

Biographical Sketch

Kelly Addy Lowder

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Education

M.S., 1997, Department of Natural Resources Science, University of Rhode Island.
B.S., 1995, Departments of Biology and Environmental Studies, Tufts University.

Experience

Research Associate IV, Dept. of Natural Resources Science, Univ. of Rhode Island:
1998 - Present, Watershed Nitrogen Dynamics, URI Watershed Hydrology Lab
2002 - Present, Web Content Coordinator, USDA-CSREES National and New England Water Quality Program: <http://www.usawaterquality.org/>
2002 - 2005, Publications Specialist, URI Watershed Watch and the USDA-CSREES Volunteer Water Quality Monitoring National Facilitation Project
Water Quality Specialist, 1997 - 1998, Groundwater Biogeochemistry, Dept. of Natural Resources Science, Univ. of Rhode Island.
Graduate Research Assistant, 1995 - 1997, Dept. of Natural Res. Sci., Univ. of Rhode Island.

Professional Awards

- 2011 and 2010 Outstanding Reviewer Award, Journal of Environmental Quality.
- 2010 Project of Excellence for the National Institute of Food and Agriculture, National Water Program for work on “The National Water Program Website: A partnership of USDA NIFA and the Land Grant Colleges and Universities.”

Professional Activities

- Planning Committee, AWRA 2012 Summer Specialty Conference: Riparian Ecosystems and Buffers
- Core Leadership Team Member for the proposed Drinking Water and Human Health eXtension Community of Practice, 2009-2012
- Planning Committee, AWRA 2008 Summer Specialty Conference: Riparian Ecosystems and Buffers
- Communications Subcommittee Member, CSL, NIWQP, 2002 - present
- American Water Resources Association Member, 2004 – present
- Soil Science Society of America Member, 2000 – present
- URI Undergraduate Coastal Fellowship Program Mentor, 1996 – present, total 18 undergraduates
- RI EPSCOR SURF Mentor, 2010-present, total 4 undergraduates

Journal Article Reviewer for:

- Biogeochemistry, 2010 and 2012
- Hydrological Processes, 2012
- Journal of Environmental Quality, 2004, 2010, and 2011
- Environmental Science and Technology, 2003
- Journal of the North American Benthological Society, 2000
- Wetlands, 2000
- Guest Associate Editor, Journal of Environmental Quality, 12/2002 - 2/2003

Proposal Reviewer for:

- USDA-NIFA National Integrated Water Quality Program, 2012
- Binational Agricultural Research and Development (BARD) Fund, 2004

Representative Research/Grants

- Co-PI, "Efficacy, Constraints And Uncertainties Of Constructed Wetlands And Bioreactors: A Place-Based, Integrated Approach To Foster N Abatement". 2011-2014. A.J. Gold, M. David, L. Schipper, B. Needelman, K. Addy. USDA NIFA. \$495,000.
- Co-PI, "Gas chromatography upgrades to promote research on climate change, water quality, bioenergy and ecosystems." URI CELS CARES. A.J. Gold, M. Stolt, D. Cardace, V. Carver, K. Addy. \$38,448 equipment grant.

Representative Peer-Reviewed Publications

- Addy, K., A.J. Gold, M. Stolt, S. Donohue. In press. Groundwater denitrification capacity and nitrous oxide flux of former fringing salt marshes filled with human-transported materials. *Urban Ecosystems*.
- Gold, A.J., D. Parker, R.M. Waskom, J. Dobrowolski, M. O'Neill, P.M. Groffman, and K. Addy. In press. Advancing water resource management in agricultural, rural, and urbanizing watersheds: Why U.S. Land-Grant Universities Matter. *Journal of Soil and Water Conservation*.
- Kellogg, D.Q., A.J. Gold, S. Cox, K. Addy, and P.V. August. 2010. A geospatial approach for assessing denitrification sinks at the local level. *Journal of Ecological Engineering* 36: 1596–1606.
- Watson, T.K., D.Q. Kellogg, K. Addy, A.J. Gold, M.H. Stolt, S.W. Donohue and P.M. Groffman. 2010. Groundwater denitrification capacity of riparian zones in suburban and agricultural watersheds. *Journal of the American Water Resources Association* 46:237-245.
- Kellogg, D.Q., A.J. Gold, P.M. Groffman, M.H. Stolt, and K. Addy. 2008. Riparian ground-water flow patterns using flownet analysis: Evapotranspiration-induced upwelling and implications for N removal. *Journal of the American Water Resources Association* 44:1024-1034.
- Clough T.J., K. Addy, D.Q. Kellogg, B.L. Nowicki, A.J. Gold, and P.M. Groffman. 2007. Dynamics of nitrous oxide in groundwater at the aquatic-terrestrial interface. *Global Change Biology* 13:1528–1537.
- Addy, K., A. Gold, B. Nowicki, J. McKenna, M. Stolt, and P. Groffman. 2005. Denitrification capacity in a subterranean estuary below a Rhode Island (USA) fringing salt marsh. *Estuaries*. 28(6):896-908.
- Kellogg, D.Q., A.J. Gold., P.M. Groffman, K. Addy, M.H. Stolt. and G. Blazejewski. 2005. In situ ground water denitrification in stratified, permeable soils underlying riparian wetlands. *Journal of Environmental Quality* 34:524-533.
- Rotkin-Ellman, M., K. Addy, A.J. Gold and P.M Groffman. 2004. Tree species, root decomposition and subsurface denitrification potential in riparian wetlands. *Plant and Soil* 263:335-344.
- Addy, K., D.Q. Kellogg, A.J. Gold, P.M. Groffman, G. Ferendo, and C. Sawyer. 2002. In situ Push-Pull method to determine ground water denitrification in riparian zones. *Journal of Environmental Quality*. 31:1017-1024.

- Gold, A.J., P.M. Groffman, K. Addy, D.Q. Kellogg, M. Stolt, and A.E. Rosenblatt. 2001. Landscape attributes as controls on ground water nitrate removal capacity of riparian zones. *Journal of the American Water Resources Association*. 37:1457-1464.
- Groffman, P.M., A.J. Gold, and K. Addy. 2000. Nitrous oxide production in riparian zones and its importance to national emission inventories. *Chemosphere-Global Change Science* 2:291-299.
- Gold, A.J., P.M. Groffman, K. Addy, D.Q. Kellogg, and A. E. Rosenblatt. 2000. The role of landscape setting in riparian groundwater nitrate removal. Pages 113-117 in *AWRA Proceedings of the International Conference on Riparian Zone Ecology and Management in Multi-Land Use Watersheds*, Portland, OR.
- Addy, K.L., A.J. Gold, P.M. Groffman, P.A. Jacinthe. 1999. Groundwater nitrate removal in forested and mowed riparian buffer zones. *Journal of Environmental Quality* 28:962-970.