rhode River watershed: Phosphorus distribution and export in forest and agricultural soils. *J. Environ. Qual.* 21:280-288.
- Walton, C.P. and Lee, G.F. 1972. A biological evaluation of the molybdenum blue method for orthophosphate analysis. *Tech. Int. Ver. Limnol.* 18:676-684.
- Wendt, R.C. and Corey, R.B. 1980. Phosphorus variations in surface runoff from agricultural lands as a function of land use. *J. Environ. Qual.* 9:130-136.
- Williams, J.D.H., Syers, J.K., Harris, R.F., and Armstrong, D.E. 1971. Fractionation of inorganic phosphate in calcareous lake sediments. *Soil Sci. Soc. Amer. Proc.* 35:250-255.
- Williams, J.D.H., Shear, H., and Thomas, R.L. 1980. Availability to Scenedesmus quadricanda of different forms of phosphorus in sedimentary materials in the Great Lakes. *Limnol. Oceanogr.* 25:1-11.
- Withers, P.J.A., R.M. Dils, and R.A. Hodginson. 1999. Transfer of phosphorus from small agricultural basins with variable soil types and land use. P. 20-29. In Impact of land-use change on nutrient loads from diffuse sources. International Association of Hydrological Sciences Symp., Birmingham, England. 19-20 July 1999. IAHS, Wallingford, UK.
- Young, T.C., J.V. DePinto, Flint, S.E., Switzenbaum, M.S., and Edzwald, J.K. 1982. Algal Availability of Phosphorus in Municipal Wastewaters. *Jour. Water Pollut. Control Fed.* 54, 1505-1516.
- Young, T.C. and DePinto., J.V. 1981. Algal-Availability of Particulate Phosphorus from Diffuse and Point Sources in the Lower Great Lakes Basin," in Sediment/Freshwater Interaction, Proceedings of 2nd International Symposium on the Interactions Between Sediments and Freshwater, Kingston, Ontario. Developments in Hydrobiology, V. 9, P.G. Sly (ed.), 111-119 (1982).
- Young, T.C., DePinto, J.V., and Hughes, B.J. 1988. Comparative study of methods for estimating bioavailable particulate phosphorus. Chemical and Biological characterization of sludges, sediments, dredge spoils, and drilling muds. ASTM STP 976. J.J. Lichtenberg, J.A. Winter, C.I. Weber, and L. Fradkin (ed.). American Society for Testing and Materials, Philadelphia, 1988, pp. 69-80.
- Young, T.C., DePinto, J.V., Martin, S.C., Bonner, J.S. 1995. Algal-available Particulate Phosphorus in the Great Lakes Basin. J. Great Lakes Res. 111(5):434-446.
- U.S. Geological Survey (USGS). 2002. National Water-Quality Assessment Program. Water-Quality Assessment of Part of the Upper Mississippi River Basin Study Unit, Minnesota and Wisconsin—Nutrients, Chlorophyll a, Phytoplankton, and Suspended Sediment in Streams, 1996-98. Water-Resources Investigations Report 02-4287.