SHORT CURRICULUM VITAE

Dr. Joseph Anthony Magner
Research Professor
Department of Bioproducts & Biosystems Engineering
University of Minnesota (UM)
1390 Eckles Ave., St. Paul, MN 55108
ORCID ID: 0000-0001-8775-5112; ResearchGate score, 22.68
jmagner@umn.edu

ACADEMIC PREPARATION & REGISTRATION:
B.S. (with honors) - Soil & Water Science, University of Wisconsin, River Falls, 1979.
Ph.D. - Hydrology & Watershed Management, University of Minnesota, St. Paul, 2006.
Watershed-Stream Restoration Engineering; 500 hours training from 1996-1999.
AIH - Registered Professional Hydrogeologist - 1988
State of Minnesota - Licensed Geoscientist (Soils) - 1998
State of Wisconsin - Licensed Hydrologist – 1999

ADDITIONAL APPOINTMENTS:
Fulbright Specialist, Council for International Exchange of Scholars, USA State Dept.
(*Invited* – Visiting Professor, Khazar University, Baku, Azerbaijan)
Visiting Professor, Fu Jen University, Taipei, Taiwan; 2015
Visiting Professor, Qingdao University, Qingdao, China; 2014
Visiting Professor, University of the Free State, Bloemfontein, South Africa; 2013,
Graduate School Appointments: WRS, NRSM and BBSEM

INSTRUCTIONAL EXPERIENCE:
Environmental and Ecological Engineering (1-credit, UM)
Hydrology and Water Quality Field Methods (3-credit, UM)
Water Quality of a Natural Resource (3-credit, UM)
Assessment & Diagnosis of Impaired Waters (3-credit, UM)
Agroforestry in Watershed Management (3-credit, UM)

PROFESSIONAL EXPERIENCE:
2011- present: Research Professor UMN; Direct water research projects and manage 10-15 graduate and civil service staff; Teach Fall and Spring Semesters.
2006-2013: Principal Research Scientist, MN Pollution Control Agency (MPCA), Impaired Waters Nonpoint Source Management Program.
2006- present: Water Resources Consultant; clients include: EPA Grant Review, David Letterman Ranch, Choteau MT, Mizoram State Government, India, Environmental Defense Fund and state and local units of government in Minnesota.
1979-2006: Research Hydrologist, MPCA, Clean Water Research

RELEVANT RESEARCH PROJECTS & GRANTS:

PI: Quantifying Cropland-Riparian Water Management: 2016-2019; $283,787; EPA 319

Co-PI: Global Spotlight award focusing on agriculture, climate change and human development in Mizoram: 2014-2015; $100,000; UMN international funds.
PI: Implementing the "watershed approach" in Beargrass minor watershed, central Indiana: 2014-2018; $1,200,000; NRCS CIG and Walton Foundation providing match.
PI: Defining and measuring water quantity & quality in Dobbins Creek watershed using a treatment train to trap and treat: 2014-2018; $333,952 via State, District and EPA 319.
Co-PI: Quantifying hydrologic impacts of drainage under corn production systems in the upper Midwest: 2014-2017; $496,740 with MN Corn Growers Association.
PI: Developing the One Watershed One Plan Land Use Management Strategy: 2013-2017; $225,000; MN Board of Water and Soil Resources.
PI: Nutrient sequestration & flood management in the Red River Basin using engineered flood impoundments; 2014-2018: $288,394; Environmental Trust Fund and EPA 319.
Co-PI: Baseflow restoration in Minnehaha Creek with storm water infiltration: 2012-2014; $100,000; Minnehaha Creek Watershed District.
Co-PI: Tile Outlet Treatment Trains in Elm Creek: 2013-2016; $165,000; EPA 319.

RELEVANT PUBLICATIONS:

Brooks, K.N., Ffolliott, P.F. and **Magner**, J.A.: (2013). HYDROLOGY AND THE MANAGEMENT OF WATERSHEDS, 4th edition, Wiley-Blackwell, Hoboken, NJ.

Krider, L., J. **Magner**, B. Hansen, B. Wilson, G. Kramer J. Peterson, and J. Nieber. (2017) Improvements in fluvial stability associated with two - stage ditch construction in Mower County, Minnesota. *Journal of the American Water Resources Association* doi: 10.1111/1752-1688.12541.

Dolph, C., Vondracek, B. Eggert, S. **Magner**, J. Farrington, L. (2015) Reach-scale stream restoration in agricultural streams of southern Minnesota alters functional responses of macroinvertebrates. *Freshwater Science* 34: DOI: 10.1086/680984.

Krider, L. **Magner**, J. and Perry, J. (2013) Air-water temperature relationships in the trout streams of Southeastern Minnesota's karst landscape. *Jour. of Amer. Water Res. Asso.* 49:896-907 (DOI 10.1111/jawr12046).

Magner, J., Hansen, B., Sundby, T., Wilson, B. and Nieber, J. (2012). Channel evolution of southern Minnesota ditches. *Environmental Earth Sciences* 67: 2359-2369, (DOI 10.1007/s12665-012-1682-3).

Lenhart, C., K. Brooks, S. Verry and J. **Magner.** (2012). Adjustment of a prairie pothole stream to land-use, drainage and climate change: past history and active processes. *River Research & Applications* DOI: 10.1002/rra.1549

Magner, J.A. (2011). Tailored Watershed Assessment and Integrated Management (TWAIM): A Systems Thinking Approach. *WATER* 3:590-603. (INVITED)

Asmus, B., **Magner**, J.A., Vondracek, B., Perry, J., (2009). Physical Integrity: the missing link in biological monitoring and TMDLs. *Environmental Monitoring and Assessment,* 159: 443-463.

Green, M.B., Nieber, J.L., Johnson, G., **Magner**, J.A., Schaefer, B., (2007). Hydrologic influence on N: P ratios in two headwater streams: A paired watershed study. *Journal of Geophysical Research-Biogeosciences.* Vol. 112, G03015, doi: 10.1029/2007JG000403.

Komor, S. and J.A. **Magner**., (1996). Nitrate in ground water and water sources used by riparian trees in an agricultural watershed: A chemical an isotopic investigation in Southern Minnesota. *Water Resources Research,* 32:1039-1050.