

2012 NADP Reference Listing

Includes 170 publications that used NADP data or resulted from NRSP 3 activities in 2012. A publically available online database that lists citations using NADP data is accessible at: <http://nadp.slh.wisc.edu/lib/bibliography.aspx>.

1. Air Resources Specialists, Inc., 2012. Oil and Gas Leasing in the Wyoming Range: Final Supplemental Environmental Impact Statement, Air Quality Analysis Technical Support Document for Bridger-Teton National Forest, 71 pp.
2. Alam, M. J., & Goodall, J. L., 2012. Toward disentangling the effect of hydrologic and nitrogen source changes from 1992 to 2001 on incremental nitrogen yield in the contiguous United States. *Water Resources Research* 48(4): W04506.
3. Allen, D. J., Pickering, K. E., Pinder, R. W., Henderson, B. H., Appel, K. W., & Prados, A., 2012. Impact of lightning-NO on eastern United States photochemistry during the summer of 2006 as determined using the CMAQ model. *Atmospheric Chemistry & Physics* 12: 1737–1758.
4. Amos, H. M., Jacob, D. J., Holmes, C. D., Fisher, J. A., Wang, Q., Yantosca, R. M., et al., 2012. Gas-particle partitioning of atmospheric hg(II) and its effect on global mercury deposition. *Atmospheric Chemistry & Physics* 12(1): 591–603.
5. Angradi, T. R., Bolgrien, D. W., Starry, M. A., & Hill, B. H., 2012. Modeled summer background concentration of nutrients and suspended sediment in the mid-continent (USA) great rivers. *JAWRA Journal of the American Water Resources Association* 48(5): 1054–1070. doi: 10.1111/j.1752-1688.2012.00669.x.
6. Arnett, H. A., Saros, J. E., & Alisa Mast, M., 2012. A caveat regarding diatom-inferred nitrogen concentrations in oligotrophic lakes. *J Paleolimnology* 47: 277–291. doi:10.1007/s10933-011-9576-z.
7. Arundale, R., 2012. The higher productivity of the bioenergy feedstock *Miscanthus x giganteus* relative to *Panicum virgatum* is seen both into the long term and beyond Illinois. Doctoral dissertation, University of Illinois, 116 pp.
8. Bagui, S., Brown, J., Caffrey, J., & Bagui, S., 2012. Designing a relational database for tracking and analysis of atmospheric deposition of mercury and trace metals in the Pensacola (Florida) Bay Watershed. *International Journal of Sustainable Society* 4(3): 240–265.
9. Bain, D. J., Yesilonis, I. D., & Pouyat, R. V., 2012. Metal concentrations in urban riparian sediments along an urbanization gradient. *Biogeochemistry* 107(1-3): 67–79.
10. Baiser, B., Gotelli, N. J., Buckley, H. L., Miller, T. E., & Ellison, A. M., 2012. Geographic variation in network structure of a nearctic aquatic food web. *Global Ecology & Biogeography* 21(5): 579–591.

11. Baker, K. R., & Bash, J. O., 2012. Regional scale photochemical model evaluation of total mercury wet deposition and speciated ambient mercury. *Atmospheric Environment* 49: 151–162.
12. Bash, J. O., Cooter, E. J., Dennis, R. L., Walker, J. T., & Pleim, J. E., 2012. Evaluation of a regional air-quality model with bi-directional NH₃ exchange coupled to an agro-ecosystem model. *Biogeosciences Discussions* 9(8): 11375–11401.
13. Beaulieu, K. M., Button, D. T., Scudder Eikenberry, B. C., Riva-Murray, K., Chasar, L. C., Bradley, P. M., and Burns, D. A., 2012. Mercury bioaccumulation studies in the National Water-Quality Assessment Program—Biological data from New York and South Carolina, 2005–2009: U.S. Geological Survey Data Series 705, 13 p., at <http://pubs.usgs.gov/ds/705/>.
14. Berkelhammer, M., Stott, L., Yoshimura, K., Johnson, K., & Sinha, A., 2012. Synoptic and mesoscale controls on the isotopic composition of precipitation in the western United States. *Climate Dynamics* 38: 433–454.
15. Bradley, P. M., Journey, C. A., Lowery, M. A., Brigham, M. E., Burns, D. A., Button, D. T., ... & Riva-Murray, K., 2012. Shallow groundwater mercury supply in a coastal plain stream. *Environmental Science & Technology* 46(14): 7503–7511.
16. Brooks, R. T., Eggert, S. L., Nislow, K. H., Kolka, R. K., Chen, C. Y., & Ward, D. M., 2012. Preliminary assessment of mercury accumulation in Massachusetts and Minnesota seasonal forest pools. *Wetlands* 32: 653–663.
17. Brown, T. C., & Froemke, P., 2012. Nationwide assessment of nonpoint source threats to water quality. *BioScience* 62(2): 136–146.
18. Brown, T. C., & Froemke, P., 2012. Improved measures of atmospheric deposition have a negligible effect on multivariate measures of risk of water-quality impairment: response from Brown and Froemke. *BioScience* 62(7): 621–622.
19. Bruder, S. R., 2012. Prediction of spatial-temporal distribution of algal metabolites in Eagle Creek Reservoir, Indianapolis, IN. Doctoral dissertation, Department of Earth Sciences, Indiana University, 142 pp.
20. Bruesewitz, D. A., Tank, J. L., & Hamilton, S. K., 2012. Incorporating spatial variation of nitrification and denitrification rates into whole-lake nitrogen dynamics. *J Geophysical Research*. 117: G00N07, doi:10.1029/2012JG002006.
21. Buennning, N. H., Stott, L., Yoshimura, K., & Berkelhammer, M., 2012. The cause of the seasonal variation in the oxygen isotopic composition of precipitation along the western U.S. coast. *J Geophysical Research* 117: 18114.
22. Cai, M., Johnson, A., Schwartz, J., Moore, S., & Kulp, M., 2012. Soil acid-base chemistry of a high-elevation forest watershed in the Great Smoky Mountains National Park: Influence of acidic deposition. *Water, Air, & Soil Pollution* 223(1): 289–303.

23. Calvo, A. I., Pont, V., Olmo, F. J., Castro, A., Alados-Arboledas, L., Vicente, A. M., ... & Fraile, R., 2012. Air masses and weather types: a useful tool for characterizing precipitation chemistry and wet deposition. *Aerosol & Air Quality Research* 12: 856–878.
24. Canham, C. D., Pace, M. L., Weathers, K. C., McNeil, E. W., Bedford, B. L., Murphy, L., & Quinn, S., 2012. Nitrogen deposition and lake nitrogen concentrations: a regional analysis of terrestrial controls and aquatic linkages. *Ecosphere* 3(7): 66. <http://dx.doi.org/10.1890/ES12-00090.1>.
25. Carey, R. O., Hochmuth, G. J., Martinez, C. J., Boyer, T. H., Nair, V. D., Dukes, M. D., ... & Sartain, J. B., 2012. Regulatory and resource management practices for urban watersheds: the Florida experience. *Hort. Technology* 22(4): 418–429.
26. Carlo, T. A., & Norris, A. E., 2012. Direct nitrogen intake by petals. *Oikos* 121: 1953–1958.
27. Castro, M. S., Moore, C., Sherwell, J., & Brooks, S. B., 2012. Dry deposition of gaseous oxidized mercury in western Maryland. *Science of the Total Environment* 417–418: 232–240.
28. Catalano, J. G., Huhmann, B. L., Luo, Y., Mitnick, E. H., Slavney, A., & Giammar, D. E., 2012. Metal release and speciation changes during wet aging of coal fly ashes. *Environmental Science & Technology* 46(21): 11804–11812.
29. Chen, C. Y., Driscoll, C. T., & Kamman, N. C., 2012. Mercury hotspots in freshwater ecosystems. *Mercury in the Environment: Pattern and Process*, 143, 340 pp.
30. Chen, J., Hintelmann, H., Feng, X., & Dimock, B., 2012. Unusual fractionation of both odd and even mercury isotopes in precipitation from Peterborough, ON., Canada. *Geochimica et Cosmochimica Acta* 90: 33–46.
31. Clark, E., Schlenker, K., & Filardi, C., 2012. Wilderness character monitoring report hyalite porcupine buffalo horn wilderness study area. U.S. Forest Service, Region 1 Report, Gallatin National Forest, 109 pp.
32. Coleman Wasik, J. K., Mitchell, C. P., Engstrom, D. R., Swain, E. B., Monson, B. A., Balogh, S. J., ... & Almendinger, J. E., 2012. Methylmercury declines in a boreal peatland when experimental sulfate deposition decreases. *Environmental Science & Technology* 46(12): 6663–6671.
33. Committee on Preparing for the Third Decade (Cycle 3) of the National Water-Quality Assessment (NAWQA) Program, & National Research Council, 2012. Preparing for the third decade (cycle 3) of the national water-quality assessment (NAWQA) program (prepublication copy). The National Academies Press, Washington DC, 160 pp.
34. Cope, B., & Roberts, M., 2012. Draft for stakeholder review: review and synthesis of available information to estimate human impacts to dissolved oxygen in hood canal. Office of Environmental Assessment Environmental Protection Agency, Region 10 Seattle, Washington and Environmental Assessment Program Washington State Department of Ecology, Olympia, Washington, 94 pp.
35. Cronan, C. S., 2012. Biogeochemistry of the Penobscot River watershed, Maine, USA: nutrient export patterns for carbon, nitrogen, and phosphorus. *Environmental Monitoring & Assessment* 184(7): 4279–4288.

36. Darrouzet-Nardi, A., Erbland, J., Bowman, W. D., Savarino, J., & Williams, M. W., 2012. Landscape-level nitrogen import and export in an ecosystem with complex terrain, Colorado Front Range. *Biogeochemistry* 109(1): 271–285.
37. Day, D. E., Chen, X., Gebhart, K. A., Carrico, C. M., Schwandner, F. M., Benedict, K. B., ... & Collett, J. L., 2012. Spatial and temporal variability of ammonia and other inorganic aerosol species. *Atmospheric Environment* 61: 490–498.
38. Denkenberger, J. S., Driscoll, C. T., Branfireun, B. A., Eckley, C. S., Cohen, M., & Selvendiran, P., 2012. A synthesis of rates and controls on elemental mercury evasion in the Great Lakes Basin. *Environmental Pollution* 161: 291–298.
39. Dilley, G., Council, D. R. A. Q., Morris, R., Koo, B., Tai, E., McNally, D., et al., 2012. Revised base case modeling and model performance evaluation for the Denver 2008 ozone episode. Final Report (Project 06-26421A), Denver Regional Air Quality Council, August, 113 pp.
40. Dodson, J., 2012. Draft report: nutrient TMDL for Jackson Blue Spring and Merritts Mill Pond (WBIDs 180Z and 180A), for the Florida Department of Environmental Protection, November, 95 pp.
41. Dohleman, F. G., Heaton, E. A., Arundale, R. A., & Long, S. P., 2012. Seasonal dynamics of above-and below-ground biomass and nitrogen partitioning in *Miscanthus× giganteus* and *Panicum virgatum* across three growing seasons. *GCB Bioenergy* 4: 534–544.
42. Drevnick, P. E., Engstrom, D. R., Driscoll, C. T., Swain, E. B., Balogh, S. J., Kamman, N. C., et al., 2012. Spatial and temporal patterns of mercury accumulation in lacustrine sediments across the Laurentian great lakes region. *Environmental Pollution* 161: 252–260.
43. Ebel, B. A., Moody, J. A., & Martin, D. A., 2012. Hydrologic conditions controlling runoff generation immediately after wildfire. *Water Resources Research* 48(3): W03529.
44. Ebel, J. D., 2012. Biofilm responses to salmon carcass addition in central Idaho. Master's thesis (in Biological Sciences), Michigan Technology University, 70 pp.
45. Fenn, M. E., Bytnarowicz, A., & Liptzin, D., 2012. Nationwide maps of atmospheric deposition are highly skewed when based solely on wet deposition. *BioScience* 62(7): 621–621.
46. Fernández, F. G., Ebelhar, S., Greer, K., & Brown, H., 2012. Corn response to sulfur in Illinois. Illinois Fertilizer & Chemical Association, FREC Reports, <http://www.ifca.com/FREC%20Proceedings/>.
47. Feyte, S., Gobeil, C., Tessier, A., & Cossa, D., 2012. Mercury dynamics in lake sediments. *Geochimica et Cosmochimica Acta* 82: 92–112.
48. Fissore, C., Hobbie, S. E., King, J. Y., McFadden, J. P., Nelson, K. C., & Baker, L. A., 2012. The residential landscape: fluxes of elements and the role of household decisions. *Urban Ecosystems* 15(1): 1–18.

49. Freppaz, M., Williams, M. W., Seastedt, T., & Filippa, G., 2012. Response of soil organic and inorganic nutrients in alpine soils to a 16-year factorial snow and N-fertilization experiment, Colorado Front Range, USA. *Applied Soil Ecology* 62: 131–141.
50. Forbes, M. G., Back, J., & Doyle, R. D., 2012. Nutrient transformation and retention by coastal prairie wetlands, upper Gulf Coast, Texas. *Wetlands* 32: 705–715.
51. Gabriel , M. , N. Howard, S. Atkins. 2011. Annual Permit Compliance Monitoring Report for Mercury in Downstream Receiving Waters of the Everglades Protection Area. Appendix 3B-1 in 2011 South Florida Environmental Report Volume I. South Florida Water Management District, West Palm Beach, FL.
http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2011_sfer/v1/appndices/v1_app3b-1.pdf.
52. Gao, X., 2012. Draft TMDL Report Nutrient TMDLs for Sykes Creek/Barge Canal (WBID 3044B), Florida Department of Environmental Protection, 75 pp.
53. Gillespie, J., Nelson, S. T., Mayo, A. L., & Tingey, D. G., 2012. Why conceptual groundwater flow models matter: a trans-boundary example from the arid Great Basin, western USA. *Hydrogeology Journal* 20: 1133–1147.
54. Gopalakrishnan, G., Cristina Negri, M., & Salas, W., 2012. Modeling biogeochemical impacts of bioenergy buffers with perennial grasses for a row-crop field in Illinois. *GCB Bioenergy* 4: 739–750, doi: 10.1111/j.1757-1707.2011.01145.x .
55. Grant, C. A., Mahli, S. S., & Karamanos, R. E., 2012. Sulfur management for rapeseed. *Field Crops Research* 128: 119–128.
56. Greaver, T.L., T.J. Sullivan, J.D. Herrick, M. Barber, J. Baron, B.J. Cosby, M. Deerhake, R.L. Dennis, J.J.D. Dubois, C. Goodale, A.T. Herlihy, G.B. Lawrence, L. Liu, J. Lynch, and K. Novak, 2012. Ecological effects of nitrogen and sulfur air pollution in the US: what do we know? *Frontiers in Ecology and the Environment* 10(7): 365–372.
57. Grenon, J. A., 2012. Epiphytic lichens, nitrogen deposition and climate in the US northern Rocky Mountain states, Doctoral dissertation, Montana State University, Bozeman, 162 pp.
58. Grigal, D. F., 2012. Atmospheric Deposition and Inorganic Nitrogen Flux. *Water, Air, & Soil Pollution* 223: 3565–3575.
59. Gu, Ben and N. Howard, 2012. Annual permit compliance monitoring report for mercury in downstream receiving waters of the Everglades Protection Area. Appendix 3-2, Attachment F in 2012 South Florida Environmental Report Vol III. South Florida Water Management District, West Palm Beach, FL.
http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2012_sfer/v3/appndices/v3_app3-2.pdf.
60. Gupta, V. K., 2012. Environmental water: advances in treatment, remediation and recycling. Elsevier Publishing, Amsterdam, Netherlands, ISBN: 978-0-444-59399-3, 211 pp.

61. Gurdak, J. J., & Qi, S. L., 2012. Vulnerability of recently recharged groundwater in principle aquifers of the United States to nitrate contamination. *Environmental Science & Technology* 46(11): 6004–6012.
62. Han, H., & Allan, J. D., 2012. Uneven rise in N inputs to the Lake Michigan Basin over the 20th century corresponds to agricultural and societal transitions. *Biogeochemistry* 109(1): 175–187.
63. Hansen, J., 2012. Assessment of atmospheric nitrogen deposition: possible effects on alpine ecosystems above 9000 feet in Grand Teton National Park. Master's thesis, Utah State University, All Graduate Theses and Dissertations. Paper 1250, 185 pp.
<http://digitalcommons.usu.edu/etd/1250>.
64. Harms, T. K., & Grimm, N. B., 2012. Responses of trace gases to hydrologic pulses in desert floodplains. *J Geophysical Research* 117(G1): G01035.
65. Harms, T. K., & Jones, J. B., 2012. Thaw depth determines reaction and transport of inorganic nitrogen in valley bottom permafrost soils. *Global Change Biology* 18 2958–2968, doi: 10.1111/j.1365-2486.2012.02731.x.
66. Harris, R., Pollman, C., Landing, W., Evans, D., Axelrad, D., Hutchinson, D., ... & Sunderland, E., 2012. Mercury in the Gulf of Mexico: sources to receptors. *Environmental Research* 119: 42–52.
67. Haynes, K. M., & Mitchell, C. P., 2012. Inter-annual and spatial variability in hillslope runoff and mercury flux during spring snowmelt. *J Environmental Monitoring* 14: 2083.
68. He, W. M., Montesinos, D., Thelen, G. C., & Callaway, R. M., 2012. Growth and competitive effects of Centaurea stoebe populations in response to simulated nitrogen deposition. *PLOS ONE* 7(4): e36257.
69. Hicks, R., & Holland, K., 2012. Nutrient TMDL for Silver Springs, Silver Springs group, and upper Silver River (WBIDs 2772A, 2772C, and 2772E). Florida Department of Environmental Protection, Division of Environmental Assessment and Restoration, Bureau of Watershed Restoration, 104 pp.
70. Holloway, T., Voigt, C., Morton, J., Spak, S. N., Rutter, A. P., & Schauer, J. J., 2012. An assessment of atmospheric mercury in the Community Multiscale Air Quality (CMAQ) model. *Atmospheric Chemistry & Physics Discussions* 12: 2131–2166.
71. Hong, Y.S., Hunter, S., Clayton, L. A., Rifkin E., & Bouwer E J. 2012. Assessment of mercury and selenium concentrations in captive bottlenose dolphin's (*Tursiops truncatus*) diet fish, blood, and tissue. *Science of the Total Environment* 414: 220–226.
72. Huang, J., & Gustin, M. S., 2012. Evidence for a free troposphere source of mercury in wet deposition in the western United States. *Environmental Science & Technology* 46(12): 6621–6629.
73. Huang, J., Kang, S., Zhang, Q., Yan, H., Guo, J., Jenkins, M. G., et al. 2012. Wet deposition of mercury at a remote site in the Tibetan plateau: Concentrations, speciation, and fluxes. *Atmospheric Environment* 62: 540–550.

74. Jacobson, G. L., Norton, S. A., Grimm, E. C., & Edgar, T., 2012. Changing climate and sea level alter
hg mobility at Lake Tulane, Florida, U.S. Environmental Science & Technology 46(21): 11710–11717.
75. Kappel, C. V., Halpern, B. S., & Napoli, N., 2012. Mapping cumulative impacts of human activities
on marine ecosystems. Coastal and Marine Spatial Planning, Report #03.NCEAS.12, 109 pp.
76. Ketterings, Q. M., Godwin, G., Gami, S., Dietzel, K., Lawrence, J., Barney, P., ... & Czymbek, K. J.,
2012. Soil and tissue testing for sulfur management of alfalfa in New York State. Soil Science
Society of America Journal 76(1): 298–306.
77. Kim, J. H., & Jackson, R. B., 2012. A global analysis of groundwater recharge for vegetation, climate,
and soils. Vadose Zone Journal 11(1), doi: 10.2136/vzj2011.
78. Kim, M. K., & Zoh, K. D., 2012. Fate and transport of mercury in environmental media and human
exposure. J Preventive Medicine and Public Health 45(6): 335–343.
79. Konkler, M. J., & Hammerschmidt, C. R., 2012. Methylmercury in mosquitoes around a large coal-
fired power plant in central Ohio. Environmental Toxicology & Chemistry 31(7): 1657–1661.
80. Koo, B., Piyachaturawat, P., Morris, R., & Knipping, E., 2012. Evaluation of the variability in
chemical transport model performance for deposition and ambient concentrations of nitrogen and
sulfur compounds. Atmosphere 3(3): 400–418.
81. Koskelo, A. I., Fisher, T. R., Utz, R., & Jordan, T. E., 2012. A new precipitation-based method of
baseflow separation and event identification for small watersheds (< 50 km²). J Hydrology 450–451:
267–278.
82. Journey, C. A., Burns, D. A., Riva-Murray, K., Brigham, M. E., Button, D. T., Feaster, T. D.,
Petkewich, M. D., & Bradley, P. M., 2012. Fluvial transport of mercury, organic carbon, suspended
sediment, and selected major ions in contrasting stream basins in South Carolina and New York,
October 2004 to September 2009: U.S. Geological Survey Scientific Investigations Report 2012–5173,
125 p.
83. Lan, X., Talbot, R., Castro, M., Perry, K., & Luke, W., 2012. Seasonal and diurnal variations of
atmospheric mercury across the US determined from AMNet monitoring data. Atmospheric
Chemistry & Physics Discussions 12: 10845–10878.
84. Latysh, N., & Wetherbee, G., 2012. Improved mapping of national atmospheric deposition program
wet-deposition in complex terrain using PRISM-gridded data sets. Environmental Monitoring &
Assessment 184(2): 913–928.
85. Lawrence, G. B., Shortle, W. C., David, M. B., Smith, K. T., Warby, R. A. F., & Lapen, A. G., 2012.
Early indications of soil recovery from acidic deposition in U.S. red spruce forests. Soil Science
Society of America Journal 76(4): 1407–1417.
86. Lee, K. S., Lee, D. S., Lim, S. S., Kwak, J. H., Jeon, B. J., Lee, S. I., ... & Choi, W. J., 2012. Nitrogen
isotope ratios of dissolved organic nitrogen in wet precipitation in a metropolis surrounded by
agricultural areas in southern Korea. Agriculture, Ecosystems & Environment 159: 161–169.

87. Leibensperger, E. M., Mickley, L. J., Jacob, D. J., Chen, W. T., Seinfeld, J. H., Nenes, A., ... & Rind, D., 2012. Climatic effects of 1950–2050 changes in US anthropogenic aerosols—part 1: aerosol trends and radiative forcing. *Atmospheric Chemistry & Physics* 12, 3333–3348.
88. Lessard, C., 2012. Mass balance model of mercury for the St. Lawrence River, Cornwall, Ontario. Doctoral dissertation, University of Ottawa, 109 pp.
89. Li, Y., Tang, J., Yu, X., Xu, X., Cheng, H., & Wang, S., 2012. Characteristics of precipitation chemistry at Lushan Mountain, East China: 1992–2009. *Environmental Science & Pollution Research* 19: 2329–2343.
90. Liao, L., Green, C. T., Bekins, B. A., & Böhlke, J. K., 2012. Factors controlling nitrate fluxes in groundwater in agricultural areas. *Water Resources Research* 48: W00L09.
91. Lin, C. J., Shetty, S. K., Pan, L., Pongprueksa, P., Jang, C., & Chu, H. W., 2012. Source attribution for mercury deposition in the contiguous United States: Regional difference and seasonal variation. *J Air & Waste Management Association* 62(1): 52–63.
92. Lutz, B. D., Mulholland, P. J., & Bernhardt, E. S., 2012. Long-term data reveal patterns and controls on stream water chemistry in a forested stream: Walker Branch, Tennessee. *Ecological Monographs* 82(3): 367–387.
93. Mallikarachchi, T. D. 2012. Exfiltration trenches for post construction storm water management for linear transportation projects: site investigation on metal removal. Master's thesis, Ohio University, Civil Engineering (Engineering and Technology), 231 pp.
94. Marshall, B. D., Moscati, R. J., & Patterson, G. L., 2012. Fluid geochemistry of Yucca Mountain and vicinity. *Hydrology and Geochemistry of Yucca Mountain and Vicinity, Southern Nevada and California*, 143.
95. Mason, R. P., 2012. A framework for a mercury monitoring and assessment program. *Mercury in the Environment: Pattern and Process*, 81.
96. McCrackin, M. L., & Elser, J. J., 2012. Denitrification kinetics and denitrifier abundances in sediments of lakes receiving atmospheric nitrogen deposition (Colorado, USA). *Biogeochemistry* 108: 39–54.
97. McLauchlan, K. K., & Craine, J. M., 2012. Species-specific trajectories of nitrogen isotopes in Indiana hardwood forests, USA. *Biogeosciences* 9: 867–874.
98. Metcalf, J., & Mose, D. G., 2012. Monitoring sources of mercury in the atmosphere. *Proceedings of the Annual International Conference on Soils, Sediments, Water & Energy*: Vol. 17, Article 4.
99. Minogue, P. J., Miwa, M., Rockwood, D. L., & Mackowiak, C. L., 2012. Removal of nitrogen and phosphorus by Eucalyptus and Populus at a tertiary treated municipal wastewater sprayfield. *International J of Phytoremediation* 14(10): 1010–1023.

100. Mladenov, N., Williams, M. W., Schmidt, S. K., & Cawley, K., 2012. Atmospheric deposition as a source of carbon and nutrients to an alpine catchment of the Colorado Rocky Mountains. *Biogeosciences* 9: 3337–3355.
101. Montgomery, E. L., Calle, L. M., Curran, J. C., & Kolody, M. R. 2012. Timescale correlation between marine atmospheric exposure and accelerated corrosion testing - part 2. National Aeronautics and Space Administration, Technical Report # KSC-2012-049, 17 pp.
102. Moore, G. W., Barre, D. A., & Owens, M. K., 2012. Does shrub removal increase groundwater recharge in southwestern Texas semiarid rangelands? *Rangeland Ecology & Management* 65(1): 1–10.
103. Moore, C. W., & Castro, M. S., 2012. Investigation of factors affecting gaseous mercury concentrations in soils. *Science of the Total Environment* 419: 136–143.
104. Moore, J., Lichtner, P. C., White, A. F., & Brantley, S. L., 2012. Using a reactive transport model to elucidate differences between laboratory and field dissolution rates in regolith. *Geochimica et Cosmochimica Acta* 93: 235–261.
105. Morano, S., Stewart, K. M., Sedinger, J. S., Nicolai, C. A., & Vavra, M., 2012. Life-history strategies of North American elk: Trade-offs associated with reproduction and survival. *J Mammalogy*, (in press).
106. Nair, U. S., Wu, Y., Walters, J., Jansen, J., & Edgerton, E. S., 2012. Diurnal and seasonal variation of mercury species at coastal-suburban, urban, and rural sites in the southeastern United States. *Atmospheric Environment* 47: 499–508.
107. Nanus, L., Clow, D. W., Saros, J. E., Stephens, V. C., & Campbell, D. H., 2012. Mapping critical loads of nitrogen deposition for aquatic ecosystems in the Rocky Mountains, USA. *Environmental Pollution* 166: 125–135.
108. Nasr, M., Malloch, D. D., & Arp, P. A., 2012. Quantifying hg within ectomycorrhizal fruiting bodies, from emergence to senescence. *Fungal Biology* 116: 1163–1177.
109. Nikopoulou, Z., Cullinane, K., & Jensen, A., 2012. The role of a cap-and-trade market in reducing NOx and SOx emissions: prospects and benefits for ships within the northern european ECA. *Proceedings of the Institution of Mechanical Engineers, Part M: J Engineering for the Maritime Environment*, (in press).
110. Obrist, D., 2012. Mercury distribution across 14 US forests, part II: patterns of methyl mercury concentrations and areal mass of total and methyl mercury. *Environmental Science & Technology* 46(11): 5921–5930.
111. O'Driscoll, M. A., 2012. The 1909 North Carolina drainage act and agricultural drainage effects in eastern North Carolina. *Journal of North Carolina Academy of Science* 128(3): 59-73.
112. Olson, J. R., 2012. The influence of geology and other environmental factors on stream water chemistry and benthic invertebrate assemblages. Doctoral dissertation, Utah State University, May.

All Graduate Theses and Dissertations. Paper 1327, 162 pp.
<http://digitalcommons.usu.edu/etd/1327>.

113. Olson, J. R., & Hawkins, C. P., 2012. Predicting natural base-flow stream water chemistry in the western United States. *Water Resources Research* 48(2): W02504.
114. Peters, E., Wythers, K., Bradford, J., & Reich, P., 2012. Influence of disturbance on temperate forest productivity. *Ecosystems* (online) 1–16.
115. Peterson, C., Alishahi, M., & Gustin, M. S., 2012. Testing the use of passive sampling systems for understanding air mercury concentrations and dry deposition across Florida, USA. *Science of the Total Environment* 424: 297–307.
116. Phillis, C. C., O'Regan, S. M., Green, S. J., Bruce, J. E. B., Anderson, S. C., Linton, J. N., et al., 2012. Multiple pathways to conservation success. *Conservation Letters* doi: 10.1111/j.1755-263X.2012.00294.x.
117. Poulette, M. M., 2012. Ecosystem impacts of the invasive shrub *Lonicera Maackii* are influence by associations with native tree species. Doctoral dissertation, University of Kentucky, 196 pp., http://uknowledge.uky.edu/biology_etds/6.
118. Price, J. R., Hardy, C. R., Tefend, K. S., & Szymanski, D. W., 2012. Solute geochemical mass-balances and mineral weathering rates in small watersheds II: biomass nutrient uptake, more equations in more unknowns, and land use/land cover effects. *Applied Geochemistry* 27: 1247–1265.
119. Qi, Z., Bartling, P. N., Ahuja, L. R., Derner, J. D., Dunn, G. H., & Ma, L., 2012. Development and evaluation of the carbon–nitrogen cycle module for the GPFARM-Range model. *Computers & Electronics in Agriculture* 83: 1–10.
120. Reynolds, K. M., Hessburg, P. F., Sullivan, T., Povak, N., McDonnell, T., Cosby, B., & Jackson, W., 2012. Spatial decision support for assessing impacts of atmospheric sulfur deposition on aquatic ecosystems in the Southern Appalachian Region. In *System Science (HICSS), 2012 45th Hawaii International Conference on System Sciences*, pp. 1197–1206.
121. Risch, M. R., DeWild, J. F., Krabbenhoft, D. P., Kolka, R. K., & Zhang, L., 2012. Litterfall mercury dry deposition in the eastern USA. *Environmental Pollution* 161: 284–290.
122. Risch, M. R., Gay, D. A., Fowler, K. K., Keeler, G. J., Backus, S. M., Blanchard, P., et al., 2012. Spatial patterns and temporal trends in mercury concentrations, precipitation depths, and mercury wet deposition in the North American great lakes region, 2002–2008. *Environmental Pollution* 161: 261–271.
123. Rolison, C. J., 2012. Soil nitrification and mineralization rates along an elevation gradient in the Great Smoky Mountains National Park. Master's thesis, University of Tennessee, http://trace.tennessee.edu/utk_gradthes/1199.
124. Ross, D. S., Shanley, J. B., Campbell, J. L., Lawrence, G. B., Bailey, S. W., Likens, G. E., Wemple, B. C., Fredriksen, G., and Jamison, A. E., 2012. Spatial patterns of soil nitrification and nitrate export

- from forested headwaters in the northeastern United States, *J. Geophys. Res.*, 117, G01009, doi:10.1029/2011JG001740.
125. Rueda-Holgado, F., Bernalte, E., Palomo-Marín, M. R., Calvo-Blázquez, L., Cereceda-Balic, F., & Pinilla-Gil, E., 2012. Miniaturized voltammetric stripping on screen printed gold electrodes for field determination of copper in atmospheric deposition. *Talanta* 101(11): 435–439.
 126. Ruiz Diaz, D. A., Mengel, D. B., Lamond, R. E., Duncan, S. R., Whitney, D. A., & Maxwell, T. M., 2012. Meta-analysis of winter wheat response to chloride fertilization in Kansas. *Communications in Soil Science & Plant Analysis* 43(18): 2437–2447.
 127. SanClements, M. D., Oelsner, G. P., McKnight, D. M., Stoddard, J. L., & Nelson, S. J., 2012. New insights into the source of decadal increases of dissolved organic matter in acid-sensitive lakes of the northeastern United States. *Environmental Science & Technology* 46(6): 3212–3219.
 128. Scanlon, B. R., Reedy, R., Strassberg, G., Huang, Y., & Senay, G., 2012. Estimation of groundwater recharge to the Gulf Coast aquifer in Texas, USA: final contract report to Texas water development board. University of Texas at Austin, Bureau of Economic Geology, Jackson School of Geoscience 128 pp.
 129. Schlenker, K., & Filardi, C., 2012. Wilderness character monitoring report Hyalite Porcupine Buffalo Horn Wilderness study area. U.S. Forest Service, Region 1, Gallatin National Forest, 111 pp.
 130. Scudder Eikenberry, B.C., Riva-Murray, K., Smith, M. J., Bradley, P. M., Button, D. T., Clark, J. M., Burns, D. A., & Journey, C. A., 2012. Environmental settings of selected streams sampled for mercury in New York and South Carolina, 2005–09: U.S. Geological Survey Open-File Report 2011–1318, 36 p., <http://pubs.usgs.gov/ofr/2011/1318/>.
 131. Selin, N. E., 2012. Atmospheric chemistry, modeling, and biogeochemistry of mercury. *Mercury in the Environment: Pattern and Process*, 73.
 132. Simon, H., Baker, K. R., & Phillips, S., 2012. Compilation and interpretation of photochemical model performance statistics published between 2006 and 2012. *Atmospheric Environment* 61: 124–139.
 133. Simonich, S. L., & Nanus, L. (2012). Sierra Nevada-Southern Cascades (SNSC) region air contaminants research and monitoring report. For the Sierra Nevada-Southern Cascades Steering Committee, 124 pp.
 134. Shrestha, S., & Fang, X. 2012. Application of WARMF model to study the effect of land use change and climate change in the Saugahatchee Creek Watershed. In *World Environmental and Water Resources Congress 2012, Crossing Boundaries* (pp. 1794–1805). ASCE.
 135. Smeltzer, E., Shambaugh, A. D., & Stangel, P., 2012. Environmental change in lake Champlain revealed by long-term monitoring. *Journal of Great Lakes Research*, 38, Supplement 1, 6–18.
 136. Spence, P. L., Osmond, D. L., Childres, W., Heitman, J. L., & Robarge, W. P., 2012. Effects of lawn maintenance on nutrient losses via overland flow during natural rainfall events. *J American Water Resources Association* 48(5): 909–924.

137. State of Maryland, 2012. Watershed report for biological impairment of the Deep Creek Lake watershed in Garrett County, Maryland. Biological Stressor Identification Analysis Results and Interpretation, Revised Final Report, 35 pp.
138. Steffen, A., Scherz, T., Olson, M., Gay, D., & Blanchard, P., 2012. A comparison of data quality control protocols for atmospheric mercury speciation measurements. *J Environmental Monitoring* 14(3): 752–765.
139. Stephan, K., Kavanagh, K. L., & Koyama, A., 2012. Effects of spring prescribed burning and wildfires on watershed nitrogen dynamics of central Idaho headwater areas. *Forest Ecology & Management* 263: 240–252.
140. Straub, D. J., Hutchings, J. W., & Herckes, P., 2012. Measurements of fog composition at a rural site. *Atmospheric Environment* 47: 195–205.
141. Strauss, S., Day, T., & Garcia-Pichel, F., 2012. Nitrogen cycling in desert biological soil crusts across biogeographic regions in the southwestern United States. *Biogeochemistry* 108(1): 171–182.
142. Stuckless, J. S., 2012. Hydrology and geochemistry of Yucca Mountain and vicinity, southern Nevada and California. *Geological Society of America Memoir* 209, p 1–7.
143. Sullivan, T. J., Cosby, B. J., Driscoll, C. T., McDonnell, T. C., Herlihy, A. T., & Burns, D. A., 2012. Target loads of atmospheric sulfur and nitrogen deposition for protection of acid sensitive aquatic resources in the Adirondack Mountains, New York. *Water Resources Research* 48(1): W01547.
144. Sullivan, T., Cosby, B., McDonnell, T., Porter, E., Blett, T., Haeuber, R., et al., 2012. Critical loads of acidity to protect and restore acid-sensitive streams in Virginia and West Virginia. *Water, Air, & Soil Pollution* 223: 5759–5771, doi:10.1007/s11270-012-1312-4.
145. Sverdrup, H., McDonnell, T. C., Sullivan, T. J., Nihlgård, B., Belyazid, S., Rihm, B., ... & Geiser, L., 2012. Testing the feasibility of using the ForSAFE-VEG model to map the critical load of nitrogen to protect plant biodiversity in the Rocky Mountains region, USA. *Water, Air, & Soil Pollution* 223(1): 371–387.
146. Tank, S. E., Frey, K. E., Striegl, R. G., Raymond, P. A., Holmes, R. M., McClelland, J. W., & Peterson, B. J., 2012. Landscape-level controls on dissolved carbon flux from diverse catchments of the circumboreal. *Global Biogeochemical Cycles* 26: GB0E02.
147. Taylor, A., 2012. Phosphorus mass balance for hypertrophic Grand Lake St. Marys, Ohio. Doctoral dissertation, Wright State University, 96 pp.
148. Templer, P. H., Pinder, R. W., & Goodale, C. L., 2012. Effects of nitrogen deposition on greenhouse-gas fluxes for forests and grasslands of North America. *Frontiers in Ecology and the Environment* 10(10): 547–553.
149. Trammell, T. L., Ralston, H. A., Scroggins, S. A., & Carreiro, M. M., 2012. Foliar production and decomposition rates in urban forests invaded by the exotic invasive shrub, *Lonicera maackii*. *Biological Invasions* 14(3): 529–545.

150. Uejio, C. K., Peters, T. W., & Patz, J. A., 2012. Inland lake indicator bacteria: long-term impervious surface and weather influences and a predictive bayesian model. *Lake & Reservoir Management* 28(3): 232–244.
151. U.S. Department of Agriculture-Forest Service, 2012. Air program national accomplishments and successes, 2010. USDA-Forest Service, Air Resource Management Program National Report, 23 pp.
152. Van Metre, P. C., 2012. Increased atmospheric deposition of mercury in reference lakes near major urban areas. *Environmental Pollution* 162: 209–215.
153. Volk, J. A., Scudlark, J. R., Savidge, K. B., Andres, A. S., Stenger, R. J., & Ullman, W. J., 2012. Intra- and inter-annual trends in phosphorus loads and comparison with nitrogen loads to Rehoboth Bay, Delaware (USA). *Estuarine, Coastal & Shelf Science* 96(1): 139–150.
154. Walker, J. T., Dombek, T., Green, L., Gartman, N., & Lehmann, C., 2012. Stability of organic nitrogen in NADP wet deposition samples. *Atmospheric Environment* 60: 573–582.
155. Waller, K., Driscoll, C., Lynch, J., Newcomb, D., & Roy, K., 2012. Long-term recovery of lakes in the Adirondack region of New York to decreases in acidic deposition. *Atmospheric Environment* 46: 56–64.
156. Wang, K., & Zhang, Y., 2012. Application, evaluation, and process analysis of the US EPA's 2002 Multiple-Pollutant Air Quality Modeling platform. *Atmospheric & Climate Sciences* 2(3): 254–289.
157. Warrender, R., Bowell, R., Prestia, A., Barnes, A., Mansanares, W., & Miller, M., 2012. The application of predictive geochemical modelling to determine backfill requirements at turquoise ridge joint venture, Nevada. *Geochemistry: Exploration, Environment, Analysis* 12(4): 339–347.
158. Welker, J. M., 2012. ENSO effects on $\delta^{18}\text{O}$, $\delta^{2}\text{H}$ and d-excess values in precipitation across the US using a high-density, long-term network (USNIP). *Rapid Communications in Mass Spectrometry* 26(17): 1893–1898.
159. Weiss-Penzias, P. S., Ortiz Jr., C., Acosta, R. P., Heim, W., Ryan, J. P., Fernandez, D., Collett J. L. Jr., & Flegal, A. R., 2012. Total and monomethyl mercury in fog water from the central California coast. *Geophysical Research Letters* 39: L03804, doi:10.1029/2011GL050324.
160. Wetherbee, G. A., Gay, D. A., Debey, T. M., Lehmann, C. M. B., & Nilles, M. A. Wet deposition of fission-product isotopes to North America from the Fukushima Dai-ichi incident, March 2011. *Environmental Science & Technology* 46(5): 2574–2582.
161. Winder V.L., & Emslie S.D., 2012. Mercury in Nelson's Sparrow subspecies at breeding sites. *PLOS ONE* 7(2): e32257. doi:10.1371/journal.pone.0032257.
162. Winnick, M., Welker, J., & Chamberlain, C., 2012. Stable isotopic evidence of el niño-like atmospheric circulation in the pliocene western United States. *Climate of the Past Discussions* 8: 5083–5108.

163. Yager, T. J. B., & McMahon, P. B., 2012. Preliminary assessment of sources of nitrogen in groundwater at a biosolids-application area near Deer Trail, Colorado, 2005. U.S. Geological Survey Scientific Investigations Report 2012-5056, 30 pp.
164. Yang, Y., Liu, J., Di, Y., Yang, J., Wen, T., Li, Y., et al., 2012. Major ionic composition of precipitation in the Shigatse region, southern Tibetan plateau. *Advanced Materials Research* 347-353: 1005–1011.
165. Zhang, L., Blanchard, P., Gay, D. A., Prestbo, E. M., Risch, M. R., Johnson, D., ... & Dalziel, J., 2012. Estimation of speciated and total mercury dry deposition at monitoring locations in eastern and central North America. *Atmospheric Chemistry & Physics* 12: 4327–4340.
166. Zhang, L., Blanchard, P., Johnson, D., Dastoor, A., Ryzhkov, A., Lin, C. J., et al., 2012. Assessment of modeled mercury dry deposition over the great lakes region. *Environmental Pollution* 161: 272–283.
167. Zhang, L., Jacob, D. J., Knipping, E. M., Kumar, N., Munger, J. W., Carouge, C. C., et al., 2012. Nitrogen deposition to the United States: distribution, sources, and processes. *Atmospheric Chemistry & Physics* 12(10): 4539–4554.
168. Zhang, Y., Chen, Y., Sarwar, G., & Schere, K., 2012. Impact of gas-phase mechanisms on Weather Research Forecasting Model with Chemistry (WRF/Chem) predictions: mechanism implementation and comparative evaluation. *J Geophysical Research* 117(D1): D01301.
169. Zhang, Y., Jaeglé, L., van Donkelaar, A., Martin, R. V., Holmes, C. D., Amos, H. M., ... & Zsolwai, R., 2012. Nested-grid simulation of mercury over North America. *Atmospheric Chemistry & Physics* 12: 6095–6111.
170. Zhang, Y., Karamchandani, P., Glotfelty, T., Streets, D. G., Grell, G., Nenes, A., ... & Bennartz, R., 2012. Development and initial application of the global-through-urban weather research and forecasting model with chemistry (GU-WRF/Chem). *J Geophysical Research* 117(D20): D20206.