

Publications containing LINX data

As of December 2014

Publications: Journal articles

Mulholland, P.J., H.M. Valett, J.R. Webster, S.A. Thomas, L.N. Cooper, S.K. Hamilton, and B.J. Peterson. 2004. Stream denitrification and total nitrate uptake rates measured using a field ¹⁵N isotope tracer approach. *Limnology and Oceanography* 49:809-820.

Hamilton, S. K., J. L. Tank, D. F. Raikow, E. Siler, N. Dorn, J. Halliday, and N. Leonard. 2004. The role of in-stream vs allochthonous N in stream food webs: modeling the results of an isotope addition experiment. *Journal of the North American Benthological Society* 23: 429-448.

Payn, R. A., J. R. Webster, P. J. Mulholland, H. M. Valett, and W. K. Dodds. 2005. Estimation of stream nutrient uptake from nutrient addition experiments. *Limnology and Oceanography: Methods* 3:174-182.

Bernot, M. J. and W. K. Dodds. 2005. Nitrogen retention, removal, and saturation in lotic ecosystems. *Ecosystems* 8:442-453.

Inwood, S. E., J. L. Tank, and M. J. Bernot. 2005. The influence of land use on sediment denitrification in 9 Midwestern headwater streams. *Journal of the North American Benthological Society* 24: 227-245.

Grimm, N.B., R.W. Sheibley, C. Crenshaw, C.N. Dahm, W. J. Roach, and L. Zeglin. 2005. Nitrogen retention and transformation in urban streams. *Journal of the North American Benthological Society* 24: 626-642.

Hall, R. O. and J. L. Tank. 2005. Correcting whole-stream metabolism estimates for groundwater input. *Limnology and Oceanography Methods* 3: 222-229.

Wall, L.G., J.L. Tank, T.V. Royer, and M. J. Bernot. 2005. Spatial and temporal variability in sediment denitrification within an agriculturally influenced reservoir. *Biogeochemistry* 76:85-111.

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- Hamilton, S. K., and N. E. Ostrom. 2007. Measurement of the stable isotope ratio of dissolved N₂ in ¹⁵N tracer experiments. *Limnology and Oceanography Methods* 5:233-240.
- Gooseff, M.N., R.O. Hall, and J.L. Tank. 2007. Relating transient storage to channel complexity in streams of varying land use in Jackson Hole, Wyoming. *Water Resources Research*. 43:1-10.
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- Inwood, S.E., J.L. Tank, and M.J. Bernot. 2007. Factors controlling sediment denitrification in Midwestern streams of varying land use. *Microbial Ecology*. 53:1-12.
- O'Brien, J. M. and W. K. Dodds. 2008. Ammonium uptake and mineralization in prairie streams: chamber incubation and short-term nutrient addition experiments. *Freshwater Biology* 53:102-112.
- Dent, C.L., N.B. Grimm, E. Marti, J.W. Edmonds, J.C. Henry, and J.R. Welter. 2007. Variability in surface-subsurface hydrologic interactions and implications for nutrient retention in an arid-land stream. *Journal of Geophysical Research* 112: G04004, doi: 10.1029/2007/JG000467.
- Arango, C.P., J.L. Tank, J.L. Schaller, T.V. Royer, M.J. Bernot, and M.B. David. 2007. Benthic organic carbon influences denitrification in streams with high nitrate concentration. *Freshwater Biology* 52:1210-1222.
- Earl, S., H.M. Valett, and J.R. Webster. 2007. Comparison of nitrogen spiraling in stream ecosystems quantified using stable isotope tracers and nutrient addition experiments. *Limnology and Oceanography*, In Press.
- Beaulieu, J.J., C.P. Arango, J.L. Tank, and S. Hamilton. 2008. The production and emission of nitrous oxide from headwater streams in the Midwestern US. *Global Change Biology* 14:878-894.
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- McDowell, J. L. Meyer, H. M. Valett, J. R. Webster, C. Arango, J. J. Beaulieu, M. J. Bernot, A. J. Burgin, C. Crenshaw, L. Johnson, J. Merriam, B. R. Niederlehner, J. M. O'Brien, J. D. Potter, R.W. Sheibley, D. J. Sobota, and S. M. Thomas. 2008. Stream denitrification across biomes and its response to anthropogenic nitrate loading. *Nature* 452:202-205.
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- Johnson, L.T., C.P. Arango, and J.L.Tank. 2009. The effect of land use on dissolved organic carbon and nitrogen uptake in streams. *Freshwater Biology* 54: 2335-2350.
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- Helton, A.M., G.C. Poole, J.L. Meyer, W.M. Wollheim, B.J. Peterson, P.J. Mulholland, E.S. Bernhardt, J.A. Stanford, C. Arango, L.R. Ashkenas, L.W. Cooper, W.K. Dodds, S.V. Gregory, R.O. Hall, Jr., S.K. Hamilton, S.L. Johnson, W.H. McDowell, J.D. Potter, J.L. Tank, S.M. Thomas, H.M. Valett, J.R. Webster, and L. Zeglin. 2011. Thinking outside the channel: modeling nitrogen cycling in networked river ecosystems. *Frontiers in Ecology and the Environment*. 4(9): 229-238. doi: 10.1890/080211
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- Findlay, S., P.J. Mulholland, S.K. Hamilton, J.L. Tank, M.J. Bernot, A.J. Burgin, C.L. Crenshaw, N.B. Grimm, W.H. McDowell, J.D. Potter, and D.J. Sobota. 2011. Cross-stream comparison of substrate-specific denitrification potential. *Biogeochemistry* 104:381–392. doi: 10.1007/s10533-010-9512-8
- Raymond, P.A., C. J. Zappa, D. Butman, T.L. Bott, J. Potter, P. Mulholland, A.E. Laursen, W.H. McDowell, and D. Newbold. 2012. Scaling the gas transfer velocity and hydraulic geometry in streams and small rivers. *Limnology and Oceanography Fluids and Environments* 2:41-53 DOI 10.1215/21573689-1597669.
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- King, S., J. B. Heffernan, and M. J. Cohen. 2014. Nutrient flux, autotrophic demand, and nutrient limitation in streams and rivers. *Freshwater Science* 33:85-98.
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Publications: Book chapters

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- Tank, J.L., M.J. Bernot, and E.J. Rosi-Marshall. 2006. Nitrogen limitation and uptake. In *Methods in stream ecology*, eds F.R. Hauer and G.A. Lamberti. Pp. 213-238. Academic Press.

Webster, J. R. , and H. M. Valett. 2006. Solute dynamics. Pages 169-185 *in* F. R. Hauer and G. A. Lamberti, editors. *Methods in Stream Ecology*. Academic Press, San Diego.

Theses

Wilson, K.C. 2005. Hyporheic oxygen flux and substratum spatial heterogeneity: Effects on whole-stream dynamics. MS thesis. Kansas State University, Manhattan, KS.

Helton, A.M. 2006. An Inter-biome Comparison of Stream Network Nitrate Dynamics. M.S. Thesis. Institute of Ecology, University of Georgia, Athens, GA.

Wojculewski, C.A. 2006. Influence of land use on the quality of seston in southern Appalachian stream ecosystems. MS thesis, Virginia Tech, Blacksburg, VA.

O'Brien, J.M. 2006. Controls of nitrogen spiraling in Kansas streams. PhD dissertation. Kansas State University, Manhattan, KS.

Crenshaw, C.L. 2007. Carbon and nitrogen dynamics in stream ecosystems. Ph.D. dissertation. University of New Mexico, Albuquerque, NM.

Sobota, D.J. 2007. Linkages among land use, riparian zones, and uptake and transformation of nitrate in stream ecosystems. Ph.D. Dissertation. Oregon State University, Corvallis, OR. 151 pp.

Arango, C.P. 2007. Anthropogenic and landscape factors control stream nitrogen transformations at multiple spatial scales. Ph.D. Dissertation. University of Notre Dame, Notre Dame, IN.

Potter, J.D. 2007. Denitrification drives nitrate uptake in small Puerto Rican streams. M.S. Thesis, University of New Hampshire.

Beaulieu, J.B. 2007. Controls on greenhouse gas emissions from headwater streams. Ph.D. Dissertation. University of Notre Dame, Notre Dame, IN.

Johnson, L.T. 2008. The influence of land use on the role of dissolved organic carbon and nitrogen in stream nutrient processing. Ph.D. Dissertation. University of Notre Dame, Notre Dame, IN.