

2008 Publications Using NADP Data

- Alexander, R.B., Smith, R.A., Schwarz, G.E., Boyer, E.W., Nolan, J.V., and Brakebill, J.W. 2008. Differences in phosphorus and nitrogen delivery to the Gulf of Mexico from the Mississippi river basin. *Environ. Sci. Technol.* 42:822–830, DOI: 10.1021/es0716103.
- Allen, S.K., and Allen, J.M. 2008. *Chemistry Matters*. Kendall Hunt Publishing, Dubuque, Iowa, ISBN 978-0-7575-4380-7. 426 pp.
- Allen, S.K., and Allen, J.M. 2008. *Chemistry Matters Study Guide*. Kendall Hunt Publishing, Dubuque, Iowa, ISBN 978-0-7575-4583-2. 178 pp.
- Avis, P.G., Mueller, G.M., and Lussenhop, J. 2008. Ectomycorrhizal fungal communities in two North American oak forests respond to nitrogen addition. *New Phytologist* 179:472–483.
- Axelrad, D.M., Lange, T., Gabriel, M., Atkeson, T.D., Pollman, C.D., Orem, W.H., Scheidt, D.J., Kalla, P.I., Frederick, P.C., and Gilmour, C.C. 2008. Annual permit compliance monitoring report mercury and sulfur monitoring, research and environmental assessment in South Florida. Appendix 3B. In 2008 South Florida Environmental Report. South Florida Water Management District, West Palm Beach, FL.
- Baldigo, B.P., Lawrence, G.B., Bode, R.W., Simonin, H.A., Roy, K.M., and Smith, A.J. 2008. Impacts of acidification on macroinvertebrate communities in streams of the western Adirondack Mountains, New York, U.S.A.: Ecological indicators, DOI: 10.1016/j.ecolind.04.004.
- Barco, J., Hogue, T.S., Curto, V., and Rademacher, L. 2008. Linking hydrology and stream geochemistry in urban fringe watersheds. *J. Hydrology* 360:31-47.
- Barnes, R.T., Raymond, P.A., and Casciotti, K.L. 2008. Dual isotope analyses indicate efficient processing of atmospheric nitrate by forested watersheds in the northeastern U.S. *Biogeochemistry* 90:15-27.
- Baron, J.S. 2008. Interactions between atmospheric nitrogen deposition and climate change in the Colorado Front Range. Talking points editorial for environmentalresearchweb.org.
<http://environmentalresearchweb.org/cws/article/opinion/33501>
- Baron, J.S., Allen, C.D., Fleishman, E., Gunderson, L., McKenzie, D., Meyerson, L., Oropeza, J., and Stephenson, N. 2008. National parks. In S.H. Julius, J.M. West (eds.) *Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources*. A Report by the U.S. Climate Change

- Science Program and the Subcommittee on Global Change Research. U.S. Environmental Protection Agency, Washington, DC, pp. 4-1 to 4-68.
- Biswas, A., Blum, J.D., and Keeler, G.J. 2008. Mercury storage in surface soils in a central Washington forest and estimated release during the 2001 Rex Creek Fire. *Science of the Total Environment* 404:129-138.
- Bookman, R., Driscoll, C.T., Engstrom, D.R., and Effler, S.W. 2008. Local to regional emission sources affecting mercury fluxes to New York lakes. *Atmospheric Environment* 42:6088-6097.
- Boonstra, R., Desantis, L., Krebs, C.J., and Hik, D.S. 2008. Climate and nutrient influences on the growth of white spruce trees in the boreal forests of the Yukon. *Climate Research* 36:123-130, DOI: 10.3354/cr00736.
- Bosch, N.S., and Allan, J.D. 2008. The influence of impoundments on nutrient budgets in two catchments of Southeastern Michigan. *Biogeochemistry* 87:325-338.
- Boynton, W.R., Hagy, J.D., Cornwell, J.C., Kemp, W.M., Greene, S.M., Owens, M.S., Baker, J.E., and Larsen, R.K. 2008. Nutrient budgets and management actions in the Patuxent River Estuary, Maryland. *Estuaries and Coasts* 31:623-651, DOI: 10.1007/s12237-008-9052-9.
- Bullock, O.R., Jr., Atkinson, D., Braverman, T., Civerolo, K., Dastoor, A., Davignon, D., Ku, J.-Y., Lohmen, K., Myers, T., Park, R., Seigneur, C., Selin, N., Sistla, G. and Vijayaraghavan, K. 2008. An analysis of simulated wet deposition of mercury from the North American Mercury Model Intercomparison. *Journal of Geophysical Research*, (in press.)
- Bullock, O.R., Jr., Atkinson, D., Braverman, T., Civerolo, K., Dastoor, A., Davignon, D., Ku, J.-Y., Lohmen, K., Myers, T., Park, R., Seigneur, C., Selin, N., Sistla, G., and Vijayaraghavan, K. 2008. The North American Mercury Model Intercomparison Study (NAMMIS): Study description and model-to-model comparisons. *Journal of Geophysical Research* 113, D17310, DOI:10.1029/2008JD009803.
- Burns, D.A., Riva-Murray, K., Bode, R.W., and Passy, S. 2008. Changes in stream chemistry and biology in response to reduced levels of acid deposition during 1987-2003 in the Neversink River Basin, Catskill Mountains. *Ecological Indicators* 8:191-203.
- Bushey, J.T., Nallana, A.G., Montesdeoca, M.R., and Driscoll, C.T. 2008. Mercury dynamics of a northern hardwood canopy. *Atmos. Environ.* 42:6905-6914.
- Butler, T.J., Cohen, M.D., Vermelyn, F.M., Likens, G.E., Schmeltz, D., and Artz, R.S. 2008. Regional precipitation mercury trends in the eastern USA, 1998-2005: Declines in the Northeast and Midwest, no trend in the Southeast. *Atmos. Environ.* 42:1582-1592.

- Cain, M.L., Bowman, W.D., and Hacker, S.D. 2008. *Ecology*. Sinauer, Sunderland, MA.
- Chen, L., Kost, D., and Dick, W.A. 2008. Petroleum coke circulating fluidized bed combustion product as a sulfur source for alfalfa. *Communications in Soil Science and Plant Analysis* 39:1993-2008, DOI: 10.1080/00103620802134826.
- Choi, H.D., Sharac, T.J., and Holsen, T.M. 2008. Mercury deposition in the Adirondacks: A comparison between precipitation and throughfall. *Atmospheric Environment* 42:1818-1827.
- Christopher, S.F., Mitchell, M.J., McHale, M.R., Boyer, E.W., Burns, D.A., and Kendall, C. 2008. Factors controlling nitrogen release from two forested catchments with contrasting hydrochemical responses. *Hydrological Processes* 22:46-62.
- Civerolo, K., Hogrefe, C., Lynn, B., Rosenzweig, C., Goldberg, R., Rosenthal, J., Knowlton, K., and Kinney, P. 2008. Simulated effects of climate change on nitrogen deposition in the eastern US. *Atmospheric Environment* 42:2074-2082.
- Clark, C.M., and Tilman, D. 2008. Loss of plant species after chronic low-level nitrogen deposition to prairie grasslands. *Nature* 451:712-715.
- Coates, T.A., Boerner, R.E.J., Waldrop, T.A., and Yaussy, D.A. 2008. Soil Nitrogen transformations under alternative management strategies in Appalachian forests. *Soil Sci. Soc. Am. J.* 72:558-565.
- Costanza, J.K., Marcinko, S.E., Goewert, A.E., and Mitchell, C.E. 2008. Potential geographic distribution of atmospheric nitrogen deposition from intensive livestock production in North Carolina, USA. *Science of the Total Environment* 389:76-86.
- Dayan, U., and Lamb, D. 2008. Influences of atmospheric circulation on the variability of wet sulfate deposition. *International Journal of Climatology* 28:1315-1324.
- Elliott, K.J., Vose, J.M., Knoepp, J.D., Johnson, D.W., Swank, W.T., and Jackson, W. 2008. Simulated effects of sulfur deposition on nutrient cycling in Class I wilderness areas. *J. Environ. Qual.* 37:1419-1431, DOI:10.2134/jeq2007.0358.
- Enders, S.K., Pagani, M., Pantoja, S., Baron, J.S., Wolfe, A.P., Pedentchouk, N., and Nuñez, L. 2008. Compound-specific stable isotopes of organic compounds from lake sediments track recent environmental changes in an alpine ecosystem, Rocky Mountain National Park (United States of America). *Limnology and Oceanography* 53(4):1468-1478.
- Engle, M.A., Tate, M.T., Krabbenhoft, D.P., Kolker, A., Olson, M.L., Edgerton, E.S., DeWild, J.F., and McPherson, A.K. 2008. Characterization and cycling

- of atmospheric mercury along the central U.S. Gulf of Mexico Coast, *Applied Geochemistry* 23:419-437.
- Eshleman, K.N., Kline, K.M., Morgan, R.P. II, Castro, N.M., and Negley, T.L. 2008. Contemporary trends in the acid–base status of two acid-sensitive streams in western Maryland. *Environ. Sci. Technol.* 42:56–61, DOI: 10.1021/es071195e.
- Fitzgibbon, T.O., Lyons, W.B., Gardner, C.B., and Carey, A.E. 2008. A preliminary study of the Hg flux from selected Ohio watersheds to Lake Erie. *Applied Geochemistry* 23:3434–3441.
- Flint, C.M., Harrison, R.B., Strahm, B.D., and Adams, A.B. 2008. Nitrogen leaching from douglas-fir forests after urea fertilization. *Environ. Qual.* 37:1781-1788, DOI:10.2134/jeq2007.0367.
- Gardner, E.M., McKnight, D.M., Lewis, Jr., W.M., and Miller, M.P. 2008. Effects of nutrient enrichment on phytoplankton in an Alpine Lake, Colorado, U.S.A. *Arctic, Antarctic, and Alpine Research* 40(1):55-64.
- Garten Jr., C.T., Brice, D.J., and Todd Jr., D.E. 2007. Short-term recovery of Ammonium-15 Nitrogen applied to a temperate forest inceptisol and ultisol in east Tennessee, USA. *Communications in Soil Science and Plant Analysis* 38:2693-2704.
- Gauci, V., Dise, N.B., Howell, G., and Jenkins, M.E. 2008. Suppression of rice methane emission by sulfate deposition in simulated acid rain, *J. Geophys. Res.* 113, G00A07, doi:10.1029/2007JG000501.
- Guo, Y., Feng, X., Li, Z., He, T., Yan, H., Meng, B., Zhang, J., and Qiu, G. 2008. Distribution and wet deposition fluxes of total and methyl mercury in Wujiang River Basin, Guizhou, China. *Atmospheric Environment* 42: 7096-7103.
- Hales, H.C., and Ross, D. 2008. Drastic short-term changes in the isotopic composition of soil nitrate in forest soil samples. *SSSAJ* 72(6):1645-1652.
- Harper, T.W., Brye, K.R., Daniel, T.C., Slaton, N.A., and Haggard, B.E. 2008. Land use effects on runoff and water quality on an Eastern Arkansas soil under simulated rainfall. *Journal of Sustainable Agriculture* 32(2):231-253.
- Heinz Center for Science, Economics and the Environment. 2008. *State of the Nation’s Ecosystems 2008*. Island Press, Washington, DC, 352 pp.
- Homyak, P.M., Yanai, R.D., Burns, D.A., Briggs, R.D., Germain, R.H. 2008. Nitrogen immobilization by wood chip application: Protecting water quality in a northern hardwood forest. *Forest Ecology and Management* 255:2589-2601.
- Howarth, R.W. 2008. Coastal nitrogen pollution: A review of sources and trends globally and regionally. *Harmful Algae* 8:14-20.

- Hudy, M., Thieling, T.M., Gillespie, N., and Smith, E.P. 2008. Distribution, status, and land use characteristics of subwatersheds within the native range of brook trout in the Eastern United States. *North American J. Fisheries Management* 28:1069-1085, DOI: 10.1577/M07-017.1.
- Hutcheson, M.S., Smith, C.M., Wallace, G.T., Rose, J., Eddy, B., Sullivan, J., Pancorbo, O., and West, C.R. 2008. Freshwater fish mercury concentrations in a regionally high mercury deposition area. *Water Air Soil Pollut.* 191:15-31, DOI: 10.1007/s11270-007-9604-9.
- Hyfield, E.C.G., Day, J.W., Cable, J.E., and Justic, D. 2008. The impacts of re-introducing Mississippi River water on the hydrologic budget and nutrient inputs of a deltaic estuary. *Ecological Engineering* 32:347-359.
- Inamdar, S.P., and Mitchell, M.J. 2008. Sulfate exports from multiple catchments in a glaciated forested watershed in western New York, USA. *Environ. Monit. Assess.* 139:227-245.
- Inamdar, S.P., Rupp, J., and Mitchell, M.J. 2008. Differences in dissolved organic carbon (DOC) and nitrogen (DON) responses to storm-event and groundwater conditions in a forested western New York. *Journal of American Water Resources Association* (in press).
- Ingersoll, G.P., Mast, M.A., Campbell, D.H., Clow, D.W., Nanus, L., and Turk, J.T. 2008. Trends in snowpack chemistry and comparison to National Atmospheric Deposition Program results for the Rocky Mountains, US, 1993–2004. *Atmospheric Environment* 42:6098-6113.
- Karouna-Renier, N.K., Rao, K.R., Lanza, J.J., Rivers, S.D., Wilson, P.A., Hodges, D.K., Levine, K.E., and Ross, G.T. 2008. Mercury levels and fish consumption practices in women of child-bearing age in the Florida Panhandle. *Environmental Research* 108:320-326.
- Kirby, C.S., McNerney, B., and Turner, M.D. 2008. Groundtruthing and potential for predicting acid deposition impacts in headwater streams using bedrock geology, GIS, angling, and stream chemistry. *Science of the Total Environment* 393:249-261.
- Kost, D., Chen, L., and Dick, W.A. 2008. Predicting plant sulfur deficiency in soils: Results from Ohio. *Biol. Fertil. Soils* 44:1091-1098.
- Krupa, S., Booker, F., Bowersox, V., Lehmann, C., and Grantz, D. 2008. Trace gases associated with U.S. agriculture: A review. *J. Air & Waste Manage. Assoc.* 58:986-993, DOI:10.3155/1047-3289.58.8.986.
- Kuiken, T., Zhang, H., Gustin, M., and Lindberg, S. 2008. Mercury emission from terrestrial background surfaces in the eastern USA. Part I: Air/surface exchange of mercury within a southeastern deciduous forest (Tennessee) over one year. *Applied Geochemistry* 23:345-355.

- Lawrence, G.B., Roy, K.M., Baldigo, B.P., Simonin, H.A., Capone, S.B., Sutherland, J.W., Nierzwicki-Bauer, S.A., and Boylen, C.W. 2008. Effects of acid rain on the chemistry of western Adirondack streams in 2003-2005: *Journal of Environmental Quality* 37:1-11, DOI: 10.2134/jeq2008.0061.
- Liu, G., Cai, Y., Kalla, P., Scheidt, D., Richards, J., Scinto, L.J., Gaiser, E., and Appleby C. 2008. Mercury mass budget estimates and cycling seasonality in the Florida Everglades. *Environ. Sci. Technol.* 42:1954–1960, DOI: 10.1021/es7022994.
- Liu, I., Liu, S., Loveland, T.R., and Tieszen, L.L. 2008. Integrating remotely sensed land cover observations and a biogeochemical model for estimating forest ecosystem carbon dynamics. *Ecological modeling* (in press.)
- Lohsea, K.A., Hope, D., Sponsellera, R., Allend, J.O., and Grimmer, N.B. 2008. Atmospheric deposition of carbon and nutrients across an arid metropolitan area. *Science of the Total Environment* 402:95-105.
- Lucas, R.W., and Casper, B.B. 2008. Ectomycorrhizal community and extracellular enzyme activity following simulated atmospheric N deposition. *Soil Biology & Biochemistry* 40:1662-1669.
- Luo, Y., Zhang, X., Liu, X., Ficklin, D., and Zhang, M. 2008. Dynamic modeling of organophosphate pesticide load in surface water in the northern San Joaquin Valley watershed of California. *Environmental Pollution* 156:1171-1181.
- Lyman, S.N., and Gustin, M.S. 2008. Speciation of atmospheric mercury at two sites in northern Nevada, USA. *Atmospheric Environment* 42:927-939.
- May, D., and Sivakumar, M. 2008. Comparison of artificial neural network and regression models in the prediction of urban stormwater quality. *Water Environment Research* 80(1):4-9.
- Mast, M.A., and Clow, D.W. 2008. Effects of 2003 wildfires on stream chemistry in Glacier National Park, Montana. *Hydrological Processes* (in press.) (www.interscience.wiley.com) DOI: 10.1002/hyp.7121.
- McHale, M.R., Murdoch, P.S., Burns, D.A., Baldigo, B.P. 2008. Effects of forest harvesting on ecosystem health in the headwaters of the New York City water supply, Catskill Mountains, New York. U.S. Geological Survey Scientific Investigations Report 2008-5057, 22 pp.
- Mitchell, C.P.J., Branfireun, B.A., and Kolka, R.K. 2008. Assessing sulfate and carbon controls on net methylmercury production in peatlands: An in situ mesocosm approach. *Applied Geochemistry* 23:503–518.
- Mitchell, M.J., Bailey, S.W., Shanley, J.B., and Mayer, B. 2008. Evaluating storm events for three watersheds in the Northeastern United States: A

- combined hydrological, chemical and isotopic approach. *Hydrological Processes* 22:4023-4034.
- Nanus, L., Williams, M.W., Campbell, D.H., Elliott, E.M., and Kendall, C.K. 2008. Evaluating regional patterns in nitrate sources to watersheds in national parks of the Rocky Mountains using nitrate isotopes. *Environmental Science and Technology* 42:6487-6493.
- Nazareth, C. 2008. Invasive species and panne ecosystems: The effects of atmospheric pollution, Master's Thesis, Indiana University.
- Nelson, S.J., Johnson, K.B., Weathers, K.C., Loftin, C.S., Fernandez, I.J., Kahl, J.S., and Krabbenhoft, D.P. 2008. A comparison of winter mercury accumulation at forested and no-canopy sites measured with different snow sampling techniques. *Applied Geochemistry* 23:384-398.
- Newman, B.D., and Graham, R.C. 2008. Species-level impacts on chaparral root zone hydrology (Special Section). *Vadose Zone J.* 7:1110-1118, DOI: 10.2136/vzj2007.0105.
- Oropeza, J. K. 2008. Controls on soil acidity in Loch Vale Watershed, Rocky Mountain National Park, Colorado. M.S. Thesis, Colorado State University. 59 pp.
- Page, B.D., Bullen, T.D., and Mitchell, M.J. 2008. Influences of calcium availability and tree species on Ca isotope fractionation in soil and vegetation. *Biogeochemistry* 88:1-13, DOI: 10.1007/s10533-008-9188-5.
- Paulson, A.J., and Norton, D. 2008. Mercury sedimentation in lakes in western Whatcom County, Washington, USA and its relation to local industrial and municipal atmospheric sources. *Water Air Soil Pollution* 189:5-19, DOI: 10.1007/s11270-007-9549-z.
- Pellerin, B.A., Wollheim, W.M., Feng, X., and Vorosmarty, C.J. 2008. The application of electrical conductivity as a tracer for hydrograph separation in urban catchments. *Hydrol. Process.* 22:1810-1818.
- Perez-Suarez, M., Fenn, M.E., Cetina-Alcala, V.M., and Aldrete, A. 2008. The effects of canopy cover on throughfall and soil chemistry in two forest sites in the México City air basin. *Atmósfera* 21(1).
- Peterson, C., and Gustin, M. 2008. Mercury in the air, water and biota at the Great Salt Lake (Utah, USA). *Science of the Total Environment* 405:255-268.
- Pinder, R.W., Gilliland, A.B., and Dennis, R.L. 2008. Environmental impact of atmospheric NH₃ emissions under present and future conditions in the Eastern United States. *Geophys. Res. Lett.*, 35, L12808, DOI:10.1029/2008GL033732.
- Pongprueksa, P., Lin, C.-J., Lindberg, S.E., Jang, C., Braverman, T., Bullock, O.R. Jr., Ho, T.C., Chu, H.-W. 2008. Scientific uncertainties in atmospheric

- mercury models III: Boundary and initial conditions, model grid resolution, and Hg(II) reduction mechanism. *Atmospheric Environment* 42:1828-1845.
- Queen, A., Zhang, Y., Gilliam, R., and Pleim, J. 2008. Examining the sensitivity of MM5-CMAQ predictions to explicit microphysics schemes and horizontal grid resolutions, Part I—Database, evaluation protocol, and precipitation predictions. *Atmospheric Environment* 42:3842-3855.
- Queen, A., and Zhang, Y. 2008. Examining the sensitivity of MM5-CMAQ predictions to explicit microphysics schemes and horizontal grid resolutions, Part II—PM concentrations and wet deposition predictions. *Atmospheric Environment* 42:3856-3868.
- Queen, A., and Zhang, Y. 2008. Examining the sensitivity of MM5-CMAQ predictions to explicit microphysics schemes and horizontal grid resolutions, Part III—The impact of horizontal grid resolution. *Atmospheric Environment* 42:3869-3881.
- Rappold, A.G., Gelfand, A.E., and Holland, D.M. 2008. Modeling mercury deposition through latent space-time processes. *Journal of the Royal Statistical Society: Series C (Applied Statistics)* 57:187-205.
- Raun, W.R., Solie, J.B., Taylor, R.K., Arnall, D.B., Mack, C.J., and Edmonds, D.E. 2008. Ramp calibration strip technology for determining midseason nitrogen rates in corn and wheat. *Agronomy Journal* 100:1088-1093, DOI: 10.2134/agronj2007.0288N.
- Risch, M.R., and Fowler, K.K. 2008. Mercury in precipitation in Indiana, January 2004–December 2005: U.S. Geological Survey Scientific Investigations Report 2008-5148 (in press).
- Rosfjord, C., Webster, K., Kahl, J.S., Norton, S.A., Fernandez, I., and Herlihy, A. 2007. Anthropogenically-driven changes in chloride complicate interpretation of base cation trends in lakes recovering from acidic deposition. *Environ. Sci. Technol.* 41:7688-7693.
- Rothenberg, S.E., Ambrose, R.F., and Jay, J.A. 2008. Evaluating the potential efficacy of Mercury total maximum daily loads on aqueous methylmercury levels in four coastal watersheds. *Environ. Sci. Technol.* 42:5400–5406, DOI: 10.1021/es702819f.
- Rypel, A.L., Arrington, D.A., and Findlay, R.H. 2008. Mercury in southeastern U.S. riverine fish populations linked to water body type. *Environ. Sci. Technol.* 42:5118–5124. DOI: 10.1021/es8001772.
- Sabin, L.D., and Schiff, K.C. 2008. Dry atmospheric deposition rates of metals along a coastal transect in southern California. *Atmospheric Environment*, 42:6606-6613.

- Scanlon, B.R., Reedy, R.C., and Bronson, K.F. 2008. Impacts of land use change on nitrogen cycling archived in semiarid unsaturated zone nitrate profiles, southern high plains, Texas. *Environ. Sci. Technol.* 42:7566–7572, DOI: 10.1021/es800792w.
- Scanlon, B.R., Reedy, R.C., Jackson, W.A., and Rao, B. 2008. Mobilization of naturally occurring perchlorate related to land-use change in the southern high plains, Texas. *Environ. Sci. Technol.* 42(23):8648–8653.
- Scharenbroch, B.C., and Bockheim, J.G. 2008. The effects of gap disturbance on nitrogen cycling and retention in late-successional northern hardwood–hemlock forests. *Biogeochemistry* 87:231–245, DOI: 10.1007/s10533-008-9180-0.
- Selin, N.E., and Jacob, D.J. 2008. Seasonal and spatial patterns of mercury wet deposition in the United States: Constraints on the contribution from North American anthropogenic sources. *Atmospheric Environment* 42:5193–5204.
- Selvendiran, P., Driscoll, C.T., Bushey, J.T., and Montesdeoca, M.R. 2008. Wetland influence on mercury fate and transport in a temperate forested watershed. *Environ. Pollut.* DOI:10.1016/j.envpol.2007.12.005:154:46–55.
- Selvendiran, P., Driscoll, C.T., and Montesdeoca, M.R. 2008. Mercury dynamics and transport in two Adirondack lakes. *Limnol. Oceanogr.* (in press).
- Selvendiran, P., Driscoll, C.T., Montesdeoca, M.R., and Bushey, J.T. 2008. Inputs, storage and transport of total and methyl mercury in two temperate forest wetlands. *J. Geophys. Res.* (in press).
- Shanley, J.B., Mast, M.A., Campbell, D.H., Aiken, G.R., Krabbenhoft, D.P., Hunt, R.J., Walker, J.F., Schuster, P.F., Chalmers, A., Aulenbach, B.T., Peters, N.E., Marvin-DiPasquale, M., Clow, D.W., and Shafer, M.M. 2008. Comparison of total mercury and methylmercury cycling at five sites using the small watershed approach. *Environmental Pollution* 154:143–154.
- Showers, W.J., Genna, B., McDade, T., Bolich, R., and Fountain, J.C. 2008. Nitrate contamination in groundwater on an urbanized dairy farm. *Environ. Sci. Technol.* 42:4683–4688, DOI: 10.1021/es071551t.
- Smith, S.M., Hanley, M., and Killingbeck, K.T. 2008. Development of vegetation in dune slack wetlands of Cape Cod National Seashore (Massachusetts, USA). *Plant Ecology* 194:243–256, DOI: 10.1007/s11258-007-9288-7.
- Sparks, J.E.D.P., Walker, J., Turnipseed, A., and Guenther, A. 2008. Dry nitrogen deposition estimates over a forest experiencing free air CO₂ enrichment. *Global Change Biology* 14:768–781, DOI: 10.1111/j.1365-2486.2007.01526.x.

- Spruill, T.B., and Bratton, J.F. 2008. Estimation of groundwater and nutrient fluxes to the Neuse River Estuary, North Carolina. *Estuaries and Coasts* 31:501-520, DOI: 10.1007/s12237-008-9040-0.
- Stamenkovic, J., Gustin, M.S., Arnone III, J.A., Johnson, D.W., Larsen, J.D., and Verburg, P.S.J. 2008. Atmospheric mercury exchange with a tallgrass prairie ecosystem housed in mesocosms. *Science of the Total Environment* 406:227-238.
- Stednick, J.D. 2008. Long-term water quality changes following timber harvesting. In *Hydrological and Biological Responses to Forest Practices. Ecological Studies V199*, Springer, New York, ISSN 0070-8356, DOI: 10.1007/978-0-387-69036-0.
- Stephen, K., and Aneja, V.P. 2008. Trends in agricultural ammonia emissions and ammonium concentrations in precipitation over the Southeast and Midwest United States. *Atmospheric Environment* 42:3238-3252.
- Suchanek, T.H., Cooke, J., Keller, K., Jorgensen, S., Richerson, P.J., Eagles-Smith, C.A., Harner, E.J., and Adam, D.P. 2008. A mass balance mercury budget for a mine-dominated lake: Clear Lake, California. *Water, Air, & Soil Pollution* DOI: 10.1007/s11270-008-9757-1.
- Sullivan, T.J., Cosby, B.J., Webb, J.R., Dennis, R.L., Bulger, A.J., and Deviney Jr, F.A. 2008. Streamwater acid-base chemistry and critical loads of atmospheric sulfur deposition in Shenandoah National Park, Virginia. *Environ. Monit. Assess.* 137:85-99, DOI: 10.1007/s10661-007-9731-1.
- Sunderland, E.M., Cohen, M.D., Selin, N.E., and Chmura, G.L. 2008. Reconciling models and measurements to assess trends in atmospheric mercury deposition. *Environmental Pollution* (in press) 1-10, DOI: 10.1016/j.envpol.2008.01.021.
- Tkacz, B., Moody, B., Castillo, J.V., Fenn, M.E. 2008. Forest health conditions in North America. *Environmental Pollution* 155:409-425.
- U.S. Climate Change Science Program. 2008. Preliminary review of adaptation options for climate-sensitive ecosystems and resources. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [S.H. Julius, J.M. West (eds.), J.S. Baron, L.A. Joyce, B.D. Keller, M.A. Palmer, C.H. Peterson, and J.M. Scott (Authors)]. U.S. Environmental Protection Agency, Washington, DC, 873 pp.
- Ulberg, A.L., and Risch, M.R. 2008. Total mercury and methylmercury in Indiana streams, August 2004–September 2006. U.S. Geological Survey Scientific Investigations Report 2008-5176 (in press).
- van Verseveld, W.J., McDonnell, J.J., and Lajtha, K. 2008. A mechanistic assessment of nutrient flushing at the catchment scale. *J. Hydrology* 358: 268-287.

- Vet, R., and Ro, C.-U. 2008. Contribution of Canada–United States transboundary transport to wet deposition of sulphur and nitrogen oxides: A mass balance approach. *Atmospheric Environment* 42:2518-2529.
- Walker, C., and Lin, H.S. 2008. Soil property changes after four decades of wastewater irrigation: A landscape perspective. *Catena* 73:63-74.
- Walker, J., Spence, P., Kimbrough, S., and Robarge, W. 2008. Inferential model estimates of ammonia dry deposition in the vicinity of a swine production facility. *Atmospheric Environment* 42:3407-3418.
- Wang, Y., Wai, K.M., Gao, J., Liu, X., Wang, T., and Wang, W. 2008. The impacts of anthropogenic emissions on the precipitation chemistry at an elevated site in Northeastern China. *Atmospheric Environment* 42:2959-2970.
- Watras, C.J., and Morrison, K.A. 2008. The response of two remote, temperate lakes to changes in atmospheric mercury deposition, sulfate, and the water cycle. *Canadian J. Fisheries and Aquatic Sciences* V65(1):110-116.
- Wetherbee, G.A., and Lehmann, C.M.B. 2008. Mercury deposition network site operator training for the system blank and blind audit programs. U.S. Geological Survey Open-File Report 2008-1252, version 1.0., <http://pubs.usgs.gov/of/2008/1252/>.
- Woltemade, C.J., and Woodward, J. 2008. Nitrate removal in a restored spring-fed wetland, Pennsylvania, USA. *J. American Water Resources Assoc.* 44:222-234.
- Woodbury, P.B., Howarth, R.W., and Steinhart, G. 2008. Understanding nutrient cycling and sediment sources in the Upper Susquehanna River Basin. *Journal of Contemporary Water Research & Education* 138(1):7-14.
- Wu, S., Krishnan, S., Zhang, Y., and Aneja, V. 2008. Modeling atmospheric transport and fate of ammonia in North Carolina—Part I: Evaluation of meteorological and chemical predictions. *Atmospheric Environment* 42:3419-3436.
- Zhai, J., Driscoll, C.T., Sullivan, T.J., and Cosby, B.J. 2008. Regional application of the PnET-BGC model to assess historical acidification of Adirondack lakes. *Water Resour. Res.* 44, W01421, DOI:10.1029/2006WR005532.

Internal Publications

National Atmospheric Deposition Program, 2008. 30 Years of Network Operations: Focusing on the Future. 2008 Annual Meeting and Scientific Symposium Proceedings 2008-001. Illinois State Water Survey, Champaign, IL, October, 2008. 143 pp.

National Atmospheric Deposition Program, 2008. Governance Handbook. Illinois State Water Survey, Champaign, IL, July, 2008. 12 pp.

National Atmospheric Deposition Program, 2008. 2007 Annual Summary. Illinois State Water Survey, Champaign, IL, July, 2008. 16 pp.