# *Project Manager Qualifications and Organization Description*

**Project Manager:** Dr. James Cotner, Professor, Department of Ecology, Evolution and Behavior, 1479 Gortner, St. Paul 55108, 612-625-1706; [cotne002@umn.edu](mailto:cotne002@umn.edu)

**Education:**

Ph.D., University of Michigan, Ann Arbor, 1990, Biology; (Major professor-Dr. Robert Wetzel-deceased).

M.Sc., Kent State University, Kent, Ohio, 1984, Biology; (Major professor-Dr. Robert Heath).

B.A., Wittenberg University, Springfield, Ohio, 1981, Biology.

**Organization description:** University of Minnesota, Twin Cities Campus; Education and research facility serving the entire state of Minnesota.

**Project responsibilities:** Professor Cotner will oversee all research activities and personnel. He will assist with the design and implementation of the project and communicate with managers and the Dept. of Agriculture.

**Research Interest:** Microbial ecology and biogeochemistry of wetlands and large lakes; human influences on water quality in wetlands and lakes.

**Relevant Publications:**  
Ginger, Luke J., Kyle D. Zimmer, Brian R. Herwig, Mark A. Hanson, William O. Hobbs, Gaston E. Small, and James B. Cotner (2017) ‘Watershed Versus Within-Lake Drivers of Nitrogen: Phosphorus Dynamics in Shallow Lakes’, Ecological Applications, doi: 10.1002/eap.1599.

Phillips, K. N., C. M. Godwin, and J. B. Cotner. 2017. The Effects of Nutrient Imbalances and Temperature on the Biomass Stoichiometry of Freshwater Bacteria. Front. Microbiol. 8. doi:10.3389/fmicb.2017.01692

Cotner, JB, and EK Hall. "Comment on "A Bacterium That Can Grow by Using Arsenic Instead of Phosphorus"." Science (New York, N.Y.) 332, no. 6034 (2011): doi:10.1126/science.1201943.

Kolka, R. K.; Mitchell, C.P.J.; Jeremiason, J. D.; Hines, N. A.; Grigal, D. F.; Engstrom, D. R.; Coleman-Wasik, J.K.; Nater, E. A.; Swain, E.B.; Monson, B. A.; Fleck, J. A.; Johnson, B.; Almendinger, J. E.; Branfireun, B. A.; Brezonik, P.L.; Cotner, J.B. 2011. Mercury cycling in peatland watersheds. In “Kolka, R.K.; Sebestyen, S. .; Verry, E. S.; Brooks, K.N., eds. Peatland biogeochemistry and watershed hydrology at the Marcell Experimental Forest. Boca Raton, FL: CRC Press: 349-370.

Cotner J.B., E.K. Hall, T. Scott and M. Heldal. 2010. Freshwater bacteria are stoichiometrically flexible with a nutrient composition similar to seston. Front. Microbio. doi: 10.3389/fmicb.2010.00132

Cory, R M, K McNeill, J B Cotner, A Amado, J M Purcell, and A G Marshall. 2010. Singlet Oxygen in the Coupled Photochemical and Biochemical Oxidation of Dissolved Organic Matter. Environmental Science & Technology 44: 3683-3689.

Tranvik, L.J., J.A. Downing, J.B. Cotner and others. 2009. Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography 54: 2298-2314.

Hall, E.K., A.R. Dzialowski, S. M. Stoxen, and J.B. Cotner. 2009. The effect of temperature on the coupling between phosphorus and growth in natural bacterioplankton communities. Limnology and Oceanography 54: 880-889.

Stets, E.G., and J.B. Cotner. Littoral zones as sources of biodegradable dissolved organic carbon in lakes. Canadian Journal of Fisheries and Aquatic Science 65 :2454-2460.

Cory, R.M., J.B. Cotner and K. McNeill. 2009. Quantifying interactions between singlet oxygen and aquatic fulvic acids. Environmental Science and Technology 43: 718-723.

Hall, E.K., C. Neuhauser and J.B. Cotner. 2008. Toward a mechanistic understanding of how natural bacterial communities respond to changes in temperature in aquatic ecosystems. ISME Journal 2: 471-481.

Stets, E.G. and J.B. Cotner. 2008. The influence of dissolved organic carbon on bacterial phosphorus uptake and bacteria-phytoplankton dynamics in two Minnesota lakes. Limnology and Oceanography 53: 137-147.