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Education

Ph.D., Oceanography and Limnology, University of Wisconsin, Madison, Wisconsin 1995 M.S., Oceanography and Limnology, University of Wisconsin, Madison, Wisconsin 1991 B.S., Biological Sciences, University of Notre Dame, Notre Dame, Indiana 1987

Professional Positions

Division Director, Division of Biological Infrastructure, National Science Foundation. 2019-present Editor-in-Chief, Limnology & Oceanography Letters. 2015-2019.

Professor, Dept. of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. 2012-present Associate Professor, Dept. of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. 2002-2012 Assistant Professor, Dept. of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. 1996-2002 Post-doctoral Research Associate, Trout Lake Station, University of Wisconsin, Boulder Junction, Wisconsin. 1995-1996 Research Assistant, Center for Limnology, University of Wisconsin, Madison, Wisconsin. 1989-1995 Biological Technician III, University of Notre Dame, Notre Dame, Indiana. 1987-1989

Awards and Honors

Fellow, Ecological Society of America, ESA, 2020

Fellow, American Association for the Advancement of Science, AAAS, 2019

Sustaining Fellow, Association for the Sciences of Limnology & Oceanography, ASLO, 2018.

William J. Beal Outstanding Faculty Award, Michigan State University, 2016.

Excellence Award in Interdisciplinary Scholarship by the MSU Chapter of the Honor Society of Phi Kappa Phi. Awarded to interdisciplinary team: K.S. Cheruvelil, K.C. Elliott, G.M. Montgomery, I. Settles, P.A. Soranno & P.-N. Tan. 2015. Fellow, Lilly Teaching Fellows Program, Michigan State University, 1999-2000.

Grants

National Science Foundation, Biology Directorate, Emerging Frontiers Division, Macrosystems Biology Program. REU Supplement to MSB-FRA: A macrosystems ecology framework for continental-scale prediction and understanding of lakes. PA Soranno (PI), KS Cheruvelil, P-N Tan, J Zhou, (Michigan St. Univ). 2018-2019. \$35,208.

National Science Foundation, Biology Directorate, Emerging Frontiers Division, Macrosystems Biology Program.

Collaborative proposal MSB-FRA: A macrosystems ecology framework for continental-scale prediction and understanding of lakes. PA Soranno (PI until 2019), KS Cheruvelil, P-N Tan, J Zhou, (Michigan St. Univ., Lead Institution); EH Stanley, C Gries, NR Lottig (Univ. Wisconsin); T Wagner, E Hanks (Penn. St. Univ.); E Schliep (Univ. Missouri). 2016-2021. \$4,257,250 (MSU, lead institution, portion \$2,392,743).

National Science Foundation, Dynamics of Coupled Natural and Human Systems Program. CNH-L: Linking land-use decision making, water quality, and lake associations to understand human-natural feedbacks in lake catchments. PI: K.M. Cobourn; co-PIs: K.J. Boyle, C.C. Carey, K.J. Duffy, P.C. Hanson; Senior personnel: A.R. Kemanian, J.L. Klug, L.G. Rudstam, P.A. Soranno, M.G. Sorice, M.J. Vanni, K.C. Weathers. 2015-2018. \$1,799,931 (MSU portion \$195,019).

Michigan State University Science Network, WaterCube Program. Ecological linkages between terrestrial and aquatic systems. PI: K. Dahlin, co-PIs: P. Zarnetske, P.A. Soranno, K.S. Cheruvelil. 2015-2017. \$80,000.

National Science Foundation, Directorate for Social, Behavioral & Economic Sciences, Cultivating cultures for ethical STEM Program. Ethical standards and practices of environmental science teams: Does team diversity matter? PI: K.C. Elliott, co-PIs: K.S. Cheruvelil, G.M. Montgomery, I.H. Settles, P.A. Soranno. 2014-2019. \$600,000.

- Michigan State University Science Studies at State Program. Conceptions of good science in a data-rich world. PIs: P.A. Soranno (Lead), K.S. Cheruvelil, K.C. Elliot, G.M. Montgomery, P.-T. Tan. 2014 2016. \$10,000
- U.S. Environmental Protection Agency, 205J Funds via Huron River Watershed Council and the MI-Department of Environmental Quality: Revision, update, and validation of the lake-specific model for establishing expected nutrient conditions in Michigan lakes, PI: K.S. Cheruvelil, co-PI: P.A. Soranno. 2012 2014. \$116,400.
- National Science Foundation, Biology Directorate, Emerging Frontiers Division, Macrosystems Biology Program. EF 1258503. Macrosystems biology: an emerging perspective. PI: S. Silver, co-PI: **P.A. Soranno**. 2012-2014. \$77,075.
- National Science Foundation, Biology Directorate, Emerging Frontiers Division, Macrosystems Biology Program.

 Supplement to: The effects of cross-scale interactions on freshwater ecosystem state across space and time. PI: P.A. Soranno, co-PIs: K.S. Cheruvelil, P-N. Tan. 2012-2014. \$209,913
- National Science Foundation, Biology Directorate, Emerging Frontiers Division, Macrosystems Biology Program. EF1065786. The effect of cross-scale interactions on freshwater ecosystem state across space and time. PI: **P.A. Soranno**, co-PIs: K.S. Cheruvelil, E.H. Stanley, J.A. Downing, N.R. Lottig, P-N. Tan. 2011-2016. \$2,204,673 (MSU (lead institution) portion \$1,377,823.
- MSU CWS/ESPP Innovation Grant Program. Lakes as Complex Socio-Ecological Systems: Exploring the Causalities between Human Land Use Decisions and Landscape Limnological Processes to Inform Sustainable Water Conservation Policies. PI: A. Ligmann-Zielinska, CO-PIs: M.T. Bremigan, K.S. Cheruvelil, D.B. Kramer, P.A. Soranno. May 2011 May 2013. \$49,978.
- Center for Water Sciences Post-doctoral Program. \$131,500. Understanding complex aquatic landscapes: Lakes as model systems for integrating ecology, economics, human behavior and policy. PI: Cheruvelil, K.S., co-PIs: M.T. Bremigan, D.B. Kramer A. Ligmann-Zielinska, **P.A. Soranno**, and K.E. Webster. 2009 –2011.
- Center for Water Sciences Venture Grant Program. \$10,000. Impacts of large-capacity groundwater withdrawal on lake and wetland ecosystems: Michigan lakes as a model for conducting research to inform policy of water withdrawals. PI's: **P.A. Soranno** and J.A. Latimore. 2009-2010.
- Environmental Protection Agency Region 5 funding under Section 106, Clean Water Act, FY 2009. \$18,617. Use of the BTPM framework to develop nutrient criteria for lakes of the Fond du Lac Band of the Lake Superior Chippewa. Subcontract to **P.A. Soranno**. May 2009 April 2010.
- Environmental Protection Agency Region 5 funding under Section 106, Clean Water Act, FY 2009. \$18,617. Use of the BTPM framework to develop nutrient criteria for lakes of the Grand Portage Band of the Lake Superior Chippewa. Subcontract to **P.A. Soranno**. May 2009 April 2010.
- Center for Water Sciences Venture Grant Program, \$16,408. WETL.AKE Project: Effects of wetland type, extent and connectivity on lake chemistry. PI's: **P.A. Soranno** and C. Yansa. August 2008 July 2009.
- Environmental Protection Agency-Office of Wetlands, Oceans and Watershed, \$245,208. A hydrogeomorphic lake classification system for refining lake assessment at multiple spatial scales. PI: **P.A. Soranno**, co-PIs: K.E. Webster, M.T. Bremigan and others. 2005-2007.
- National Park Service, \$73,855. Water resources assessment of the Indiana Dunes National Lakeshore. PI: K. Spence Cheruvelil, co-PIs: **P.A. Soranno**, E. Rosi-Marshall and J. Tank. 2005-2006.
- Michigan Department of Environmental Quality Great Lakes Environmental Center, \$309,447. Nutrient criteria development support. PI's: R. Jan Stevenson and **P.A. Soranno**. 2005-2006.
- Michigan Department of Natural Resources Fisheries Division, \$80,000. Developing a lake classification system for Michigan inland lakes. PI's: **P.A. Soranno, P.A.**, M.T. Bremigan, K. Wehrly and J.E. Breck, 2004-2006.
- Michigan Department of Natural Resources Fisheries Division, \$183,694. Managing Michigan Lakes: Evaluating Effects of Watersheds and habitat perturbation on Lake Resources. PI's: Bremigan, M.T. and **P.A. Soranno**. October 2002-2006.
- USGS-Water Quality Grants, \$15,000. Water quality trends of Michigan inland lakes and their relationship to ecoregions:1974-2001. PI: **P.A. Soranno, P.A.** March 2002 March 2003.
- M.S.U. Agricultural Experiment Station Disciplinary Research Grants, \$90,000. A multi-scaled landscape-context model to predict abiotic and biotic lake characteristics. P.I.'s: **P.A. Soranno** and M. T. Bremigan. July 2001 July 2004.
- *USGS-Water Quality Grants*, \$15,000. *Building a landscape context for lake ecological processes*. P.I.'s: **P.A. Soranno** and M.T. Bremigan. March 2001 March 2002.
- National Science Foundation, Division of Environmental Biology, Ecosystems Program. Impacts of a strong interactor along a productivity gradient: Linking watersheds with reservoir food webs. PI: Michael Vanni (MU), co-PIs: W. Renwick (MU); R. Stein (OSU); P.A. Soranno and M.T. Bremigan (MSU); and M. Gonzalez (WSU). \$500,000 (MSU \$107,399). June 1998 June 2001.

- College of Agriculture and Natural Resources and the College of Social Science, \$222,482. Understanding and predicting landscape dynamics: Integration of Ecological Human Dimensions for Ecosystem Management. P.I.'s: J. Liu, **P.A. Soranno** and A. Mertig. September 1997 2001.
- Michigan Agricultural Experiment Station, \$52,000. The effect of changing exotic macrophyte communities on fish and macroinvertebrate population dynamics. PI: **P.A. Soranno**. June 1997 June 2000.
- Michigan State University Extension, \$22,750. Synthesis and extension of Sonar® research in Michigan lakes. P.I.: P.A. Soranno. June 1997 June 2000.

Michigan Sea Grant College Program. Program development grant - \$10,000. Impacts of upstream land use on near-shore Great Lakes habitats and biological communities. P.I.: P.A. Soranno. January 1997 - January 1998.

Publications

Italicized text Student or post-doctoral co-author

§ Joint lead-author

Perspectives and commentary

- 12. *Deemer, B.R., S. Hotaling,* K. Poulson-Ellestad, L.J. Falkenberg, J.E. Cloern, **P.A. Soranno**. 2021. *Viewpoint:* Engaging the next generation of editorial talent through a hands-on fellowship model. Ecology Letters 24(7): 1297-1301. https://doi.org/10.1111/ele.13758
- 11. **P.A. Soranno,** John A. Downing, Teresa L. Curto. 2021. *Editorial:* Founding Limnology & Oceanography Letters: the challenges, risks, and rewards of launching a new scientific journal. Limnology & Oceanography Letters. https://doi.org/10.1002/lol2.10182
- 10. *Poulson-Ellestad K.*, *S. Hotaling*, *L.J. Falkenberg*, **P.A. Soranno**. 2020. Illuminating a black box of the peer review system: demographics, experiences, and career benefits of associate editors. Limnology & Oceanography Bulletin. 29(1):11-17. https://doi.org/10.1002/lob.10362
- 9. **Soranno, P.A.**, K.E. Webster, N.J. Smith, *J. Diaz Vazquez*, K.S. Cheruvelil. 2020. What's in a "lake" name? That which we call a lake by any other name. Limnology & Oceanography Bulletin. 29(1):1-7. https://doi.org/10.1002/lob.10355
- 8. Cloern, J., **P.A. Soranno**. 2019. ASLO takes a next step towards open science: introducing data papers, a new article type in Limnology & Oceanography Letters. Limnology and Oceanography Bulletin 28(4):142-143. https://doi.org/10.1002/lob.10341
- 7. **Soranno, P.A.** 2019. Six simple steps to share your data when publishing research articles. Limnology & Oceanography Bulletin 28(2):41-44. https://doi.org/10.1002/lob.10303
- 6. **Soranno, P.A.** and *L.J. Falkenberg*. 2018. How editorial fellowships at society journals can provide opportunities for early career researchers in publishing: A case study of the Raelyn Cole Editorial Fellowship. Limnology and Oceanography Bulletin. 27(3):88. https://doi/10.1002/lob.10252
- 5. Falkenberg, L.J. and **P.A. Soranno**. 2017. Reviewing reviews: an evaluation of peer reviews of journal article submissions. Limnology and Oceanography Bulletin 27:1-5. https://doi.org/10.1002/lob.10217 *Top downloaded paper in this journal in 2018-2019.
- 4. **Soranno**, **P.A.** 2016. *Editorial*: L&O Letters: Why we need a new journal for the aquatic sciences. Limnology & Oceanography Letters. 1:1-2. http://doi.org/10.1002/lol2.10025
- 3. **Soranno, P.A.** 2015. ASLO News: Message from the new L&O Editor: A brief introduction. Limnology and Oceanography Bulletin. 24(3):91.
- 2. **Soranno, P.A.,** and D.S. Schimel. 2014. *Guest Editorial:* Macrosystems ecology: Big data, big ecology. Special issue on Macrosystems Ecology, Frontiers in Ecology and the Environment. 12(1):3. https://doi.org/10.1890/1540-9295-12.1.3
- Tallis, H., Lubchenco, J. Adams, V.M., Adams-Hosking, C., Agostini, and 210 additional co-authors including P.A. Soranno. 2014. A call for inclusive conservation. Nature 515: 27-28. doi:10.1038/515027a

Peer-reviewed journal articles

95. Cheruvelil, K.S., **Soranno, P.A.**, *McCullough, I.M.*, Webster, K.E., *Rodriguez, L.K.*, & Smith, N.J. 2021. LAGOS-US LOCUS v1.0: Data module of location, identifiers, and physical characteristics of lakes and their watersheds in the conterminous U.S. Limnology and Oceanography Letters. https://doi.org/10.1002/lol2.10203

- 94. Dahlin, K.M., P.L. Zarnetske, Q.D. Read, L.A. Twardochleb, A.G. Kamoske, K.S. Cheruvelil, **P.A. Soranno**. Linking terrestrial and aquatic biodiversity to ecosystem function across scales, trophic levels, and realms. 2021. Frontiers in Environmental Science 9: e692401. https://doi.org/10.3389/fenvs.2021.692401
- 93. *Liang, Z., P.A. Soranno, T.* Wagner. 2020. The role of phosphorus and nitrogen on chlorophyll a: evidence from hundreds of lakes. Water Research 185:116236 https://doi.org/10.1016/j.watres.2020.116236
- 92. Stachelek, J., Weng, W., Carey, C.C., Kemanian, A.R., Cobourn, K.M., Wagner, T., Weathers, K.C., **Soranno, P.A**. 2020. Granular measures of agricultural land-use influence lake nitrogen and phosphorus differently at macroscales. Ecological Applications 30(8): e02187 https://doi.org/10.1002/eap.2187
- 91. **Soranno§, P.A.,** K.S. Cheruvelil§, *B. Liu, Q. Wang*, P.-N. Tan, J. Zhou, *K.B.S. King*, *I.M. McCullough*, *J Stachelek*, *M. Bartley*, C.T. Filstrup, E.M. Hanks, J.-F. Lapierre, N.R. Lottig, E.M. Schliep, T. Wagner, K.E. Webster. 2020. Ecological prediction at macroscales using big data: does sampling design matter? Ecological Applications 30(6):e02123. https://doi-org.proxy1.cl.msu.edu/10.1002/eap.2123
- Wagner, T., N.R. Lottig, M.L. Bartley, E.M. Hanks, E.M. Schliep, N.B. Wikle, K.B.S. King, I. McCullough, J. Stachelek, K.S. Cheruvelil, C.T. Filstrup, J.-F. Lapierre, B. Liu, P.A. Soranno, P.-N. Tan, Q. Wang, K.E. Webster, J. Zhou. 2020. Increasing accuracy of lake nutrient predictions in thousands of lakes by leveraging water clarity data. Limnology & Oceanography Letters 5(2):228-235. https://aslopubs.onlinelibrary.wiley.com/doi/abs/10.1002/lol2.10134
- 89. Bartley, M.L., E.M. Hanks, E.M. Schliep, **P.A. Soranno**, and T. Wagner. 2019. Identifying and characterizing extrapolation in multivariate response data. PLOS ONE 14(12): e0225715. https://doi.org/10.1371/journal.pone.0225715
- 88. *McCullough, I.M., N.K. Skaff,* **P.A. Soranno**, and K.S. Cheruvelil. 2019. No lake left behind: How well do U.S. protected areas meet lake conservation targets? Limnology & Oceanography Letters 4(6): 183-192. https://doi.org/10.1002/lol2.10123
- 87. *Poisson, A.C., I.M. McCullough*, K.S. Cheruvelil, K.C. Elliott, J.A. Latimore, and **P.A. Soranno**. 2019. Quantifying the contribution of citizen science to broad-scale ecological databases. Frontiers in Ecology and the Environment 18(1):19-26. https://doi.org/10.1002/fee.2128
- 86. Qian, S.S., C.A. Stow, A.F. Nojavan, *J. Stachelek*, Y. Cha, I. Alameddine, and **P.A. Soranno**. 2019. The implications of Simpson's paradox for cross-scale inference among lakes. Water Research. 163(114855). https://doi.org/10.1016/j.watres.2019.114855
- 85. Settles, I.H., *S.T. Brassel*, **P.A. Soranno**, K.S. Cheruvelil, G.M. Montgomery, and K.C. Elliott. 2019. Team climate mediates the effect of diversity on environmental science team satisfaction and data sharing. PLoS ONE 14(7): e0219196. https://doi.org/10.1371/journal.pone.0219196
- 84. **Soranno§, P.A.**, T. Wagner§, *S.M. Collins*, J.-F. Lapierre, N.R. Lottig, *S.K. Oliver*. 2019. Spatial and temporal variation of ecosystem properties at macroscales. Ecology Letters 22(10): 1587-1598. https://doi.org/10.1111/ele.13346
- 83. *McCullough, I.M.*, K.S. Cheruvelil, J.-F. Lapierre, N.R. Lottig, M.A. Moritz, *J. Stachelek*, **P.A. Soranno**. 2019. Do lakes feel the burn? Ecological consequences of increasing exposure of lakes to fire in the continental U.S. Global Change Biology 25(9):2841-2854. http://doi.org/10.1111/gcb.14732
- 82. *Collins, S.M.*, S. Yuan, P.-N. Tan, *S.K. Oliver*, J.-F. Lapierre, K.S. Cheruvelil, *C.E. Fergus, N.K. Skaff, J. Stachelek*, T. Wagner, **P.A. Soranno**. 2019. Winter precipitation and summer temperature predict lake water quality at macroscales. Water Resources Research 55(4): 2708-2721. http://dx.doi.org/10.1029/2018WR023088
- 81. *Stachelek, J.* and **P.A. Soranno**. 2019. Does freshwater connectivity influence phosphorus retention in lakes? Limnology and Oceanography. 64(4): 1586-1599. https://doi.org/10.1002/lno.11137
- 80. Stanley, E.H., *S.M. Collins*, N.R. Lottig, *S.K. Oliver*, K.E. Webster, K.S. Cheruvelil, and **P.A. Soranno**. 2019. Biases in lake water quality sampling and implications for macroscale research. Limnology & Oceanography. 64(4):1572-1585. https://doi.org/10.1002/lno.11136
- 79. *McCullough, I.M.*, K.S. Cheruvelil, *S.M. Collins*, and **P.A. Soranno**. 2019. Geographic patterns of the climate sensitivity of lakes. Ecological Applications 29(2):e01836. https://doi.org/10.1002/eap.1836
- 78. Cheruvelil§, K.S. and **P.A. Soranno**§. 2018. Data-intensive ecological research is catalyzed by open science and team science. BioScience 68(10):813-822. https://doi.org/10.1093/biosci/biy097
- 77. Lapierre, J.-F., S.M. Collins, D.A. Seekell, K.S. Cheruvelil, N.K. Skaff, Z.E. Taranu, C.E. Fergus, P.-N.Tan. P.A. Soranno. 2018. Similarity in spatial structure constrains ecosystem relationships: Building a macroscale understanding of lakes. Global Ecology and Biogeography 27(10):1251-1263. https://doi.org/10.1111/geb.12781
- 76. Cobourn, K.M., C.C. Carey, K.J. Boyle, C. Duffy, H.A. Dugan, K.J. Farrell, L. Fitchett, P.C. Hanson, J.A. Hart, V.R. Henson, A.L. Hetherington, A.R. Kemanian, L.G. Rudstam, L. Shu, **P.A. Soranno**, M.G. Sorice, J.

- Stachelek, N.K. Ward, K.C. Weathers, W. Weng, Y. Zhang. 2018. From concept to practice to policy: modeling coupled natural and human systems in lake catchments. Ecosphere 9(5):e02209. https://doi.org/10.1002/ecs2.2209
- 75. Oliver, S.K. C.E. Fergus, N.K. Skaff, T. Wagner, P.-N. Tan, K.S. Cheruvelil, **P.A. Soranno**. 2018. Strategies for effective collaborative manuscript development in interdisciplinary science. Ecosphere 9(4):e02206. https://doi.org/10.1002/ecs2.2206 Awarded "Top 20 Cited 2017-2018 Paper in Ecosphere" and "Top Downloaded paper 2018-2019 in Ecosphere".
- 74. Stow, C.A., K.E. Webster, T. Wagner, N.R. Lottig, **P.A. Soranno**, and *Y-K. Cha*. 2018. Small values in big data: The continuing need for appropriate metadata. Ecological Informatics 45:26-30. https://doi.org/10.1016/j.ecoinf.2018.03.002
- 73. Settles, I.H., *S.T. Brassel*, G.M. Montgomery, K.C. Elliott, **P.A. Soranno**, K.S. Cheruvelil. 2018. Missing the mark: A new form of honorary authorship motivated by desires for inclusion. Innovative Higher Education. https://doi.org/10.1007/s10755-018-9429-z
- 72. *Yuan, S.*, J. Zhou, P.N. Tan, *C.E. Fergus*, T. Wagner, T., **P.A. Soranno**. 2017. Multi-level multi-task learning for modeling cross-scale interactions in nested geospatial data. Proceedings of the IEEE International Conference on Data Mining. New Orleans, Louisiana. November 18-21, 2017. DOI: 10.1109/ICDM.2017.154
- 71. Lottig, N., P.-N. Tan, T. Wagner, K.S. Cheruvelil, **P.A. Soranno**, E. Stanley, *C. Scott*, C. Stow, *S. Yuan*. 2017. Macroscale patterns of synchrony identify complex relationships among spatial and temporal ecosystem drivers. Ecosphere 8(12):e02024. https://doi.org/10.1002/ecs2.2024
- 70. 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. Cheruvelil, S.T. Christel, M. Claucherty, S.M. Collins, J.D. Conroy, J.A. Downing, J. Dukett, C.E. Fergus, C.T. Filstrup, C. 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. Lathrop, J.A. Latimore, Y. Lee, N.R. Lottig, J.A. Lynch, L.J. Matthews, W.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, A.P. Thorpe, M.J. Vanni, T. Wagner, G. Watkins, K.C. Weathers, K.E. Webster, J.D. White, M.K. Wilmes, 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. Gigascience 6(12):1-22. https://doi.org/10.1093/gigascience/gix101
- 69. Resnik, D.B., K.C. Elliott, **P.A. Soranno**, and E.M. Smith. 2017. Data-intensive science and research integrity. Accountability in Research. 24(6):344-358. https://doi.org/10.1080/08989621.2017.1327813
- 68. Fergus, C.E., J.-F. Lapierre, S.K. Oliver, N. Skaff, K.S. Cheruvelil, **P.A. Soranno**, K.E. Webster, C. Scott. 2017. The freshwater landscape: Lake, wetland, and stream abundance and connectivity at macroscales. Ecosphere 8(8):e01911. https://doi.org/10.1002/ecs2.1911
- 67. Oliver, S.K., S.M. Collins, P.A. Soranno, T. Wagner, E.H. Stanley, J. Jones, C. Stow, N.R Lottig. 2017. Unexpected stasis in a changing world: Lake nutrient and chlorophyll trends since 1990. Global Change Biology 23:5455–5467. https://doi.org/10.1111/gcb.13810
- 66. *Collins, S.M., S.K. Oliver, J.-F. Lapierre*, E.H. Stanley, J. Jones, T. Wagner, **P.A. Soranno**. 2017. Lake nutrient stoichiometry is less predictable than nutrient concentrations at regional and sub-continental scales. Ecological Applications 27:1529–1540. https://doi.org/10.1002/eap.1545
- 65. Lapierre, J.-F., D. Seekell, C.T. Filstrup, S.M. Collins, C.E. Fergus, P.A. Soranno, K.S. Cheruvelil. 2017. Continental-scale variation in controls of summer CO₂ in United States lakes. Journal of Geophysical Research Biogeosciences. 122(4):875-885. http://dx.doi.org/10.1002/2016JG003525
- 64. *Yuan, S.*, P.-N. Tan, K.S. Cheruvelil, *C.E. Fergus, N.K. Skaff*, and **P.A. Soranno**. 2017. Learning hash-based features for incomplete continuous-valued data. Proceedings of the 2017 SIAM International Conference on Data Mining. Houston, Texas. April 27-29, 2017. DOI: 10.1137/1.9781611974973.76
- 63. Cheruvelil, K.S., S. Yuan, K.E. Webster, P.-N. Tan, J.-F. Lapierre, S.M. Collins, C.E. Fergus, C.E. Scott, E.N. Henry, P.A. Soranno, C.T. Filstrup, T. Wagner. 2017. Creating multi-themed ecological regions for macrosystems ecology: Testing a flexible, repeatable, and accessible clustering method. Ecology and Evolution. 7: 3046–3058. https://doi.org/10.1002/ece3.2884
- 62. Elliott, K.C., I.S. Settles, G.M. Montgomery, *S.T. Brassel*, K.S. Cheruvelil, and **P.A. Soranno**. 2017. Honorary authorship practices in environmental science teams: structural and cultural causes and solutions. Accountability in Research: Policies and quality assurance 24(2):80-98. https://doi.org/10.1080/08989621.2016.1251320

- 61. Fergus, C.E., A.O. Finley, **P.A. Soranno**, T. Wagner. 2016. Spatial variation in the nutrient-color paradigm at macroscales. PloS ONE. 11(10): e0164592. https://doi.org/10.1371/journal.pone.0164592
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- 18. Lapierre J., S. Collins, D. Seekell, K. Cheruvelil, P. Tan, N. Skaff, Z. Taranu, C. Fergus, P.A. Soranno. 2017. LAGOS-NE Lake nutrient chemistry and geospatial data to measure spatial structure of ecosystem properties in a 17-state region of the U.S.. Environmental Data Initiative. https://doi.org/10.6073/pasta/4e479018aa3d23603736bb5849f9a200
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- Soranno P.A, K.S. Cheruvelil. 2017. LAGOS-NE-LIMNO v1.087.1: A module for LAGOS-NE, a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of U.S. Lakes: 1925-2013. Environmental Data Initiative. http://dx.doi.org/10.6073/pasta/b1b93ccf3354a7471b93eccca484d506. Dataset accessed 9/26/2017.
- 15. Soranno P.A., K.S. Cheruvelil. 2017. LAGOS-NE-LOCUS v1.01: A module for LAGOS-NE, a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of U.S. Lakes: 1925-2013. Environmental Data Initiative. http://dx.doi.org/10.6073/pasta/940b25d022c695b440e1bdbc49fbb77b. Dataset accessed 9/26/2017.
- 14. Soranno P.A., K.S. Cheruvelil. 2017. LAGOS-NE-GEO v1.05: A module for LAGOS-NE, a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of U.S. Lakes: 1925-2013. Environmental Data Initiative. http://dx.doi.org/10.6073/pasta/b88943d10c6c5c480d5230c8890b74a8. Dataset accessed 9/26/2017.
- 13. Soranno P.A., K.S. Cheruvelil. 2017. LAGOS-NE-GIS v1.0: A module for LAGOS-NE, a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of U.S. Lakes: 2013-1925. Environmental Data Initiative. http://dx.doi.org/10.6073/pasta/fb4f5687339bec467ce0ed1ea0b5f0ca. Dataset accessed 9/26/2017.
- 12. Oliver, S.K., S.M. Collins, P.A. Soranno, T. Wagner, E.H. Stanley, J. Jones, C. Stow, N.R Lottig. 2017. LAGOS-NE v.1.054.1 Lake water quality time series and geophysical data from a 17-state region of the United States. https://lter.limnology.wisc.edu/content/lagos-ne-v10541-lake-water-quality-time-series-and-geophysical-data-17-state-region-united
- 11. Fergus, C.E., J.-F. Lapierre, S.K. Oliver, N. Skaff, K.S. Cheruvelil, P.A. Soranno, K.E. Webster, C. Scott. 2017. DATA for :The freshwater landscape: Lake, wetland, and stream abundance and connectivity at macroscales (Freshwater connectivity clusters for lakes, wetlands, and streams at the Hydrologic Unit 12 scale in the Midwest and Northeast U.S.A. freshwater metric variables and K-means cluster assignment). EDI Data Portal. https://pasta.lternet.edu/package/data/eml/edi/120/2/8bad2e607a2ed2126b76db309a1f436d
- 10. Cheruvelil, K.S. 2016. CODE: Creating multi-themed ecological regions for macroscale ecology: testing a flexible, repeatable, and accessible clustering method. https://github.com/cont-limno/SpectralClustering4Regions
- Cheruvelil, K.S., S. Yuan, K.E. Webster, P.-N. Tan, J.-F. Lapierre, S.M. Collins, C.E. Fergus, C.E. Scott, E.N. Henry, P.A. Soranno, C.T. Filstrup, T. Wagner. 2016. DATA for Creating multi-themed ecological regions for macroscale ecology: Testing a flexible, repeatable, and accessible clustering method. Long Term Ecological Research Network Data Repository. https://doi.org/10.6073/pasta/1532a9a0c023fa50a912021291c8fc1f
- 8. Collins, S.M.; Oliver, S.K.; Lapierre, J.-F.; Stanley, E.H.; Jones, J.; Wagner, T.; Soranno, P.A. 2016. LAGOS Lake nitrogen, phosphorus, stoichiometry, and geospatial data for a 17-state region of the U.S.. Environmental Data Initiative data repository. http://dx.doi.org/10.6073/pasta/3abb4a56e76a52a12a366a338fc07dd8
- 7. Oliver S., S. Collins, P. Soranno, T. Wagner, E. Stanley, J. Jones, C. Stow, N. Lottig. 2016. LAGOS-NE v.1.054.1 Lake water quality time series and geophysical data from a 17-state region of the United States. Environmental Data Initiative. http://dx.doi.org/10.6073/pasta/bd1b6e49413f009950ddc08abf061c1c
- 6. Oliver S.K., Soranno P.A., Fergus E.C., Wagner T, Webster KE, Scott C.E., Winslow L.A., Downing J.A., Stanley E.H. 2016. LAGOS Predicted and observed maximum depth values for lakes in a 17-state region of the U.S. Long Term Ecological Research Network. https://portal.edirepository.org/nis/mapbrowse?packageid=knb-lter-ntl.320.4
- 5. Soranno, P.A., K.S. Cheruvelil, T. Wagner, K.E. Webster, M.T. Bremigan. 2015. Data from: Effects of land use on lake nutrients: The importance of scale, hydrologic connectivity, and region. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.58445
- 4. Soranno, P.A., Nicole J. Smith, Scott Stopyak. 2015. CODE: LAGOS GIS Toolbox. https://github.com/soranno/LAGOS GIS Toolbox
- 3. Cheruvelil, K.S., P.A. Soranno, K.E. Webster, M.T. Bremigan. 2013. Data from: The multi-scaled drivers of ecosystem state: Quantifying the importance of the regional spatial scale. Dryad Digital Repository. http://datadryad.org/resource/doi:10.5061/dryad.75s9s
- Fergus C.E., P.A. Soranno, K.S. Cheruvelil, M.T. Bremigan. 2011. Data from: Multi-scale landscape and wetland drivers
 of lake total phosphorus and water color. Dryad Digital Repository.
 http://datadryad.org/resource/doi:10.5061/dryad.4v2m5
- Soranno P.A., Cheruvelil K.S., Stevenson R.J., Rollins S.L., Holden S.W., Heaton S., Torng E.K. 2008. Data from: A framework for developing ecosystem-specific nutrient criteria: integrating biological thresholds with predictive modeling. Dryad Digital Repository. http://datadryad.org/resource/doi:10.5061/dryad.5df61

Presentations

Invited

- **Soranno, P.A.** Leveraging big data in biology requires open science, team science, and data-intensive science. Keynote presentation to the *International Max Planck Research School for Organismal Biology Grand Challenges Symposium,* 2021. Constance, Germany. October 11, 2021
- Falkenberg, L.J., **P.A. Soranno.** Exploring the occluded genre of academic peer review. Invited presentation to the session: *Author spotlight: recent high-impact authors from the ASLO journals.* Virtual Aquatic Sciences Conference, June 22-27, 2021.
- **Soranno**, **P.A.** The ethics of data sharing in the environmental sciences. Emerging Technologies Information Sessions (ETIS) Webinar Series. Pacific Northwest Aquatic Monitoring Partnership. February 25, 2021.
- **Soranno**, **P.A.** The value of collaboratively-drafted policies for science teams and networks. National Science Foundation AccelNet Program Webinar Series (Accelerating Research through International Network-to-Network Collaborations. February 17, 2021.
- **Soranno**, **P.A.** LAGOS-US: Leveraging open science, ecoinformatics, and geography to build research capacity for national-scale environmental research. University of Florida, Gainseville. October 15, 2020.
- **Soranno**, **P.A.** Underrepresented racial and ethnic minoritized individuals in U.S. academic institutions: status and barriers. Michigan State University Fisheries and Wildlife Department Seminar Series. September 23, 2020.
- **Soranno**, **P.A.**, K.S. Cheruvelil. Fostering best practices and cultures that promote interdisciplinary research: Collaborative manuscript writing and publishing. Invited presentation to the University of Miami Laboratory for Integrative Knowledge, University of Miami, Miami, FL. January 30, 2020.
- Cheruvelil, K.S. and **P.A. Soranno**. Studying science teams and conducting team science: Practitioners' perspectives. Invited oral presentation at the Interdisciplinary Science Forum, Michigan State University, March 22, 2019.
- **Soranno, P.A.,** K.S. Cheruvelil, and N.J. Smith. Developing a continental understanding of lakes at continental scales. Invited presentation to the NSF-funded workshop: A new paradigm in lake and reservoir research and management through global monitoring, modeling, and engaging and empowering people networks. Alexandria, VA. September 7, 2018.
- **Soranno, P.A.** Macrosystems ecology: Developing a macroscale understanding of ecosystems. Invited presentation to the Great Lakes Seminar Series, Great Lakes Environmental Research Laboratory, Ann Arbor, MI. May 3, 2018.
- **Soranno**, **P.A.** The top four practical questions related to the ethics of data sharing in ecology. Invited presentation to the Special Session: *Standing on the Shoulders of Clients: Evolving Cyberinfrastructure in the Ecological Sciences*, at the 102nd Annual Meeting of the Ecological Society of America, August 7, 2017.
- **Soranno, P.A.** *Marine and freshwater science in the 21st century: Team-based, data-intensive, and open.* Invited presentation to the Eco-DAS (Ecological Dissertations in the Aquatic Sciences) XII. Honolulu, HI. October 25, 2016.
- **Soranno, P.A.** *Ecology in the 21st century: Team-based, data-intensive, and open.* Invited Keynote Address to the 2016 KBS-LTER All Scientist Meeting. September 16, 2016.
- **Soranno, P.A.** and K.S. Cheruvelil. Landscape limnology: bridging local and regional scales to understand freshwaters. Invited oral presentation to the special session: *Bridging local processes and large-scale patterns in aquatic biogeochemical cycles across landscapes*, at the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- **Soranno**, **P.A.** What can data-intensive, continental-scaled ecology contribute to the climate-food-energy-water nexus? Invited presentation to the Michigan State University's Fate of the Earth Symposium. East Lansing, MI. April 7, 2016.
- **Soranno, P.A.** Landscape limnology: Developing a macrosystems ecology understanding of freshwaters from local to continental scales. Invited presentation to the *Group for Interuniversity Research in Limnology and Aquatic Environments*. Jouvence, Quebec. March 11, 2016.
- **Soranno**, **P.A.** Macrosystems ecology: Understanding ecological pattern and process at continental scales. Invited seminar at the Zoology Department, Miami University of Ohio. September 11, 2014.
- **Soranno**, **P.A**.* Landscape limnology: Understanding freshwaters at regional to continental scales. Invited plenary to the Joint Aquatic Sciences Meeting (a combined meeting of the Association for Limnology and Oceanography, Society for Freshwater Sciences, and the Society of Wetland Scientists). May 18-23, 2014. Portland, OR. **Plenary*
- **Soranno**, **PA***. Using landscape limnology for extrapolating within and across regions. Invited presentation at the Center for Limnology, University of Wisconsin, Madison, WI. December 4, 2013. *Kaiser Scholar of the Center for Limnology

- **Soranno, PA.** Macrosystems ecology: understanding ecological pattern and process at continental scales. Invited presentation at the Zoology Department, University of Wisconsin. Madison, WI. December 3, 2013.
- Soranno, P.A., K.S. Cheruvelil, E.G. Bissell, M.T. Bremigan, J.A. Downing, C.E. Fergus, C. Filstrup, N. Lottig, E.N. Henry, E.H. Stanley, C.A. Stow, P.-N. Tan, T. Wagner, K.E. Webster. A conceptual framework for understanding multi-scaled cause-effect relationships between terrestrial and aquatic ecosystems. Invited presentation to the special session: Terrestrial-aquatic linkages II: movement of nutrients and carbon. Ecological Society of America 98th Annual Meeting. Minneapolis, MN. August 2013.
- Cheruvelil, K.S., **P.A. Soranno**, K.C. Weathers, P.C. Hanson, S. Goring, *C.T. Filstrup*, and *E.K. Read*. Creating and maintaining high-performing collaborative research teams: the importance of diversity and interpersonal skills. Invited presentation at the NSF-Macrosystems Biology PI Meeting, Washington, D.C. June 2013.
- Goring, S., K. Weathers, W.K. Dodds, **P.A. Soranno**, L. Sweet, K.S. Cheruvelil, J. Kominoski, J. Ruegg, A. Thorn, R. Utz. Improving the culture of interdisciplinary collaboration in ecology by expanding measures of success. Invited presentation at the NSF-Macrosystems Biology PI Meeting, Washington, D.C. June 2013.
- **Soranno**, **PA.** and co-authors. Macrosystems ecology: Understanding ecological pattern and process at continental scales. Invited presentation at the NSF-Macrosystems Biology PI meeting. NSF, Arlington, VA. June 2013.
- **Soranno**, **PA**. *J. Ruegg*, C. Gries. Completing the data life cycle: information management in macrosystems ecology research. Invited presentation at the NSF-Macrosystems Biology PI meeting. NSF, Arlington, VA. June 2013.
- **Soranno**, **PA.** Understanding today's water problems requires both fine- and broad-scaled perspectives. Presentation to the *Interdisciplinary Research Forum on Water* sponsored by MSU Office of the Vice President for Research and Graduate Studies. April 2013.
- **Soranno, PA.** Macrosystems ecology: understanding ecological pattern and process at continental scales. Ecology, Evolutionary Biology and Behavior Seminar Series. Michigan State University. March 2013.
- Fergus, C.E., P.A. Soranno, K.S. Chervulil, M.T. Bremigan, K.E. Webster. A landscape limnology framework to understand responses of lake ecosystems to environmental change across broad scales. Invited presentation to the Special Session: Freshwater Systems in a Changing World: A New Frontier, at the American Geophysical Union Annual 45th Annual Fall Meeting. San Francisco, CA. December 2012.
- **Soranno**, **P.A.** Landscape Limnology: Vision for today and the future. Invited plenary address at the North American Lake Management Society Annual Symposium. Madison, WI. November 2012. **Plenary*
- **Soranno**, **P.A.** What can we learn from studying freshwater landscapes? Invited plenary speaker at the Kellogg Biolgoical Station GK-12 Bioenergy Sustainability Project Workshop. Kellogg Biological Station, Michigan. December 2011.
- **Soranno, P.A.** Freshwater landscapes: consideration of composition, configuration and scale in the Session Sentinels from the Future. Invited presentation at the 2011 Gordon Research Conference: Catchments as Sentinels of Global Change. Bates College, Lewiston, ME. July 2011.
- **Soranno, P.A.** Developing lake-specific nutrient criteria too meet the mandate of the Clean Water Act. Invited presentation to the Michigan Tribal Environmental Group, Gun Lake Tribe, Shelbyville, MI. May 2009.
- Bremigan, M.T., **P.A. Soranno**, M. Gonzalez, B. Bunnell, *K. Arend*, W. Renwick, R. Stein, and M. Vanni, K.S. Cheruvelil, K. Webster, C.A. Stow, and T. Wagner. Linking Foodweb and Landscape Models: Hydrogeomorphic Mediation of Land-use Effects on Reservoirs. Invited presentation to Special Symposium on *Reservoir Ecology*, at the 69th Midwest Fisheries and Wildlife Conference, Columbus OH, December 2008.
- **Soranno, P.A.** Limnology 101. Presentation to the Michigan Water Resources Advisory Council. Grand Rapids, MI. December 2008.
- **Soranno, P.A.,** M.T. Bremigan, K.S. Cheruvelil, and K.E. Webster. Databases and related research from the MSU landscape limnology research group. Presentation to the Michigan Water Resources Advisory Council Subcommittee on Inland Lakes and Wetlands. Lansing, MI. November 2008.
- Bremigan, M.T., K.S. Cheruvelil, **P.A. Soranno**, K.E. Webster, *B. Alger*, and *T. Wagner*. 2008. Landscape scale management for lakes: connecting lake landscapes to water chemistry and fishes. National conference sponsored by US EPA and North American Lake Management Society: *Enhancing the States' Lake Management Programs Building Partnerships for Improved Fisheries and Lake Water Quality*. Chicago, IL. April 2008
- **Soranno**, **P.A.**, M.T. Bremigan and K.S. Cheruvelil. Using a landscape perspective for lake science, management and conservation: Results to date and future directions. Invited presentation to the *Midwest Glacial Lakes Partnership Session* at the Midwest Fish and Wildlife Conference. Madison, WI. December 2007.
- **Soranno**, **P.A.** A hydrogeomorphic lake landscape context paradigm to explain lake variation at multiple spatial scales. Invited research seminar. Central Michigan University. Mount Pleasant, MI. November 2007.

- **Soranno, P.A.,** K. Spence Cheruvelil, R.J. Stevenson, S. Rollins, S.W. Holden, S. Heaton, and E.K. Torng. Developing lake-specific nutrient criteria: integrating predictive modeling with biological response gradients. Invited plenary address to the New England Association of Environmental Biologists Annual Conference. West Dover, Vermont. March 2007.
- Cheruvelil, K.S., **P.A. Soranno**, M.T. Bremigan, K.E. Webster, *T. Wagner* and *S.L. Martin*. The roles of regionalization and spatial scale for national lake classification and assessment. EPA Region 5 -- 5th Annual Surface Water Monitoring and Standards (SWiMS) Meeting. Chicago, IL. February 2006.
- Cheruvelil, K.S., T. Wagner, **P.A. Soranno**, and M.T. Bremigan. 2005. The role of regionalization for lake assessment and monitoring: how do we predict lake physico-chemical variables from landscape features at multiple spatial scales. Invited presentation to the Department of Biology, University of Notre Dame, South Bend, IN.
- **Soranno**, **P.A.** Developing a landscape-context paradigm for lakes: Why (and how) does the landscape matter? Michigan State University Department of Fisheries and Wildlife Graduate Student Organization Seminar Series. October 28, 2005.
- **Soranno**, **P.A.** The role of landscape context on lake chemistry and biology. Invited presentation to the Grand Valley State University Annis Water Resources Institute. March 2003.
- Bremigan, M.T. and **P.A. Soranno.** 2001. Integrating fisheries and limnological perspectives to evaluate indirect effects of Sonar herbicide control of Eurasian watermilfoil on Michigan lakes. Invited oral presentation to Michigan Chapter of the American Fisheries Society Meeting (Session: Bridging the Gap between Limnology and Fisheries). Higgins Lake, Michigan. March 2001.
- **Soranno, P.A.** 2001. Landscape ecology of lakes: Introduction and primer. Invited oral presentation to the Society of Canadian Limnologists (Special Symposium: Landscape Ecology of Aquatic Ecosystems, opening presentation), Toronto, Canada. January 2001.
- Seelbach, Paul W., M.J. Wiley, **P.A. Soranno**, M.T. Bremigan, and J. Higgins. 2000. Aquatic conservation planning: predicting ecological reference conditions for specific waters. Invited oral presentation to the Conservation Biology Annual Meeting. Montana. June 2000.
- Soranno, P.A. 1997. Phosphorus cycling in the Lake Mendota ecosystem: Internal versus external nutrient supply. Dissertations Initiative for the Advancement of Limnology and Oceanography II Conference, Bermuda Biological Station for Research, Bermuda. Sponsored by European Commission, US-NASA, US-NOAA, US-NSF, US-ONR. October 1997.
- **Soranno**, **P.A.** 1997. Internal and external phosphorus supply to eutrophic lakes: Implications for ecosystems and algal processes Miami University of Ohio, Oxford, Ohio. April 1997.
- **Soranno**, **P.A.** 1997. Internal and external phosphorus supply to eutrophic lakes: Implications for ecosystems and algal processes. Wright State University, Dayton, Ohio. April 1997.
- **Soranno**, **P.A.** 1997. Incorporating spatial pattern in the modeling of phosphorus loads to surface waters. American Fisheries Society Michigan Chapter Meeting, East Lansing, Michigan. March 1997.
- Soranno, P.A., S.R. Carpenter, R.C. Lathrop, J.F. Kitchell, and T.B. Johnson. 1994. Interannual climate variability and its effects on Lake Mendota nutrients and plankton. Madison Hydrology Club, Madison, WI. February 1994.
- **Soranno**, **P.A.** 1993. The impact of land use pattern on the transport of phosphorus from land to water in the Lake Mendota watershed. Mathematical Sciences Symposium: Spatial Processes in Biology. University of Wisconsin, Madison, WI. November 1993.

Contributed Research Presentations

- Settles, I. S. Brassel, P. Soranno, K. Cheruvelil, G. Montgomery, K. Elliott. Team climate mediates the effect of diversity on science teams. Oral presentation to the 2019 Science of Team Science (SciTS) Conference, Lansing, MI. May 2019.
- Soranno, P.A. and K.S. Cheruvelil. Leading large interdisciplinary research teams: Lessons from LAGOS. Oral presentation to the 2019 Science of Team Science (SciTS) Conference, Lansing, MI. May 2019.
- *McCullough, I.M.*, K.S. Cheruvelil, J.-F. Lapierre, N.R. Lottig, and **P.A. Soranno**. Do lakes feel the burn? Effects of fire on North American lake ecosystem properties. Oral presentation to the Ecological Society of America, New Orleans, LA. August 2018.
- **Soranno, P.A.,** T. Wagner, *S.M. Collins*, J.-F. Lapierre, N.R. Lottig, S.K. Oliver. Spatial variation exceeds temporal variation in lake ecosystem properties at macroscales. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Victoria, BC. June 2018.
- Stachelek, J. and P.A. Soranno. Does lake and stream connectivity control phosphorus retention in lakes? Oral presentation to the Association for the Sciences of Limnology and Oceanography, Victoria, BC. June 2018.
- *McCullough, I.,* K.S. Cheruvelil, *S.M. Collins*, and **P.A. Soranno**. Geographic patterns of the climate sensitivity of lakes. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Victoria, BC. June 2018.

- Filstrup, C.T., Lapierre, J.-F., S.K. Oliver, **P.A. Soranno**, T. Wagner, J.A. Downing. Spatiotemporal patterns in extreme lake chlorophyll concentrations at the sub-continental scale. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Victoria, BC. June 2018.
- *Brassel, S.T.*, Elliott, K.C., I.H. Settles, K.S. Cheruvelil, G.M. Montgomery, and **P.A. Soranno**. Interdisciplinary Scholarship to Promote Inclusivity in Science: A Case Study of Credit and Authorship. Oral presentation to The Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), Atlanta, GA. June 2018.
- Twardochleb, L., Q. Read, P. Zarnetske, E. Hiltner, K. Dahlin, K. Cheruvelil, P.A. Soranno and A. Kamoske. Scaling relationships between freshwater insect diversity and the terrestrial environment Oral presentation to the Society of Freshwater Science, Detroit, MI May 2018.
- Smith, N., P.A. Soranno, K.S. Cheruvelil, J. Stachelek, and C. Gries. Mapping a journey towards open science: Lessons learned building a lake water quality geodatabase. Oral to American Water Resources Association GIS and Water Resources Conference, Orlando, FL April 2018.
- *Brassel, S.*, Settles, I., Montgomery, G., Elliott, K.E., **Soranno, P.A.**, and Cheruvelil, K.S. Power, career status, and the dark side of "inclusion" in interdisciplinary research teams. Oral presentation at the Association for Women in Psychology, Philadelphia, PA, March 2018.
- Fergus, C.E., J.F. Lapierre, S.K Oliver, N.K. Skaff, K.S. Cheruvelil, P.A. Soranno, K.E. Webster, C. Scott. The freshwater landscape: lake, wetland, and stream abundance and connectivity at macroscales. Oral presentation to the American Water Resources Spring Specialty Conference, Snowbird, UT. May 2017.
- Stanley, E.H., K.E. Webster, **P.A. Soranno**, *S.K. Oliver*, N.R. Lottig, *S.M. Collins*, and K.S. Cheruvelil. 2017. Data accumulation patterns for lakes in northeastern and Midwestern U.S. states. Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting, Honolulu, HI. February 2017.
- Lottig, N.R., P.-N. Tan, T. Wagner, K.S. Cheruvelil, *C.E. Scott*, **P.A. Soranno**, E.H. Stanley, C.A. Stow, *S. Yuan*. Long-term patterns and drivers of water clarity at sub-continental spatial scales. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- Lapierre, J.-F., S.M. Collins, P.A. Soranno, K.S. Cheruvelil, P.-N. Tan, T. Wagner, N. Skaff, C.E. Fergus, D. Seekell Aligning spatial scales improves understanding of relationships between climate, landscape and limnological properties. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- Fergus, C.E., J.-F., Lapierre, S. Oliver, N. Skaff, C.E Scott, K.S. Cheruvelil, P.A. Soranno, and K.E. Webster. Patterns of lake, wetland, and stream connectivity at macroscales. Oral presentation to the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- Oliver, S., S.M. Collins, E.H. Stanley, P.A. Soranno, K.S. Cheruvelil, J.-F. Lapierre, N.R. Lottig, T. Wagner. Recent changes in lake N & P concentrations: Where are we now? Oral presentation to the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- Collins, S.M., S.K. Oliver, J.F. Lapierre, E.H. Stanley, J.R. Jones, T. Wagner, and **P.A. Soranno**. What drives lake nitrogen and phosphorus concentrations at broad spatial scales, and why is it so hard to explain nutrient ratios? Oral presentation to the Association for the Sciences of Limnology and Oceanography, Santa Fe, NM. June 2016.
- Elliott, K.C., I. Settles, *S. Brassel*, G.M. Montgomery, K.S. Cheruvelil, **P.A. Soranno**. The dark side of "inclusivity": Problematizing authorship practices in interdisciplinary teams. Oral presentation to the 2016 Science of Team Science Conference, Phoenix, AZ. May 2016.
- *Collins, S.M., S.K. Oliver, J.-F. Lapierre*, E.H. Stanley, K.S. Cheruveli1, **P.A. Soranno**. What drives lake nutrients at continental scales, and why is it so hard to predict nutrient ratios? Oral Presentation to the American Geophysical Union Fall Meeting, San Francisco, CA. December 2015.
- **Soranno**, **P.A.**, K.S. Cheruvelil, K.C. Elliott, D. Higgins, G.M. Montgomery, S. Nicholson, *C.E. Scott*, P.-N. Tan, E. Tans. Evidence for the historical development of and recent trends in data-intensive ecology. Poster presentation at The Ecological Society of America Annual Meeting: Ecological Science at the Frontier, celebrating the ESA Centennial, Baltimore, MD August 2015.
- Cheruvelil, K.S., S. Yuan, S.M. Collins, C.E. Fergus, C.T. Filstrup, E.N Henry, J.-F. Lapierre, C.E. Scott, P.A. Soranno, P.-N. Tan, T. Wagner, K.E. Webster. Including the freshwater landscape in a multi-themed regionalization system to capture macroscale patterns. Oral presentation at The Ecological Society of America Annual Meeting: Ecological Science at the Frontier, celebrating the ESA Centennial, Baltimore, MD August 2015.
- Lapierre, J.-F., S.M. Collins, C.E. Scott, K.S. Cheruvelil, P.-N. Tan, M.T. Bremigan, T. Wagner, **P.A. Soranno**. The role of spatial structure in determining the strength of the relationships among climate, landscape and limnological properties. Oral presentation at The Ecological Society of America Annual Meeting: Ecological Science at the Frontier, celebrating the ESA Centennial, Baltimore, MD August 2015.

- Collins, S.M., S.K. Oliver, J.-F. Lapierre, E.H. Stanley, and P.A. Soranno. 2015. Macroscale patterns in lake N:P stoichiometry: Influence of landscape drivers at multiple scales. Conference on Biological Stoichiometry, Peterborough, Ontario. June 2015.
- *Lapierre, J.-F.*, K.S. Cheruvelil, *S.M. Collins, C.E. Fergus, C.T. Filstrup*, D. Seekell, **P.A. Soranno**. Climate and land-use gradients drive spatially coherent CO2 driver-response relationships across U.S. lakes. Oral Presentation to the 25th Joint Assembly of the AGC-AGU-AMC-UGC, Montreal, Quebec, CA. May 2015.
- Soranno, P.A., K.S. Cheruvelil, K. Elliott, and G. Montgomery. Exploratory Analysis and Big Data. Oral presentation to The Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE) Detroit. MI. March 2015.
- Elliott, K.E., I. Settles, G. Montgomery, **P.A. Soranno** and K.S. Cheruvelil. STEP (Science Teams' Effective Practices) Oral presentation to The Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE) Detroit, MI. March 2015.
- Lapierre, J.F., Z.E. Taranu, K.S. Cheruvelil, P. A. Soranno. LAGOS-Québec: Bâtir un réseau collaboratif pour l'étude de la qualité de l'eau des lacs [LAGOS-Quebec: Building a collaborative network for studying lake water quality]. Poster presentation at the 25th Annual GRIL Symposium Saint-Hippolyte, Québec. March 2015.
- **Soranno**, **P.A.** and K.S. Cheruvelil. Creating integrated geospatial-temporal databases for broad-scale limnology. Oral Presentation at the Global Lakes Ecological Observation Network All-Hands Meeting. Orford, Canada. October, 2014.
- Fergus, C.E., N. Skaff, S.K. Oliver, C.E. Scott, P.A. Soranno, K.S. Cheruvelil, K.E. Webster, M. Tate Bremigan. Freshwater connectivity (FW) of lakes, streams, and wetlands at macroscales. Poster Presentation at the Global Lakes Ecological Observation Network All-Hands Meeting. Orford, Canada. October, 2014.
- Scott, C.E, C.E. Fergus, N., Skaff, N.R. Lottig, C.T. Filstrup, T. Wagner, P.A. Soranno, K.S. Cheruvelil. The effects of climate change on lake water quality at macroscales. Oral presentation at the Joint Aquatic Sciences Meeting. Portland, OR. May 2014.
- Fergus, C.E., S.K. Oliver, N. Skaff, C.E. Scott, P.A. Soranno, K.S. Cheruvelil, K.E. Webster, M. Tate Bremigan. Measuring patterns of lake, stream, and wetland connectivity at macroscales. Oral presentation at the Joint Aquatic Sciences Meeting. Portland, OR. May 2014.
- Lottig, N.R., T. Wagner, P.-N. Tan, S. Yuan, C.E. Scott, C.A. Stow, **P.A. Soranno**, K.S. Cheruvelil, E.H. Stanley. Taxonomy of change: Using cluster analysis to identify temporal-patterns in limnological data. Oral presentation at the Joint Aquatic Sciences Meeting. Portland, OR. May 2014.
- Oliver, S.K., E.H. Stanley, K.S. Cheruvelil, J.A. Downing, C.E. Fergus, P.A. Soranno, T. Wagner, K.E. Webster, and L. Winslow. Prediction and patterns of lake depth across a 17-state region in the U.S. Oral presentation at the Joint Aquatic Sciences Meeting. Portland, OR. May 2014.
- Christel, S.T., P.A. Soranno, E.G. Bissell, K.S. Cheruvelil, 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. Tate Bremigan, J.A. Downing, C. Gries, E.N. Henry, N. Skaff, E.H. Stanley, C.A. Stow, P.N. Tan, T. Wagner, K.E. Webster. Lessons from LAGOS: The triumphs and challenges of creating an integrated multi-scaled, multi-themed lake nutrient geodatabase at subcontinental scales. Oral presentation at the Joint Aquatic Sciences Meeting. Portland, OR. May 2014.
- Cheruvelil K.S., **P.A. Soranno**, E. 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. Tan, T. Wagner and K.E. Webster. A conceptual framework for understanding multi-scaled cause-effect relationships between terrestrial and aquatic ecosystems. Oral presentation at the Symposium for European Freshwater Sciences, Munster, Germany. July 2013.
- Soranno, P.A., K.S. Cheruvelil, J.A. Downing, E.H. Stanley, N.R. Lottig, P.-N. Tan, T. Wagner, C.A. Stow, M.T. Bremigan, K.E. Webster, *C.T. Filstrup*, *E.N. Henry*, *C.E. Fergus*, E. Bissell. The effect of cross-scale interactions (CSIs) on freshwater ecosystem state across space and time. Poster presentation at the NSF-Macrosystems Biology PI Meeting, Washington, D.C. June 2013.
- Filstrup, C.T., T. Wagner, P.A. Soranno, E.H. Stanley, C.A. Stow, K.E. Webster, and J.A. Downing. 2013. Regional variability in non-linear chlorophyll response to total phosphorus enrichment in lakes. Oral presentation at the Association of Limnology and Oceanography Aquatic Sciences Meeting. New Orleans, LA. February 2013.
- Stanley, E.H., N.R. Lottig, **P.A. Soranno** and K.S. Cheruvelil. Long-term datasets: opportunities and challenges for lake science and management. Oral presentation at the Association of Limnology and Oceanography Aquatic Sciences Meeting. New Orleans, LA. February 2013.
- Ligmann-Zielinska, A., D.B. Kramer, K.S. Cheruvelil, **P.A. Soranno**. Sensitivity analysis in agent-based models of socioecological systems: an example in agricultural land conservation for lake water quality improvement. Oral presentation at the American Geophysical Union Annual 45th Annual Fall Meeting. San Francisco, CA. December 2012.

- Cheruvelil, K.S., D.B. Kramer, A. Ligmann-Zielinska, **P.A. Soranno**. Evaluating alternative strategies for investments in freshwater conservation. Oral presentation at the American Geophysical Union Annual 45th Annual Fall Meeting. San Francisco, CA. December 2012.
- Ligmann-Zielinska A., *Ling C.*, Kramer D.B., Cheruvelil K.S., **Soranno P.A.**, Bremigan M.T. How simple is too simple? Using Sensitivity Simulation for Factor Reduction in Agent-Based Modeling of Agricultural Land Conservation. RGS-IBG Annual International Conference, Edinburgh UK. 2012.
- Fergus, C.E., A.O. Finley, **P.A. Soranno**. Accounting for spatial dependence among lake water chemistry variables across geographic regions. Oral presentation at the Association for Limnology and Oceanography Aquatic Sciences Meeting. Lake Biwa, Otsu Japan. July 2012.
- Filstrup, C.T., P.A. Soranno, E.H. Stanley, C.A. Stow, T. Wagner, K.E. Webster, and J.A. Downing. Chlorophyll a response to total phosphorus enrichment in lakes differs by spatial scale and regions: implications for developing water quality criteria at the state level. Oral presentation at the North American Lake Management Society Annual Symposium. Madison, WI. November 2012.
- Stanley, E.H., **P.A. Soranno**, N.R. Lottig, S. Hampton. Long-term data sets: opportunities and challenges for lake science and management. Oral presentation at the North American Lake Management Society Annual Symposium. Madison, WI. November 2012.
- Fergus, C.E., P.A. Soranno, K.S. Cheruvelil, M.T. Bremigan. Incorporating regional landscape information in local lake management decisions. Oral presentation at the North American Lake Management Society Annual Symposium. Madison, WI. November 2012.
- *Zhang, T.*, **P.A. Soranno**, K.S. Cheruvelil, D.B. Kramer, A. Ligmann-Zielinska, M.T. Bremigan. 2011. The effect of upstream lakes and wetlands in modeling phosphorus concentrations in lakes. Oral Presentation at the 2011 US-International Association for Landscape Ecology Symposium. April 2011.
- **Soranno**, **P.A.**, *K.L. Droscha*, K.E. Webster, K.S. Cheruvelil, T. Wagner, M.T. Bremigan. 2011. The optimal spatial extent for quantifying catchment agriculture on lake nutrients using simple metrics. Oral Presentation at the 2011 US-International Association for Landscape Ecology Symposium. Portland, Oregon. April 2011.
- Fergus, C.E., P.A. Soranno, K.S. Cheruvelil, and M.T. Bremigan. 2011. The effects of land use disturbance at local and regional scales on wetland relationships with lake total phosphorus and water color. Oral Presentation at the 2011 US-International Association for Landscape Ecology Symposium. Portland, Oregon. April 2011.
- **Soranno**, **P.A**., K.S. Cheruvelil, M.T. Bremigan, K.E. Webster, *C.E. Fergus*. 2010. Landscape limnology: Defining the freshwater landscape. Oral presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society. Santa Fe, NM. June 2010.
- Cheruvelil, K.S., **P.A. Soranno**, M.T. Bremigan, K.E. Webster, T. Wagner, and C.A. Stow. 2010. Landscape: Integrating freshwater, terrestrial, and human landscapes for ecological understanding and natural resource management and conservation. Oral presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society. Santa Fe, NM. June 2010.
- Fergus, C.E., P.A. Soranno, K.S. Cheruvelil, and M.T. Bremigan. 2010. The effect of land use disturbance on wetland relationships with lake TP and water color. Oral presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society. Santa Fe, NM. June 2010. * Award: Outstanding Student Presentation.
- Bremigan, M.T., *B.M. Alger*, K.S. Cheruvelil, **P.A. Soranno**, and K.E. Webster. 2010. Quantifying the influence of terrestrial, freshwater, and human landscapes on fish assemblages in 360 north-temperate lakes. Oral presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society. Santa Fe, NM. June 2010.
- *Droscha, K.L.*, and **P.A. Soranno**. 2010. The effect of agricultural type and spatial pattern on lake nutrients. Poster presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society. Santa Fe, NM. June 2010.
- Wagner, T., K.S. Cheruvelil, **P.A. Soranno** and K.E. Webster. Modeling regional parameter variation in the total phosphorus-chlorophyll a relationship using a hierarchical Bayesian approach. Oral presentation at the North American Lake Management Society Annual Meeting. Hartford, CT. October 2009.
- Cheruvelil, K.S., **P.A. Soranno**, M.T. Bremigan, K.E. Webster, T. Wagner and C.A. Stow. 2009. Freshwater ecosystem classification for landscape-scale management. Oral presentation at the North American Benthological Society Meeting. Grand Rapids, MI. May 2009.
- Wagner, T., **P.A. Soranno**, M.T. Bremigan, K.S. Cheruvelil, K.E. Webster, and C.A. Stow. 2009. Freshwater ecosystem classification for landscape-scale management. Oral presentation at the 65th Northeastern Association of Fish and Wildlife Conference. Lancaster, PA. April 2009.

- Fergus, C.E., P.A. Soranno, P. Garrison and M.T. Bremigan. 2009. Wetland effects on lake phosphorus: does location matter? Oral presentation at the U.S. International Association for Landscape Ecology Annual Meeting. Snowbird, UT. April 2009.
- Martin, S.L., P.A. Soranno, M.T. Bremigan, and K.S. Cheruvelil. 2008. Lake classifications: comparison of approaches and implications for lake management. Fisheries Division, Michigan Department of Natural Resources, Annual Meeting of Research Section. Higgins Lake, MI. October 2008.
- **Soranno, P.A.**, K.S. Cheruvelil, K.E. Webster, M.T. Bremigan, and T. Wagner. 2008. Does landscape position determine the optimal spatial scale defining the effects of land use on lake nutrients? Oral presentation at the Ecological Society of America Annual Meeting. Milwaukee, WI. August 2008.
- Cheruvelil, K.S., **P.A. Soranno**, M.T. Bremigan, and K.E. Webster. 2008. Quantifying the role of geographic regionalizations for national lake classification and assessment. Oral presentation at the Ecological Society of America Annual Meeting. Milwaukee, WI. August 2008.
- Alger, B.M, M.T. Bremigan, K.S Cheruvelil, **P.A Soranno**, and K.E Webster. 2008. Hydrogeomorphic and anthropogenic disturbance gradients in lakes: How have fish assemblages been altered? Oral presentation at the Ecological Society of America Annual Meeting. Milwaukee, WI. August 2008.
- *Fergus, C.E.*, **P.A. Soranno**, P. Garrison, and M.T. Bremigan. 2008. The influence of wetland scale and connectivity on lake phosphorus. Poster presentation at the Ecological Society of America Annual Meeting, Milwaukee, WI. August 2008.
- Bremigan, M.T., K.S. Cheruvelil, **P.A. Soranno**, K.E. Webster, B. Alger, and T. Wagner. 2008. Landscape scale management for lakes: connecting lake landscapes to water chemistry and fishes. National conference sponsored by US EPA and North American Lake Management Society: Enhancing the States' Lake Management Programs Building Partnerships for Improved Fisheries and Lake Water Quality. Chicago, IL. April 2008.
- **Soranno, P.A.**, K.E. Webster, M.T. Bremigan, and K.S. Cheruvelil. 2007. A hydrogeomorphic lake landscape context paradigm to explain lake variation at multiple spatial scales. Oral presentation at the 30th Congress of the International Association of Theoretical and Applied Limnology. Montreal, CA. August 2007.
- Webster, K.E., **P.A. Soranno**, M.T. Bremigan, K.S. Cheruvelil, T. Asplund, L.C. Bacon, J. Connor, J.A. Downing, P.D. Vaux. 2007. Applying the nutrient-color trophic paradigm to 1646 north temperate lakes. Oral presentation at the 30th Congress of the International Association of Theoretical and Applied Limnology. Montreal, CA. August 2007.
- Martin, S.L., P.A. Soranno, K.S. Cheruvelil, M.T. Bremigan. 2007. A comparison of landscape-based lake classifications for understanding variation in lake water chemistry. Poster presentation at the MSU Graduate Student Organization Research Symposium. East Lansing, MI. February 2007. * <u>Award:</u> Best Student Poster.
- **Soranno**, **P.A.**, K.S. Cheruvelil, R.J. Stevenson, *S. Rollins*, S.W. Holden, S. Heaton, and E.K. Torng. 2006. Developing lake-specific nutrient criteria: integrating predictive modeling with biological response gradients. Oral presentation at the North American Lake Management Society Annual Meeting. Indianapolis, IN. November 2006.
- Bremigan, M.T., U. Beier, K. Holmgren, S. Pakkasmaa, K.S. Cheruvelil, **P.A. Soranno**, and T. Wagner. 2006. Quantifying lake landscape linkages: comparing landscape regionalizations for capturing water chemistry and fish assemblage variation among swedish lakes. Oral presentation at the American Society of Limnology and Oceanography Summer Aquatic Sciences Meeting 2006. Victoria, British Columbia, June 2006.
- Martin, S.L., P.A. Soranno, K.S. Cheruvelil and M.T. Bremigan. 2006. A comparison of landscape-based lake classifications for understanding variation in lake water chemistry and clarity. Oral presentation at the American Society of Limnology and Oceanography Summer Aquatic Sciences Meeting. Victoria, British Columbia, June 2006.
- Cheruvelil, K.S., **P.A. Soranno**, M.T. Bremigan, K.E. Webster. 2006. The roles of regionalization and spatial scale for national lake classification and assessment. Oral presentation at the American Society of Limnology and Oceanography Summer Aquatic Sciences Meeting. Victoria, British Columbia, June 2006.
- Webster, K.E., **P.A. Soranno**, M.T. Bremigan, K.S. Cheruvelil, T. Asplund, L.C. Bacon, K.P. Bell, J. Connor, J.A. Downing, W.H. Renwick, and P.D. Vaux. 2006. Landscape patterns in the trophic status of north-temperate lakes (USA): relationships with anthropogenic and hydrogeomorphic features. Oral presentation at the American Society of Limnology and Oceanography Summer Aquatic Sciences Meeting. Victoria, British Columbia, June 2006.
- Bremigan, M.T., K.S. Cheruvelil, **P.A. Soranno**, K.E. Webster, and *T. Wagner*. 2006. A Hydrogeomorphic Lake Classification System for Lake Assessment . Oral presentation at the EPA workshop for the National Lake Assessment Project. Chicago, IL. April 2006.
- Bremigan, M.T., **P.A. Soranno**, K.S. Cheruvelil, and *T. Wagner*. 2005. Can Hydrogeomorphic Features Predict Water Chemistry and Fish Growth in Michigan, US Lakes?: Implications for Lake Classification and Monitoring. Poster presentation at the Fifteenth annual workshop of the Nordic Freshwater Fish Group, Alvkarleby, Sweden. October 2005.

- **Soranno, P. A.**, Cheruvelil, K.S., Bremigan, M.T. 2005. Relationships between land use and lake productivity in upper Midwest lakes. Oral presentation to the North American Lake Management Society 25th Annual Meeting. Madison, WI. November 2005.
- Cheruvelil, K.S. **P.A. Soranno**, M.T. Bremigan, *T. Wagner* and *S.L. Martin*. 2005. Grouping lakes for water quality assessment and monitoring: The role of regionalization. Oral presentation at the North American Lake Management Society 25th Annual Meeting. Madison, WI. November 2005.
- Benson, B. J., O. P. Jensen, J. J. Magnuson, K. M. Stewart, V. Card, M.N. Futter, and **P.A. Soranno**. 2005. Spatial patterns of trends in ice breakup dates for lakes across the Great Lakes Region in recent years. Oral presentation at the Ecological Society of America Annual Summer Meeting. Montreal, Canada. August 2005.
- Cheruvelil, K. S., *T. Wagner*, **P.A. Soranno**, M.T. Bremigan, and J.E. Breck. 2005. Predicting lake physico-chemical variables from landscape features at multiple spatial scales. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT. February 2005.
- **Soranno, P. A.**, K.S. Cheruvelil, and M.T. Bremigan. 2005. Relationships between land use and lake nutrients in upper midwest lakes and the effect of landscape context. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT. February 2005.
- *Wagner, T.*, M.T. Bremigan, K. Spence Cheruvelil, **P.A. Soranno**, N.A. Nate, and J.E. Breck. 2005. Comparing multi-scale predictors of fish growth: towards a regional framework for lake management. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT. February 2005.
- *Martin, S. L.*, and **P.A. Soranno**. 2005. Lake landscape position: relationships to hydrologic connectivity and landscape features. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT. February 2005.
- *Wagner, T.* M.T. Bremigan, *K.S. Cheruvelil*, **P.A. Soranno**, N.A. Nate, and J.E. Breck. 2004. Comparing multi-scale predictors of fish growth: towards a regional framework for fish management. Oral presentation at the Midwest Fish and Wildlife Conference. Indianapolis, IN. December 2004.
- Bremigan, M.T., **P.A. Soranno**, *J.A. Chiotti*, M.J. Gonzalez, W.H. Renwick, R.A. Stein and M.J. Vanni . 2004. Do landscape and local basin properties mediate the effects of land use change on reservoir nutrient concentrations and foodweb dynamics? Oral presentation at the Ecological Society of America 89th Annual Meeting, Portland, OR, August 2004.
- Bremigan, M.T., **P.A. Soranno**, M.J. Gonzalez, W.H. Renwick, R.A, Stein and M.J. Vanni. 2004. Reservoir landscape features and land use: relations to water chemistry and gizzard shad population demographics. Oral presentation at the American Fisheries Society 134th Annual Meeting. Madison, WI. August 2004.
- Cheruvelil, K.S., T. Wagner, P.A. Soranno and M.T. Bremigan. 2004. Controls of lake water chemistry and clarity at local and regional spatial scales. Oral presentation at the Ecological Society of America 89th Annual Meeting, Portland, OR, August 2004.
- *Martin, S.L.* and **P.A. Soranno**. 2004. The role of hydrologic connectivity in measuring lake landscape position. Oral presentation at the Ecological Society of America 89th Annual Meeting. Portland, OR. August 2004.
- *Martin, S.L.* and **P.A. Soranno**. 2004. The role of hydrologic connectivity in measuring lake landscape position. Oral presentation at the Midwest Ecology and Evolution Conference. University of Notre Dame, Notre Dame, IN. March 2004.
- Nate, N., M.T. Bremigan, J. Breck and **P.A. Soranno**. 2004. Evaluation of a lake classification system for describing variation in fish growth in Michigan and Wisconsin lakes. Oral presentation at the American Fisheries Society 134th Annual Meeting. Madison, WI. August 2004.
- Webster, K.E., **P.A. Soranno**, K.L. Ness and R.J Bouchard. 2003. Lake littoral zones and shoreline development: scientific and social challenges to maintaining the ecological integrity of lakes. Oral presentation at the North American Lake Management Society Meeting, Mashantucket, CT. November 42003.
- Cheruvelil, K.S., N. Nate, P.A. Soranno and M.T. Bremigan. 2003. A field-test of the unimodal relationship between fish growth and macrophyte cover in lakes. Oral presentation at the Ecological Society of America Annual Meeting. Savannah, GA. August 2003.
- *Nelson*, *S.A.C*, *K.S. Cheruvelil*, **P.A. Soranno**. 2003. Remote sensing of freshwater macrophytes and the influence of lake characteristics. Oral presentation at the Society of Wetland Scientists 24th Annual Meeting. New Orleans, LA. June 2003.
- *Bruhn, L.*, **P.A. Soranno** and J. Bartholic. 2002. Water quality trends of Michigan inland lakes and their relationship to ecoregions:1974-2001. Oral presentation at the North American Lake Management Society Meeting, Anchorage, AK. October 30-November 2002.
- Nelson, S.A.C., P.A. Soranno, K.S. Cheruvelil, S.A. Batzli, D.L. Skole. 2002. Remote sensing of inland lake water clarity in Michigan lakes. Oral presentation at the Ecological Society of America. Tuscon, AZ. August 2002.

- **Soranno, P.A.**, M.T. Bremigan, K.S. Cheruvelil, S.A.C. Nelson and S.E. Walsh. 2002. Understanding the relationships between land-use and aquatic ecosystems. Land Use Poster Forum: Research, teaching and outreach programs in land use at Michigan State University. Michigan State University, East Lansing, MI. February 2002.
- **Soranno, P.A.**, M.T. Bremigan, K. S. Cheruvelil, S.M. Hanson, K.L. Rogers, R.D. Valley and J.D. Madsen. 2001. The role of macrophytes in mediating pelagic and littoral zone foodweb interactions: implications for shallow lake management. Oral paper presented at the North American Lake Management Society Annual Meeting, Madison, Wisconsin. November 2001.
- **Soranno**, **P.A.**, M.T. Bremigan, K.S. Cheruvelil, *S.M. Hanson*, *K.L. Rogers*, *R.D. Valley* and J.D. Madsen. 2001. The importance of macrophyte cover in lakes to littoral and pelagic foodwebs. Oral presentation at the Ecological Society of America, Madison, Wisconsin. August 2001.
- Nelson, S.A.C., P.A. Soranno, and J. Qi. 2001. Land cover change in the upper Barataria Basin Estuary, Louisiana from 1972-1992: Increases in wetland area. Oral presentation at the Ecological Society of America, Madison, Wisconsin. August 2001.
- *Rogers, K.L.* and **P.A. Soranno**. 2001. Differences between littoral and pelagic zooplankton communities and the role of macrophyte cover. Oral presentation at the Ecological Society of America, Madison, Wisconsin. August 2001.
- Bremigan, M.T., **P.A. Soranno**, K.S. Cheruvelil, *S.M. Hanson*, *K.L. Rogers*, *R.D. Valley*, and J.D. Madsen. 2001. Control of Eurasian watermilfoil using Sonar herbicide: effects on littoral and pelagic zone foodwebs. Oral presentation at the annual meeting of the Aquatic Plant Management Society, Minneapolis, Minnesota. July 2001.
- Nelson, S.A.C., P.A. Soranno, and J. Qi. 2001. Land cover change in the upper Barataria Basin Estuary, Louisiana from 1972-1992: Increases in wetland area. Oral presentation at the Society of Wetland Scientists, Chicago, Illinois. May 2001.
- Rogers, K.L. and **P.A. Soranno**. 2001. The influence of an invasive macrophyte (Myriophyllum spicatum L.) on zooplankton community structure. Oral presentation at the Michigan Academy of Science, Arts and Letters Annual Meeting. Dearborn, Michigan. March 2001.
- Walsh, S.E. and P.A. Soranno. 2000. Lakes, streams, and wetlands as drivers of riparian land use pattern and change. Oral presentation at the American Water Resources Association Annual Summer Specialty Conference: International Conference on Riparian Ecology and Management in Multi-Land Use Watersheds. Portland, Oregon. August 2000.
- Cheruvelil, K.S., P.A. Soranno and J.D. Madsen. 2000. Epiphytic macroinvertebrate abundance along a gradient of Eurasian water milfoil cover. Oral presentation at the Aquatic Plant Management Society 40th Annual Meeting and International Symposium on Invasive Weeds. San Diego, California. July 2000. * Award: Best Student Paper, 2nd place.
- *Cheruvelil, K.S.*, **P.A. Soranno**, J.D. Madsen, and M.J. Sanborn. 2000. The effects of Eurasian water milfoil invasion on interactions between plant architecture and epiphytic macroinvertebrates. Poster Presentation at the Fifth Annual Science to Achieve Results (STAR) Graduate Fellowship Conference. Washington, D.C. July 2000.
- Cheruvelil, K.S., P.A. Soranno, J.D. Madsen. 2000. Epiphytic macroinvertebrate abundance along a gradient of Eurasian watermilfoil cover. 2000. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting. Copenhagen, Denmark. June 2000.
- Walsh, S.E. and **P.A. Soranno**. 2000. Lakes, streams, and wetlands as drivers of riparian land use pattern and change. Oral presentation at the American Society of Limnology and Oceanography Aquatic Sciences Meeting. Copenhagen, Denmark. June 2000.
- Webster, K.E., P.A. Soranno, S.B. Baines, C.J. Bowser, T.K. Kratz, J.J. Magnuson, P.J. Dillon, P. Campbell, E.J. Fee and R.E. Hecky. 1999. Structuring features of lake districts in Wisconsin and Ontario: Geomorphic and landscape controls on lake responses to drought. Oral presentation at Ecological Society of America Workshop on: Formation of a North American Regional LTER Network: Cross-site research opportunities for Canada, Mexico and the U.S. Spokane, Washington. August 1999.
- *Cheruvelil*, *K.S.*, *R.D. Serbin* and **P.A. Soranno**. 1999. A new sampling method for the study of macroinvertebrates associated with submerged macrophytes in lakes. Oral presentation at the North American Benthological Society Meeting, Duluth, Minnesota. May 1999.
- **Soranno, P.A.**, K.E. Webster, J.S. Baron, J.L. Riera, R.C. Lathrop, D. White and T.K. Kratz. 1998. The role of landscape position in predicting the characteristics of lakes along a positional series. Oral presentation at the XXVII Congress of Societas Internationalis Limnologiae (SIL) of the International Association of Theoretical and Applied Limnology. Dublin, Ireland. August 1998.
- Webster, K.E., **P.A. Soranno**, T.K. Kratz, R.C. Lathrop, P.J. Dillon, P. Campbell, E.J. Fee and R.E. Hecky. 1998. Factors influencing the dynamics of highland lakes in contrasting hydrologic settings. Oral presentation at the XXVII Congress of Societas Internationalis Limnologiae (SIL) of the International Association of Theoretical and Applied Limnology. Dublin, Ireland. August 1998.

- Soranno, P.A., K.E. Webster, J.S. Baron, J.L. Riera, R.C. Lathrop, D. White, and T.K. Kratz. 1998. The role of landscape position in predicting the characteristics of lakes along a positional series. Oral presentation at the American Society of Limnology and Oceanography and Ecological Society of America The land-water interface: Science for a sustainable biosphere. St. Louis, Missouri. June 1998.
- Baines, S.B., K.E. Webster, **P.A. Soranno**, T.K. Kratz and S.R. Carpenter. 1997. Determinants of synchrony in lake water quality and physical structure across a landscape. Oral presentation at the Ecological Society of America Annual Meeting, Providence, Rhode Island. August 1997.
- **Soranno, P.A.,** T.K. Kratz, J.J. Magnuson. 1996. Regionalization of lake studies: Collaboration between Canadian and U.S. long-term sites. Poster presentation at the Ecological Monitoring and Assessment Network: 2nd National Science Meeting, Halifax, Canada. January 1996.
- **Soranno**, **P.A.** 1995. The timing of surface blooms and epilimnetic chlorophyll: Effects of nutrients, grazing and climate. Oral presentation at the American Society of Limnology and Oceanography, Reno, Nevada. June 1995.
- **Soranno, P.A.** and S.R. Carpenter. 1994. Response of Cyanobacteria to external phosphorus loading and entrainment of phosphorus from the hypolimnion in a deep stratified lake. Oral presentation at the International Association on Water Quality International Association of Theoretical and Applied Limnology special conference, Amsterdam, The Netherlands. December 1994.
- **Soranno**, **P.A.**, S.L. Hubler, S.R. Carpenter and R.C. Lathrop. 1993. The impacts of watershed characteristics on nutrient loading into Lake Mendota, WI. Oral presentation at the North American Lake Management International Symposium, Seattle, WA. November 29 December 1993. * Award: Best Student Paper.
- **Soranno**, **P.A.**, S.L. Hubler, S.R. Carpenter and R.C. Lathrop. 1993. The impact of land use, location and slope of the watershed on water quality in Lake Mendota, WI. Oral presentation at the Ecological Society of America Annual Meeting, Madison, Wisconsin, July 1993.
- **Soranno, P.A.**, T.B. Johnson, R.C. Lathrop, B.M. Johnson, J.F. Kitchell, and S.R. Carpenter. 1992. Lake Mendota biomanipulation project: Phase II 1990 1992. Poster presentation at the North American Lake Management International Symposium, Cincinnati, Ohio. November 1992.
- **Soranno**, **P.A.** and S.R. Carpenter. 1991. Response of zooplankton communities to whole-lake fish manipulations. Oral presentation at the American Society of Limnology and Oceanography, Halifax, Canada. June, 1991.
- **Soranno**, **P.A.**, S.R. Carpenter and M.M. Elser. 1989. Zooplankton community dynamics in manipulated lakes. Poster presentation at the Ecological Society of America Annual Meeting, Toronto, Canada. June, 1989.

Professional Service, Leadership, and Engagement

Editorial positions

Editor-in-Chief (founding), Limnology and Oceanography Letters. 2015-2019

PLOS Data Guidelines Board. 2015 - 2019

Editorial Board member, GigaScience, 2014-2015

Editorial Board member, Frontiers in Ecology and the Environment. 2014 – 2015.

Editorial Board member, Scientific Data (journal of the Nature Publishing Group). 2013 – 2015.

Guest Co-Editor, Special issue in Frontiers in Ecology and the Environment: Macrosystems Ecology. 2012 – 2013.

Editorial Board member, *Ecosystems*. 2009 – 2015.

Review-panel member and reviews

Panel member (multiple programs), NSF: 2018, 2017, 2011, 2010, 2009, 1997

Reviewer for peer-review journals: Aquatic Sciences, BioScience, Canadian Journal of Fisheries and Aquatic Sciences, Ecology, Ecological Applications, Ecosystems, Freshwater Biology, Freshwater Science, Global Ecology and Biogeography, Hydrobiologia, Hydrological Processes, Inland Waters, Journal of Geophysical Research, Journal of Natural Resources and Science Education, Landscape Ecology, Limnology and Oceanography, Limnology and Oceanography Methods, Oikos, Phycologia, Water Resources Research

Reviewer for granting agencies: National Science Foundation, Great Lakes Protection Fund, The Netherlands Organisation for Scientific Research (the Dutch research council), USDA Water Quality Grants, MSU Water Quality Grants, MSU Center for Water Sciences, Environmental Protection Agency

Disciplinary engagement

- Commentator (invited) for a symposium titled: *Opening up Open Science*. Philosophy of Science Association. Baltimore, MD. November 14, 2021.
- Panelist (invited; with Juan Corley, Kathy Cottingham, Nuria Catalan, Facundo Scordo). *GLEON2021: Career development workshop on publishing*. GLEON 2021 Annual Meeting, Virtual. September 29, 2021.
- Panelist (invited; E. Zipkin, A. Ellison, D. Lowenberg, P. Soranno). *Roundtable on open data in ecology*. Ecological Society of America Annual Meeting. August 4, 2021. [~30 participants]
- Workshop presenter (K.S. Cheruvelil and P.A. Soranno; additional authors: K.C. Elliott, I.H. Settles, G.M. Montgomery), Strategies for effective team authorship decisions: Power dynamics, authorship policies, and team climate. Michigan State University Graduate School. November 10, 2020. [~290 participants]
- Workshop presenter (K.S. Cheruvelil and P.A. Soranno; additional authors: K.C. Elliott, I.H. Settles, G.M. Montgomery), Strategies for effective team authorship decisions: Power dynamics, authorship policies, and team climate. University of Miami Graduate School, University of Miami, FL. January 30, 2020. [~35 participants]
- Panelist (invited; N. Haddad, J. Siegford, P. Soranno, and S. Swinton), *Team Science in Agriculture and Natural Resources* at the 2019 Science of Team Science (SciTS) Conference, Lansing, MI. May 20-23, 2019.
- Panelist (invited; G. Hubbs, K. Hall, A. Vogel, K.S. Cheruvelil, and P. Soranno), *Collaborative Scientific Writing:*Challenges and Strategies at the 2019 Science of Team Science (SciTS) Conference, Lansing, MI. May 20-23, 2019.
- Workshop presenter (K.C. Elliott, I. Settles, K.S. Cheruvelil, P.A. Soranno, G. Montgomery). *Navigating Team Power Dynamics in Authorship Decisions*, at the 2019 Science of Team Science (SciTS) Conference, Lansing, MI. May 20-23, 2019. [~30 participants]
- Advisory Board, 2019 Science of Team Science Conference. June 2018-May 2019.
- Panelist (invited), *Project Redefining Recognition*, at the Association for the Sciences of Limnology and Oceanography Aquatic Sciences Meeting, San Juan, Puerto Rico, February 27, 2019.
- Workshop presenter (K.C. Elliott, I. Settles, K.S. Cheruvelil, P.A. Soranno, G. Montgomery), *Authorship Decisions: Advocating for Representation*, at The American Association for the Advancement of Science, February 16, 2019. [~50 participants]
- Workshop participant (invited), *Global Network MSB RCN Team Science (Leadership/collaboration) Carpentry Workshop*. Cary Institute of Ecosystem Studies, Millbrook, NY, October 9-10, 2019.
- Workshop participant (invited), A New Paradigm in Lake and Reservoir Research and Management Through Global Monitoring, Monitoring, Modeling, and Engaging and Empowering People Networks, funded by the National Science Foundation. Alexandria, VA, Sept 7-8, 2018.
- Co-Convener of special session, *Innovative Continental-scale Ecological Research Enabled by NEON (National Ecological Observatory Network)*. Frank Davis, Peter Groffman, Patricia A. Soranno. Ecological Society of America Annual Meeting, New Orleans, LA. August 5-10, 2018.
- Panelist (invited) for a student workshop: *Publish me, please!* at the Association for the Sciences of Limnology and Oceanography, Victoria, BC. June 2018.
- Co-convener of special session, *Tipping the scales: Examining broad-scale patterns and processes in limnology*. I. McCullough, J.-F. Lapierre, K.S. King, K.S. Cheruvelil, and P.A. Soranno. At the Association for the Sciences of Limnology and Oceanography Summer Meeting, June 10-15, 2018.
- Co-led workshop (with R. Pinkus): *Author Workshop Manuscript Submission Tips*. At the Ocean Sciences Meeting, Portland, OR. February 2018.
- Co-convener of special session, *Creativity in Ecology: Where do good ideas come from?* P.C. Hanson, P.A. Soranno. At the 102nd Annual Meeting of the Ecological Society of America, August 8, 2017.
- Member, National Ecological Observatory Network (NEON) Technical Working Group on NEON Aquatic Sampling. June 2017 present.
- Co-convener of special session, Supporting Data-Intensive Freshwater and Marine Research: Integrating Informatics Infrastructure, Databases and Open Science. At the Association for the Sciences of Limnology and Oceanography All Sciences meeting, H. Glaves, J. Pearlman, D. Schaap, M. Follows, K.S. Cheruvelil, E.H. Stanley, A. White, and P.A. Soranno. Honolulu, HI. February 26- March 3, 2017.
- Faculty Mentor (invited) to the 2016 Eco-DAS symposium (Ecological Dissertations in the Aquatic Sciences). October 24-28, 2016.
- Working group participant (invited) at SESYNC (National Socio-Environmental Synthesis Center) on: *The Value of Lakes:* Evidence from Geotagged Social Media. Project leads: Bonnie Keeler and Spencer Wood. 2016-2018.
- Scientific Advisory Committee of the GRIL (Interuniversity Research Group in Limnology and Aquatic Environments). 2015 present.

- Workshop participant (invited), *Complex Data Integration Workshop*, American Institute of Biological Sciences, funded by the National Science Foundation, Washington DC, March 30-31, 2015.
- International collaborator for UK Natural Environment Research Council Highlight Topics Program Grant: *Hydroscape: Connectivity x stressor interaction in freshwater habitats.* Lead PI: N. Willby (University of Stirling. 2.9 million GBP (none to MSU). 2015-2019. https://hydroscapeblog.wordpress.com/about/
- Panelist and presenter (invited) at MSU Cyberinfrastructure Forum, Panel on: *Sharing is Caring: Challenges and Opportunities in Producing Open Data*. October 22, 2015. East Lansing, MI.
- Discussion leader (invited). Topic: Conceptual frameworks: Are thresholds and resilience useful frameworks for understanding catchment behavior? Gordon Research Conference: Catchment Science: Interactions of Hydrology, Biology and Geochemistry. Proctor Academy, Andover, NH. Jun 14-19, 2015.
- Chair, Ruth Patrick Award Subcommittee of the Awards and Citations Committee of the Association for the Sciences of Limnology and Oceanography, 2014-2015
- Member, Ruth Patrick Award Subcommittee of the Awards and Citations Committee of the Association for the Sciences of Limnology and Oceanography, 2012-2013.
- Member, Organizing Committee for NSF-sponsored meeting, NSF Macrosystems Biology Program all-PI meeting, Arlington, VA, June 6-7, 2012.
- Chair, Organizing Committee for NSF-sponsored meeting, NSF Macrosystems Biology Program all-PI meeting, Boulder, CO, March 11-14, 2012.
- Member of 'Landscape and water' committee, Michigan H2Objective Conference: Research Shaping Michigan's Water Future. Wayne State University. September 29-30, 2011.
- Session moderator, *Scale*. US-International Association for Landscape Ecology Annual Symposium, *Sustainability in Dynamic Landscapes*, Portland, OR, April 2011.
- Co-convener of special session, *Landscape limnology: Integrating lakes, streams and wetlands in the freshwater landscape*, P.A. Soranno, K.S. Cheruvelil and M.T. Bremigan. Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society, Santa Fe, June 2010.
- Scientific Committee Member, 2011 American Society of Limnology and Oceanography Annual Meeting, Puerto Rico, January 2010-2011.
- Member of the Ecological Society of America's Thomas Frost Award Selection Committee. 2008 2010.
- Co-convener of special session, *Lakes, Streams and Wetlands in the Landscape: Linkages among freshwater systems*, W.A. Wurtsbaugh, M. Schallenberg, J.J. Frenette, S. Larned, P.A. Soranno, and E.H. Stanley. 30th Congress of the International Association of Theoretical and Applied Limnology. Montreal, Canada. August 12-18, 2007.
- Co-convener of special session, Landscape limnology: Interactions among land, water, and humans at multiple spatial scales, K.E. Webster, K. Spence Cheruvelil, M.T. Bremigan and P.A. Soranno. American Society of Limnology and Oceanography annual meeting, British Columbia, June 2006.
- Co-Organizer of EPA-sponsored National Lake Assessment and Planning Workshop (30 attendees representing 6 states): *HydroGeomorphic Lake Classification Workshop*. Radisson Hotel, Lansing, MI. November 17-18, 2005.
- Session Moderator for *Aquatic Plant Ecology Session*. North American Lake Management Society Annual Conference. Madison, WI. November 6 9, 2001.
- Judge for Buell-Braun Student Award for Excellence in Ecology at the Ecological Society of America Annual Meeting. Madison, Wisconsin. August 6-10, 2001.
- Co-Investigator in the NASA-funded Upper Great Lakes Regional Earth Science Applications Center (RESAC), in cooperation with researchers at MSU, University of Wisconsin-Madison and University of Minnesota. 1999-2002.
- Member of the Planning Committee for the U.S. International Association of Landscape Ecology Conference (IALE) held at Michigan State University, East Lansing, MI. March 17-21, 1998.
- Co-organizer, with Dr. J. Liu and Dr. W. Taylor, for workshop on "Bridging the Gap between Landscape Ecology and Natural Resource Management", US-IALE Meeting, East Lansing, MI, March 17-21, 1998.
- Panel member for the NSF/EPA sponsored, Water and Watersheds Program, Washington D.C. May 1997.
- Co-organizer, with Dr. T. Kratz, workshop on *Ecological Variability and Organization of Lake Districts* (funded by NSF-Long-term Ecological Research Program). University of Wisconsin, Trout Lake Station, Boulder Junction, WI. Attended by 20 participants from North America and Europe. February 5-7, 1997.
- Attendee (invited) at the symposium on *Synthesis in Ecology: Applications, Opportunities, and Challenges* at the National Center for Ecological Analysis and Synthesis, Santa Barbara, California. November 17-20, 1996.

Service within the University

Member (invited). Advisory Board, Center for Interdisciplinarity, College of Arts and Letters, Michigan State University. 2017-present.

Member (elected). Search Committee, Department of Fisheries and Wildlife Department Chairperson. Spring 2017-present. Member (elected). Faculty Senate and University Council, Michigan State University. 2017 – 2020.

Chairperson. Committee on Diversity, Equity, and Inclusion, Department of Fisheries and Wildlife, MSU. Fall 2017 – present.

Co-led an effort to create a new departmental committee: Department Fisheries and Wildlife Inclusive and Excellence Committee, 2017.

Co-presenter to the Department of Fisheries and Wildlife Faculty Retreat, with K.C. Elliott, D. Infante, and K.S. Cheruvelil, *The value and need for a Fisheries and Wildlife Inclusion Committee*. August 17, 2017.

Panel member (invited). Environmental Science and Public Policy Colloquia: Understanding complex human-environment systems. January 12, 2017.

Member (invited). Search Committee for Senior Terrestrial Ecologist, MSU-Kellogg Biological Station and the College of Agriculture and Natural Resources,. Fall, 2016.

Member (invited). Search committee, Founding Director of the Center for Interdisciplinarity, MSU-College of Arts and Letters. Fall, 2016.

Member (elected). Promotion, & Tenure Review Committee, MSU-College of Agriculture and Natural Resources (CANR) Reappointment, 2014-2017.

Member (invited). Science and Society at State Advisory Board, an interdisciplinary program to foster interdisciplinary research between STEM and humanities faculty, 2014-present.

Member. CANR IT Services Advisory Group, 2013-2014

Panel member, Faculty panel on Research Enabling Technologies at MSU's Cyberinfrastructure Days Meeting. October 2013.

Chair. FW Department Ad-hoc committee to review the procedures for departmental Reappointment, Promotion and Tenure review. 2012-2013.

Chair (elected). FW Department Advisory Committee. 2012-2013.

Member (elected). FW Department Advisory Committee. 2011-2012.

Chair. FW Department Curriculum Committee. 2010-2011.

Member. CANR Restructuring Task Team. Helped to draft white paper on the creation of a new department in CANR with members from multiple departments. 2009 - 2010

Chair. FW Department Committee on Faculty Input & Peer Review for Faculty Appointments & Evaluation. 2008-2009

Member. FW Department Committee on Faculty Input & Peer Review for Faculty Appointments and Evaluation. 2007-2009.

Judge. FW Department Graduate Symposium. 2008, 2009.

Member. Faculty Search Committee for MSU Kellogg Biological Station and Department of Zoology - Aquatic Ecologist tenure-stream position. 2005

Member. MSU-Center for Water Sciences, Science Advisory Board. 2005 – 2010.

Member. Faculty Search Committee for Department of Plant Biology and Department of Fisheries and Wildlife - Wetlands Ecologist tenure-stream position. 2004

Member. FW Department Curriculum Committee. 2004 – 2005

Chair. FW Department Curriculum Committee. 2003 – 2004

Secretary, CANR College Teaching and Academic Policy Committee. 2003 – 2004

Member, CANR College Teaching and Academic Policy Committee, 2001 – 2002.

Member. FW Department Curriculum Committee. 1998-2000.

Member. College of Natural Sciences Russell and Laura Whalls Library Endowment Fund Committee. 1997-2002.

Outreach and Service within the Broader Community

Presentation to the 13th Annual Conference of the Michigan Clean Water Corps, "Using citizen science data for lake water quality research to inform policy". Tustin, MI. November 9, 2017.

Presentation to the MSU-Library Environmental Series for college librarians titled, "Taking the Macroscopic View of Lake Ecology: Studying 50,000 Lakes in the Midwestern and Northeastern US". Michigan State University, East Lansing. October 18, 2017.

Presentation to the *Great Lakes Science Boot Camp* for college librarians working with science researchers titled, "Taking the macroscopic view of lake ecology". Michigan State University, East Lansing. July 21, 2017.

Panelist, *Citizen science! How curious citizens contribute to research around the world.* Panel presentation at the MSU Science Festival along with panelists: Casey O'Donnell, Darren Bagley, Misty Klotz. April 18, 2015.

Provided expert opinion to EPA and Michigan DEQ on setting statewide Hg and PCB TMDL's for Michigan. July 2011. Provided technical review to EPA on of the procedures for the state of Missouri to develop nutrient criteria in their waterbodies to protect their designated uses. June 2011.

Developed the approach to quantify nutrient standards in lakes in the Fond du Lac and Grand Portage Reservations. Report submitted to: Fond du Lac Reservation Office of Water Protection and Grand Portage Reservation Water Quality Program. May 2011.

Provided expert opinion on Draft Report to Congress: Strengthening the scientific understanding of climate change impacts on freshwater resources of the US, March 2011.

Provided conceptual framework for planning document of the UK for the Water Framework Directive (analogous to the US Clean Water Act). (Rowan, J.S. 2010. *Developing a lake hydromorphology typology for the UK*. Project WFD104.

Provided conceptual framework for the Report from workshop (Deliverable D6.3-1) for the Swedish WISER group (Angeler, D. and R.K. Johnson. 2010. *Water bodies in Europe: Integrative Systems to Assess Ecological Status and Recovery*; http://www.wiser.eu/download/D6.3-1.pdf).

Appointed to the State of Michigan Legislature's Water Resources Conservation Advisory Council, and elected Chairperson of the 'Effects on inland lakes and wetlands' subcommittee. 2008 – 2010.

Helped the MI-Department of Environmental Quality identify reference lakes for Michigan as part of the EPA's Survey of the Nation's Lakes. 2007.

Member. Michigan Department of Environmental Quality Nutrient Criteria Taskgroup. 2005 – 2007.

Lead scientist for developing nutrient standards for MI lakes. 2005 - 2007.

Member. Science Advisory Board, Michigan Lakes and Stream Association. 2000-2004.

Teaching Experience

Undergraduate

Undergraduate Seminar in Fisheries and Wildlife (Co-taught with Dr. Amber Peters). Fall 2016-present.

Limnology (Undergraduate course using a flipped teaching design: 3 credits). Course taught in newly constructed REAL classroom (Rooms for Engaged and Active Learning). Spring 2013-present.

Limnology (Undergraduate lecture course: 3 credits). Spring 1999-present.

Aquatic Ecosystem Management (Undergraduate lecture course: 3 credits). Fall 2000-2006.

Applications of GIS in Natural Resource Management (Lecture and laboratory course; 3 credit hours). Course co-taught with Dr. Kelly Millenbah. Spring 1997.

Environmental Issues Seminar (Undergraduate seminar course: 1 credits). Spring 1999.

Limnological and Fisheries Techniques (Lab/field & lecture course; 3 credits). Co-taught with Dr. Thomas Coon. Fall 1996.

Graduate

Seminar: Philosophy of environmental science: Big data, values and interdisciplinarity. Spring 2016

Advanced Limnology (Graduate lecture course: 3 credits). Spring even years (2000 - 2010).

Seminar: Defining reference conditions in lakes, streams and wetlands: approaches and perspectives. Spring 2007.

Seminar: Freshwater Ecosystems as Integrators of the Landscape. Fall 1997.

Other instructional activities

Presenter (invited). Using the REAL Classroom at MSU: Faculty Perspectives at *Explorations in Instructional Technology Brown Bag Seminar*. September 27, 2013.

Participant (invited). The Future of Learning + Instructional Space Design Innovation workshop. September 18-19, 2013.

Panel member (invited). Workshop: Using Rooms for Engaged and Active Learning at MSU. March 15, 2013.

Workshop presenter (invited). *Making the case: an introduction to case-based learning in the sciences.* A workshop at: Teaching Essentials for MSU STEM Faculty. February 11, 2013.

Selected member, MSU-REAL Academy (Rooms for Engaged and Active Learning). Fall 2012.

Selected member, Faculty Writing Project, Michigan State University. May 1997.

Graduate and Post-Doctoral Advisees

Dr. Ian McCullough (Post-doc & Research Academic Specialist (starting 2021) 2017-present

Dr. Jemma Stachelek (Ph.D.) 2016-2020. Current position: Researcher, Earth System Observations, Los Alamos National Lab.

Dr. Sarah M. Collins (Post-doc) 2014-2017. Current position: Asst. Professor, University Wyoming, Laramie.

Dr. Caren Scott (Post-doc) 2013-2015. Current position: Staff Scientist, National Ecological Observatory Network

C. Emi Fergus (Ph.D.) 2010 – 2016. Current position: Post-doc, Western Ecol. Division, Environmental Protection Agency

Katie Droscha (M.S.) 2008 – 2011. Current position: Soil Conservationist, Nat. Rsce Conservation Service, Region 3, MI.

C. Emi Fergus (M.S.) 2007 – 2010. Current position: see above

Sherry L. Martin (M.S.) 2002 –2004. Current position: Postdoctoral researcher, Michigan State University

Kendra Spence Cheruvelil (Ph.D.) 2000 – 2004. Current position: Professor, Michigan State University

Stacy Nelson (Ph.D.) Fall 1997 –2002. Current position: Professor, North Carolina State University

Kendra Spence Cheruvelil (M.S.) 1997 –2000. See above

Sarah Walsh (Holden) (M.S.) 1997 -2000. Current position: Aquatic Biologist, Michigan Dept. of Environmental Quality

Professional Membership

American Association for the Advancement of Science

American Institute of Biological Sciences

Association for the Sciences of Limnology and Oceanography (lifetime member)

Association for Women in Science

Ecological Society of America

Global Lake Ecological Observatory Network

International Association for Landscape Ecology

International Network for the Science of Team Science

International Society of Limnology

Faculty member (Michigan State University) of: Ecology, Evolutionary and Behavioral Biology Graduate Program; Environmental Science and Policy Program

Media Engagement

CANR-MSU Press release. August 3, 2021. *MSU researchers catalog 480,000 lakes in the lower 48 states.* https://www.canr.msu.edu/news/msu-researchers-catalog-480-000-lakes-in-the-lower-48-states

Michigan State University. Press Release. October 4, 2019. *Does protecting land help freshwater species?* https://www.canr.msu.edu/news/does-protecting-land-help-freshwater-species

University of Michigan. Press Release, July 18, 2019. *Diversity on teams leads to positive outcomes, but not for all.* https://www.eurekalert.org/pub_releases/2019-07/uom-dot071819.php

Michigan State University. Press Release, July 15, 2019. *Feeling the burn: Wildfires increasingly threaten U.S. lakes.* https://www.canr.msu.edu/news/feeling-the-burn-wildfires-increasingly-threaten-us-lakes

Michigan State University. Press release, March 26, 2019. *MSU researchers named fellows of the Association for the Sciences of Limnology and Oceanography*. https://msutoday.msu.edu/news/2019/msu-researchers-named-fellows-of-the-association-for-the-sciences-of-limnology-and-oceanography/

CANR-MSU Press release, 11 January 2019. *New MSU research suggest not all lakes respond the same to climate change*. https://www.canr.msu.edu/news/new-msu-research-suggests-not-all-lakes-respond-the-same-to-climate-change

Interviewed along with K.S. Cheruvelil for the Bioscience Talks Podcast Series, *Big Data is synergized by team and open science*. September 12, 2018. http://bioscienceaibs.libsyn.com/the-big-data-and-team-open-science-synergy

Press release from the American Institute of Biological Sciences. *Big data is synergized by team and open science*. https://www.eurekalert.org/pub_releases/2018-09/aiob-bdi091118.php

MSU Press release 12 September 2018. *Big data scientists are more effective when they work together and share data.* http://www.canr.msu.edu/news/big-data-scientists-are-more-effective-when-they-work-together-and-share-data

MSU Press release, 27 October 2017. *A fresh look at freshwaters.* http://msutoday.msu.edu/news/2017/a-fresh-look-at-freshwaters/

NSF Press release, 19 October 2017. A fresh look at fresh water: Researchers create a 50,000-lake database. https://www.nsf.gov/news/news_summ.jsp?cntn_id=243391&org=NSF&from=news University of Wisconsin-Madison Press release, 23 August 2017. *Amid environmental change, lakes surprisingly static.* https://news.wisc.edu/amid-environmental-change-lakes-surprisingly-static/

Interviewed along with K. Elliott, K.S. Cheruvelil, and G. Montgomery for the Bioscience Talks Podcast Series, *Big Data and Good Science*. October 13, 2016. https://www.aibs.org/publications/news/latest-bioscience-talks-podcast.html

MSU Press release, 12 September 2016. *Harnessing big data to see the big picture in ecology*. http://msutoday.msu.edu/news/2016/harnessing-big-data-to-see-the-big-picture-in-ecology/

Interviewed for and featured on the On Biology Blog for the BioMed Central Open Access Publisher, *Reproducible research* and publish data-sharing in ecology: A Q+A with LAGOS creators. 1 July 2015 http://blogs.biomedcentral.com/on-biology/2015/07/01/reproducible-research-public-data-sharing-ecology-qa-lagos-creators/

Interviewed for Atlantic Monthly article, *Scientists have a sharing problem*, 15 December 2014. http://www.theatlantic.com/health/print/2014/12/scientists-have-a-sharing-problem/383061/

MSU press release, 22 October 2014. *Some scientists share better than others*. http://msutoday.msu.edu/news/2014/some-scientists-share-better-than-others/

MSU Website feature, 22 October 2014, *Research Team studying Environmental Science*. http://msutoday.msu.edu/360/2014/research-team-studying-environmental-science/

MSU press release, 16 September 2014, *Diversity could lead to ethical behaviors among scientists*. http://msutoday.msu.edu/news/2014/diversity-could-lead-to-ethical-behaviors-among-scientists/

Radio interview: *Current State*, with Mark Bashore, 13 February 2014 http://wkar.org/post/msu-ecologists-steer-adaptation-big-data

MSU press release, 5 February 2014. *New scientific field looks at the big picture*. http://msutoday.msu.edu/news/2014/new-scientific-field-looks-at-the-big-picture/

The press release was picked up by numerous media outlets.

MSU press release, 5 February 2014. *Research: it's more than just the science*. http://msutoday.msu.edu/news/2014/research-its-more-than-just-the-science/

NSF press release, 3 February 2014. *Data-intensive ecology needed to understand what makes the biosphere tick.* http://www.nsf.gov/news/news_summ.jsp?cntn id=130218&org=NSF&from=news

Video describing works, 3 February 2014. *Pioneering a new field: Macrosystems ecology*. http://www.youtube.com/watch?v=pPSOwz7c1dI

MSU press release, 23 August 2013. *Why should we be alarmed about water*? http://msutoday.msu.edu/news/2013/h2o-sos/ Article in *MSU AgBioResearch Futures Magazine on the MSU Global Water Initiative*: *Looking at the big water picture*. Spring/Summer 2012. http://agbioresearch.msu.edu/publications/futures/spring-summer-2012/safe-clean-water.pdf

Radio interview: *Greening of the Great Lakes Program*, with Kirk Heinze. 5 January 2012. http://www.mlive.com/environment/index.ssf/2012/02/patricia soranno studying how.html

Article in MSU Alumni Magazine, Around Circle Drive: Pioneering Water Systems Research. Fall 2011. http://www.onlinedigitalpubs.com/publication/index.php?i=84967&m=&l=&p=8&pre=&ver=flex

MSU press release, 9 August 2011. *MSU professor launches new field of water research*. http://news.msu.edu/story/9647/. Radio interview (along with K.S. Cheruvelil) on *Impact Exposure Program*, MSU Student radio 88.9 FM. 23 August 2011.

MSU Press release. *Research makes lake and stream conservation more effective*. https://www.agronomy.org/news-media/releases/2010/0512/360/. This publication was featured in the editorial in the same issue of the journal it was published, *Sustainability for Here and Now*, by T. M. Beardsley, Editor in Chief.

American Society of Agronomy Press release, 12 May 2010. *Building a better student discussion*.

https://www.agronomy.org/news-media/releases/2010/0512/360/. The publication was selected as a 'Research Highlight' on the ASA-CSSA-SSSA website.

Blog Posts

- P.A. Soranno, J.A. Downing, T.L. Curto. 2021. The Challenges, Risks, And Rewards of Launching a New Journal. Wiley Blog Society Leaders. May 17, 2021. https://www.wiley.com/network/societyleaders/publishing-strategy/the-challenges-risks-and-rewards-of-launching-a-new-journal
- A. Poisson and P.A. Soranno. Citizens in Action: MiCorps CLMP contributes to 50,000-lake database! Blog post written for the Michigan Clean Water Corps Blog. December 19, 2017. https://micorps.net/blog/micorps-lagos/
- P.A. Soranno. Why should societies embrace open access? An Editor's perspective. Blog post written for The Wiley Network Discover Blog. October 24, 2017.

 https://hub.wiley.com/community/exchanges/discover/blog/2017/10/23/why-should-societies-embrace-open-access-an-editor-s-perspective
- P.A. Soranno. Numerous posts for the LAGOS Visualization Blog. August 2017 present. https://lagoslakes.org/blog/