

**CURRICULUM VITAE  
EMILY H. STANLEY**

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**EDUCATION**

B.S., Biology, Yale University, 1984  
M.S., Biology, Southwest Texas State University, 1986  
Ph.D., Zoology, Arizona State University, 1993

**PROFESSIONAL EMPLOYMENT**

Professor, Department of Integrative Biology, University of Wisconsin, 2010-  
Associate Professor, Department of Zoology, University of Wisconsin, 2004-2010  
Assistant Professor, Department of Zoology, University of Wisconsin, 1998-2004  
Assistant Professor, Department of Zoology, Oklahoma State University, 1995-1998  
Post-Doctoral Research Associate, Department of Biological Sciences, University of Alabama,  
1993-1995

**OTHER APPOINTMENTS AND AFFILIATIONS**

University of Wisconsin Freshwater and Marine Sciences Graduate Faculty  
Freshwater and Marine Sciences Chair- 2014-present  
University of Wisconsin Nelson Institute for Environmental Studies Graduate Faculty

**RESEARCH INTERESTS**

Aquatic ecosystem ecology and biogeochemistry; long-term change in ecosystems; geomorphic and hydrologic influences on the ecology of streams and lakes

**AWARDS, HONORS, AND ELECTED OFFICES**

Wayland E. Noland Distinguished Chair in Integrative Biology, 2020-2021  
G.E. Hutchinson Award- Association for the Science of Limnology and Oceanography, 2018  
Fellow- Ecological Society of America, 2018  
Fellow- Society for Freshwater Sciences, 2018  
Kellett Mid-Career Faculty Researcher Award- University of Wisconsin, 2015  
Secretary, Biogeosciences Division, American Geophysical Union, 2008-2010  
Member-at-Large, Ecological Society of America, 2008-2010  
Romnes Faculty Fellowship Award- University of Wisconsin, 2008  
Fellow- Aldo Leopold Leadership Program, 2006  
Vilas Associate Award- University of Wisconsin, 2003  
Madison Magazine- Madison's 50 People Who Make a Difference List, 2002

Aquatic Section Secretary- Ecological Society of America, 2001-2003  
Member-at-Large, Madison Ecology Group 2000-2002  
American Dissertation Fellowship- American Association of University Women Educational  
Foundation, 1991-1992  
Graduate College Fellowship- Arizona State University, 1988

## **PUBLICATIONS**

### **Peer-reviewed journal articles**

132. Lapierre, J.F., S.M. Collins, S.K. Oliver, T. Wagner, and E.H. Stanley. Accepted. Inconsistent browning of Northeastern US lakes despite increased precipitation and recovery from acidification. *Ecosphere*
131. Mooney, R.J., E.H. Stanley, W. Rosenthal, P.C. Esselman, A.D. Kendall, and P.B. McIntyre. 2020. A day in the life of a Great Lake: Outsized contributions from small tributaries. *Proceedings of the National Academy of Sciences*. DOI:10.1073/pnas.2001376117
130. Blackburn, S.R. and E.H. Stanley. 2020. Floods increase carbon dioxide and methane fluxes and concentrations in agricultural streams. *Freshwater Biology* DOI: 10.1111/fwb.13614
129. Matsuzaki, S.I., R.C. Lathrop, S.R. Carpenter, J.R. Walsh, M.J. Vander Zanden, M.R. Gahler, and E.H. Stanley. Accepted. Climate and food web effects on the spring clear-water phase in two north-temperate eutrophic lakes. *Limnology and Oceanography* DOI: 10.1002/lno.11584
128. Schliep, E.M., S.M. Collins, S. Rojas Salazar, N.R. Lottig, and E.H. Stanley. Accepted. Data fusion model to identify environmental drivers and improve estimation of total nitrogen in lakes. *Annals of Applied Statistics*.
127. Cowles, J., L. Templeton, J.J. Battles, P.J. Edmunds, R.C. Carpenter, S.R. Carpenter, Stephen, M.P. Nelson, N.L. Cleavitt, T.J. Fahey, P.M. Groffman, J.H. Sullivan, M.C. Neel, G.J.A. Hansen, S. Hobbie, S.J. Holbrook, C.E. Kazanski, E.W. Seabloom, R.J. Schmitt, E.H. Stanley, N.S. van Doorn, and M.J. Vander Zanden. Accepted. Ecosystem trajectories, resilience, and the state of our future Earth: Insight from the U.S. LTER Network. *Ecosphere*.
126. Zhang, L., X. Xia, S. Liu, S. Zhang, J. Wang, S. Li, G. Wang, H. Gao, Z. Zhang, W. Wen, Q. Wang, R. Liu, Z. Yang, E.H. Stanley, and P.A. Raymond. 2020. Significant methane ebullition from alpine permafrost rivers on the East Qinghai-Tibet Plateau. *Nature Geoscience* <https://doi.org/10.1038/s41561-020-0571-8>
125. Carpenter, S.R., B.M.S. Arani, P.C. Hanson, M. Scheffer, E.H. Stanley, and E. van Nes. 2020. Stochastic dynamics of Cyanobacteria in long-term high-frequency observations of a eutrophic lake. *Limnology and Oceanography Letters* 5:331-336. <https://doi.org/10.1002/lol2.10152>
124. Stanley, E.H., Rojas Salazar, S., N.R. Lottig, E.M. Schliep, C.T. Filstrup, and S.M. Collins. 2019. Comparison of total nitrogen data from direct and Kjeldahl-based approaches in integrated datasets. *Limnology and Oceanography: Methods* 17:639-649.
123. Loken, L.C., J.T. Crawford, P.J. Schramm, P. Stadler, and E.H. Stanley. 2019. Large spatial and temporal variability of carbon dioxide and methane in a eutrophic lake. *Journal of Geophysical Research – Biogeosciences* 124: 2248–2266.

122. Stanley, E.H., S.M. Collins, N.R. Lottig, S.K. Oliver, K.E. Webster, K.S. Cheruvellil, and P.A. Soranno. 2019. Biases in lake water quality sampling and implications for macroscale research. *Limnology and Oceanography* 64: 1572-1585.
121. Stadler, P., L.C. Loken, J.T. Crawford, P.J. Schramm, K. Sorsa, C. Kuhn, D. Savio, R.G. Striegl, D. Butman, E.H. Stanley, A.H. Farneitner, and M. Zessner. 2019. Spatial patterns of enzymatic activity in large water bodies: ship-borne measurements of beta-D-glucuronidase activity as a rapid indicator of microbial water quality. *Science of the Total Environment* 651: 1742-1752.
120. Bertolet, B.L., J.R. Corman, N.J. Casson, S.D. Sebestyen, R.K. Kolka, and E.H. Stanley. 2018. Influence of soil temperature and moisture on the dissolved carbon, nitrogen, and phosphorus in organic matter entering lake ecosystems. *Biogeochemistry* 139: 293-305.
119. Loken, L.C., J.T. Crawford, M.M. Dornblaser, R.G. Striegl, J.N. Houser, P.A. Turner, and E.H. Stanley. 2018. Limited nitrate retention capacity in the Upper Mississippi River. *Environmental Research Letters* 13: 074030.
118. Appling, A., J. Read, L. Winslow, M. Arroita, E. Bernhardt, N. Griffiths, R. Hall, J. Harvey, J. Heffernan, E. Stanley, E. Stets, and C. Yackulic. 2018. The metabolic regimes of 356 U.S. rivers. *Scientific Data* 5: 180292.
117. Dornelas, M., L.H. Antao, F. Moyes, A.E. Bates, A.E. Magurran, and BioTIME consortium (200+ authors including E.H. Stanley). 2018. BioTIME: a database of biodiversity time-series for the Anthropocene. *Global Ecology and Biogeography* 27: 760-786.
116. Corman, J.R., B.L. Bertolet, N.J. Casson, S.D. Sebestyen, R.K. Kolka, and E.H. Stanley. 2018. Nitrogen and phosphorus loads to temperate seepage lakes associated with allochthonous dissolved organic carbon loads. *Geophysical Research Letters* 45: 5481-5490.
115. Bernhardt, E.S., J.B. Heffernan, N.B. Grimm, E.H. Stanley, J.W. Harvey, M. Arroita, A.P. Appling, M.J. Cohen, W.H. McDowell, R.O. Hall, J.S. Read, B.J. Roberts, and E.G. Stets. 2018. The metabolic regimes of flowing waters. *Limnology and Oceanography* 63: S99-S118.
114. Filstrup, C.T., T. Wagner, S.K. Oliver, C.A. Stow, K.E. Webster, E.H. Stanley, and J.A. Downing. 2018. Evidence for regional nitrogen stress on lake phytoplankton biomass across large landscape and climate gradients. *Limnology and Oceanography* 63: S324-S339.
113. Golub, M., A.R. Desai, G.A. McKinley, C.K. Remucal, and E.H. Stanley. 2017. Large uncertainty in estimating pCO<sub>2</sub> from carbonate equilibria in lakes. *Journal of Geophysical Research Biogeosciences* 122: 2909-2924.
112. Lottig, N.R., P.-N. Tan, T. Wagner, K.S. Cheruvellil, P.A. Soranno, E.H. Stanley, C.E. Scott, C.A. Stow, and S. Yuan. 2017. Macroscale patterns of synchrony identify complex relationships among spatial and temporal ecosystem drivers. *Ecosphere* 8: e 02024.
111. Powers, S.M., H.M. Baulch, S.E. Hampton, S.G. Labou, N.R. Lottig, and E.H. Stanley. 2017. Nitrification contributes to winter oxygen depletion in seasonally frozen forested lakes. *Biogeochemistry Letters* 136: 119-129.
110. Powers, S.M., S.G. Labou, H.M. Baulch, R.J. Hunt, N.R. Lottig, J.F. Walker, S.E. Hampton, and E.H. Stanley. 2017. Ice duration drives winter nitrate accumulation in north temperate lakes. *Limnology and Oceanography Letters* 2: 177-186.
109. Butitta, V.L., S.R. Carpenter, L.C. Loken, M.L. Pace, and E.H. Stanley. 2017. Spatial early warning indicators in a lake manipulation. *Ecosphere* 8: e01941.

108. Oliver, S.K., S.M. Collins, P.A. Soranno, T. Wagner, E.H. Stanley, J.R. Jones, C.A. Stow, N.R. Lottig. 2017. Unexpected stasis in a changing world: Lake nutrient and chlorophyll trends since 1990. *Global Change Biology* 23: 5455-5467.
107. Crawford, J. T., L.C. Loken, W.E. West, B. Cray, S.A. Spawn, N. Gubbins, S.E. Jones, R.G. Striegl, and E.H. Stanley. 2017. Spatial heterogeneity of within-stream methane concentrations. *Journal of Geophysical Research Biogeosciences* 122: 1036-1048.
106. Collins, S.M., S.K. Oliver, J.F. Lapierre, E.H. Stanley, J. R. Jones, T. Wagner, and P.A. Soranno. 2017. Lake nutrient stoichiometry is less predictable than nutrient concentrations at regional and sub-continental scales. *Ecological Applications* 27: 1529-1540.
105. Soranno, P.A., L.C. Bacon, M. Beauchene, K.E. Bednar, E.G. Bissell, C.K. Boudreau, M.G. Boyer, M.T. Bremigan, S.R. Carpenter, J.W. Carr, K.S. Cheruvilil, S.T. Christel, M. Claucherty, S.M. Collins, J.D. Conroy, J. Duckett, J.A. Downing, C.E. Fergus, C.T. Filstrup, C.S. Funk, M.J. Gonzalez, L.T. Green, C. Gries, J.D. Halfman, S.K. Hamilton, P.C. Hanson, E.N. Henry, E.M. Herron, C. Hockings, J.R. Jackson, K. Jacobson-Hedin, L.L. Janus, W.W. Jones, J.R. Jones, C.M. Keson, K.B.S. King, S.A. Kishbaugh, J.-F. Lapierre, B.F. Lathrop, J.A. Latimore, Y. Lee, N.R. Lottig, J.A. Lynch, L.J. Matthews, B.H. McDowell, K.E.B. Moore, B.P. Neff, S.J. Nelson, S.K. Oliver, M.L. Pace, D.C. Pierson, A.C. Poisson, A.I. Pollard, D.M. Post, P.O. Reyes, D.O. Rosenberry, K.M. Roy, L.G. Rudstam, O. Sarnelle, N.J. Schuldt, C.E. Scott, N.K. Skaff, N.J. Smith, N.R. Spinelli, J.J. Stachelek, E.H. Stanley, J.L. Stoddard, S.B. Stopyak, C.A. Stow, J.M. Tallant, P.-N. Tan, T.P. Thorpe, T. Wagner, M.J. Vanni, G. Watkins, K.C. Weathers, K.E. Webster, J.D. White, M.K. Wilmes, and S. Yuan. 2017. LAGOS-NE: A multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of U.S. lakes. *GigaScience* 6: 1-22.
104. Crawford, J.T., E.H. Stanley, M.M. Dornblaser, and R.G. Striegl. 2016. CO<sub>2</sub> time series patterns in contrasting headwater streams of the Northern Hemisphere. *Aquatic Sciences* 79: 473-486.
103. Hampton, S.E., A.W.E. Galloway, S.M. Powers, T. Ozersky, K.H. Woo, R.D. Batt, S.G. Labou, C.M. O'Reilly, S. Sharma, N.R. Lottig, E.H. Stanley, R.L. North, J.D. Stockwell, R. Adrian, G.A. Weyhenmeyer, L. Arvola, H.M. Baulch, I. Bertani, L.L. Bowman, Jr., C.C. Carey, J. Catalan, W. Colom-Montero, L.M. Domine, M. Felip, I. Granadoso, C. Gries, H.P. Grossart, J. Haberan, M. Haldna, B. Hayden, S.N. Higgins, J.C. Jolley, K.K. Kahilainen, E. Kaup, M.J. Kehoe, S. MacIntyre, A.W. Mackay, H.L. Mariash, R.M. McKay, B. Nixdorf, P. Nöges, T. Nöges, M. Palmer, D.C. Pierson, D.M. Post, M.J. Pruet, M. Rautio, J. S. Read, S.L. Roberts, J. Rucker, S. Sadro, E.A. Silow, D.E. Smith, R.W. Sterner, G.E.A. Swann, M.A. Timofeyev, M. Toro, M.R. Twiss, R.J. Vogt, S.B. Watson, E.J. Whiteford, and M.A. Xenopoulos. 2016. Ecology under lake ice. *Ecology Letters* 20: 98-111.
102. Gries, C., M.R. Gahler, P.C. Hanson, T.K. Kratz, and E.H. Stanley. 2016. Information management at the North Temperate Lakes Long-Term Ecological Research site - successful support of research in a large, diverse, and long running project. *Ecological Informatics* 36: 201-208.
101. Oliver, S.K., P.A. Soranno, C.E. Fergus, T. Wagner, L.A. Winslow, C.E. Scott, K.E. Webster, J.A. Downing, and E.H. Stanley. 2016. Prediction of lake depth across a 17-state region in the U.S. *Inland Waters* 6: 314-324.

100. Crawford, J.T. and E.H. Stanley. 2016. Controls on methane concentrations and fluxes in streams draining human-dominated landscapes. *Ecological Applications* 26: 1581-1591.
99. Stanley, E.H., N.J. Casson, S.T. Christel, J.T. Crawford, L.C. Loken, and S.K. Oliver. 2016. The ecology of methane in streams and rivers: patterns, controls, and global significance. *Ecological Monographs* 86: 146-171.
98. Crawford, J.T., L.C. Loken, E.H. Stanley, E.G. Stets, M.M. Dornblaser, and R.G. Striegl. 2016. Basin scale controls on CO<sub>2</sub> and CH<sub>4</sub> emissions from the Upper Mississippi River. *Geophysical Research Letters* 43: 1973-1979.
97. Loken, L.C., G.E. Small, J.C. Finlay, R.W. Sterner, and E.H. Stanley. 2016. Nitrogen cycling in a freshwater estuary. *Biogeochemistry* 127: 199-216.
96. Soranno, P.A., E.G. Bissell, K.S. Cheruvilil, S.T. Christel, S.M. Collins, C.E. Fergus, C.T. Filstrup, J.-F. Lapierre, N.R. Lottig, S.K. Oliver, C.E. Scott, N.J. Smith, S. Stopyak, S. Yuan, M.T. Bremigan, J.A. Downing, C. Gries, E.N. Henry, N.K. Skaff, E.H. Stanley, C.A. Stow, P.-N. Tan, T. Wagner, and K.E. Webster. 2015. Building a multi-scaled geospatial temporal ecology database from disparate data sources: Fostering open science through data reuse. *GigaScience* 4: 10.1186/s13742-015-0067-4.
95. Crawford, J.T., M.M. Dornblaser, E.H. Stanley, D.W. Clow, and R.G. Striegl. 2015. Source limitation of carbon gas emissions in high-elevation mountain streams and lakes. *Journal of Geophysical Research- Biogeosciences* 120: 952-964.
94. Hampton, S.E., M.V. Moore, T. Ozersky, E.H. Stanley, C.M. Polshenski, and A.W.E. Galloway. 2015. Heating up a cold subject: prospects for under-ice research in lakes. *Journal of Plankton Research* 37: 277-284.
93. Hanson, P.C., M.L. Pace, S.R. Carpenter, J.J. Cole, and E.H. Stanley. 2015. Integrating landscape carbon cycling: research needs for resolving organic carbon budgets. *Ecosystems* 18: 363–375.
92. Winslow, L.A., J.S. Read, P.C. Hanson, and E.H. Stanley. 2015. Does lake size matter? Combining morphology and process modeling to examine the contribution of lake classes to population-scale processes. *Inland Waters* 5: 7-14.
91. Filstrup, C.T., T. Wagner, P.A. Soranno, E. H. Stanley, C.A. Stow, K.E. Webster, and J.A. Downing. 2014. Regional variability among nonlinear chlorophyll-phosphorus relationships in lakes. *Limnology and Oceanography* 59: 1691-1703.
90. Powers, S.M., D.M. Robertson, and E.H. Stanley. 2014. Effects of lakes and reservoirs on annual nutrient and sediment export in agricultural and forested landscapes. *Hydrological Processes* 28: 5919-5937.
89. Crawford, J.T., E.H. Stanley, S.A. Spawn, J.C. Finlay, L.C. Loken, and R.G. Striegl. 2014. Ebullitive methane emissions from oxygenated wetland streams. *Global Change Biology* 20: 3408-3422.
88. Crawford, J.T., N.R. Lottig, E.H. Stanley, J.F. Walker, P.C. Hanson, J.C. Finlay, and R.G. Striegl. 2014. CO<sub>2</sub> and CH<sub>4</sub> emissions from streams in a lake-rich landscape: Patterns, controls and regional significance. *Global Biogeochemical Cycles* 28: 197-210.
87. Crawford, J.T. and E.H. Stanley. 2014. Distinct fluvial patterns of a headwater stream network underlain by discontinuous permafrost. *Arctic, Antarctic, and Alpine Research* 46: 52-62.
86. Orr, C.H., K.I. Predick, K.L. Rogers, and E.H. Stanley. 2014. Spatial autocorrelation of denitrification in a restored and a natural floodplain. *Wetlands* 34: 89-100.

85. Soranno, P.A., K.S. Cheruvilil, E.G. Bissell, M.T. Bremigan, J.A. Downing, C.E. Fergus, C.T. Filstrup, N.R. Lottig, E.N. Henry, E.H. Stanley, C.A. Stow, P.-N. Tang, T. Wagner, and K.E. Webster. 2014. Cross-scale interactions: quantifying multi-scaled cause-effect relationships in macrosystems. *Frontiers in Ecology and the Environment* 12: 65-73.
84. Watras, C.J., J.S. Read, K.D. Holman, Z. Liu, Y.-Y. Song, A.J. Watras, S. Morgan, and E. H. Stanley. 2014. Decadal oscillation of lakes and aquifers in the upper Great Lakes region of North America: hydroclimatic implications. *Geophysical Research Letters* 41: 456-462.
83. Hanson, P.C., I. Buffam, J. Rusak, E.H. Stanley, and C. Watras. 2014. Quantifying lake allochthonous organic carbon budgets using a simple equilibrium model. *Limnology and Oceanography* 59: 167-181.
82. Winslow, L.A., J.S. Read, P.C. Hanson, and E.H. Stanley. 2014. Lake shoreline in the contiguous United States: quantity, distribution and sensitivity to observation resolution. *Freshwater Biology* 59: 213-223.
81. Lottig, N.R., I. Buffam, and E.H. Stanley. 2013. Comparisons of wetland and drainage lake influences on stream dissolved carbon concentrations and yields in a north temperate lake-rich region. *Aquatic Sciences* 75: 619-630.
80. Crawford, J.T., R.G. Striegl, K.P. Wickland, M.M. Dornblaser, and E.H. Stanley. 2013. Emissions of carbon dioxide and methane from a headwater stream network of interior Alaska. *Journal of Geophysical Research Biogeosciences* 118: 482-494.
79. Powers, S.M., J.P. Julian, M.W. Doyle, and E.H. Stanley. 2013. Retention and transport of nutrients in a mature agricultural impoundment. *Journal of Geophysical Research Biogeosciences* 118: 91-103.
78. Shade, A., J.S. Read, N.D. Youngblut, N. Fierer, R. Knight, T.K. Kratz, N.R. Lottig, E.E. Roden, E.H. Stanley, J. Stombaugh, R.J. Whitaker, C.H. Wu, and K.D. McMahon. 2012. Lake microbial communities are resilient after a whole-ecosystem disturbance. *ISME Journal* 6: 2153–2167.
77. Lottig, N.R., E.H. Stanley, and J.T. Maxted. 2012. Assessing the influence of upstream drainage lakes on fluvial organic carbon in a wetland rich region. *Journal of Geophysical Research Biogeosciences* 117: G03011.
76. Powers, S.M., R.A. Johnson, and E.H. Stanley. 2012. Nutrient retention and the problem of hydrologic disconnection in streams and wetlands. *Ecosystems* 15: 435-449.
75. Robertson, G.P., N. Brokaw, S.L. Collins, H.W. Ducklow, D.R. Foster, T.L. Gragson, C. Gries, S.K. Hamilton, A.D. McGuire, J.C. Moore, E.H. Stanley, R.B. Waide and M.W. Williams. 2012. Long term ecological research in a human dominated world. *BioScience* 62: 342-353.
74. Stanley, E.H., S.M. Powers, N.R. Lottig, I. Buffam, and J.T. Crawford. 2012. Contemporary changes in dissolved organic carbon of human-dominated rivers: Is there a role for DOC management? *Freshwater Biology* 57 (Suppl. 1): 26–42.
73. Carpenter, S.R., E.H. Stanley, and M.J. Vander Zanden. 2011. State of the world's freshwater ecosystems: physical, chemical, and biological changes. *Annual Review of the Environment and Resources* 36: 75-99.
72. Baulch, H.M., E.H. Stanley, and E.S. Bernhardt. 2011. Can algal uptake stop NO<sub>3</sub><sup>-</sup> pollution? *Nature* 477: E3.

71. Lottig, N.R., E.H. Stanley, P.C. Hanson, and T.K. Kratz. 2011. Comparison of regional stream and lake chemistry: Differences, similarities, and potential drivers. *Limnology and Oceanography* 56: 1551-1562.
70. Hanson, P.C., D.P. Hamilton, E.H. Stanley, N. Preston, O. Langman, and E.L. Kara. 2011. Fate of allochthonous dissolved organic carbon in lakes: A quantitative approach. *PLoS ONE* 6: e21884.
69. Julian, J.P., S.Z. Seegert, S.M. Powers, E.H. Stanley, and M.W. Doyle. 2011. Light as a first-order control on ecosystem structure in a small Midwestern stream. *Ecohydrology* 4: 422-432.
68. Buffam, I., M.G. Turner, A. Desai, P.C. Hanson, J.A. Rusak, N.R. Lottig, E.H. Stanley, and S.R. Carpenter. 2011. Integrating aquatic and terrestrial components to construct a complete carbon budget for a north temperate lake district. *Global Change Biology* 17: 1193-1211.
67. Stanley, E.H. and A.K. Ward. 2010. Effects of vascular plants on seasonal pore water carbon dynamics in a lotic wetland. *Wetlands* 30: 889-900.
66. Predick, K.I. and E.H. Stanley. 2010. Influence of vegetation and seasonal flow patterns on hyporheic nitrogen retention in a 7<sup>th</sup>-order river. *Journal of the North American Benthological Society* 29: 904-917.
65. Stanley, E.H., S.M. Powers, and N.R. Lottig. 2010. The evolving legacy of disturbance in stream ecology: concepts, contributions and coming challenges. *Journal of the North American Benthological Society* 29: 67-83.
64. Powers, S.M., E.H. Stanley, and N.R. Lottig. 2009. Quantifying phosphorus uptake using pulse and steady-state approaches in streams. *Limnology and Oceanography Methods* 7: 498-508.
63. Solomon, C.T., E.R. Hotchkiss, J.M. Moslemi, A.J. Ulseth, E.H. Stanley, R.O. Hall, and A.S. Flecker. 2009. Sediment size and nutrients regulate denitrification in a tropical stream. *Journal of the North American Benthological Society* 28: 480-490.
62. Julian, J.P., E.H. Stanley, and M.W. Doyle. 2008. Basin-scale consequences of agricultural land use on benthic light availability and primary production along a 6<sup>th</sup>-order temperate river. *Ecosystems* 11: 1091-1105.
61. Julian, J.P., M.W. Doyle, S.M. Powers, E.H. Stanley and J.A. Riggsbee. 2008. Optical water quality in rivers. *Water Resources Research* 44: W10411.
60. Julian, J.P., M.W. Doyle, and E.H. Stanley. 2008. Empirical modeling of light availability in rivers. *Journal of Geophysical Research- Biogeosciences* 11: G03022.
59. Stanley, E.H. and J.T. Maxted. 2008. Changes in the dissolved nitrogen pool across land cover gradients in Wisconsin streams. *Ecological Applications* 18: 1579-1590.
58. Doyle, M.W., E.H. Stanley, D. Havlick, M.J. Kaiser, G. Steinbach, W. Graf, and G. Galloway. 2008. Aging infrastructure and ecosystem restoration. *Science* 319: 286-287.
57. Orr, C.H., S.J. Kroiss, K.L. Rogers, and E.H. Stanley. 2008. Downstream benthic responses to small dam removal in a coldwater stream. *River Research and Applications* 24: 804-822.
56. Orr, C.H., E.H. Stanley, K.A. Wilson and J.C. Finlay. 2007. Effects of restoration and reflooding on soil denitrification in a leveed Midwestern floodplain. *Ecological Applications* 17: 2365-2376.
55. Stanley, E.H., M.J. Catalano, N. Mercado-Silva, and C.H. Orr. 2007. Effects of dam removal on brook trout in a Wisconsin stream. *River Research and Applications* 23: 792-798.

54. Watters, J.R. and E.H. Stanley. 2007 Stream channels in peatlands: the role of biological processes in controlling channel form. *Geomorphology* 89: 97-110.
53. Lottig, N.R. and E.H. Stanley. 2007. Benthic sediment influence on dissolved phosphorus concentrations in a headwater stream. *Biogeochemistry* 84: 297-309.
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6. Stanley, E.H., D.L. Buschman, A.J. Boulton, N.B. Grimm, and S.G. Fisher. 1994. Invertebrate resistance and resilience to intermittency in a desert stream. *American Midland Naturalist* 131: 288-300.

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### **Books**

Jones, J.B. and E.H. Stanley, editors. 2016. *Streams in a Changing Environment*. Academic Press/Elsevier, London.

### **Book chapters, conference proceedings, and other publications**

17. Jones, J.B. and E.H. Stanley 2016. Synthesis and conclusions. Pages 525-533 in J.B. Jones and E.H. Stanley, editors. *Streams in a Changing Environment*. Academic Press/Elsevier, London.
16. Stanley, E.H., R.A. Sponseller, and J.B. Heffernan. 2016. Landscape and regional stream ecology. Pages 389-415 in J.B. Jones and E.H. Stanley, editors. *Streams in a Changing Environment*. Academic Press/Elsevier, London.
15. Stanley, E.H. 2013. Understanding the ecological effects of dams. Pages 253-258 in K.C. Weathers, D.L. Strayer, and G.E. Likens, editors. *Fundamentals of Ecosystem Science*. Academic Press.
14. Stanley, E.H. 2009. Lake levels and drought indices in northern Wisconsin: data, graphs, and photographs. Ecological Society of America EcoEd Digital Library, Ecological Society of America. [http://http://ecoed.esa.org/](http://ecoed.esa.org/)
13. Turner, M.G., E.H. Stanley, M. Bürgi and D.J. Mladenoff. 2008. Changes in the Wisconsin River and its floodplain. Pages 229-249 in D. M. Waller and T. P. Rooney, editors. *The vanishing present: ecological change in Wisconsin*. University of Chicago Press.
12. Doyle, M. and Stanley, E. 2005. Stream ecosystem response to experimental dam removals. Pages 1-12 in G.E. Moglen (ed.), *Managing Watersheds for Human and Natural Impacts*: doi: 10.1061/40763(178)20
11. Doyle, M.W., E.H. Stanley, M.A. Luebke, and J.M. Harbor. 2000. Dam removal: physical, biological, and societal considerations. American Society of Civil Engineering Joint Conference on Water Resources Engineering and Water Resources Planning and Management, Minneapolis, MN.
10. Stanley, E.H. and A.J. Boulton. 2000. River size as a factor in conservation. Pages 403-413 in P.J. Boon, B.R. Davies, and G.E. Petts (eds.), *Global perspectives on river conservation: science, policy, and practice*. John Wiley and Sons.

9. Boulton, A.J. F. Sheldon, M.C. Thoms, and E.H. Stanley. 2000. Problems and constraints in managing rivers with contrasting flow regimes. Pages 415-430 in P.J. Boon, B.R. Davies, and G.E. Petts (eds.), *Global perspectives on river conservation: science, policy, and practice*. John Wiley and Sons.
8. Stanley, E.H. and J.B. Jones, Jr. 2000. Surface-subsurface interactions: past, present, and future. Pages 405-417 in J.B. Jones, Jr. and P.J. Mulholland (eds.), *Streams and Groundwater*. Academic Press.
7. Ward, A.K., J. Randle, and E. Stanley 2000. What is the fate of alder-derived nitrogen in a lotic wetland? *Internationale Vereinigung für Theoretische und angewandte Limnologie Verhandlungen* 27: 1640.
6. Stanley, E.H., E.C. Barrett, and A.K. Ward. 1998. Methane efflux through *Nymphaea*: potential effects of leaf damage and leaf age. *Internationale Vereinigung für Theoretische und angewandte Limnologie Verhandlungen* 26: 1882-1885.
5. Boulton, A.J., E.H. Stanley, S.G. Fisher, and P.S. Lake. 1992. Over-summering strategies of macroinvertebrates in intermittent streams in Australia and Arizona. Pages 227-237 in R.D. Robarts and M.L. Bothwell (eds.), *Aquatic ecosystems in semi-arid regions: Implications for resource management*. NHRI Symposium Series 7, Environment Canada, Saskatoon, Saskatchewan.
4. Stanley, E.H. and S.G. Fisher. 1992. Intermittency, disturbance, and stability in stream ecosystems. Pages 271-280 in R.D. Robarts and M.L. Bothwell (eds.), *Aquatic ecosystems in semi-arid regions: Implications for resource management*. NHRI Symposium Series 7, Environment Canada, Saskatoon, Saskatchewan.
3. Stanley, E.H. and H.M. Valett. 1992. Interactions between drying and the hyporheic zone in a desert stream. Pages 234-249 in P. Firth and S.G. Fisher (eds.), *Global climate change and freshwater ecosystems*. Springer-Verlag, New York.
2. Valett, H.M., S.G. Fisher, N.B. Grimm, E.H. Stanley, and A.J. Boulton. 1992. Hyporheic-surface water exchange: implications for the structure and functioning of desert stream ecosystems. Pages 395-405 in J.A. Stanford and J.J. Simons (eds.), *Proceedings of the First Annual Conference on Groundwater Ecology*. American Water Resources Association, Bethesda, MD.
1. Grimm, N.B., H.M. Valett, E.H. Stanley, and S.G. Fisher. 1991. Contribution of the hyporheic zone to the stability of an arid-land stream. *Internationale Vereinigung für Theoretische und angewandte Limnologie Verhandlungen* 24: 1595-1599.

#### **Non-peer-reviewed articles**

10. Stanley, E.H. and P.A. del Giorgio. 2018. Editorial: Towards an integrative, whole network approach to C cycling of inland waters. *Limnology and Oceanography Letters* 3: 39-40.
9. Stanley, E. and J. Vander Zanden. 2018. Steve Carpenter makes the move to “free range scientist.” *Bulletin of the Association for the Science of Limnology and Oceanography* 27: 23-24.
8. Lajtha, K., E. Bai, T. Baisden, A.A. Berhe, B. Bowden, J. Brookshire, E. Brzostek, S. Crow, C. Driscoll, C. Evans, J. Finlay, M. Fisk, S. Grandy, L. Hamdan, J. Harrison, C. Hawkes, K. Kalbatz, S. Kaushal, M. Kramer, E. Matzner, J. Melack, J. Mulder, S. Porder, J. Sanderman, E. Stanley, J. Tank, M. Vile, M. Voss, K. Wieder, and S. Ziegler. 2017. *Brave New World*. *Biogeochemistry* 133: 3-5.

7. Schimel, D., D.R. Strong, A.M. Ellison, D.P.C. Peters, S. Silver, E.A. Johnson, J. Belnap, A.T. Classen, T.E. Essington, A.O. Finley, B.D. Inouye, and E.H. Stanley. 2014. Editors are editors, not oracles. *Bulletin of the Ecological Society of America* 95: 342-346.
6. Hampton, S.E. and E.H. Stanley. 2013. Long-term perspectives on lake science and management. *Bulletin of the Association for the Science of Limnology and Oceanography* 22: 74-77.
5. Doyle, M.W., E.H. Stanley, and J.M. Harbor. 2003. Reply- Geomorphic analogies for assessing probable channel responses to dam removal. *Journal of the American Water Resources Association* 39: 1311-1312.
4. Doyle, M.W., E.H. Stanley, J.M. Harbor, and G.S. Grant. 2003. Dam removal in the United States: emerging needs for science and policy. *Eos* 84: 29-36.
3. Stanley, E.H. 1999. For better or worse? Researching the effects of dam removal. *Water Power and Dam Construction*. September: 30-31.
2. Stanley, E.H. 1999. Book review of *Fresh Water*. *Trends in Ecology and Evolution* 14: 79-80.
1. Boulton, A.J. and E.H. Stanley. 1996. But the story gets bigger: subsurface invertebrates in stream ecosystems. *Trends in Ecology and Evolution* 11: 430.

### **GRANTS AND CONTRACTS**

- University of Wisconsin 2020 WARF Discovery Initiative: “Full season science in the Northwoods” - \$188,908, co-PI, 2019-2021
- National Science Foundation- Ecosystem Studies: “Collaborative Research: Spatial dynamics, early warnings, and harmful algal blooms” - \$887,272 (lead institute- University of Virginia; UW portion: \$493,560). UW Lead PI, 2018-2021
- National Science Foundation- Macrosystems Biology: “Collaborative Research: A macrosystems ecology framework for continental-scale prediction and understanding of lakes” - \$4,249,947 (lead institute- Michigan State University; UW portion: \$1,104,886). UW Lead PI, 2016-2021
- University of Wisconsin 2020 WARF Discovery Initiative: “Seeing the hydroscape: developing a new approach for the study of inland waters” - \$297,710. Lead PI, 2016-2017
- Wisconsin Groundwater Coordinating Council: “Using climatic data and historic water levels from lakes, groundwater wells, and streams to model lake levels in Wisconsin” - \$107,770. co-PI, 2016-2019
- U.S. Geological Survey: “Research assistant internship work at Trout Lake WEBB site” - \$45,444. Sole PI, 2015-2017
- U.S. Geological Survey Powell Center: “Continental-scale overview of stream primary productivity, its links to water quality, and consequences for aquatic carbon biogeochemistry” - \$147,948 (UW portion \$131,759). co-PI, 2014-2016
- U.S. Geological Survey Climate Science Center: “An integrated assessment of lake and stream thermal habitats under climate change” - \$150,000 (UW portion \$26,289). co-PI, 2015-2017
- National Science Foundation- Macrosystems Biology: “Collaborative Research: Defining stream biomes to better understand and forecast stream ecosystem change” - \$4,482,660 (lead institute- Duke University; UW portion: \$312,501). UW Sole PI, 2015-2019
- National Science Foundation “LTER: Comparative study of a suite of lakes in Wisconsin” \$7,852,651 with supplements, Lead PI 2014-2020

\$8,031,892 with supplements, Lead PI 2009-2014  
 \$7,344,817 co-PI 2002-2008, 2009  
 National Science Foundation- FSML: “Next-generation instrumented buoys for the University of Wisconsin Trout Lake Station” - \$211,562. co-PI, 2014-2016  
 Erb Family Foundation Subcontract from University of Wisconsin Milwaukee: “Urban Pollution Footprints on the Great Lakes” - \$52,374. Sole PI, 2014-2015  
 USDA Forest Service Research Joint Venture: “Assessing the susceptibility and resilience of lake chemistry to environmental change on the Chequamegon-Nicolet National Forest” - \$237,066. Sole PI, 2013-2018  
 U.S. Geological Survey: “Yukon Flats Carbon Dynamics” - \$41,527. Sole PI, 2012-2014  
 Wisconsin Sea Grant: “Landscape regulators of biogeochemical pattern and process in the Saint Louis River Estuary” - \$189,877 Lead PI, 2012-2013  
 National Science Foundation- Macrosystems Biology: “Collaborative Research: The effects of cross-scale interactions on freshwater ecosystem state across space and time” \$2,204,670 (UW portion: Lead PI, \$591,461). UW Lead PI, 2011-2016  
 Prairie Enthusiasts: “Water Resources Assessment of a Driftless Area creek that bisects the Mounds View Preserve and Landscape Scale Restoration Project” - \$4,800. Sole PI, 2011  
 U.S. Geological Survey: “Yukon Flats Carbon Dynamics” - \$46,031. Sole PI, 2010-2012  
 National Science Foundation- FSML: “Addition of a medium-sized conference room to the University of Wisconsin Trout Lake Station” - \$343,000. co-PI, 2010-2012  
 National Science Foundation- FSML: “Improving the chemistry laboratory capabilities at the University of Wisconsin Trout Lake Station” - \$87,293. co-PI, 2008-2010  
 Wisconsin Groundwater Coordinating Council: “Occurrence and generation of nitrite in ground and surface waters in an agricultural watershed” - \$59,786. Sole PI, 2007-2010  
 United States Department of Agriculture- Cooperative State Research, Education, and Extension Service: “Effects of dam removal on nutrient retention in agriculturally dominated streams” - \$498,500. Lead PI, 2004-2009  
 National Science Foundation- FSML: “Increasing housing capacity at the University of Wisconsin Trout Lake Station” - \$282,000. co-PI, 2005-2007  
 Bradley Fund for the Environment: “Evaluating effects of floodplain restoration on nitrogen dynamics in the Baraboo River system” E.H. Stanley, 2003-2005, \$56,547  
 National Science Foundation: “Nitrogen loss and carbon use in a large river floodplain ecosystem” - \$575,000. Sole PI, 2003-2007  
 REU Supplement - \$11,500. 2005  
 Equipment Supplement - \$30,000. 2005  
 Wisconsin River Alliance: “Sediment management project” - \$20,000. Lead PI, 2001-2002  
 National Science Foundation: “Effects of dam removal on riverine habitats and nutrient retention” - \$99,999. Sole PI, 2001-2003  
 Bradley Fund for the Environment: “Baraboo River nitrogen reduction demonstration project” - \$20,000. Sole PI, 2002-2003  
 Bradley Fund for the Environment: “Baraboo River Floodplain Restoration - Water Quality Assessment” - \$35,000. Sole PI, 2000-2002  
 U.S. Geological Survey: “Inorganic carbon dynamics in Allequash Creek: ecological implications of subsurface-surface linkages” - \$24,509. Sole PI, 2000-2001  
 Wisconsin Department of Natural Resources: “Denitrification in headwater streams of the Mississippi River drainage” - \$22,298. Sole PI, 2000-2001

Sand County Foundation: “Wisconsin dam database project” - \$6,000. Sole PI, 2000  
Bradley Fund for the Environment: “Sediment transport following small dam removal in the Baraboo River, Wisconsin” - \$25,000. Sole PI, 1999-2000  
U.S. Geological Survey and National Institute for Water Resources: “Hydrology and biogeochemistry in the Wisconsin River floodplain: implications for riverine nitrogen loads” - \$43,498. Lead PI, 1999-2001  
Environmental Protection Agency: “Ecological indicators for large river-floodplain landscapes” - \$677,351. co-PI, 1998-2001  
Oklahoma State University Environmental Institute, Center for Water Research: “Sources and sinks for nitrogen and phosphorus in a tallgrass prairie watershed” - \$25,000. Sole PI, 1997-1998,  
Oklahoma State University Environmental Institute, Center for Water Research: “An investigation of ecological characteristics of hyporheic zones in Oklahoma streams” - \$23,446. Sole PI, 1996-1997

### **INVITED SEMINARS, KEYNOTES, AND PLENARY TALKS**

2019 Keynote Speaker UW-Madison Geospatial Summit  
Plenary Speaker, Great Plains Limnology Conference  
Davidson Award Lecture, Department of Biology, Baylor University  
Department of Earth Sciences, Uppsala University, Sweden  
Department of Biological Sciences, Michigan Technological University  
Department of Evolution, Ecology, and Organismal Biology, Ohio State University  
Wisconsin Institute of Discovery Crossroads of Ideas program  
2018 University of Waterloo Water Institute, Waterloo, Canada  
2017 Aquatic Biology Group, Université du Québec à Montréal, Canada  
48<sup>th</sup> Binghamton Symposium: Resilience and Biogeomorphic Systems. Texas State University  
McMurdo LTER Annual Science Meeting, University of Colorado-Boulder  
2016 Plenary Speaker, Association for the Science of Limnology and Oceanography Meeting, Santa Fe, NM  
Department of Forest and Wildlife Ecology, University of Wisconsin-Madison  
2015 Physical Sciences Lab, University of Wisconsin, Stoughton, WI  
Department of Ecology and Genetics, Uppsala University, Sweden  
Gordon Research Conference on Catchment Science: Interactions of Hydrology, Biology, and Geochemistry. Andover, NH  
2014 Mississippi River Research Consortium, Keynote address, La Crosse, WI  
Swiss Academy of Sciences 194<sup>th</sup> Annual Congress: Celebration of the 100<sup>th</sup> Anniversary of the Swiss National Park. Lausanne, Switzerland  
2012 Ecology, Evolutionary Biology, and Behavior Program, Michigan State University  
2011 School of Life Sciences, Arizona State University  
Department of Natural Resource Ecology and Management, Iowa State University  
Plenary speaker- Wisconsin Lakes Convention Annual Meeting, Stevens Point, WI  
2010 Freshwater Biological Association Second Freshwater Biology Summit: Achieving Ecological Outcomes: Aquatic Ecological Responses to Catchment Management. Windermere, Cumbria, UK

- Department of Biology, St. Olaf's College  
Wisconsin Groundwater Coordinating Council, Madison, WI
- 2008 Plenary speaker, 56th Annual Meeting, North American Benthological Society, Salt Lake City, UT  
Program in Ecology, Duke University
- 2007 Plenary speaker, Wisconsin Wetlands Association 12<sup>th</sup> Annual Wetland Science Forum, LaCrosse, WI  
Chaos and Complex Systems Seminar Series, University of Wisconsin-Madison  
Center for Sustainability and the Global Environment, University of Wisconsin-Madison  
Department of Biology, Wright State University
- 2006 Mississippi River/Gulf of Mexico Watershed Nutrient Task Force Science Symposium: Sources, Transport, and Fate of Nutrients in the Mississippi and Atchafalaya River Basins. Minneapolis, MN  
Department of Ecology and Evolutionary Biology, University of Minnesota  
Department of Biological Sciences, Kansas State University  
Biogeochemistry Program, Cornell University
- 2005 36<sup>th</sup> Binghamton Geomorphology Symposium: Geomorphology and Ecosystems. Buffalo, NY  
Kellogg Biological Station, Michigan State University
- 2004 Institute of Ecosystem Studies, Millbrook, NY  
Department of Biology, Grinnell College  
Second International Symposium on Riverine Landscapes: The Scientific Basis of Restoring Watercourses in Landscapes. Bredsel, Sweden  
Keynote speaker- Center for Riverine Science and Stream Re-naturalization: Conference on Assessing and Re-Naturalizing Streams Impacted by Dams and Dam Removal. University of Montana  
North/South Basin Summit: Market Incentives to Reduce Agricultural Nitrogen Discharge. Sand County Foundation, New Orleans, LA
- 2003 Hydrologic Sciences Group, University of California-Davis  
Northwest Fisheries Science Center, Seattle, WA  
Center for Sustainability and the Global Environment, University of Wisconsin-Madison  
Department of Geology, Indiana University-Purdue University at Indianapolis
- 2001 Plenary speaker- International Symposium on the Role of Drought in Aquatic Systems, Cooperative Research Center for Freshwater Ecology, New South Wales, Australia  
Department of Earth and Environmental Sciences, Lehigh University  
Department of Biology, Carlton College  
Department of Civil and Environmental Engineering, University of Wisconsin-Madison
- 2000 Department of Biology, University of Nevada-Reno  
Department of Biology, Virginia Tech University.
- 1999 Plenary speaker- Utah Wetlands and Riparian Center Second Annual Conference: Rivers, Dams, and the Future of the West, Salt Lake City, UT
- 1998 Upper Mississippi Research Group, U.S. Geological Survey, La Crosse, WI
- 1997 U.S. Environmental Protection Agency, Multi-regional meeting. St. Louis, MO
- 1996 Red River Chloride Control Project, Upper Red River Ecosystem Work Group, Indianahoma, OK



1995 Department of Zoology, University of Oklahoma  
1993 Keynote speaker- America Fisheries Society, Alaska Chapter annual meeting, Fairbanks, AK

### **EDUCATIONAL ACTIVITIES**

Classes taught at University of Wisconsin: Animal Biology, Ecology of Streams and Rivers, Limnology: Conservation of Aquatic Resources, Problems in Oceanography, Graduate seminars in Limnology

Classes taught at Oklahoma State University: Introductory Biology, Limnology, Ecosystem Ecology, Stream Ecology

Early Career Workshop Panelist, ASLO Annual Meeting- 2010, 2018

Career Development Workshop panelist- Earth Science Women's Network, 2012

Invited discussion leader for graduate workshop on successful grantsmanship- International Association of Landscape Ecology U.S. meeting, 2008

Executive committee member- "Human dimensions of social and aquatic system interactions" National Science Foundation Integrative Graduate Education and Research Training grant (IGERT), 1998-2002

Project Intermath Team Member (team development of interdisciplinary math exercises for classroom use)- sponsored by the National Science Foundation and the U.S. Military Academy), 1996-1998.

Ph.D. Opponent-

Department of Earth Sciences, Uppsala University, Sweden, 2019

Department of Ecology and Genetics, Uppsala University, Sweden, 2015

Department of Ecology and Environmental Science, Umeå University, Sweden, 2012

External dissertation examiner-

Geosciences, Southern Cross University Australia, 2018

School of Biological, Earth, and Environmental Sciences, University of New South Wales, Australia, 2018

Department of Earth and Environmental Sciences, University of Waterloo, Canada, 2016

Environmental Sciences, Charles Sturt University, New South Wales, Australia, 2013

Department of Ecosystem Management, University of New England, Australia- 2005

### **Undergraduate Independent Researchers/Research fellows**

Nora Beckenmeyer, Brittini Bertolet, Barbara Birrittella, Colleen Flaherty, Jennifer Follstad, Ry Forseth, Paul Gabriel, Gretchen Gantz, Kevin Gauthier, Casey Hall, Ryan Hassemer, Alison Horne, Kathleen Huntley, Dustin Kincaid, Scott Kloehn, Steven Kroiss, Tim Looney, Ben Lubbers, Declan McCormick, Emily McParlane, Bryce Milliken, Sean Moore, Nels Paulsen, James M. Raspanti, Olivia Sanderfoot, Natalie Schmer, Hailey Shanovich, Julia Sheahan, Seth Spawn, Jennifer Tennessen, Ethan Thomas, Gabrielle Valenti-Hein, Leah Vanden Busch, Grant Wickman, Tina Wisniewski, Paige Witek, Jennifer Zawacki

### **Undergraduate Thesis/Capstone Students**

Kevin Gauthier Jr.- Environmental Science, B.S. 2020

Adam Rexroade- Conservation Biology, B.S. 2020

Quinn Gavin- Environmental Science, B.S. (with honors) 2019; recipient of UW-Madison Letters and Sciences Dean's Award  
Nicholas Gubbins- Environmental Science, B.S. 2016  
Greta Helmueller- Zoology, B.S. 2016  
Robert A. Johnson- Zoology and Biological Aspects of Conservation, B.S. 2010  
Sarah E. Zahn- Biology, B.S. (with honors) 2007  
Scott R. Laeser- Biology B.S. 2004  
Jeffrey R. Watters- Anthropology and Zoology, B.S. 2004  
Suresh A. Sethi- Zoology, B.S. 2002  
Aaron L. Thiel- Botany and Zoology, B.S. 2002  
Michelle A. Luebke- Zoology, B.S. 2000

### **Graduate Students**

#### *University of Wisconsin*

Adam Rexroade, Freshwater and Marine Sciences, M.S. in progress  
David Ortiz, Freshwater and Marine Sciences, Ph.D. in progress  
Caroline Gottschalk Druschke, Environment and Resources, M.S. in progress  
Robert J. Mooney, Zoology, Ph.D. in progress  
Samuel R. Blackburn, Freshwater and Marine Sciences, M.S. 2019  
Paul J. Schramm, Freshwater and Marine Sciences, M.S. 2018  
Julia Hart, co-advisor, Freshwater and Marine Sciences, M.S. 2017  
Vincent L. Butitta, Freshwater and Marine Sciences, M.S. 2016, Ph.D. in progress  
Luke C. Loken, Freshwater and Marine Sciences, M.S. 2014, Ph.D. 2018  
Samantha K. Oliver, Freshwater and Marine Sciences, Ph.D. 2016  
John T. Crawford, Freshwater and Marine Sciences, M.S. 2012; Ph.D. 2014  
Luke A. Winslow, co-advisor, Freshwater and Marine Sciences, Ph.D. 2014  
Stephen M. Powers, Limnology and Marine Sciences M.S. 2008; Ph.D. 2012  
Noah R. Lottig, Limnology and Marine Sciences, Ph.D. 2009  
Matthew R. Fuller, co-advisor, Zoology, M.S., 2009  
Abigail S. Popp, Limnology and Marine Sciences, M.S. 2005  
Kristy L. Rogers, Limnology and Marine Sciences, M.S. 2005  
Cailin H. Orr, Limnology and Marine Sciences, M.S. 2002; Ph.D. 2005  
Kenneth J. Forshay, Zoology, M.S. 2003  
Jonathan L. West, Zoology, M.S. 2001  
Ross E. Freeman, Conservation Biology and Sustainable Development, M.S. 2000

#### *Oklahoma State University*

Gary W. Hunt, Ph.D., Zoology, 1999  
John J. Spranza II, M.S., Zoology, 1998  
W. Michael Mallett, M.S., Zoology, 1998

### **Post-doctoral associates**

Sarah M. Collins, 2016-2018  
Jessica R. Corman, 2015-2017  
Alison P. Appling, 2015-2016  
Nora J. Casson, 2013-2014  
Noah R. Lottig, 2009-2013

Helen M. Baulch, 2011  
Karen A. Wilson, 2002  
Jacques C. Finlay, 2000-2001  
Hojeong Kang, 1998-2000

## **OTHER PROFESSIONAL ACTIVITIES**

### **Professional Society Memberships**

American Geophysical Union  
Association for the Sciences of Limnology and Oceanography  
Ecological Society of America  
Society for Freshwater Science  
Wisconsin Wetlands Association

### **Journal Reviewing and Editing**

Guest co-Editor (with Paul del Giorgio), *Limnology and Oceanography Letters* Special Issue on Carbon Cycling in Inland Waters: Progress and Perspectives (Volume 3, Issue 3, 2018).  
Associate Editor- *Limnology and Oceanography Letters*, 2015-present  
Assigning Editor- *Ecological Applications*, 2010- 2018  
Associate Editor- *Ecological Applications*, 2004-2010  
Associate Editor- *Biogeochemistry*, 2015-2018  
Associate Editor- *Marine and Freshwater Research*, 2008- 2013  
Associate Editor- *Journal of Geophysical Research-Biogeosciences*, 2007-2009  
Journal reviewer for: *Archiv für Hydrobiologie*, *Aquatic Biology*, *Aquatic Sciences*, *ASAE Transactions*, *Biogeochemistry*, *BioScience*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Current Opinions in Environmental Sustainability*, *Ecology*, *Ecology Letters*, *Ecological Applications*, *Ecological Monographs*, *Ecosphere*, *Ecosystems*, *Elementa*, *Environmental Biology of Fishes*, *Environmental Research Letters*, *Environmental Science & Technology*, *Freshwater Biology*, *Freshwater Science*, *Frontiers in Ecology and the Environment*, *Geophysical Research Letters*, *Global Biogeochemical Cycles*, *Global Change Biology*, *Hydrobiologia*, *Journal of American Water Resources Association*, *Journal of Environmental Quality*, *Journal of Geophysical Research-Biogeosciences*, *Journal of Great Lakes Research*, *Journal of the North American Benthological Society*, *Limnology and Oceanography*, *Limnology and Oceanography Letters*, *Limnology and Oceanography Methods*, *Marine and Freshwater Research*, *Nature*, *Nature Climate Change*, *Nature Geoscience*, *PLoS ONE*, *Polar Research*, *Proceedings of the National Academy of Science*, *River Research and Applications*, *Science*, *Science of the Total Environment*, *Water Resources Research*

### **Proposal Reviewing**

#### *Panelist*

SESYNC-LTER post-doctoral fellowship competition, 2016  
National Science Foundation-Long Term Ecological Research site review panelist, 2015  
National Science Foundation-Long Term Ecological Research site review panelist, 2013  
National Science Foundation Ecosystem Science full proposal competition, 2012  
National Science Foundation Ecosystem Science pre-proposal competition, 2012

National Science Foundation Long Term Ecological Research competition, 2011  
National Science Foundation-Long Term Ecological Research site review panelist, 2001  
National Science Foundation Biocomplexity in the Environment: Coupled  
Biogeochemical Cycles competition, 2001  
National Science Foundation Integrative Graduate Education and Research Training  
Grant competition, 1999  
National Science Foundation Doctoral Dissertation Improvement Grants, 1995-1996

*Ad hoc Proposal Reviews*

National Science Foundation (NSF programs: Doctoral Dissertation Improvement Grants; IGERT; INSPIRE; Hydrologic Sciences; Critical Zone Observatories; Water Cycle Research; Geomorphology; Emerging Topics in Biogeochemical Cycles; Organisms & Ecosystems; Polar Programs; Geography and Regional Science; Chemical, Bioengineering, Environmental and Transport Systems; Dynamic Data Driven Application Systems; Biodiversity Surveys and Inventories; Ecological and Evolutionary Physiology; Ecology; Ecosystem Science; Long-Term Ecological Research; International Research Fellows Program; Microbial Observatories and Microbial Interactions and Processes), Graduate Women in Science, National Fish and Wildlife Foundation, National Geographic Young Explorers, National Institutes for Water Resources, National Oceanic and Atmospheric Administration-Coastal Ocean Program, Ohio Sea Grant, CALFED, Illinois Water Resources Center, Iowa Water Center, Minnesota Water Resources Center, North Carolina Water Resources Research Institute, Ohio Water Resources Center, Oklahoma Water Resources Institute, Wisconsin Water Resources Institute; Cooperative Research Centre for Freshwater Ecology (Australia), Fonds de la Recherche Scientifique (NSF equivalent agency for Belgium), Swedish Research Council, Ruth Dickie Sigma Delta Epsilon Graduate Women in Science Research Scholarship, UW-Madison Hatch Grant Program

**Advisory Activities**

External Advisor- Aquatic N<sub>2</sub>-Fixation Research Coordination Network 2020-present  
Scientific Advisory Committee- Carbon Biogeochemistry in Boreal Aquatic Systems (CarbBAS) program, Université du Québec à Montréal, 2016-2018  
National Research Council Committee on Hydrologic Sciences- 2005-2010  
NSF/EPSCoR Advisory Committee- University of New Mexico, 2010-2012  
NSF/EPSCoR Advisory Committee- University of Wyoming, 2007- 2009  
Science Forum Advisory Board- Wisconsin Wetlands Association, 2007  
Committee of Visitors- National Science Foundation Ecology Program, 2002  
Science Advisory Committee, The Nature Conservancy Emiquon Reserve Restoration Project, 2001-2002  
Scientific Advisory Group member- Arid West Water Quality Research Project, Pima County Wastewater Management Department (funded by the U.S. Environmental Protection Agency), 1998-1999

**Service to Professional Organizations (non-elected, non-editorial positions and activities)**

*Long-Term Ecological Research (LTER) Network*

Co-Organizer, LTER mini-symposium at the National Science Foundation, 2015

Executive Board  
2018-present  
2010- 2013

*National Ecological Observatory Network (NEON)*

University of Wisconsin representative NEON- 2013-2015  
NEON Science and the Human Dimension Committee Member (Hydroecology sub-  
committee)-2004-2005

*Association for the Sciences of Limnology and Oceanography-*

Awards and Citations Executive Committee, Hutchinson Subcommittee of the Awards -  
2019-2022

*Society for Freshwater Sciences (SFS)/North American Benthological Society (NABS)*

Co-Chair, Meeting Organizational Committee- 2013-2015  
Program committee member, SFS Annual meeting- 2011-2012  
Executive Committee- 2005-2008

Award of Excellence and Distinguished Service Award Committee- 2000-2001  
Committee chair, 2001

Environmental Stewardship Award Committee- 2003

Conservation and Environmental Issues Committee Co-Chair- 2002-2008

Human Resources Committee- 1996-1997

*Ecological Society of America*

Ecological Society of America Committee to evaluate proposals for Emerging Issues  
Conference- 2010

*Other organizations*

Program committee member- North American Lake Management Society Annual  
Meeting, 2011-2012

Program Planning Committee- Wisconsin River Alliance/Trout Unlimited Small Dam  
Removal Technical Conference, 2000-2001

Steering committee, 24<sup>th</sup> Annual Meeting, Great Plains Limnologists Society, Stillwater,  
OK. 1997

**Workshops and Working Group Participation**

Co-organizer LTER cross-site working group on organic matter synthesis, 2018

Participant- LTER-NEON Synergies Working Group, 2015-2017

Co-organizer (co-PI)- U.S. Geological Survey Climate Science Center Working Group “An  
integrated assessment of lake and stream thermal habitats under climate change”, 2015-  
2017

Co-organizer (co-PI)- U.S. Geological Survey Powell Center Working Group “Continental-scale  
overview of stream primary productivity, its links to water quality, and consequences for  
aquatic carbon biogeochemistry”, 2014-2016

Steering Committee- National Center for Ecological Analysis and Synthesis Working Group:  
“Ecology under lake ice”, 2014-2015

Steering Committee- CUAHSI Interdisciplinary Working Group on Floodplain Science-, 2004

Participant, National Research Council - National Center for Earth-Surface Dynamics Planning  
Workshop on Stream Restoration, 2003

Participant- Heinz Center Dam Removal Research Workshop, 2002

Participant- Integrating Ecological and Geological Sciences Workshop- NSF-sponsored workshop, 2001  
Working group member- Sediment management and dam removal- Wisconsin River Alliance, FishAmerica, EPA Office of Wetlands and Oceans, 2000  
Participant- National Center for Ecological Analysis and Synthesis: “Managed Floods” Workshop, 2000  
Participant- National Center for Ecological Analysis and Synthesis: “Freshwater and environmental change” Working Group member, 1999-2000  
Participant- Experts Workshop: Osage Plains/Flint Hills ecoregion. Kansas, Missouri, and Oklahoma Chapters of the Nature Conservancy, 1998  
Participant, Edwards Aquifer Biological Research Forum, Sponsored by the Nature Conservancy of Texas, 1994

### **Special Session Organization/Co-Organization at Scientific Meetings**

Instability of aquatic ecosystems in a changing world. ASLO-SFS, Madison, WI 2020 (cancelled)  
Synthesizing across time: Bridging the gap between long-term and high frequency data. ASLO-SFS, Madison, WI 2020 (cancelled)  
Metabolism of inland waters: patterns and drivers across multiple scales- Association for the Science of Limnology and Oceanography Winter Meeting, Honolulu, HI, 2017  
Enough C plumbing: other biogeochemical cycles and coupled biogeochemical cycles from mountains to the sea- Association for the Science of Limnology and Oceanography Winter Meeting, Honolulu, HI, 2017  
Supporting data-intensive freshwater and marine research through integrated informatics, databases, networks, and open science- Association for the Science of Limnology and Oceanography Winter Meeting, Honolulu, HI, 2017  
Ecology under lake ice- Association for the Science of Limnology and Oceanography Summer Meeting, Santa Fe, NM, 2016  
Long-term perspectives on lake research and management- Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting, 2013  
Assessing the role of hydrologic variability in stream nutrient processing and transport- American Geophysical Union Winter Meeting, San Francisco, CA, 2011  
Agricultural streams- American Society of Limnology and Oceanography Annual Meeting, St. John, Nova Scotia, 2008  
Lakes, streams, groundwater and wetlands in the landscape: Linkages among freshwater systems- 30<sup>th</sup> Congress of the International Association of Theoretical and Applied Limnology, 2007  
Scales of restoration and ecosystem response- American Geophysical Union Winter Meeting, San Francisco, CA, 2005  
Surface water-groundwater interactions in floodplains- American Society of Limnology and Oceanography Winter Meeting, Salt Lake City, UT, 2005  
Ecological effects of dam removal- 49<sup>th</sup> annual meeting, North American Benthological Society, LaCrosse, WI, 2001.  
Nitrogen cycling in large rivers- 49<sup>th</sup> annual meeting, North American Benthological Society, LaCrosse, WI, 2001

### **Selected Outreach Presentations and Activities**

Multiple interactions/interviews with journalists, media outlets including Wisconsin Public Radio, WORT, Cap Times, Wisconsin State Journal, Milwaukee Journal Sentinel, AP, New York Times, National Geographic News, NOVA Next, WISC-TV Madison

Clean Lakes Alliance Yahara Watershed Academy field trip leader, 2017

University of Wisconsin Grandparents University instructor, 2016

Clean Lakes Alliance Yahara Lakes 101 Speaker, 2014

Minocqua Science on Tap speaker, Minocqua, WI, 2014

Institute for Journalism & Natural Resources field trip speaker, 2011, 2012

Congressional briefing speaker- Using Science to Improve Floodplain Management- sponsored by the Ecological Society of America, 2011

Congressional visits to offices of Sens. Herb Kohl, Robert Johnson, and Rep. Reid Ribble, 2011

Madison Science Pub speaker, 2011

Presentation to the Crawling Stone Lake Association, Vilas County WI, 2010

Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI)- Education and Outreach Committee, 2007

Expert witness- Town of Magnolia, WI. In a case of evaluating a conditional use permit for dairy farm citing, 2007

Participant- Consortium for National Science Funding “Science on the Hill” day on behalf of the American Society for Limnology and Oceanography (speaking with staff members from Rep. T. Baldwin, Rep. M. Green, Sen. H. Kohl, and Sen. R. Feingold’s offices to support funding for the National Science Foundation), 2006

Aldo Leopold Foundation, Potter Preserve Planning Committee member, 2000

Presenter- Town of LaValle Wisconsin Department of Natural Resources Public hearing regarding removal of the LaValle Millpond Dam, 1999