Papers Related to Minnesota River and Other Research Projects

Multiple watersheds

AGNPS/GLEAMS – Pete Cooper as part of the Minnesota River Assessment Project in 1993. 10 subwatersheds were modeled.

Thoma, D.P., S.C. Gupta, and M.E. Bauer. 2004. Evaluation of optical remote sensing models for crop residue cover assessment. J. Soil, and Water Conserv. 59: 224-233.

Chippewa

Land Stewardship Project, 2001. The Multiple Benefits of Agriculture: An Economic, Environmental, and Social Analysis. – ADAPT was used

Cottonwood

Petrolia, D., P. H. Gowda, and D. J. Mulla. 2005. Targeting agricultural drainage to reduce nitrogen losses in a Minnesota watershed. Staff paper series P-05-2. Dept. Applied Econ., Univ. Minnesota. http://agecon.lib.umn.edu/mn/p05-02.pdf

HSPF – Driss Ennaanay (U of M Ken Brooks grad student – used HSPF model from DO TMDL)

Blue Earth

Thoma, D.P., S.C. Gupta, M.E. Bauer, and C. E. Kirchoff. 2005. "Airborne laser scanning for riverbank erosion assessment," Remote Sensing of Environment. 95:943-501.

Le Sueur

HSPF – Driss Ennaanay (U of M Ken Brooks grad student – used HSPF model from DO TMDL)

Johansson, R. C., P. H. Gowda, D. J. Mulla, and B. J. Dalzell. 2004. Metamodeling phosphorus best management practices for policy use: A frontier approach. Am. J. Agric. Economics 30: 63-74.

Middle Minnesota

Nangia, V., P. Gowda, D. Mulla and K. Kuehner. 2005. Evaluation of predicted long-term water quality trends to changes in N fertilizer management for a cold climate. International Annual Meeting Am. Soc. Ag. Eng. Tampa, FL. Paper No. 052226.

Nangia, V., P. H. Gowda, D. J. Mulla, and G. Sands. 2005. Field scale application of a water quality modeling approach for alternative agronomic practices. Pp 364-372. In: Proc. 3rd ASAE Conference on Watershed Management to Meet Water Quality Standards and Emerging TMDLs. Atlanta, GA. ASAE, St. Joseph, MI.
(Nitrate-nitrogen, ADAPT, Nicollet County)

Lower Minnesota

Dalzell, B. J., D. J. Mulla, and P. H. Gowda. 2001. Modeling and evaluation of alternative agricultural management practices in Sand Creek watershed. pp. 637-640. In:

J. C. Ascough II and D. C. Flanagan (eds.), Soil Erosion Research for the 21st Century. Am. Soc. Ag. Eng., St. Joseph, MI.

Dalzell, Brent. 2000. Modeling and evaluation of non point source pollution in the Lower Minnesota River Basin. MS Thesis

Updegraff, K., P. Gowda and D. J. Mulla. 2004. Watershed scale modeling of the water quality effects of cropland conversion to short rotation woody crops. Renewable Agric. Food Sys. 19(2):1-11.

Hansen, N.C., S.C. Gupta, and J.F. Moncrief. 2000. Snowmelt runoff, sediment, and phosphorus losses under three different tillage systems. Soil and Tillage Research 57: 93-100.

Other

Ginting, D., J. F. Moncrief, and S. C. Gupta. 2000. Runoff, Solids, and Contaminant Losses into Tile Inlets Draining Lacustrine Depressions. J. Environ. Qual. 29: 551-560.

Thoma, D.P., S.C. Gupta, and M.E. Bauer. 2001. Quantifying riverbank erosion with scanning laser altimetry. In. International Archives of Photogrammetry and Remote Sensing, Vol. XXXIV-3/W4 Annapolis, MD, 22-24 October 2001.

Thoma, D.P, S.C. Gupta, J.F. Strock, and J.F. Moncrief. 2005. Tillage and Nutrient Source Impacts on Water Quality and Corn Grain Yield from a Flat Landscape. J. Environ. Qual. 34:1102-1111.

Zhao, S.L, S.C. Gupta, D.R. Huggins, and J.F. Moncrief. 2000. Predicting subsurface drainage, corn yield, and nitrate losses with DRAINMOD-N. J. Environ. Qual. 29: 817-825.

Zhao, S.L., S.C. Gupta, D.R. Huggins, and J.F. Moncrief. 2001. Tillage and nutrient source effects on surface and subsurface water quality at corn planting. J. Environ. Qual. 30: 998-1008.

Other Papers

Trimble, S.W. 1999. Decreased Rates of Alluvial Sediment Storage in the Coon Creek Basin, Wisconsin, 1975–93. Science. Aug 20, 1999. 285:1244-1246.

Trimble, S.W. 1997. Contribution of Stream Channel Erosion to Sediment Yield from an Urbanizing Watershed. Science. Nov 21, 1997. 278:1442-1444.

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