

MATTHEW J. COHEN, ASSOCIATE PROFESSOR OF ECOHYDROLOGY
SCHOOL OF FOREST RESOURCES AND CONSERVATION, UNIVERSITY OF FLORIDA
PO BOX 110410, GAINESVILLE, FL 32611-0410
PHONE: (352) 846-3490, FAX: (352) 846-1277 EMAIL: MJC@UFL.EDU

(A) PROFESSIONAL PREPARATION

B.S. (with Distinction) Environmental Engineering 1995 Swarthmore College, Swarthmore, PA
M.E. Environmental Engineering Sciences 1999 University of Florida, Gainesville, FL
Ph.D. Environmental Engineering Sciences 2003 University of Florida, Gainesville, FL

(B) APPOINTMENTS

Associate Professor (Forest Resources & Conservation, UF) *July 2011 – present*
Assistant Professor (Forest Resources & Conservation, UF) *March 2006 – June 2011*
Assistant Research Scientist (Soil and Water Science, UF) *January 2005 – March 2006*
Lecturer (Natural Resources and Environment, UF) *January 2004 – March 2006*
Post-Doctoral Researcher (Soil and Water Science, UF) *August 2003 – January 2005*
Graduate Teaching Associate (Env. Eng. Sciences, UF) *June - August 2003*

(C) PUBLICATIONS (N = 51 SINCE 2004; * DENOTES MY GRADUATE STUDENTS AND † DENOTES MY POST DOCS)

- Yuan, J.*, M.J. Cohen, D.A. Kaplan, S. Acharya†, L.G. Larsen and M.K. Nungesser. Accepted. Linking metrics of landscape pattern to hydrological process in a lotic wetland. *Landscape Ecology*
- Acharya, S. †, D.A. Kaplan, S. Casey*, M.J. Cohen and J.W. Jawitz. Accepted. Coupled local facilitation and global hydrologic inhibition drive landscape geometry in a patterned peatland. *Hydrologic and Earth System Science*
- Kurz, M.J*., V. de Montety, J.B. Martin, M.J. Cohen and R.T. Hensley*. 2015. Solute fluxes from the sediments of a spring-fed river: Implications for element budgets and river ecosystems. *Freshwater Science* 34:206-221
- Mushet, D.M., A.J. Calhoun, L.C. Alexander, M.J. Cohen, E.S. DeKeyser, L. Fowler, C.R. Lane, M.W. Lang, M.C. Rains, and S.C. Walls. 2015. Geographically Isolated Wetlands: Rethinking a Misnomer. *Wetlands* doi: 10.1007/s13157-015-0631-9
- Hensley, R.T.*., M.J. Cohen, and L.V. Korhnak. 2015. Hydraulic effect on nitrogen removal in a tidal spring-fed river. *Water Resources Research* 51:1443-1456
- Marton, J.M., I.F. Creed, D.B. Lewis, C.R. Lane, N.B. Basu, M.J. Cohen and C.B. Craft. 2015. Geographically isolated wetlands are important biogeochemical reactors in the landscape. *BioScience* doi: 10.1093/biosci/biv009
- Watts, A.C., D.L. Watts*, M.J. Cohen, J.B. Heffernan, D.L. McLaughlin†, J.B. Martin, D.A. Kaplan, T.Z. Osborne and L. Kobziar. 2014. Evidence of biogeomorphic patterning in a low-relief karst landscape. *Earth Surface Processes and Landforms* 39:2027-2037
- Nifong, R.L.*., M.J. Cohen and W.P. Cropper. 2014. Homeostasis and nutrient limitation of benthic autotrophs in natural chemostats. *Limnology and Oceanography* 59:2101-2111
- Liebowitz, D.M.*., M.J. Cohen, J.B. Heffernan, L.V. Korhnak and T.K. Frazer. 2014. Environmentally-mediated consumer control of algal proliferation in Florida springs. *Freshwater Biology* 59:2009-2023

- McLaughlin, D.L. †, D.A. Kaplan and M.J. Cohen. 2014. A significant nexus: Geographically isolated wetland influence landscape hydrology. *Water Resources Research* 50:7153-7166
- McLaughlin, D.L. †, M.L.C. Mazur, D.A. Kaplan and M.J. Cohen. 2014. Estimating effective specific yield in inundated conditions: a comment on a recent application. *Ecohydrology* 7:1245-1247
- Hensley, R.T.* , M.J. Cohen, and L.V. Korhnaak. 2014. Inferring nitrogen removal in large rivers from high resolution longitudinal profiling. *Limnology and Oceanography* 59:1152-1170
- King, S.A.* , J.B. Heffernan and M.J. Cohen. 2014. Nutrient flux, uptake and autotrophic limitation in streams and rivers. *Freshwater Science* 33:85-98
- McLaughlin, D.L. †, and M.J. Cohen. 2014. Ecosystem specific yield for estimating evapotranspiration and groundwater exchange from diel surface water variation. *Hydrological Processes* 28:1495-1506
- Cohen, M. J., Kurz, M. J.* , Heffernan, J. B., Martin, J. B., Douglass*, R. L., Foster, C. R., and Thomas, R. G. (2013). Diel phosphorus variation and the stoichiometry of ecosystem metabolism in a large spring-fed river. *Ecological Monographs* 83, 155-176.
- Deimeke, E.* , Cohen, M. J., and Reiss, K. C. (2013). Temporal stability of vegetation indicators of wetland condition. *Ecological Indicators* 34, 69-75.
- Kurz, M. J.* , de Montety, V., Martin, J. B., Cohen, M. J., and Foster, C. R. (2013). Controls on diel metal cycles in a biologically productive carbonate-dominated river. *Chemical Geology* 358, 61-74.
- McLaughlin, D. L. †, and Cohen, M. J. (2013). Realizing ecosystem services: Wetland hydrologic function along a gradient of ecological condition. *Ecological Applications* 23, 1619-1631.
- McLaughlin, D.L. †, D.R. Kaplan† and M.J. Cohen. 2013. Managing forests for increased regional water yield. *Journal of the American Water Resources Association* 49:953-965
- Heffernan, J.B., D.L. Watts*, and M.J. Cohen. 2013. Discharge Competence and Pattern Formation in Peatlands: a meta-ecosystem model of the Everglades Ridge-Slough landscape. *PLoS1* 8(5): e64174. doi:10.1371/journal.pone.0064174
- Cohen, M.J., J.B. Heffernan, A. Albertin† and J.B. Martin. 2012. Inference of Riverine Nitrogen Processing from Longitudinal and Diel Variation in Dual Nitrate Isotopes. *Journal of Geophysical Research – Biogeosciences* 117(G1), G01021
- Hensley, R.T.* , and M.J. Cohen. 2012. Controls on Solute Transport in Large Spring Fed Rivers. *Limnology and Oceanography* 57:912
- Kaplan, D.A.†, R. Paudel, M.J. Cohen and J.W. Jawitz. 2012. Orientation Matters: Patch Anisotropy Controls Discharge Competence and Hydroperiod in a Patterned Peatland. *Geophysical Research Letters* 39 (17), L17401
- McLaughlin, D.L. †, and M.J. Cohen. 2012. Ecosystem specific yield for estimating evapotranspiration and groundwater exchange from diel surface water variation. *Hydrological Processes* doi:10.1002/hyp.9672
- Liebenow, D.K.* , M.J. Cohen, T. Gumbrecht, K.D. Shepherd and G. Shepherd. 2012. Do ecosystem services influence household wealth in rural Mali? *Ecological Economics* 82:33-44
- Heffernan, J.B., A.R. Albertin†, M.L. Fork, B.G. Katz and M.J. Cohen. 2012. Denitrification and inference of nitrogen sources in the karstic Floridan Aquifer. *Biogeosciences* 9:1671-1690
- McLaughlin, D.L.†. and M.J. Cohen. 2011. Thermal Artifacts in Measurements of Fine Scale Water Level Variation. *Water Resources Research* 47: 3 PP., 2011 doi:10.1029/2010WR010288

- McLaughlin, D.L.[†], M.T. Brown and M.J. Cohen. 2011. The Ecohydrology of a pioneer wetland species and a drastically altered landscape. *Ecohydrology*. doi: 10.1002/eco.253
- De Montety, V., J.B. Martin, M.J. Cohen, C. Foster and M.J. Kurz. 2011. Influence of diel biogeochemical cycles on carbonate equilibrium in a karst river. *Chemical Geology* 283:31-43
- Cohen, M.J., D.L. Watts*, J.B. Heffernan[†] and T.Z. Osborne. 2011. Reciprocal Biotic Control on Hydrology, Nutrient Gradients and Landform in the Greater Everglades. *Critical Reviews in Environmental Sciences* 35:392-409
- Osborne, T.Z., S. Newman, P.I. Kalla, G.L. Bruland, M.J. Cohen, L.J. Scinto and L.R. Ellis. 2011. Landscape patterns of significant soil nutrients and contaminants in the Greater Everglades ecosystem: Past, present and future. *Critical Reviews in Environmental Science and Technology* 41:121-148
- Watts, D.L.* , M.J. Cohen, J.B. Heffernan[†], and T.Z. Osborne. 2010. Hydrologic modification and loss of self-organized patterning in the Everglades ridge-slough mosaic. *Ecosystems* 13:813-827
- Heffernan, J.B. [†], and M.J. Cohen. 2010. Direct and indirect coupling of primary production and diel nitrate dynamics in a sub-tropical spring fed river. *Limnology and Oceanography* 55:677-688
- Heffernan, J.B. [†], D.M. Liebowitz*, T.K. Frazer, J.M. Evans and M.J. Cohen. 2010. Algal blooms and the nitrogen-enrichment hypothesis in Florida springs: Evidence, alternatives and adaptive management. *Ecological Applications* 20:816-829
- Heffernan, J.B.[†], M.J. Cohen, T.K. Frazer, R.G. Thomas, T.J. Rayfield, J. Gulley, J.B. Martin, J.J. Delfino and W.D. Graham. 2010. Hydrologic and biotic influences on nitrate removal in a subtropical spring-fed river. *Limnology and Oceanography* 55:249-263
- Brown, M.T., M.J. Cohen and S. Sweeney. 2009. Predicting national sustainability: The convergence of energetic, economic and environmental realities. *Ecological Modelling* 220:3424-3438
- Krediet, C.J., K.B. Ritchie, M.J. Cohen, E.K. Lipp, K. Patterson-Sutherland and M. Teplitski. 2009. Utilization of mucus from the Coral Acropora palmate by the Pathogen *Serratia marcescens* and by environmental and coral commensal bacteria. *Applied and Environmental Microbiology* 75:3851-3858
- Evans, J.M.[†] and M.J. Cohen. 2009. Regional water resource implication of bioethanol production in the Southeastern United States. *Global Change Biology* 15:2261-2273
- Fraulo A.* , M.J. Cohen and O. Liburd. 2009. Visible/near infrared reflectance (VNIR) spectroscopy for detecting Two-spotted Spider Mite (Acari: Tetranychidae) Damage in Strawberries. *Environmental Entomology* 38:137-142
- Cohen, M.J., S. Lamsal[†], T.Z. Osborne, J.C. Bonzongo, K.R. Reddy and S. Newman. 2009. Soil Total Mercury Concentrations Across the Greater Everglades. *Soil. Sci. Soc. Am. J.* 73:675-685
- Romanelli, T.* , M.J. Cohen, M. Milan and M.T. Brown. 2008. Emergy synthesis of intensive eucalyptus cultivation in Sao Paulo, Brazil. *Forest Science* 54:228-241
- Cohen, M.J., E.J. Dunne and G.L. Bruland. 2008. Spatial Structure of Isolated Forested Wetland Soils and Implications for Sampling Design and Condition Assessment. *Wetlands* 28:34-49
- Cohen, M.J., M.W. Clark and J. Paris*. 2007. Determination of phosphorus sorption capacity in wetland soils using NIR spectroscopy. *Wetlands* 27:1098-1111
- Cohen, M.J., R. Mylavarapu, I. Bogrecki* and D. Lee. 2007. Reflectance spectroscopy for routine agronomic soil analyses. *Soil Science* 172:469-485
- Roth, B.E.* , K.C. Slatton and M.J. Cohen. 2007. On the potential for high-resolution lidar to improve

- rainfall interception estimates in forest ecosystems. *Frontiers in Ecology & Environment* 5:421-428
- Cohen, M.J. and M.T. Brown. 2007. A Model of hierarchical wetland networks for watershed stormwater management. *Ecological Modelling* 201:179-193
- Brown, M.T., M.J. Cohen, E. Bardi*, and W. Ingwersen*. 2006. A systems approach to biodiversity. *Aquatic Sciences* 68:254-277
- Cohen, M.J., S. Dabral*, W.D. Graham, J.P. Prenger and W.F. Debusk. 2006. Evaluating ecological condition using soil biogeochemical parameters and near infrared reflectance spectra. *Environmental Monitoring and Assessment* 116:427-447.
- Cohen, M.J., J.P. Prenger and W.F. DeBusk. 2005. Visible-near infrared reflectance spectroscopy for rapid, non-destructive assessment of wetland soil quality. *J. of Environ. Qual.* 34:1422-1434
- Cohen, M.J., K.D. Shepherd and M.G. Walsh. 2004. Empirical reformulation of the Universal Soil Loss Equation for erosion risk assessment in a tropical watershed. *Geoderma* 124:235-252
- Cohen, M.J., S. Carstenn and C.R. Lane. 2004. Floristic quality indices for biotic assessment of depressional marsh condition in Florida. *Ecological Applications* 14:784-794

(D) PRESENTATIONS

National and International Meetings (n = 27; students and post-docs have given 67 additional presentations)

- Cohen, M.J., I.F. Creek, N.B. Basu, J.W. Jawitz, D.L. McLaughlin, and M.C. Rains. 2014. A Continuum of Connectivity: Geographically Isolated Wetlands and the Conservation of Landscape Functions. American Geophysical Union, San Francisco CA **[invited]**
- Cohen, M. J.; Nifong, R. L.; Kurz, M. J.; Martin, J. B.; Cropper, W. P.; Korhnaek, L. V.. 2014. Stoichiometry, metabolism and nutrient limitation across the periodic table in natural flowing water chemostats. American Geophysical Union, San Francisco CA **[invited]**
- Cohen, M.J. 2014. Fresh Eyes in the Water: A sensor-drive revolution in water quality monitoring in Florida. Joint Aquatic Sciences Meeting, Portland OR **[invited]**
- Cohen, M. J.; Nifong, R. L.; Kurz, M. J.; Martin, J. B.; Cropper, W. P.; Korhnaek, L. V.. 2014. Stoichiometry, metabolism and nutrient limitation across the periodic table in natural flowing water chemostats. Joint Aquatic Sciences Meeting, Portland OR **[invited]**
- Cohen, M.J., D.R. Kaplan, S. Casey, S. Acharya, and J.W. Jawitz. 2013. Patterned landscapes in the Everglades: Mechanisms of Pattern Formation and Lessons for Restoration. Society of Freshwater Science Jacksonville FL **[invited]**
- Cohen, M.J., D.L. McLaughlin and D.A. Kaplan. 2013. A Hydraulic Nexus between Geographically Isolated Wetlands and Downstream Water Bodies. American Geophysical Union, San Francisco CA
- Cohen, M.J., R.T. Hensley*, C. Reijo*, J.B. Heffernan, R.G. Thomas and L.V. Korhnaek. 2012. Multiple Process and Multiple Parameters: Applications of In Situ UV Spectroscopy for Aquatic Ecosystems. American Geophysical Union Fall Meeting, San Francisco CA **[invited]**
- Cohen, M.J., J.B. Martin, D.L. McLaughlin†, T.Z. Osborne, A.B. Murray, A.C. Watts, D.L. Watts* and J.B. Heffernan. 2012. An ecological mechanism to create regular patterns of surface dissolution in a low-relief carbonate landscape. American Geophysical Union Fall Meeting, San Francisco CA **[invited]**
- Cohen, M.J., M.J. Kurz*, J.B. Heffernan, J.B. Martin, R.L. Douglass, C.R. Foster and R.G. Thomas. 2012.

Diel Phosphorus Variation and the Stoichiometry of Ecosystem Metabolism in a Large Spring Fed River. INTECOL/Society of Wetland Scientists, Orlando FL

Cohen, M.J. 2011. A Framework for a Global Wetland Ecohydrology Network. Navarino Environmental Observatory, Costa Navarino GREECE **[Invited]**

Cohen, M.J., R.L. Douglass*, J.B. Heffernan, J.B. Martin, R.G., Thomas, V. de Montety and C.R. Foster. 2010. Continuous ecosystem stoichiometry in a large spring-fed river reveals decoupled N and P assimilatory dynamics. American Geophysical Union, San Francisco CA

Cohen, M.J., J.B. Heffernan, D.L. Watts* and T.Z. Osborne. February 2010. Hydrologic conditions underlying the creation and maintenance of landscape patterning in the ridge-slough mosaic of the Everglades. Wetlands in Pulsing Environments, Maun, BOTSWANA (*lecture*) **[invited]**

Cohen, M.J., J.B. Heffernan, J.B. Martin and A. Albertin[†]. Dec 2009. Discriminating assimilatory and dissimilatory N processing in a large spring-fed river using dual nitrate isotopes. American Geophysical Union, San Francisco, CA (*lecture*) **[contributed]**

Cohen, M.J. August 2006. VNIR spectroscopy for large area assessment of ecosystem responses to Everglades restoration. 18th World Congress of Soil Science, Philadelphia, PA. (*poster*) **[contributed]**

Cohen, M.J. 2012. In Situ Sensors for Measuring River Ecosystem Processes. CUAHSI Cyberseminar Series **[invited]**

Cohen, M.J., R.T. Hensley* and L.V. Korhnak. Nitrogen Retention in a Spring Fed Tidal River. AGU Chapman Conference on Tidal Freshwater Ecosystems, Reston VA **[invited]**

Cohen, M.J., M.J. Kurz*, J.B. Heffernan, J.B. Martin, R.L. Douglass, C.R. Foster and R.G. Thomas. 2012. Diel Phosphorus Variation and the Stoichiometry of Ecosystem Metabolism in a Large Spring Fed River. Society of Freshwater Science, Louisville KY

Cohen, M.J. 2011. Emergent inference: High resolution sensing for understanding ecosystem processes. CUAHSI In-Situ Optical Sensor Networks Workshop, Shepherdstown WV **[invited]**

Cohen, M.J., R.L. Hensley*, C.R. Foster and J.B. Heffernan. 2011. Spatially disaggregated benthic nitrogen removal rates from high resolution longitudinal nitrate profiles. North American Benthological Society, Providence RI

Cohen, M.J., J.B. Heffernan, D.L. Watts and T.Z. Osborne. 2010. Flow and Pattern in the Ridge-Slough Mosaic: Predictions of Two Alternative Mechanisms for Landform Development. Greater Everglades Ecosystem Research Conference, Naples FL

Cohen, M.J., J.B. Heffernan, D. Liebowitz*, A. Albertin[†], Chad R. Foster, and Rachel L. Douglass*. June 2010. Coupled carbon and nitrogen metabolism in spring-fed rivers. American Society of Limnology and Oceanography/North American Benthological Society, Santa Fe NM (*lecture*) **[contributed]**

Cohen, M.J. and J.M. Evans[†]. September 2009. Water resource impacts of large-scale bioethanol production in the southeastern United States. Society of American Foresters Annual Meeting, Orlando, FL (*lecture*) **[invited]**

Cohen, M.J. L.V. Korhnak and L. Long*. September 2009. Phosphorus loading to Newnans Lake, Florida: A case study of forestry, water quality regulations and adaptive management. Society of American Foresters Annual Meeting, Orlando, FL (*lecture*) **[Invited]**

Cohen, M.J., J.B. Heffernan[†], R.G. Thomas, and J.B. Martin. July 2009. Using high resolution nitrate sensors for the inference of process in aquatic systems. CUAHSI Workshop on Optical Sensors, Burlington, VT (*lecture*) **[Invited]**

Cohen, M.J., D. Liebowitz*, J.B. Martin, K.A. McKee and J.B. Heffernan†. May 2009. Flow controls on water chemistry in Florida's Artesian springs: A New Typology. North American Benthological Society, Grand Rapids, MI (*lecture*) **[contributed]**

Cohen, M.J., D. Watts*, T.Z. Osborne, J. Jawitz and M.W. Clark. August 2008. Hydrologic controls on water quality in the Greater Everglades: Evidence for multiple indirect effects. Greater Everglades Ecosystem Restoration Conference, Naples, FL (*lecture*) **[Invited]**

Cohen, M.J., E. Deimeke*, K.C. Reiss, and M.T. Brown. June 2008. Landscape intensity based measures of conservatism coefficients for evidence based floristic quality assessment. Annual Meeting of the Society of Wetland Scientists, Washington, DC (*lecture*) **[Invited]**

Regional and Local (n = 25; students and post-docs have given an additional 32 presentations)

Cohen, M.J., C. Reijo, and D.L. McLaughlin. 2014. A Global Synthesis of Metabolism in Springs and Rivers. Biennial Water Institute Symposium, Gainesville FL **[invited]**

Cohen, M.J., M.J. Kurz*, J.B. Heffernan, J.B. Martin, R.L. Douglass, C.R. Foster and R.G. Thomas. 2012. Diel Phosphorus Variation and the Stoichiometry of Ecosystem Metabolism in a Large Spring Fed River. Biennial Water Institute Symposium, Gainesville FL **[invited]**

Cohen, M.J., J.B. Heffernan, B. Hensley, A. Albertin, M. Fork, C.R. Foster and L.V. Korhnak. 2011. Mechanisms of N Loss in Florida's Springs. St. Johns River Water Management District, Palatka FL **[invited]**

Cohen, M.J. 2011. Eutrophication in Flowing Waters: Nutrient Enrichment, Primary Production and Algal Proliferation in Florida's Springs. Progress Energy Special Seminar Series, University of South Florida – St. Petersburg, St. Petersburg FL **[invited]**

Cohen, M.J., D.L. Watts*, J.B. Heffernan† and T.Z. Osborne. April 2010. Flow, hydroperiod and the persistence of self-organized landscape pattern in the Everglades. Landscape Pattern Workshop, South Florida Water Management District, Davie, FL (*lecture*) **[invited]**

Cohen, M.J., D. Liebowitz*, and J.B. Heffernan†. February 2010. Where does all the nitrogen in the Ichetucknee go? Ichetucknee Springs Basin Working Group presentation, Lake City, FL (*lecture*) **[contributed]**

Cohen, M.J. 2010. Numeric Nutrient Criteria in Florida. NCASI Southern Regional Meeting, Charleston SC (*lecture*) **[invited]**

Cohen, M.J., D.L. Watts*, S. Lamsal†, and T.Z. Osborne. Sept. 2009. Soil nutrients in the ridge slough: Implications for mapping. South Florida Water Management District, Davie, FL (*lecture*) **[contributed]**

Cohen, M.J. and K.K. Bohn. May 2009. Evaluating shovel logging BMPs for wetland harvesting. Florida Statewide BMP Technical Advisory Committee Biennial Meeting, Tallahassee, FL (*lecture*) **[Invited]**

Cohen, M.J. March 2009. Evidence for geologic phosphorus loading to Newnans Lake. Orange Creek Basin Working Group Meeting, Gainesville, FL (*lecture*) **[Invited]**

Cohen, M.J. and J.B. Heffernan†. December 2008. Nitrogen processing in spring rivers. St. Johns River Water Management District Seminar Series, Palatka, FL (*lecture*) **[Invited]**

Cohen, M.J. Oct 2008. Protecting forests and protecting water quality. Linking the Forests to the Bay, Plant City, Florida (*lecture*) **[Invited]**

Cohen, M.J. Sept 2008. Nutrient loading to Newnans Lake. St. Johns River Water Management District

Governing Board, Palatka, FL (*lecture*) **[Invited]**

Cohen, M.J. and J.M. Evans[†]. August 2008. Water resource implications of large scale bioethanol production. Southeastern Bioenergy Conference, Tifton, Georgia (*lecture*) **[Invited]**

Cohen, M.J., J.B. Heffernan[†] and D. Liebowitz*. July 2008. Nitrogen enrichment and algal proliferation in Florida's springs: Scrutinizing the narrative. American Water Resources Association Ft. White, Florida (*lecture*) **[Invited]**

Cohen, M.J. and J.M. Evans[†]. February 2008. Water resource implications of large scale bioethanol production. Sustainable Water Resource: Florida Challenges, Global Solutions: UF Water Institute Symposium, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. March 2007. Green for green: Payments for ecosystem services at the global scale. Public Interest Environmental Conference. Gainesville, FL (*lecture*) **[Invited]**

Cohen, M.J. 2011. The Future of Oil. Energy Seminar Series, Oak Hammock, Gainesville FL **[invited]**

Cohen, M.J. 2011. Water Quantity and Quality in the Ichetucknee River: What We Know and What We Need to Know. Three River Trust Ichetucknee Springs Workshop, Ft. White, FL

Cohen, M.J., and K.K. Bohn. 2011. Shovel Logging BMPs. Florida Forest Service Best Management Practice Technical Advisory Committee, Tallahassee FL

Cohen, M.J. October 2009. Shovel logging and forest regeneration in Florida's wetlands. Southern Group of State Foresters, Palatka, FL (*lecture*) **[contributed]**

Cohen, M.J. and K.K. Bohn. May 2009. Mat logging best management practices. Florida Division of Forestry BMP Technical Advisory Committee Meeting, Tallahassee, FL (*lecture*) **[contributed]**

Cohen, M.J. and L. Long*. March 2007. Phosphorus loading to Newnans Lake, Florida. Florida Forestry Association, Lake City, FL (*lecture*) **[contributed]**

Cohen, M.J. and D.L. Watts*. March 2007. Multiple stable states and carbon accretion in the ridge-slough mosaic of the Florida Everglades. Presentation at the Carbon Accretion Workshop, South Florida Water Management District, West Palm Beach, Florida (*lecture*) **[contributed]**

Cohen, M.J., S. Sweeney, D. King* and M.T. Brown. February 2006. Soil, water, fish and forests: Natural capital in the wealth of nations. 4th Biennial Energy Research Conference, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J., S. Sweeney and M.T. Brown. February 2006. Computing unit energy values for geologic materials. 4th Biennial Energy Research Conference, Gainesville, FL (*lecture*) **[contributed]**

Invited Seminars (n = 31)

Cohen, M.J. 2014. Eutrophication of Flowing Waters: Thoughts on Nutrient Management for Springs and Rivers of the Southeastern United States. Joseph W. Jones Ecological Research Center, Newton GA **[invited]**

Cohen, M.J. 2014. Measuring hydrologic connectivity in landscapes. Environmental Engineering Sciences, University of Florida **[invited]**

Cohen, M.J. 2013. Algal Proliferation in Florida's Springs. Florida Department of Agriculture and Consumer Services Blue Ribbon Panel, Gainesville FL **[invited]**

Cohen, M.J. 2012. A Primer on Nitrogen Pollution Effects in Florida's Springs. Governor Bob Graham, Pugh Hall, Gainesville FL **[invited]**

Cohen, M.J. 2012. Summary of Findings: Mechanisms of N Retention in Florida's Springs. St. Johns River Water Management District, Palatka FL **[invited]**

Cohen, M.J., Y. Jing*, D.L. Watts*, M.W. Clark, T.Z. Osborne and J.B. Heffernan. Sensing Subtle Ecosystem Changes in the Everglades Ridge Slough Patterned Landscape. Center for Remote Sensing, University of Florida **[invited]**

Cohen, M.J., J.B. Heffernan, R.G. Thomas, C.R. Foster, J.B. Martin, B. Hensley*, R.L. Douglass*, W.D. Graham and J. Delfino. 2011. Emergent Inference: High Resolution Sensing for Understanding Ecosystem Processes. Soil and Water Science, University of Florida **[invited]**

Cohen, M.J., D. Liebowitz, J.B. Heffernan and R.L. Douglass. Nov 2010. Nitrogen Dynamics in Florida Springs. Biology Department Seminar (*lecture*) **[invited]**

Cohen, M.J., D.L. Watts*, J.B. Heffernan[†] and T.Z. Osborne. Nov. 2009. The ecohydrology of self-organized patterned landscapes in the Everglades. Wetlands and Water Resources Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. April 2009. Sustainability and skepticism. Sustainability Mythbusters Panel, University of Florida Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. April 2009. New evidence on the links between algae and nitrate in Florida's Springs. Save Our Suwannee, Ft. White, FL (*lecture*) **[contributed]**

Cohen, M.J. March 2009. Mechanisms of N loss in a spring fed river. Geological Sciences Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. February 2009. Nitrogen dynamics in a spring-fed river. Wetlands and Water Resources Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. January 2009. The scrutiny of environmental narratives. UF Chapter of the American Water Resources Association, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. and J.M. Evans[†]. January 2009. Water resource implications of large scale bioethanol production. UF Water Institute PIF Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J., October 2008. Causes and consequences of nitrogen enrichment in Florida's springs. Jones Edmunds and Associates Continuing Education Series, Gainesville, FL (*lecture*)

Cohen, M.J. October 2008. Sources and consequences of nitrogen in Florida's springsheds. Certified Crop Advisor Training, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. September 2008. Adaptive management and the scrutiny of environmental narratives. SNRE Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. and J.B. Heffernan[†]. September 2008. Evidence for nitrogen limitation of Florida's springs. Wetlands and Water Resources Seminar Series, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. February 2008. Science and policy for Florida's springs. The Environment Science and Policy Society, Gainesville FL (*lecture*) **[contributed]**

Cohen, M.J. and J.B. Heffernan[†]. December 2007. Case for nitrogen effects in springs. Adaptive Management Seminar, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. November 2007. Adaptive management and the scrutiny of environmental narratives. Wetlands and Water Resources Seminar Series, Gainesville, FL (*lecture*)

Cohen, M.J. October 2007. A guide to NSF dissertation improvement grants. Adaptive Management Seminar, Gainesville, FL (*lecture*) **[contributed]**

Cohen, M.J. August 2007. The hydrologic footprint of large-scale bioethanol production. The Georgia Conservancy Meeting, Atlanta, GA (*lecture*) [**contributed**]

Cohen, M.J. August 2007. Nutrient loads and transformations to Florida's springs. Workshop on the Effects of Nutrients on Spring Organisms and Systems Gainesville, FL (*lecture*) [**contributed**]

Cohen, M.J. and D. King*. June 2007. Environmental accounting for sustainability. Short course (three days) delivered to national level scientists in Bamako, Mali. (*lecture*) [**contributed**]

Cohen, M.J. May 2007. Forests and the protection of Florida's springsheds. SFRC Spring Symposium. Gainesville, FL (*lecture*) [**contributed**]

Cohen, M.J. May 2007. The hydrology of the Florida Everglades. South Florida Short Course. Gainesville, FL (*lecture*) [**contributed**]

Cohen, M.J. April 2006. Natural capital in the wealth of nations. African Natural Resources Management Seminar. Gainesville, FL 2006 (*lecture*) [**contributed**]

Session Organizer or Moderator (n = 7)

The Ongoing Sensor Revolution in the Hydrologic Science. Dec. 2014. Oral and Poster Session at American Geophysical Union Fall Meeting, San Francisco CA (*session organizer and moderator*)

Springs of Florida. May 2013. Oral Session at Society of Freshwater Science Meeting, Jacksonville FL CA (*session organizer and moderator*)

Novel Applications of Continuous Measurements in Freshwater Ecosystems. Dec. 2010. Oral and Poster Session at the American Geophysical Union Fall Meeting, San Francisco CA (*session organizer and moderator*)

The Role of Flow in Everglades Landscape Pattern Formation. July 2010. Workshop and Research Session at the Greater Everglades Ecosystem Research conference, Naples, FL (*session organizer and moderator*)

Science for Springs Restoration. February 2010. Full-day session at the Biennial Water Institute Symposium, Gainesville, FL (*session organizer and moderator*)

Nutrient effects in aquatic systems. May 2009. Session at the annual meeting of the North American Benthological Society, Grand Rapids, MI (*session moderator*)

Ecosystem predictions from extremal principles. January 2006. Session at the 4th Biennial Energy Research Conference, Gainesville, FL (*session organizer and moderator*)

(E) WORKSHOPS ORGANIZED

Optical Nutrient Sensors for Aquatic Ecosystem Measurements. CUAHSI Short Course in Gainesville FL in Feb. 2013

Spring Ecosystems and Nutrient Criteria. Water Institute Workshop in Gainesville FL in June 2011.

(F) GRANTS (EXTRAMURAL ONLY)

Funded Projects

Date	Total	Funding Agency	Title	Role	Award to
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Award					Cohen Lab
2014-2018	\$655,000	FDACS, SRWMD, SJRWMD, SWFWMD	Forest Management for Increased Water Yield	PI	\$655,000
2014-2017	\$375,000	SWFWMD	Sediment Controls on Algal Abundance in Spring Rivers	PI	\$375,000
2014-2017	\$3,000,000	SJRWMD	Springs Protection Initiative – Silver River	Co-PI	\$220,000
2014-2017	\$900,000	National Science Foundation	The Ecological Drill Hypothesis: Biotic Control on Carbonate Dissolution in a Low Relief Patterned Landscape	PI	\$367,000
2013-2014	\$29,400	Gainesville Regional Utilities	Kanapaha Water Reclamation Facility Aquifer Denitrification Study	PI	\$22,000
2012-2016	\$75,000	Rayonier and Plum Creek	The Forest Fertilization Project	PI	\$75,000
2013-2015	\$160,000	Florida Forest Service	The Forest Fertilization Project	PI	\$160,000
2011	\$3,000	Rayonier, Inc.	Implications of Upland Restoration on Regional Water Availability	PI	\$3,000
2011	\$29,617	McIntire-Stennis mini-grant	New Eyes in the Water: Detection Fine-Scale Variation in Soluble, Organic and Particulate Phosphorus in Flowing Waters	PI	\$29,617
2011	\$10,470	McIntire-Stennis mini-grant	Quantifying Water Yield from Upland Habitat Restoration and Management: Benefit to Wetlands, Watersheds and Aquifers	PI	\$10,470
2010-2011	\$31,825	Three Rivers Trust	Gastropod Controls on Algal Proliferation in the Ichetucknee River	PI	\$31,825
2010-2013	\$64,800	Florida Dept. of Environmental Protection	Springs Restoration Plans	PI	\$64,800
2010-2018	\$896,639	US Army Corps of Engineers	Mechanisms of Ridge-Slough Maintenance and Degradation across the Greater Everglades	PI	\$647,469
2009-2013	\$839,446	South Florida Water Management District	Monitoring and Assessment Plan (MAP) Greater Everglades Wetlands Module-Landscape Pattern- Ridge, Slough, and Tree Island Mosaics	Co-PI	\$195,787
2010-2012	\$300,000	Southwest Florida Water Management District	Nitrate Processing in Springs Coast Rivers	Co-PI	\$55,000
2009-2011	\$534,546	National Science Foundation	Collaborative Research: High Resolution Sensor Networks for Quantifying and Predicting Surface-Groundwater Mixing and Nutrient Delivery in the Santa Fe River, Florida.	Co-PI	\$145,015
2009-2011	\$48,000	Three Rivers Trust, Inc.	Determining the Age of Ichetucknee Springs Water	Co-PI	\$6,000
2008-2010	\$78,400	St Johns River Water Mgmt. District	Spatial Nutrient Loading in the Newnans Lake Watershed: Continuing Monitoring	PI	\$78,400
2008-2010	\$115,800	US Environmental Protection Agency	Hydrologic Changes in Isolated Forested Wetlands in Response to Urbanization	PI	\$115,800

2008-2010	\$262,500	St Johns River Water Mgmt. District	Mechanisms of N Loss in Springs and Rivers	PI	\$180,200
2008-2011	\$406,000	National Science Foundation	Controls on Delivery and Fate of Water, Nitrogen, and Calcium in a Spring-Fed Karst River	Co-PI	\$112,000
2008-2009	\$2,950	South Florida Water Mgmt. District	Statistical Modeling of Chemotaxonomic and Water Quality Associations	PI	\$2,950
2008-2010	\$396,700	US Environmental Protection Agency	Recovery and Regeneration of Forested Wetlands after Harvest: Evaluation of Best Management Practices in Florida	Co-PI	\$97,000
2008	\$5,000	Alachua County Env. Protection Dept.	Ion Chemistry of North Florida Springs	PI	\$5,000
2007-2008	\$267,500	Florida Dept. of Env. Protection	Springs Nutrient Summary and Synthesis	Co-PI	\$41,089
2007-2008	\$19,600	Three Rivers Trust, Inc.	Isotope Tracing of Nitrate Sources in the Ichetucknee Springs Complex	PI	\$19,600
2007-2009	\$224,000	US Army Corps of Engineers	Scales and Resolution of Soil Nutrient Mapping in the Greater Everglades	Co-PI	\$84,600
2007-2010	\$466,700	US Army Corps of Engineers	Evaluating Decomposition Dynamics, Community Composition and Ridge Senescence in the Ridge-Slough Mosaic of the Florida Everglades	Co-PI	\$98,230
2006 - 2008	\$496,728	National Science Foundation	Design and Demonstration of a Distributed Sensor Array for Water Flow and Nitrate Flux in the Santa Fe Basin	PI	\$44,377
2006 - 2008	\$155,421	St. Johns River Water Mgmt District	Spatial Nutrient Loading in the Newnans Lake Watershed	PI	\$155,421
2006 - 2007	\$146,073	South Florida Water Mgmt. District	Mapping Sediment Quality in Lake Okeechobee	PI	\$146,073
2006 - 2007	\$6,794	South Florida Water Mgmt. District	Mapping Sediment Quality in Lake Okeechobee	PI	\$6,794
2006 - 2007	\$146,490	US Dept. of Interior/National Park Service	Rapid Assessment of Restoration Performance Measure at Multiple Scales in the Greater Everglades	PI	\$146,490
2006 - 2007	\$5,000	PBS&J (Consulting firm)	Water Supply Decision Support for the Lower East Coast of Florida	PI	\$5,000
2005 - 2006	\$212,814	Florida Dept. of Agriculture and Consumer Services	NIR Spectroscopy for Routine Agronomic Soil Analysis	Co-PI	\$156,600
TOTAL	\$11,367,213				\$4,558,607

Submitted – Pending

Date	Total Award	Funding Agency	Title	Role	Award to Cohen Lab
2014	\$2.1 million	National Science Foundation	Perceptions and Reality: Valuation of Wetland Ecological Services	Co-PI	\$440,300
2015	--	National Science Foundation	<i>Preproposal</i> : A Day in the Life of River – Metabolism and	PI	--

2015	--	National Science Foundation	Nutrient Uptake Across the River Continuum <i>Preproposal: Are there stream biomes? Patterns of stream metabolism across the continent</i>	Co-PI	--
2015	\$229,000	Florida Dept. of Environmental Protection	Forest Fertilization and the Efficacy of BMPs	PI	\$229,000

(G) SYNERGISTIC ACTIVITIES AND SERVICE

Outreach:

Global Wetland Ecohydrology Network (GWEN) founding member
Active participant in Everglades MAP/Recover
Active participant in Florida Springs Working Groups.

Technical and Faculty Advisory Committees:

Powell Center synthesis project on wetland connectivity (2015)
Florida Forestry BMPs Technical Advisory Committee (2006 to present)
Florida DEP Technical Advisory Committee for Dissolved Oxygen Criteria (2011-2012)
UF Analytical Research Lab oversight committee member (2009 to present)
UF Water Institute faculty advisory committee (2013 to present)
UF Hydrologic Sciences Academic Cluster Chair (2011-2015)
CUAHSI Short Course on In Situ Sensors (2013).

Scientific Review:

Panelist and ad hoc reviewer for National Science Foundation (Water Sustainability and Climate, Ecosystems, Hydrology);
Reviewer for scholarly journals – Ecology, Journal of Geophysical Research – Biogeosciences, Ecosphere, Limnology and Oceanography, Freshwater Science, Biogeosciences, Biogeochemistry, Ecological Applications, Wetlands, Geoderma, Science of the Total Environment, Environmental Pollution, Ecological Economics, Vadose Zone Journal, Soil Science Society of America Journal, Journal of Hydrologic Engineering.

Society Memberships:

Ecological Society of America (2006 to present)
American Geophysical Union (2007 to present)
European Geophysical Union (2014 to present)
Society of Freshwater Science (2009 to present)
Society of Wetland Scientists (2004 to present)
Society of American Foresters (2007 to present)
Sigma Xi (1995 to present)
American Society for Limnology and Oceanography (2011 to present)
American Water Resources Association (2007 to 2014)

(H) COLLABORATORS AND OTHER AFFILIATIONS

PhD. Advisors: Dr. Mark T. Brown (University of Florida); Dr. Keith Shepherd (ICRAF – Kenya); Dr. Michael Binford (University of Florida)

Collaborators (last five years): Jim Heffernan (Duke), Brad Murray (Duke University), Mike Gooseff (Colorado State University), Irena Creed (Western University), John Marton (Indiana University), Chris Craft (Indiana University), David Lewis (USF), Mark Rains (USF), Aram Calhoun (University of Maine), Adam Watts (Desert Research Institute), Nandita Basu (Waterloo University), Tim Covino (Colorado State University), Mutlu Ozdogan (University of Wisconsin), Emily Bernhardt (Duke), Brian McGlynn (Duke), Bob Hall (University of Wyoming), Bill McDowell (UNH), Will Wollheim (UNH), Brian Pellerin (USGS), Tom Bianchi (University of Florida), Jon Martin (University of Florida), Tom Frazer (University of Florida), Wendy Graham (University of Florida), Nancy Grimm (ASU), John Kominoski (FIU), Bob Hall (UWY), Emily Stanley (UW), Jason Evans (UGa), Brian Roth (UMaine), Gemma Shepherd (UNEP), Joe Delfino (UF), Todd Osborne (SJRWMD), K. Ramesh Reddy (UF), Mark Clark (UF), Martha Monroe (UF), Ed Dunne (SJRWMD), Erich Marzolf (SRWMD), Susan Newman (SFWMD), Brian Katz (USGS), Ray Thomas (UF), Jason Evans (UGa), Erik Schilling (NCASI), Kelly Reiss (UF), Joseph Prenger (Florida Fish and Wildlife Commission), Sergio Ulgiati (University of Naples – Italy), Tor Vagen (ICRAF – Mali), Veronique de Montety (U-Rennes).

Graduate Students Past and Present (n = 21 as chair or co-chair – listed here, n = 48 as committee member, not listed): Danielle King (MS 2006), Chad Foster (MS 2008), Justin Vogel (MS 2008), Lauren Long (MS2009), Lizzy Deimeke (MS 2009), Danielle Watts (MS 2009 and PhD 2013), Nicole Ricci (MS 2010), Bobby Hensley (MS 2011 and PhD 2014), Dina Liebowitz (PhD 2013), Yuan Jing (PhD 2015), Rachel Douglass (PhD 2015), Courtney Reijo (PhD current), Joseph Delasantro (MS 2013), Jake Diamond (MS 2013), Paul Decker (MS current), Nelson Anderson (MS current), Jenny McBride (MS current), Lily Kirk (PhD current), Carlos Quintero (PhD current).

Post-Doctoral Researchers (n = 8): Bobby Hensley (current), Subodh Acharya (current), Daniel McLaughlin (now faculty at Virginia Tech), David Kaplan (now faculty at University of Florida), Andrea Albertin (independent consultant, Costa Rica), Jason Evans (now faculty at University of Georgia), Jim Heffernan (now faculty at Duke University), Sanjay Lamsal (now senior scientist at International Livestock Research Institute)