

Project Reports and Publications for the USEPA Everglades Ecosystem Assessment (EEA)/ Regional Environmental Monitoring and Assessment Program (REMAP)

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**USEPA Everglades Ecosystem Assessment (EEA)/
Regional Environmental Monitoring and Assessment Program (REMAP)**

USEPA Website: <https://www.epa.gov/everglades/environmental-monitoring-everglades>

Website for 2005 program data: biogeochemical, photo documentation, plant transect, vegetation cover. <http://maps.fiu.edu/gmaps/EverREMAP.html>

Project Reports and Publications

Abbey-Lee, Robin N., Evelyn N. Gaiser and Joel C. Trexler. 2013. Relative roles of dispersal dynamics and competition in determining the isotopic niche breadth of a wetland fish. *Freshwater Biology* 58:780–792 doi:10.1111/fwb.12084.

Axelrad, Donald M., Thomas D. Atkeson, Ted Lange, Curtis D. Pollman, Cynthia C. Gilmour, William H. Orem, Irving A. Mendelssohn, Peter C. Frederick, David P. Krabbenhoft, George R. Aiken, Darren G. Rumbold, Daniel J. Scheidt, and Peter I. Kalla. 2007. Chapter 3B: Mercury Monitoring, Research and Environmental Assessment in South Florida. In *2007 South Florida Environmental Report – Volume I*. South Florida Water Management District and Florida Department of Environmental Protection.

Axelrad, Donald M., Ted Lange, Mark Gabriel, Thomas D. Atkeson, Curtis D. Pollman, William H. Orem, Daniel J. Scheidt, Peter I. Kalla, Peter C. Frederick and Cynthia C. Gilmour. 2008. Chapter 3B: Mercury and Sulfur Monitoring, Research and Environmental Assessment in South Florida. In *2008 South Florida Environmental Report – Volume I*. South Florida Water Management District and Florida Department of Environmental Protection.

Cai, Yong, Rudolf Jaffé, and Ronald Jones. 1997. Ethylmercury in the Soils and Sediments of the Florida Everglades. *Environmental Science and Technology* 31(1):302–305.

Doren, Robert, John C. Volin and Jennifer H. Richards. 2009. Invasive exotic plant indicators for ecosystem restoration: An example from the Everglades restoration program. *Ecological Indicators* 9(6) Supplement: S29–S36.

Gaiser, Evelyn E. Paul V. McCormick, Scot E. Hagerthey and Andrew D. Gottlieb. 2011. Landscape Patterns of Periphyton in the Florida Everglades. *Critical Reviews in Environmental Science and Technology* 41(S1):92-120.

Ivey, C. and J.H. Richards. 2001. Genotypic diversity and clonal structure of Everglades sawgrass, *Cladium jamaicense* (Cyperaceae). *International Journal of Plant Science* 162: 1327-1335.

Ivey, C. and J.H. Richards. 2001. Genetic diversity of Everglades sawgrass (*Cladium jamaicense*, Cyperaceae). *International Journal of Plant Science* 162: 817-825.

Kalla, P. I. and D. J. Scheidt. 2017. Everglades ecosystem assessment – Phase IV, 2014: Data reduction and initial synthesis. United States Environmental Protection Agency, Science and Ecosystem Support Division. SESD Project 14-0380. Athens, Georgia.

Li, Yanbin, Yuxiang Mao, Guangliang Liu, Georgio Tachiev, David Roelant, Xinbin Feng and Yong Cai. 2011. Degradation of Methylmercury and Its Effects on Mercury Distribution and Cycling in the Florida Everglades. *Environmental Science and Technology* 44:6661–6666.

Li, Yanbin, Zhiwei Duan, Guangliang Liu, Peter Kalla, Daniel Scheidt and Yong Cai. 2015. Evaluation of the possible sources and controlling factors of toxic metals/metalloids in the Florida Everglades and their potential risk of exposure. *Environmental Science & Technology*. DOI:10.1021/acs.est.5b01638.

Liu, G., Y. Cai, P. Kalla, D. Scheidt, J. Richards, L. Scinto, E. Gaiser and C. Appleby. 2008a. Mercury mass budget estimates and cycling seasonality in the Florida Everglades. *Environmental Science and Technology* 42: 1954-1960.

Liu, G., Y. Cai, T. Philippi, P. Kalla, D. Scheidt, L. Scinto, J. Richards and J. Trexler. 2008b. Distribution of total and methylmercury in different ecosystem compartments in the Everglades: Implications for mercury accumulation. *Environmental Pollution* 153: 257-265.

Liu, G., Yong Cai, Yuxiang Mao, Daniel Scheidt, Peter Kalla, Jennifer Richards, Leonard Scinto, Georgio Tachiev, David Roelant and Charlie Appleby. 2009. Spatial Variability in Mercury Cycling and Relevant Biogeochemical Controls in the Florida Everglades. *Environmental Science and Technology* 43 (12):4361–4366. DOI: 10.1021/es803665c

Liu, Guangliang, G. Melodie Naja, Peter Kalla, Dan Scheidt, Evelyn Gaiser, and Yong Cai. 2011. Legacy and fate of mercury and methylmercury in the Florida Everglades. *Environmental Science and Technology*, 45(2):496-501. Supporting information S1-S41.

Orem, William, Cynthia Gilmour, Donald Axelrad, David Krabbenhoft, Daniel Scheidt, Peter Kalla, Paul McCormick, Mark Gabriel and George Aiken. 2011. Sulfur in the South Florida Ecosystem: Distribution, Sources, Biogeochemistry, Impacts, and Management for Restoration. *Critical Reviews in Environmental Science and Technology* 41(S1):249-288.

Osborne, Todd Z., Susan Newman; Daniel J. Scheidt; Peter I. Kalla; Gregory L. Bruland; Matthew J. Cohen; Leonard J. Scinto; Larry 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(S1):121-148.

Richards, J.H. and C.T. Ivey. 2004. Morphological plasticity of *Sagittaria lancifolia* L. in response to phosphorus. *Aquatic Botany* 80: 53-67.

Richards, Jennifer and Tom Philippi. 2005. Macrophyte sampling, South Florida R-EMAP project. 2005 dry season. Final Report. Florida International University Department of Biological Sciences.

Richards, Jennifer H., Tom Philippi, Pete Kalla and Dan Scheidt. 2008. Everglades marsh vegetation: species associations and spatial distributions from R-EMAP Phase III. Florida International University Department of Biological Sciences.

Sargeant, B., J.C. Trexler, E.E. Gaiser. 2010. Biotic and Abiotic Determinants of Intermediate-Consumer Trophic Diversity in the Florida Everglades. *Marine & Freshwater Research* 61:11-22.

Sargeant, Brooke L., Evelyn E. Gaiser, and Joel C. Trexler. 2011. Indirect and direct controls of macroinvertebrates and small fish by abiotic factors and trophic interactions in the Florida Everglades. *Journal of Freshwater Biology* DOI: 10.1111/j.1365-2427.2011.02663.x

Scheidt, Daniel, Jerry Stober, Ronald Jones and Kent Thornton. 2000. South Florida ecosystem assessment: water management, soil loss, eutrophication and habitat. United States Environmental Protection Agency Report 904-R-00-003.

Scheidt, D. J. and P. I. Kalla. 2007. Everglades ecosystem assessment: water management, water quality, eutrophication, mercury contamination, soils and habitat. Monitoring for adaptive management: a R-EMAP status report. EPA 904-R-07-001. United States Environmental Protection Agency. Atlanta, Georgia.

Stober, Q. J., R. D. Jones and D. J. Scheidt. 1995. Ultra-trace level mercury in the Everglades Ecosystem: A Multi-media Pilot Study. *Water, Air and Soil Pollution* 80:991-1001.

Stober, Jerry, Daniel Scheidt, Ron Jones, Kent Thornton, Robert Ambrose, and Danny France. 1996. South Florida Ecosystem Assessment. Monitoring for Adaptive Management: Implications for Ecosystem Restoration. Interim Report. United States Environmental Protection Agency EPA-904-R-96-008.

Stober, Jerry, Daniel Scheidt, Ron Jones, Kent Thornton, Robert Ambrose, and Danny France. 1998. South Florida Ecosystem Assessment. Monitoring for Adaptive Management: Implications for Ecosystem Restoration. Final Technical Report - Phase I. United States Environmental Protection Agency EPA-904-R-98-002.

Stober, Q. J., K. Thornton, R. Jones, J. Richards, C. Ivey, R. Welch, M. Madden, J. Trexler, E. Gaiser, D. Scheidt and S. Rathbun. 2001. South Florida Ecosystem Assessment: Phase I/II- Everglades Stressor Interactions: Hydropatterns, Eutrophication,

Habitat Alteration, and Mercury Contamination (Summary). EPA 904-R-01-002. September 2001. USEPA Region 4 Science and Ecosystem Support Division. Athens, Georgia.

Stober, Q. J., K. Thornton, R. Jones, J. Richards, C. Ivey, R. Welch, M. Madden, J. Trexler, E. Gaiser, D. Scheidt and S. Rathbun. 2001. South Florida Ecosystem Assessment: Phase I/II (Technical Report)- Everglades Stressor Interactions: Hydropatterns, Eutrophication, Habitat Alteration, and Mercury Contamination. EPA 904-R-01-003. September 2001. USEPA Region 4 Science and Ecosystem Support Division. Athens, Georgia.

Tarpey, Thaddeus and Christopher T. Ivey. 2006. Allometric Extension for Multivariate Regression. *Journal of Data Science* 4:479-495.

Trexler, J. C., E. E. Gaiser, J. S. Kominoski, and J. Sanchez. 2015. The role of periphyton mats in consumer community structure and function in calcareous wetlands: Lessons from the Everglades. In: J. A. Entry, A. D. Gottlieb, K. Jayachandran and A. Ogram, eds. *Microbiology of the Everglades Ecosystem*, Science Publishers, CRC Press, pp 155-179.

USEPA. 2014. Everglades Ecosystem Assessment Phase IV. Miami, Florida. September 23-29, 2013. SESD Project Identification Number: 13-0513. USEPA Region 4 Science and Ecosystem Support Division. Athens, Georgia.

Yamashita, Youhei, Leonard J. Scinto, Nagamitsu Maie and Rudolf Jaffé. 2010. Dissolved Organic Matter Characteristics Across a Subtropical Wetland's Landscape: Application of Optical Properties in the Assessment of Environmental Dynamics. *Ecosystems* 13:1006-1019.