

College	Department	Faculty	Subject	Sustainability Publications
LSBE	ACCOUNTING AND FINANCE	Dr. Daniel Hsiao	Accounting	Journal Article (Revising to Resubmit) Hsiao, D. F., & Liao, Q. Effect of Carbon Emissions Disclosure on Analysts' Forecast Accuracy. Journal of Accounting and Public Policy. [Revising to Resubmit] Working Paper (Submitted) Hsiao, F.-J., & Liao, Q. Too dark to see: corporate environmental performance and analysts' forecast errors. Springer: Journal of Business Ethics.
CLA	AMERICAN INDIAN STUDIES	Dr. Linda Grover	American Indian Studies	Grover, L. L. (2017). Onigamiising: Seasons of an Ojibwe Year (pp. 201). Minneapolis MN: University of Minnesota Press.
CLA		Dr. Rebecca Webster	American Indian Studies	Webster, R. M. (2018). Food Reservations on the Reservation. In B. A. Fiedler (Ed.), Translating National Policy to Improve Environmental Conditions Impacting Public Health Through Community Planning. New York, New York: Springer
CLA	ANTHROPOLOGY/SOCIOLOGY/C RIMINOLOGY (includes Anthropology; Crimonology; Sociology; Women Gender Sexuality Studies; Bisexual Transgender & Queer Studies)	Dr. Elizabeth Bartlett	Anthropology	Bartlett, E. A. (2016). Making Waves: Grassroots Feminism in Duluth and Superior. (pp. 325). St. Paul, MN: Minnesota Historical Society Press.
CLA		Dr. Margaret Kamau	WGSS	Access to healthcare for low income African American women: Lived experiences and expectations. [Revising to Resubmit]
CLA		Dr. Kathryn Milun	Anthropology	Milun, K., & Kahn, A. Designing Diversity, Service, and Active Learning For the Common Good in an Undergraduate Computer Science Course. International Journal of Educational Research. [Submitted] Milun, K., & Grimley, M.* (2017). Solar Commons: Designing Community Trust Solar Ownership For Social Equity

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CEHSP	APPLIED HUMAN SCIENCES	Dr. Julie Ernst	Environmental Education	<p>Wojciehowski, M. *, & Ernst, J. (2018). Creative by nature: Investigating the impact of nature preschools on young children's creative thinking. <i>International Journal of Early Childhood Environmental Education</i>, 6(1), 3-20</p> <p>Ernst, J. A. (2018). Exploring Young Children's and Parents' Preferences for Outdoor Play Environments and Affinity toward Nature. <i>International Journal of Early Childhood Environmental Education</i>, 5(2), 30-45</p> <p>Hughes, A. *, Zak, K., Ernst, J. A., & Meyer, R. (2017). Exploring the intersections of beliefs toward outdoor play and cold weather among Northeast Minnesota's formal education and non-formal EE communities. <i>International Journal of Early Childhood Environmental Education</i>, 5(1), 20-38</p> <p>Ernst, J., Johnson, M. *, & Furcak, F. The nature and nature of resilience: Exploring the impact of nature preschools on young children's protective factors. <i>International Journal of Early Childhood Environmental Education</i>. [Accepted]</p> <p>Ernst, J. A. Zoos' and Aquariums' Impact and Influence on Connecting Families to Nature: An Evaluation of the Nature Play Begins at Your Zoo & Aquarium Program. <i>Visitor Studies</i>. [Accepted]</p> <p>Henry Preiner, K. *, & Ernst, J. A. Examining the effect of Hunter's Choice Alternative Ammunition project on Minnesota deer hunters' knowledge, attitudes, and behaviors regarding lead ammunition. <i>Applied Environmental Education and Communication</i>. [Submitted]</p> <p>Zamzow, J. *, & Ernst, J. Supporting school readiness naturally: Investigating executive function growth in nature preschools. <i>Environmental Education Research</i>. [Submitted]</p> <p>Ernst, J. A. (2019). Indigenous Arts and Sciences: Final evaluation report of outcomes from NSF Pathways Project Technical Report (Submitted)</p> <p>Ernst, J. (2018). Latino Earth Partnership-Community Action through Restoration Education: Final Report to the University of Wisconsin Madison and the Environmental Protection Agency</p>
CEHSP		Dr. Kenneth Gilbertson	Environmental Education	<p>Journal Article (Published) Uzun, N., Gilbertson, K. L., Keles, Ö., & Raitinen, I. (2019). Environmental Attitude Scale for Secondary School, High School and Undergraduate Students: Validity and Reliability Study. <i>Journal of Education in Science, Environment and Health</i>, 5(1), 79-90.</p> <p>Journal Article (Published) Varnaci Uzun, F. & Gilbertson, K. L. (2017). Tettegouche State Park Summer Visitors' Perceptions on Ecosystem Services of the Park and Management Practices They Support. <i>European Journal of Sustainable Development</i>, 6(2), 41-56.</p> <p>Journal Article (Published) Uzun, N., Gilbertson, K., & Özgül, K. (2017). Cognitive structures of university students about environmental education, climate change and consumption concepts. <i>Asia-Pacific Forum on Science Learning and Teaching</i>, 17(2), 18</p> <p>Peiry, G., & Gilbertson, K. Experience Expectations of Active Older Adult Users: How They Influence Outdoor Adventure Education Program Opportunities. <i>Journal of Adventure Education & Outdoor Learning</i>. [Submitted]</p> <p>Gilbertson, K. (2016). Ten-year survey on Gnesen Township resident's views on land management and their quality of life. Duluth, Minnesota: Gnesen Township.</p> <p>Book (In Preparation; Not Yet Submitted) Gilbertson, K. L., Bates, T., Siklander, P., & Ewert, A. <i>Outdoor Education: Methods & Strategies 2nd Ed.</i> (2nd ed., pp. 300). Champaign, IL</p> <p>Cephalopods between science, art, and engineering: a contemporary synthesis. <i>Frontiers in Communication</i>.</p>
SFA	ART & DESIGN (includes Art, Art Education, Art History, Graphic Design, Studio Art)	Ryuta Nakajima	Art	

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SFA		Matthew Olin	Design	In J. Hatcher & J. Moore (Eds.), <i>One River, Many Stories – Final Report</i> (pp. 36). Duluth, MN.
SFA		Dr. Jennifer Webb	Art History	Book Chapter (Working Paper) Duluth MN as case study: the History of "Place" & the Shaping of the City's Future. <i>Place/Performance/Identity</i> . Curated Exhibition (Published)
SFA		Dr. Jamie Ratliff	Art History	Ratliff, J. L., & Renne, S. (2017). <i>WTF! A Feminist Art Exhibit</i> . Duluth: Prøve Gallery and Studio 3 West.
SCSE	BIOLOGY	Dr. Valerie Brady	Biology	Journal Article (Published) Angradi, T. R., Bartsch, W. M., Trebitz, A. S., Brady, V. J., & Launsbach, J. J. (2017). A depth-adjusted ambient distribution approach for setting numeric removal targets for a Great Lakes Area of Concern beneficial use impairment: Degraded benthos. <i>JOURNAL OF GREAT LAKES RESEARCH</i> , 43(1), 108-120. Journal Article (Published) Uzarski, D. G., Brady, V. J., Cooper, M. J., Wilcox, D. A., Albert, D. A., Axler, R. P., . . . Schneider, J. P. (2017). Standardized Measures of Coastal Wetland Condition: Implementation at a Laurentian Great Lakes Basin-Wide Scale. <i>WETLANDS</i> , 37(1), 15-32. Journal Article (Published) Olker, J. H., Kovalenko, K. E., Ciborowski, Jan J. H., Brady, V. J., & Johnson, L. B. (2016). Watershed Land Use and Local Habitat: Implications for Habitat Assessment. <i>WETLANDS</i> , 36(2), 311-321
SCSE		Dr. Donn Branstator	Biology	Journal Article (Published) Pawłowski, M. B., D. K., & Hrabik, T. R. (2018). Major shift in the phenology of crustacean biomass in western Lake Superior associated with temperature anomaly. <i>Journal of Great Lakes Research</i> , 44, 788-797. Journal Article (Published) Pawłowski, M. B., Branstator, D. K., Hrabik, T. R., & Sterner, R. W. (2017). Changes in the cladoceran community of Lake Superior and the role of <i>Bythotrephes longimanus</i> . <i>Journal of Great Lakes Research</i> , 43, 1011-1110. Journal Article (Published) Kruger, B.R., Werne, J.P., Branstator, D.K., Hrabik, & T.R., Chikaraishi, Y., Ohkouchi, N., Minor, E.C. (2016). Organic matter transfer in Lake Superior's food web: Insights from bulk and molecular stable isotope and radiocarbon analyses. <i>Limnology and Oceanography</i> , 61(1), 149-164. Website (Published) Mellage, A., & Branstator, D. K. (2016). <i>Bythotrephes longimanus</i> (spiny water flea). <i>Invasive Species Compendium</i> (www.cabi.org).
SCSE		Dr. Timothy Craig	Biology	Journal Article (Published) Sakata, Y., Craig, T. P., Itami, J. K., Ikemoto, M., Utsumi, S., & Ohgushi, T. (2018). Evolutionary and environmental effects on the geographical adaptation of herbivory resistance in native and introduced <i>Solidago altissima</i> populations. <i>EVOLUTIONARY ECOLOGY</i> , 32(5), 547-559. Journal Article (Published) Sakata, Y., Craig, T. P., Itami, J. K., Yamasaki, M., & Ohgushi, T. (2017). Parallel environmental factors drive variation in insect density and plant resistance in the native and invaded ranges. <i>ECOLOGY</i> , 98(11), 2873-2884. Journal Article (Submitted) Sakata, Y., Craig, T. P., Itami, J. K., & Ohgushi, T. What environmental factors determine 1 geographic variation in the abundance of an 2 herbivore and plant resistance at home and away ? <i>The American Naturalist</i> . [Submitted]

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SCSE		Dr. Julie Etterson	Biology	<p>Journal Article (Published) Etterson, J. R., Cornett, M. W., White, M. A., & Kavajecz, L. C. (2018). Embedding research into restoration: A case study illustrating the value of applied-academic partnerships. <i>Tree Planters Notes - Reforestation, Nurseries & Genetic Resources</i>, 69(1), 89-101.</p> <p>Journal Article (Published) Ramirez-Vallente, J. A., Etterson, J. R., Deacon, N., & Cavender-Bares, J. (2018). Evolutionary potential varies across populations and traits in the neotropical oak <i>Quercus oleoides</i>. <i>Tree Physiology</i>.</p> <p>Journal Article (Published) Espeland, E. K., Emery, N. C., Mercer, K. L., Woolbright, S. A., Kettenring, K. M., Gepts, P., & Etterson, J. R. (2017). Evolution of plant materials for ecological restoration: insights from the applied and basic literature. <i>Journal of Applied Ecology</i>, 54(1), 2017.</p> <p>Journal Article (Published) Espeland, E., Emery, N., Mercer, K., Woolbright, S., Kettenring, K., Gepts, P., & Etterson, J. R. (2016). Evolution of plant materials for restoration: Insights from the applied and basic literature. <i>Journal of Applied Ecology</i>, 54(1), 102-115.</p> <p>Journal Article (Published) Etterson, J. R., Schneider, H. E., Gorden, N. L. S., & Weber, J. J. (2016). Evolutionary insights from studies of geographic variation: Contemporary variation and looking to the future. <i>American Journal of Botany</i>, 103(1), 5-9.</p> <p>Journal Article (Published) Soper Gorden, N. L., Winkler, K. J., Jahmke, M. R., Marshall, E., Horky, J., Hudelson, C., & Etterson, J. R. (2016). Geographic patterns of seed mass are associated with climate factors, but relationships vary between species. <i>American Journal of Botany</i>, 103(1), 60-72.</p> <p>Journal Article (Published) Etterson, J. R., & Mazer, S. J. (2016). How climate change affects plants' sex lives: Shifts in plant sex ratios help plant species to expand upslope in a warmer climate. <i>Science</i>, 353(6294), 32-33.</p> <p>Journal Article (Published) Etterson, J. R., Franks, S. J., Mazer, S. J., Shaw, R. G., Gorden, N. L. S., Schneider, H. E., . . . Weis, A. E. (2016). Project Baseline: An unprecedented resource to study plant evolution across space and time. <i>American Journal of Botany</i>, 103(1), 164-173.</p> <p>Book Chapter (Published) Etterson, J. R. (2016). In R. M. Kilman (Ed.), <i>Quantitative Genetics and Climate Change</i> (vol. 1, pp. 277-286). Oxford: Academic Press.</p>
SCSE		Dr. Briana Gross	Biology	<p>Journal Article (Published) Zlonis, K. J., & Gross, B. L. (2017). Genetic structure, diversity, and hybridization in populations of the rare arctic relict <i>Euphrasia hudsoniana</i> (Orobanchaceae) and its invasive congener <i>Euphrasia stricta</i>. <i>Conservation Genetics</i>, 19, 43-55</p>
SCSE		Dr. Randall Hicks	Biology	<p>Abstract (Published) Scherkenbach, W., Huang, S., Carlbom, A., & Hicks, R. E. Optimization of Bacterial Growth and Sulfate Reduction within Bioengineered Bioreactors in Northeast Minnesota.</p>
SCSE		Dr. Thomas Hrabik	Biology	<p>Journal Article (Published) Pawlowski, M. B., Branstrator, D. K., & Hrabik, T. R. (2018). Major shift in the phenology of crustacean biomass in Western Lake Superior associated with temperature anomaly. 44, 788-797.</p>

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SCSE		Dr. Joanne Itami	Biology	<p>Journal Article (Published) Sakata, Y., Craig, T. P., Itami, J. K., Ikemoto, M., Utsumi, S., & Ohgushi, T. (2018). Evolutionary and environmental effects on the geographical adaptation of herbivory resistance in native and introduced <i>Solidago altissima</i> populations. <i>Evolutionary Ecology/Springer Nature</i>, 32(5), 547-559.</p> <p>Journal Article (Published) Sakata, Y., Craig, T. P., Itami, J. K., Yamasaki, M., & Ohgushi, T. (2017). Parallel environmental factors drive variation in insect density and plant resistance in the native and invaded ranges. <i>Ecology</i>, 98(11), 2873 – 2884</p> <p>Journal Article (Published) Murchy, K. A., Cupp, A. R., Amberg, J. J., Vetter, B. J., Fredricks, K. T., Gaikowski, M. P., & Mensinger, A. F. (2017). Potential implications of acoustic stimuli as a non-physical barrier to silver carp and bighead carp. <i>FISHERIES MANAGEMENT AND ECOLOGY</i>, 24(3), 208-216.</p> <p>Journal Article (Published) Vetter, B. J., Murchy, K. A., Cupp, A. R., Amberg, J. J., Gaikowski, M. P., & Mensinger, A. F. Acoustic deterrence of bighead carp (<i>Hypophthalmichthys nobilis</i>) to a broadband sound stimulus. <i>Journal of Great Lakes Research</i>, 43.</p> <p>Journal Article (Accepted) Vetter, B. J., Casper, A. F., & Mensinger, A. F. Silver carp (<i>Hypophthalmichthys molitrix</i>) jumping in response to moving watercraft. <i>Management of Biological Invasions</i>. In press. <i>Management of Biological Invasions</i>. [Accepted]</p> <p>Journal Article (Revising to Resubmit) Nissen, A., Vetter, B. J., Rogers, L., & Mensinger, A. F. Impacts of broadband sound on silver (<i>Hypophthalmichthys molitrix</i>) and bighead (<i>H. nobilis</i>) carp hearing thresholds determined using auditory evoked potential audiometry. <i>Fish Physiology and Biochemistry</i>. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Vetter, B. J., & Mensinger, A. F. Broadband sound stimulates jumping in wild silver carp (<i>Hypophthalmichthys molitrix</i>). <i>Management of Biological Invasions</i>. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Murchy, K., Cupp, A., Amberg, J., Vetter, B., Fredricks, K., Gaikowski, M., & Mensinger, A. F. Potential implications of acoustic stimuli as a non-physical barrier to silver (<i>Hypophthalmichthys molitrix</i>) and bighead carp (<i>H. nobilis</i>). <i>Fisheries Management and Ecology</i>. [Revising to Resubmit]</p> <p>Technical Report (Published) Pultand, R., & Mensinger, A. F. Feasibility Study: using acoustic deterrents to prevent bigheaded Carp at Lock and Dam 5 (pp. 115). Duluth</p> <p>Journal Article (Published) Olson, B. T., Windels, S. K., Moen, R. A., & McCann, N. P. (2016). Moose modify bed sites in response to high temperatures. <i>Alces</i>, 52, 153-160.</p> <p>Journal Article (Accepted) Ditmer, M. A., Moen, R. A., Windels, S. K., Forester, J. D., Ness, T., & Harris, T. R. Influence of climate, landscape, and predators on the behavior of moose in the Voyageurs National Park ecosystem. <i>Current Zoology</i>. [Accepted]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Moen, R. A., Terwilliger, L., Dohmen, A. R., & Catton, S. C. Use of transportation corridors by Canada lynx. <i>Conservation Biology</i>. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (Published) Hampton, S., McGowan, S., Ozersky, T., & T. o. a. Recent ecological change in ancient lakes. <i>Limnology and Oceanography</i>, 63, 2277-2304</p> <p>Journal Article (Accepted) Bondarenko, N., Ozersky, T., Obolkina, L., Tikhonova, I., Sakirko, M., Potepov, S., . . . Belykh, O. Recent changes in the spring microplankton of Lake Baikal, Russia. <i>Limnologica</i>. [Accepted]</p>
SCSE		Dr. Ronald Moen	Biology	
SCSE		Dr. Tedy Ozersky	Biology	

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SCSE		Dr. Sheik	Biology	Journal Article (Published) Brown, E., Kaisev, S., Kelly, S., Ricketts, D., Schreiner, K., Sheik, C. S., . . . Sundberg, L. (2018). Eyes on Large Lakes. <i>Open Rivers: Rethinking Water, Place and Community</i> (10).
SCSE	CHEMICAL ENGINEERING	Dr. Richard Davis	Chemical Engineering	Journal Article (Submitted) Ozalp, N., Davis, R., Lindemer, M., Vinck, J., Zhang, Y., & Xie, G. A review of the state-of-the-art in direct carbon fuel cells per chemistry and thermodynamics. <i>Progress in Energy and Combustion Science</i> . [Submitted]
SCSE		Dr. Otavio Fortini	Chemical Engineering	Journal Article (Published) Myrmin, V., & Fortini, O. (2016). Utilization of sediments dredged from marine ports as a principal component of composite material. <i>Journal of Cleaner Production</i> .
				Journal Article (Published) Fortini, O. (2016). Energy and Raw Materials in the Selection of Technologies for Iron and Steel. <i>Metallurgical and Materials Transactions E</i> , 189 - 202.
				Journal Article (Accepted) Myrmin, V., & Fortini, O. Water cleaning sludge as principal component of composites to enhance mechanical properties of ecologically clean red ceramics. <i>Journal of Cleaner Production</i> . [Accepted]
SCSE		Dr. Guy Sander	Chemical Engineering	Technical Report (Published) Anderson, C. E.* & Sander, G. W. Report: <i>Ganoderma lucidum</i> enzymes for pretreatment of wastewater containing lignin and cellulose.
SCSE		Dr. Steven Sternberg	Chemical Engineering	Newspaper (Published) Sternberg, S. (2018). Health risks from Husky oil refinery fire. Duluth, MN: Reader. Interview (Published) Sternberg, S. (2018). UMD professor-offers-a-word-of-caution-to-those-in-the-path-of-the-smoke-plume-from-husky. Duluth, MN: KBJR 6. Broadcast Media (Published) Sternberg, S. (2018). <i>Air Pollution Expert's View: Wise to be concerned about aftereffects of refinery fire</i> . Duluth, MN: Duluth News Tribune. Book (Revising to Resubmit) Sternberg, S. P., & Walton, J. C. <i>Fate and Transport of Contaminants in the Environment</i> , 2nd Ed. Glen Allen, Virginia: Sternberg, S. P., & Walton, J. C.
SCSE		Dr. Sam Toan	Chemical Engineering	Journal Article (Published) Toan, S. (2018). An innovative way for making widely considered impossible low-cost CO2 capture possible – exemplified with monoethanolamine and methyl diethanolamine based CO2 separations. <i>Nature Communication</i> . Journal Article (Published) Toan, S. (2018). Green, Safe, Fast, and Inexpensive Removal of CO2 from Non-Carcinogenic Aqueous KHCO3 Solutions Using a TiO(OH)2 Catalyst: A Milestone Toward Truly Low-Cost CO2 Capture That Can Ease Implementing the Paris Climate Accord. <i>Nano Energy</i> , 53, 508-512. Journal Article (Published) Wu, F.* & Toan, S. (2018). TiO(OH)2 can exceed the critical limit of conventional CO2 sorbents: modification needed for high capacity and selectivity. <i>Royal Society of Chemistry</i> , 54, 8395-8398.

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SCSE		Dr. Zhihua Xu	Chemical Engineering	<p>Journal Article (Published) Xu, Z. (2017). An investigation into electric field-modulated photoluminescence of perovskite solar cells. <i>MRS Advances</i>, 2, 3099–3104.</p> <p>Journal Article (Published) Xu, Z., Edgeton, A. *, & Costello, S. * (2017). Spatially inhomogeneous photoluminescence-voltage hysteresis in planar heterojunction perovskite-based solar cells. <i>Applied Physics Letters</i>, 111(22), 223901.</p> <p>Journal Article (Published) Xu, Z., De Rosia, T. *, & Weeks, K. * (2017). The photoluminescence-voltage (PL-V) hysteresis of perovskite solar cells. <i>Journal of Physical Chemistry C</i>, 121, 24389-24396.</p> <p>Journal Article (Submitted) Xu, Z., De Rosia, T. *, & Weeks, K. * Photoluminescence hysteresis in organometal halide perovskite solar cells. <i>Journal of Physical Chemistry Letters</i>. [Submitted]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Xu, Z. Inhomogeneous electron injection at methylammonium lead iodide/titanium oxide interfaces. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (Published) Cooney, E. M. *, McKinney, P., Sterner, R., Small, G., & Minor, E. C. (2018). Tale of Two Storms: Impact of Extreme Rain Events on the Biogeochemistry of Lake Superior. <i>Journal of Geophysical Research: Biogeosciences/AGU</i>.</p> <p>Journal Article (Published) Kaushal, S. S., & e. a. (2018). Watershed 'chemical cocktails': forming novel elemental combinations in Anthropocene fresh waters. <i>Biogeochemistry/Springer International</i></p> <p>Journal Article (Published) Peters, C. A., Hendrickson, E. *, Minor, E. C., Schreiner, K., & Halbur, J. (2018). Pyr-GC/MS analysis of microplastics extracted from the stomach content of benthivore fish from the Texas Gulf Coast. <i>Marine Pollution Bulletin/Elsevier</i>, 137, 91-95.</p> <p>Journal Article (Published) Talbot, C. J., Bennett, E. M., Cassell, K., Hanes, D. M., Minor, E. C., Paerl, H., . . . Xenopoulos, M. A. (2018). The impact of flooding in aquatic ecosystem services. <i>Biogeochemistry</i>.</p> <p>Journal Article (Published) Hendrickson, E. *, Minor, E. C., & Schreiner, K. (2018). Microplastic Abundance and Composition in Western Lake Superior As Determined via Microscopy, Pyr-GC/MS, and FTIR. <i>Environmental Science and Technology</i>, 52(4), 1787–1796.</p> <p>Conference Proceeding (Published) Duckworth, R. C., Ellis, A., Hinderliter, B., Hill, E., & Maurer-Jones, M. A. (2018). Aqueous Degradation in Harvested Medium Voltage Cables in Nuclear Power Plants. <i>Proceedings of the 18th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors</i>. Springer, Cham. (Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors: Portland, OR)</p>
SCSE	CHEMISTRY AND BIOCHEMISTRY (includes biochemistry and chemistry)	Dr. Elizabeth Austin-Mir	Chemistry and Biochemistry	
SCSE		Dr. Melissa Maurer-Jon	Chemistry and Biochemistry	

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SCSE		Dr. Kathryn Schreiner	Chemistry and Biochemistry	<p>Journal Article (Published) Peters, C. A., Hendrickson, E., Minor, E. C., Schreiner, K. M., Halbur, J., & Bratton, S. P. (2018). Pyr-GC/MS analysis of microplastics extracted from the stomach content of benthivore fish from the Texas Gulf Coast. <i>Marine Pollution Bulletin</i>, 137, 91-95.</p> <p>Journal Article (Published) Hendrickson, E., Minor, E. C., & Schreiner, K. M. (2018). Microplastic abundance and composition in western Lake Superior as determined by microscopy, Pyr-GCMS, and FTIR. <i>Environmental Science and Technology</i>.</p> <p>Journal Article (Published) Hanna, A. J.M., Shanahan, T. M., Allison, M. A., Bianchi, T. S., & Schreiner, K. M. (2018). A multi-proxy investigation of Late Holocene temperature change and climate-driven fluctuations in sediment sourcing: Simpson Lagoon, Alaska, Holocene.</p> <p>Journal Article (Published) Sparrow, K. J., Kessler, J. D., Southon, J. R., Garcia-Tigeros, F., Schreiner, K. M., Leonte, M., . . . Xu, X. (2018). Limited contribution of ancient methane to surface waters of the U.S. Beaufort Sea shelf. <i>Science Advances</i>.</p> <p>Journal Article (Published) Zhang, X., Bianchi, T. S., Cui, X., Rosenheim, B., Ping, C.-L., Hanna, A. J.M., . . . Allison, M. A. (2017). Permafrost organic carbon mobilization from the watershed to the Colville River delta: Evidence from 14C ramped pyrolysis and lignin biomarkers. <i>Geophysical Research Letters</i>.</p> <p>Journal Article (Published) Schreiner, K. M., Kaisev, S., Steinman, B., Sterner, R., Williams, J., & Zak, K. (2017). Advancing Graduate Limnology Education Through Active Learning and Community Partnerships: A Pilot Program at the Large Lakes Observatory. <i>Limnology and Oceanography Bulletin</i>.</p> <p>Journal Article (Published) Yost, J. L., Hartemink, A. E., Schreiner, K. M., Palmer, C. E., & Egerton-Warburton, L. M. (2016). Limited stabilization of aggregate-bound soil organic carbon in restored urban grasslands. <i>Soil Science Society of America Journal</i>.</p> <p>Journal Article (Published) Bianchi, T. S., Schreiner, K. M., Smith, R. W., Burdige, D. J., Woodard, S., & Conley, D. J. (2016). Redox effects on organic matter storage in coastal sediments during the Holocene: A biomarker/proxy perspective. <i>Annual Reviews of Earth and Planetary Sciences</i>.</p> <p>Journal Article (Revising to Resubmit) Garcia-Tigeros, F., Schreiner, K. M., Sparrow, K., & Kessler, J. Assessing acidification from the remineralization of dissolved organic carbon and methane in the coastal Beaufort Sea, Alaska. <i>Journal of Geophysical Research - Biogeosciences</i>. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Van Allen, R., Schreiner, K., Carlin, J., & Guntenspergen, G. Effects of sea level rise and coastal marsh transgression on soil organic matter in a Chesapeake Bay salt marsh. <i>Limnology and Oceanography</i>. [Revising to Resubmit]</p>
SCSE	CIVIL ENGINEERING	Dr. Manik Barman	Civil Engineering	<p>Book (Published) (2018). In M. Barman, M. Zaman, & J.-R. Chang (Eds.), <i>Transportation and Geotechniques: Materials, Sustainability and Climate</i>. Springer.</p> <p>Technical Report (Accepted) Munch, J., Arepalli, U., & Barman, M. (2018). Cost/Benefit Analysis of the Effectiveness of Crack Sealing Techniques: Task 2 Report- Collection and Analysis of Crack Sealing Performance Data. St. Paul: Minnesota Department of Transportation. Accepted.</p>

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Mary Christiansen	Civil Engineering	<p>Journal Article (Published) Christiansen, M. U., Hoxie, A. B., Granley, M., & Slick, J. (2017). Shines!: University Engineering Students Advancing Duluth's Sustainable Development. <i>Sustainability: The Journal of Record</i>.</p> <p>Conference Proceeding (Published) Murr, A., Schlosser, C. A., & Christiansen, M. U. (2017). The Sustainable Sidewalks Initiative: Project-based Learning for Civil Engineering Students. <i>ASEE North Midwest Section Conference</i>. (ASEE North Midwest Section Conference, Minneapolis, MN)</p> <p>Conference Proceeding (Published) Hooton, R. D., Sutter, L. L., & Christiansen, M. U. Developing Specifications for Sustainable Concrete Binder Technologies. (Proceedings 1st International Conference on Grand Challenges in Construction Materials, Los Angeles, CA, 17-18 March 2016)</p> <p>Conference Proceeding (Published) Hoxie, A. B., & Christiansen, M. U. Project-Based Sustainability Courses Provide Practical Educational Experience for Students While Advancing Sustainability Within the Local Community. (Proceedings ASEE Annual Conference and Expo, New Orleans, LA, 27-29 June 2016)</p> <p>Brewer, A., & Christiansen, M. U. (2016). Collaborating to Reduce the Carbon Footprint of Concrete.</p> <p>Technical Report (Accepted) Christiansen, M. U. GHG Emission Reduction Methodology for the Sioneer Facility in Stockton, CA. California: CalRecycle. Accepted.</p> <p>Technical Report (Accepted) Sutter, L. L., Hooton, R. D., & Christiansen, M. U. Practitioner's Guide for Alternative Cements: Reported by ACI ITG-10. Farmington Hills, MI: American Concrete Institute. Accepted.</p> <p>Technical Report (Accepted) Sutter, L. L., Hooton, R. D., & Christiansen, M. U. Report on Alternative Cements: Reported by ACI ITG-10 (pp. 116). Farmington Hills, MI: American Concrete Institute. Accepted.</p> <p>Abstract (Working Paper) Christiansen, M. U., Hoxie, A. B., & Moore, J. Interdisciplinary teams of engineering and journalism students work to engage and educate community on sustainable issues through project-based learning.</p> <p>Journal Article (Published) Mathai, P. P., Dunn, H. M., Magnone, P., Zhang, O., Ishii, S., Chun, C. L., & Sadowsky, M. J. (2018). Association between submerged aquatic vegetation and elevated levels of <i>Escherichia coli</i> and potential bacterial pathogens in freshwater lakes. <i>Science of the Total Environment</i>, 657, 319–324.</p> <p>Journal Article (Published) Staley, C., Kaiser, T., Gidley, M. L., Enochs, I. C., Jones, P. R., Goodwin, K. D., . . . Chun, C. L. (2017). A next-generation sequencing approach to characterize the impacts of land-based sources of pollution on the microbiota of southeast florida coral reefs. <i>Applied and Environmental Microbiology</i>, AEM–03378.</p> <p>Journal Article (Published) Staley, C., Kaiser, T., Gidley, M. L., Enochs, I. C., Jones, P. R., Goodwin, K. D., . . . Chun, C. L. (2017). Differential impacts of land-based sources of pollution on the microbiota of southeast Florida coral reefs. <i>Applied and environmental microbiology</i>, 83(10), e03378–16.</p> <p>Technical Report (Published) Chun, C. L., & Sadowsky, M. J. (2016). A Metagenomic-Based Approach to Determine Microbial Pollution Sources in South Florida Coral Reefs.</p> <p>Technical Report (Accepted) Chun, C. L., Johnson, N. W., & Penn, R. L. Development of iron liberation methods for sustainable biological sulfate removal from mine water. <i>Natural Resources Research Institute</i>. Accepted.</p>
SCSE		Dr. Chan Lan Chun	Civil Engineering	

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Adrian Hanson	Civil Engineering	Journal Article (Published) Macias-Corral, M.*, Samani, Z., Hanson, A. T., Funk, P. (2017). Co-digestion of agricultural and municipal waste to produce energy and soil amendment. <i>Waste Management & Research</i> , 9(35), 991-996.
SCSE		Dr. Nathan Johnson	Civil Engineering	Journal Article (Published) Brennan, A. A., & Johnson, N. W. (2018). The utility of solid-phase microextraction in evaluating polycyclic aromatic hydrocarbon bioavailability during habitat restoration with dredged material at moderately contaminated sites. <i>Integrated environmental assessment and management</i> . Technical Report (Published) Johnson, N. W., Fraser, D. J., & Jeremiason, J. D. ``Mercury Bioavailability in the St. Louis River Estuary. MPCA Final Project Report. 6/30/2016
SCSE		Dr. Gustavo Merten	Civil Engineering	Journal Article (Published) Minella, J. P. G., Merten, G. H., Barros, C. A. P., Ramon, R., Schlesner, A., Clarke, R. T., . . . Dalbianco, L. (2018). Long-term sediment yield from a small catchment in southern Brazil affected by land use and soil management changes. <i>Hydrological Processes</i> , 32(2), 200-211. Journal Article (Published) Londero, A. L., Minella, J. P. G., Deuschle, D., Schneider, F. J. A., Boeni, M., & Merten, G. H. (2017). Impact of broad-based terraces on water and sediment losses in no-till (paired zero-order) catchments in southern Brazil. <i>Journal of Soils and Sediments</i> , 1-17.
SCSE		Dr. David Saffner	Civil Engineering	Book Chapter (Published) Camargo, F. A. O., Silva, L. S., Merten, G. H., Carlos, F. S., Baveye, P. C., & Triplett, E. W. (2017). Brazilian Agriculture in Perspective: Great Expectations vs Reality. <i>Advances in Agronomy</i> (vol. 141, pp. 53-114). Conference Proceeding (Submitted) Cruz, C., Cai, M., Johnson, K., Patelke, M., Saffner, D., & Teasley, R. Use and Monitoring of Alternative Media in Stormwater Biofiltration Systems. ASCE. (EWRI 2018, Minneapolis, MN) Technical Report (Published) Johnson, K., Cai, M., Patelke, M., Saffner, D., & Swanson, J. (2017). Comparing Properties of Water Absorbing/Filtering Media for Bioslope/Bioswale Design (Report No. MN/RC 2017-46). Minnesota Department of Transportation.

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Rebecca Teasley	Civil Engineering	<p>Journal Article (Revising to Resubmit) Sandoval-Solis, S., Ortiz-Partida, J. P. *, McKinney, D. C., Schmidt, J. C., Blythe, T., Lane, B., . . . Nava-Jiminez, L. History of Water Use, Management, Policies, and Agreements in the Transboundary Rio Grande-Bravo Basin. ASCE Journal of Water Resources Planning and Management. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Carlos, G. *, Sandoval-Solis, S., Cook, M. *, Teasley, R. L., McKinney, D. C., & Webber, M. Water and Energy MexUS: Effects of Mexico's Energy Reform and increased Natural Gas Production and Consumption on Water Availability in the Rio Grande. Water. [Revising to Resubmit]</p> <p>Journal Article (Submitted) Galdeano, C. *, Sandoval-Solis, S., Cook, M., Teasley, R., McKinney, D., & Webber, M. Water and Energy MexUS: Effects of Mexico's Energy Reform and Increased Natural Gas Production and Consumption on Water Availability in the Rio Grande/Bravo Basin. Journal of Water Resources Planning and Management. [Submitted]</p> <p>Teasley, R. L., Eckman, K., Kowalczyk, C., Newman, D., Smith, H. *, Glurag, T. * Examining Community Resilience in Extreme Climatic Conditions. (*2016 Minnesota Water Resources Conference, St. Paul, Minnesota. October 19-20, 2016.)</p> <p>Conference Proceeding (Published) Galdeano, C. *, Sandoval-Solis, S., Cook, M. *, Teasley, R. L., & Webber, M. Water and Energy Nexus: Case Study of Potential Water Availability Effects of Mexico's Energy Reform in the Rio Grande/Bravo Basin. (*AWARA Spring Specialty Conference: Water-Energy-Environment, 25-27 April 2016.)</p> <p>Conference Proceeding (Published) Galdeano, C. *, Sandoval-Solis, S., Cook, M. *, Teasley, R. L., & Webber, M. Water and Energy Nexus: Case Study of the Rio Grande/Bravo Basin.. (ASCE EWRI World Environmental and Water Resources Congress, West Palm Beach, FL, May 2016)</p>

College	Department	Faculty	Subject	Sustainability Publications
CLA	COMMUNICATION (includes communication and Journalism) CLA	Dr. Joshua Barnett	Communication	<p>Journal Article (Published) Cozen, B., Endres, D., Peterson, T. R., Horton, C., & Barnett, J. T. (2018). Energy Communication: Theory and Praxis Toward a Sustainable Energy Future. <i>Environmental Communication</i>, 12(3), 289-294.</p> <p>Journal Article (Published) Barnett, J. T. (2018). On Dying Ecologically in the Anthropocene. <i>The Ecological Citizen</i>, 2(2), 23-29.</p> <p>Journal Article (Published) Barnett, J. T. (2018). The Ecological Awareness of an Anthropocene Philosopher. <i>Environmental Communication</i>, 12(7), 989-993.</p> <p>Journal Article (Published) Barnett, J. T. (2018). Thinking Ecologically with Judith Butler. <i>Culture, Theory, and Critique</i>, 59(1), 20-39.</p> <p>Journal Article (Published) Barnett, J. T. (2018). Politics of Edibility: Reconceptualizing Ecological Relationality. <i>Environmental Communication</i>, 12(2), 218-231.</p> <p>Journal Article (Published) Barnett, J. T. (2018). On Dying Ecologically in the Anthropocene. <i>The Ecological Citizen</i>, 2(2), 23-29.</p> <p>Journal Article (Published) Cozen, B., Endres, D., Peterson, T. R., Horton, C., & Barnett, J. T. Energy Communication: Theory and Praxis Towards a Sustainable Energy Future. <i>Environmental Communication</i>, 7 pages.</p> <p>Journal Article (Published) Barnett, J. T. (2017). Impurities: Thinking Ecologically with Safe. <i>Communication, Culture, and Critique</i>, 10(2), 203-220.</p> <p>Journal Article (Published) Endres, D., Cozen, B., Barnett, J. T., O'Byrne, M., & Peterson, T. R. (2016). Communicating Energy in a Climate (of) Crisis. <i>Communication Yearbook</i>, 40, 419-447.</p> <p>Journal Article (Accepted) Barnett, J. T. Naming, Mourning, and the Work of Earthly Coexistence. <i>Environmental Communication</i>, 32 pages. [Accepted]</p> <p>Journal Article (Accepted) Barnett, J. T. Dying to Be Response-Able: Embodiment, Mortality, Ecology. <i>Environmental Humanities</i>, 30 pages. [Accepted]</p> <p>Journal Article (Revising to Resubmit) Barnett, J. T. Getting in the Mood to Think Ecologically with A Sand County Almanac. ISLE: Interdisciplinary Studies in Literature and the Environment. [Revising to Resubmit]</p> <p>Journal Article (Submitted) Barnett, J. T., & Gore, D. C. Dwelling in the Anthropocene: Notes from Lake Superior. <i>Ethics and the Environment</i>. [Submitted]</p>
CLA		Dr. Aaron Boyson	Communication	<p>Newspaper (Published) Boyson, A. R. (2016). Snow Covers Up Ecological Dilemma. Duluth: Duluth News Tribune</p> <p>Monograph (Revising to Resubmit) Boyson, A. R. Fathoming the Abyss. California: Explorations in Media Ecology/Media Ecology Association.</p>
CLA		Dr. John Hatcher	Journalism	<p>Technical Report (Published) Hatcher, J. A., & Moore, J. E. (2017). One River, Many Stories: Final Report (pp. 36).</p>

College	Department	Faculty	Subject	Sustainability Publications
CLA		Dr. Jennifer Moore	Journalism	Technical Report (Published) Hatcher, J. A., & Moore, J. E. One River, Many Stories: Final Report.. Duluth, Minnesota. Book Chapter (In Preparation; Not Yet Submitted) Moore, J. E. Mark Twain and Nineteenth-Century Adventure Journalism. From The Arctic to the Orient: Nineteenth-Century Adventure Journalism.
SCSE	COMPUTER SCIENCE	Dr. Haiyang Wang	Computer Science	Zhao, J., Liu, J., Wang, H., & Xu, C. (2016). Multipath TCP for Datacenters: From Energy Efficiency Perspective. IEEE International Conference on Computer Communications (INFOCOM). Accepted.
SCSE		Dr. Peter Willemssen	Computer Science	Abstract (Published) Renault, M. A., Pardyjak, E., Stoll, R., Bozorgmehr, B., Willemssen, P., Gibbs, J., & Patterson, Z. * (2018). Fast-response, high-resolution wind modeling over complex terrain. Abstract (Published) Krueger, S., Bailey, B., Jenkins, M. A., Kochanski, A., Mallia, D. V., Mandel, J., . . . Willemssen, P. (2018). A fast-response wildfire fire modeling framework for prediction and risk assessment
SCSE	EARTH & ENVIRONMENTAL SCIENCE (includes geology and environmental science)	Dr. Erik Brown	Geology	Journal Article (Published) Lozano-Garcia, S., Brown, E. T., Ortega, B., Caballero, M., Werne, J., Fawcett, P. J., . . . others (2017). Deep drilling at the Chalco lake: a technical report. BOLETIN DE LA SOCIEDAD GEOLOGICA MEXICANA, 69(2), 299–311. Journal Article (Published) Contreras, S., Werne, J. P., Brown, E. T., Anderson, R. S., & Fawcett, P. J. (2016). A molecular isotope record of climate variability and vegetation response in southwestern North America during mid-Pleistocene glacial/interglacial cycles. Palaeogeography, Palaeoclimatology, Palaeoecology, 459, 338–347.
SCSE		Dr. Salli Dymond	Earth & Environmental Science	Journal Article (Published) McDonnell, J., Evaristo, J., Bladon, K., Buttle, J., Creed, I., Dymond, S., . . . Tague, C. (2018). Forest Water Sustainability. Nature Sustainability.
SCSE		Dr. John Goodge	Geology	Journal Article (Published) Saksa, P., Safeeq, M., & Dymond, S. F. (2017). Recent Patterns in Climate, Vegetation, and Forest Water Use in California Montane Watersheds. Forests, 8(278), 16. Journal Article (Published) Goodge, J. (2018). Crustal heat production and estimate of terrestrial heat flow in central East Antarctica, with implications for thermal input to the East Antarctic ice sheet. The Cryosphere (Research Article), 12, 491–504. Journal Article (Published) Goodge, J. Crustal heat production and estimate of terrestrial heat flow in central East Antarctica, with implications for thermal input to the East Antarctic ice sheet. The Cryosphere (Discussion Paper). Conference Proceeding (Published) Nielsen, D., Delahunty, C., Goodge, J., & Severinghaus, J. (2016). Rapid Access Ice Drill (RAID) for sampling of Antarctic bedrock. Arctic Technology Conference. St. Johns, Newfoundland, Canada

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Karen Gran	Geology	<p>Cho, S. J.*, Wilcock, P., Hobbs, B., Belmont, P., & Gran, K. (2019). Simulation model for collaborative decision-making on sediment source reduction in an intensively managed watershed. <i>Water Resources Research</i>.</p> <p>Journal Article (Published)</p> <p>Jasperson, J.*, Gran, K. B., & Magner, J. (2018). Seasonal and flood-induced variations in groundwater-surface water exchange in a northern coldwater fishery. <i>Journal of the American Water Resources Association</i>, 54(5), 1109-1126.</p> <p>Journal Article (Published)</p> <p>Mitchell, N.*, Kumarasamy, K., Cho, S. J.*, Belmont, P., Dalzell, B., & Gran, K. Achieving peak flow and sediment loading reductions through increased water storage in an agricultural watershed of the Upper Midwest. <i>Water</i>, 10(8), 1053</p> <p>Journal Article (Published)</p> <p>Foufoula-Georgiou, E., Belmont, P., Wilcock, P. R., Gran, K. B., Finlay, J., Kumar, P., . . . Takkiri, Z.* (2016). Comment on "Climate and agricultural land use change impacts on streamflow in the upper midwestern United States" by Satish C. Gupta et al. <i>Water Resources Research</i>, 52, 7536-7539.</p> <p>Journal Article (Online Publication Ahead of Print)</p> <p>Gran, K., Dolph, C., Baker, A.*, Bevis, M.*, Cho, S. J.*, Czuba, J.*, . . . Foufloula-Georgiou, E. (2019). The power of environmental observatories for advancing multidisciplinary research, outreach, and decision support: the case of the Minnesota River Basin. <i>Water Resources Research</i>. [Online Publication Ahead of Print]</p> <p>Abstract (Published)</p> <p>Gran, K. B., Cho, S. J., Wilcock, P., Hobbs, B., & Belmont, P. (2019). Working to achieve a consensus strategy for sediment reduction in the Minnesota River basin: Incorporating stakeholders into the modeling process. <i>Society for Freshwater Science</i> annual meeting.</p> <p>Magazine/Trade Publication (Published)</p> <p>Burgeson, E.*, & Gran, K. (2019). The beaver debate: Impacts of beaver dams on North Shore hydrology. <i>Lake Superior Angler: The magazine of the Lake Superior Steelhead Association</i>. Lake Superior Steelhead Association</p> <p>Abstract (Published)</p> <p>Fitzpatrick, F., & Gran, K. (2018). Interaction of post-glacial landforms and historical human alterations on behavior, response, and evolution of fluvial systems in the Great Lakes and Upper Mississippi River basins. <i>Geological Society of America</i> national meeting, Indianapolis, IN.</p> <p>Abstract (Published)</p> <p>Baker, A.*, Gran, K. B., Finlay, J., Karwan, D., Engstrom, D., Atkins, W.*, . . . Belo, T.* (2018). The role of sediment in driving Phosphorus loading and dynamics in the highly altered agricultural Le Sueur River basin. North-central section <i>Geological Society of America</i> meeting, Ames, IA.</p> <p>Abstract (Published)</p> <p>Wilcock, P. R., Cho, S. J., Gran, K. B., Belmont, P., Hobbs, B. F., Heitkamp, B., & Marr, J. (2017). Mud, Models, and managers: Reaching a consensus on a watershed strategy for sediment load reduction. <i>AGU National meeting: December 15, 2017, New Orleans, LA</i>.</p> <p>Abstract (Published)</p> <p>Baker, A. C.*, Finlay, J. C., Karwan, D., Belo, T.*, Atkins, W.*, Gran, K. B., & Engstrom, D. R. (2017). Sediment-phosphorus interactions and their implications for watershed management in agricultural landscapes. October 17, 2017. <i>Minnesota's Water Resources Conference: St. Paul, MN</i>.</p> <p>Abstract (Published)</p> <p>Gran, K. B., Treat, I.*, & Targos, C.* (2017). What's missing? What's left behind? How human alterations to land use and drainage are recorded in different fluvial environments in an incising agricultural landscape of the Upper Midwest, USA. October 23, 2017. <i>Geological Society of America</i> national meeting, Seattle, WA.</p> <p>Abstract (Published)</p> <p>Treat, I.*, Gran, K. B., & Cavallin, A.* (2017). Fly ash in ravine alluvium: mapping the Holocene-Anthropocene divide in the LSRB. North-central region GSA meeting, Pittsburgh, PA.</p> <p>Abstract (Published)</p> <p>Scott, L.*, Gran, K., & Johnson, L. (2017). Groundwater-surface Water Exchange Dynamics Following a Channel Reconfiguration Project: Stewart River, MN. <i>Upper Midwest Stream Restoration Symposium, La Crosse, WI</i>.</p>

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Howard Mooers	Geology	<p>Journal Article (Submitted) Mooers, H. D., & Massman, W. J. (2017). Gravestone decay and the determination of deciduous bulk canopy resistance to acid deposition. <i>Science of The Total Environment</i>, 578, 551-556. [Submitted]</p> <p>Journal Article (Submitted) Mooers, H., Carlson, M. *, Harrison, R., Inkpen, R., & Loeffler, S.* (2017). Correlation of gravestone decay and air quality 1960–2010. <i>Atmospheric Environment</i>, 152, 156–171. [Submitted]</p>

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr Byron Steinman	Earth & Environmental Science	<p>Journal Article (Published) Mann, M. E., Rahmstorf, S., Kornhuber, K., Steinman, B. A., Miller, S. K., & Coumou, D. (2017). Influence of Anthropogenic Climate Change on Planetary Wave Resonance and Extreme Weather Events. <i>Scientific Reports / Nature</i>, 7, 45242.</p> <p>Journal Article (Published) Bird, B. W., Wilson, J. J., Gilhooly, III, W. P., Steinman, B. A., & Stamps, L. (2017). Midcontinental Native American population dynamics and late Holocene hydroclimate extremes. <i>Scientific Reports / Nature</i>, 7, 41628.</p> <p>Journal Article (Published) Mann, M. E., Miller, S. K., Rahmstorf, S., Steinman, B. A., & Tingley, M. (2017). Record Temperature Streak Bears Anthropogenic Fingerprint. <i>Geophysical Research Letters</i>, 44, 7936–7944.</p> <p>Journal Article (Published) Johnson, T. C., Werne, J. P., Brown, E. T., Abbott, A., Berke, M., Steinman, B. A., . . . others (2016). A progressively wetter climate in southern East Africa over the past 1.3 million years. <i>Nature</i>, 537(7619), 220–224.</p> <p>Journal Article (Published) Finkenbinder, M. S., Abbott, M. B., & Steinman, B. A. (2016). Holocene climate change in Newfoundland reconstructed using oxygen isotope analysis of lake sediment cores. <i>Global and Planetary Change</i>, 143, 251–261.</p> <p>Journal Article (Published) Anderson, L., Berkelhammer, M., Barron, J. A., Steinman, B. A., Finney, B. P., & Abbott, M. B. (2016). Lake oxygen isotopes as recorders of North American Rocky Mountain hydroclimate: Holocene patterns and variability at multi-decadal to millennial time scales. <i>Global and Planetary Change</i>, 137, 131–148.</p> <p>Journal Article (Published) Mann, M. E., Steinman, B. A., Miller, S. K., Frankcombe, L. M., England, M. H., & Cheung, A. H. (2016). Predictability of the recent slowdown and subsequent recovery of large-scale surface warming using statistical methods. <i>Geophysical Research Letters</i>, 43(7), 3459–3467.</p> <p>Journal Article (Published) Hillman, A. L., Abbott, M. B., Yu, J., Steinman, B. A., & Bain, D. J. (2016). The isotopic response of Lake Chenghai, SW China, to hydrologic modification from human activity. <i>The Holocene</i>, 26, 906-916.</p> <p>Journal Article (Published) Mann, M. E., Rahmstorf, S., Steinman, B. A., Tingley, M., & Miller, S. K. (2016). The Likelihood of Recent Record Warmth. <i>Scientific Reports / Nature</i>, 6, 19831.</p> <p>Journal Article (Revising to Resubmit) Mann, M. E., Rahmstorf, S., Kornhuber, K., Steinman, B. A., Miller, S. K., Petri, S., & Coumou, D. Projected Changes in Persistent Extreme Warm-Season Weather Events: The Role of Quasi-Resonant Amplification. <i>Science</i>. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Post, E., Steinman, B. A., & Mann, M. E. Acceleration of phenological advance and warming with latitude over the past century. <i>Scientific Reports / Nature</i>. [Revising to Resubmit]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Shea, C.*, Steinman, B. A., & Brown, E. T. A multi-proxy lake sediment record of Middle through Late Holocene climate change in southwestern British Columbia, Canada. <i>Journal of Quaternary Science</i>. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Steinman, B. A., Nelson, D. B., Abbott, M. B., Stansell, N. D., Finkenbinder, M. S., Finney, B. P., . . . Pompeani, D. P. Multi-proxy lake sediment records of late Quaternary climate and environmental change in the Pacific Northwest. <i>Quaternary Science Reviews</i>. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Lewandowsky, S., Cowtan, K., Risbey, J. S., Mann, M. E., Steinman, B. A., England, M., . . . Rahmstorf, S. The "pause" in global warming in historical context: Comparing models to observations. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (In Preparation; Not Yet Submitted) Verbitsky, M., Mann, M. E., Steinman, B. A., & Volobuev, D. The Causality of Global Warming. [In Preparation; Not Yet Submitted]</p>

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. John Swenson	Earth & Environmental Science	Journal Article (Published) Abeyta, A., Foreman, B., Swenson, J. B., Paola, C., & Mohr, J. (2019). Sink-to-source: The effects of offshore dynamics on upstream processes. Basin Research.
SCSE		Dr. Nigel Wattrus	Geology	Journal Article (Published) Yuan, F., Chaffin, J. D., Wattrus, N., Zhu, Y., & Sun, Y. (2018). Contrasting sources and mobility of trace metals in recent sediments of western Lake Erie. Journal of Great Lakes Research, 44(5), 1026-1034.
LSBE	ECONOMICS (includes economics, health care management) LSBE	Dr. Gibson Nene	Economics	Journal Article (Published) Moore, H. D., & Wattrus, N. J. (2017). Results of Deer Creek, Carlton County, Minnesota, Groundwater Seepage Investigation. Journal Article (Submitted) Nene, G., & Boubacar, I. Indirect Effects of Land Reform on Economic Well-Being. The Case of Southern African Development Community (SADC) Countries. International Review of Applied Economics. [Submitted]
LSBE		Dr. Ariuntungalag Taiva	Economics	Journal Article (Published) Wilmot, N., & Taivan, A. (2017). The Causal Relationship in North American Energy Production. OPEC Energy Review, 41(3), 239-258.
LSBE		Dr. Neil Wilmot	Economics	Journal Article (Published) Nene, G., & Taivan, A. (2017). Causality between Tourism and Economic Growth: Evidence from Sub-Saharan Africa (SSA). The Journal of Developing Areas, 51(2), 155-169 Journal Article (Published) Wilmot, N., & Taivan, A. (2017). The Causal Relationship in North American Energy Production. OPEC Energy Review, 41(3). Journal Article (Revising to Resubmit) Wilmot, N. A. Volatility Spillovers in Coal Markets. Energy Journal. [Revising to Resubmit] Book Chapter (Accepted) Wilmot, N. A., & Mason, C. F. (2019). Jumps in Energy Commodity Markets. Handbook of Energy Finance. World Scientific Publishing. Accepted.

College	Department	Faculty	Subject	Sustainability Publications
CEHSP	EDUCATION (includes ECE, IESE, Secondary and K-12, Special Ed, Education, Masters of Ed, Education Administration, EdD)	Dr. Roxanne Gould	Education	<p>Journal Article (Published) Gould, R. J. (2018). Dream of Wild: Growing Garden Warriors and a Food Sovereignty Movement. <i>Green Theory and Praxis Journal</i>, 11(3), 16.</p> <p>Journal Article (Published) Gould, R. B. (2018). Indigenous Women's Water Practices, Responsibilities and Resistance: Implications for Sustainability. <i>Open Rivers: Rethinking Water, Place & Community</i>(10), 1.</p> <p>Journal Article (Published) Gould, R. J., & Day, P. (2017). "You Are Here Because The Land Called You":in Search of Vivir Bien/Living Well. <i>Journal of Indigenous Well Being</i>, 2(3), 105-113.</p> <p>Journal Article (Revising to Resubmit) Gould, R. (2018). Dream of Wild Health: Growing Garden Warriors and a Food Sovereignty Movement. <i>Green Theory and Praxis Journal</i>. [Revising to Resubmit]</p> <p>Conference Proceeding (Published) (2018). Indigenous Mounds and Riverscapes: Feminine Earth-Sky Relationships (pp. 57). Honolulu, HI.: (2018 International STEM/STEAM Education Conference)</p> <p>Other Intellectual Contributions</p> <p>Book Review (Accepted) J. M. F. A. A. M. (2018). The place of nature and environmental ethics in school. <i>Oxford Educational Encyclopedia</i>. Oxford Research Encyclopedia of Education/Oxford Press. Accepted.</p>
CEHSP		Dr. Julie Williams	Education	<p>Journal Article (Published) Schreiner, K. A., Kaisev, S. M., Steinman, B. M., Sterner, R. M., Williams, J. M., & Zak, K. M. (2017). Advancing graduate limnology education through active learning and community partnerships: A pilot program at the Large Lakes Observatory. <i>Limnology and Oceanography Bulletin</i>, 26(3), 61-66.</p>
SCSE	ELECTRICAL ENGINEERING	Dr. Peng Fang	Electrical Engineering	<p>Conference Proceeding (Published) FANG, P., SHENG, B., ZHANG, Y., & Liu, Y.-F. (2018). LED Driver Achieves Electrolytic Capacitor-Less and Flicker-Free Operation with an Energy Buffer Unit. Portland, Oregon: 2018 IEEE Energy Conversion Congress and Exposition (ECCE), (2018 IEEE Energy Conversion Congress and Exposition (ECCE), Portland, Oregon)</p>
SCSE		Dr. Desineni Naidu	Electrical Engineering	<p>Conference Proceeding (Published) Egbue, O., NAIDU, D. S., Peterson, P. (2016). The Role of Microgrids in Enhancing Macrogrid Resilience. (2016 International Conference on Smart Grid and Clean Energy Technologies, University of Electronic Science and Technology of China, Chengdu, China)</p>
CLA	ENGLISH/LINGUISTICS/WRITING STUDIES (includes English, Linguistics, Writing Studies) CLA	Dr. Susan Maher	English	<p>Book Review (Published) Naramore Maher, S. (2018). Because It is So Beautiful (2 (Spring 2018) ed., vol. 109, pp. 92-93). Seattle, WA: Pacific Northwest Quarterly/University of Washington.</p> <p>Book (Published) (2017). <i>Thinking Continental: Writing the Planet One Place at a Time</i>. In S. N. Maher, T. Lynch, D. Wall, & O. A. Weltzien (Eds.), "Superior: Reimagining the Interior of a Continent" (pp. 350). Lincoln, Nebraska: University of Nebraska Press.</p>
CLA		Dr. Kathryn Van Wert	English	<p>Book Chapter (Accepted) Naramore Maher, S. "Interglacial". In J. B. Roney (Ed.), <i>Sea, Land, and Spirit: Coastal Environment in the West of Ireland</i> (pp. 20). Newcastle Upon Tyne: Cambridge Scholars. Accepted.</p> <p>Book Chapter (Accepted) Van Wert, K. "Becoming Animal, Becoming Other: Modernism, Millennial Jurisprudence, and the Limits of Materialist Subjectivity.". In M. Hall & K. Watts (Eds.), <i>Affective Ecologies of the Modernist Body</i>. University of Florida Press. Accepted.</p>

College	Department	Faculty	Subject	Sustainability Publications
CLA	GEOGRAPHY & PHILOSOPHY (includes ESG, GIS, philosophy, cognitive science, interdisciplinary studies) CLA	Dr. Ryan Bergstrom	Geography	<p>Journal Article (Published) Bergstrom, R. D., & Harrington, L. M.B. Embedded in Nature: Challenges to Sustainability in Communities of the Greater Yellowstone Ecosystem. <i>Sustainability</i>, 22.</p> <p>Journal Article (Published) Bergstrom, R. D. (2018). Defining Sustainability in the Greater Yellowstone Ecosystem. <i>Journal of Sustainable Development</i>, 11(1), 32-43.</p> <p>Journal Article (Published) Bergstrom, R. D., Harrington, L. M.B. (2018). Understanding Agents of Change in Amenity Gateways of the Greater Yellowstone Region. <i>Community Development/Routledge - Taylor & Francis Group</i>, 5, 1-16.</p> <p>Journal Article (Published) Bergstrom, R. D. (2017). The Curious Case of Cuyuna: Re-envisioning Former Mine Sites to Stimulate Local Communities. <i>Extractive Industries and Society</i>(4), 860-868.</p> <p>Journal Article (Accepted) Community Development in the Face of Resource Extraction in Northern Minnesota, USA. <i>Extractive Industries & Society</i>. [Accepted]</p> <p>Journal Article (Published) Clarke-Sather, A., Tang, X., Xiong, Y., & Qu, J. (2018). The Impact of Green Water Management Strategies on Household-Level Agricultural Water Productivity in a Semi-Arid Region: A Survey-based Assessment. <i>Water</i>, 10(1), 11.</p> <p>Journal Article (Published) Wang, J., Ma, J., Clarke-Sather, A., & Qu, J. (2018). Estimating changes in the green water productivity of cropping systems in Northern Shaanxi Province in China's Loess Plateau. <i>Water (Switzerland)</i>, 10(9).</p> <p>Journal Article (Published) Leiper, C.*, & Clarke-Sather, A. (2017). Co-creating an alternative: the moral economy of participating in farmers' markets. <i>Local Environment</i>, 22(7), 840-858.</p> <p>Journal Article (Published) Liu, L.*, Qu, J., Clarke-Sather, A., Maraseni, T. N., & Pang, J. (2017). Spatial Variations and Determinants of Per Capita Household CO2 Emissions (PHCEs) in China. <i>Sustainability</i>, 9(7), 1277.</p> <p>Journal Article (Published) Clarke-Sather, A., Crow-Miller, B., Banister, J. M., Anh Thomas, K., Norman, E. S., & Stephenson, S. R. (2017). The Shifting Geopolitics of Water in the Anthropocene. <i>Geopolitics</i>, 22(2), 332-359.</p> <p>Journal Article (In Preparation; Not Yet Submitted) The Politics of Water Security in Global Green Water Discourses. <i>Geoforum</i>. [In Preparation; Not Yet Submitted]</p> <p>Book Chapter (Published) Siegel, P. E., Pearsall, D. M., Dunning, N. P., Jones, J. G., Farrell, P., Duncan, N. A., & Curtis, J. H. (2018). Assessing Colonization, Landscape Learning, and Socionatural Change in the West Indies. <i>Island Historical Ecology: Socionatural Landscapes of the Eastern and Southern Caribbean</i>. New York, NY: Berghahn Books.</p> <p>Book Chapter (Published) Siegel, P. E., Jones, J. G., Pearsall, D. M., Dunning, N. P., Farrell, P., Duncan, N., . . . Singh, S. K. (2018). Humanizing the Landscapes of the Lesser Antilles during the Archaic Age. <i>The Archaeology of Caribbean and Circum-Caribbean Farmers (6000 BC – AD 1500)</i>. London: Routledge.</p> <p>Book Chapter (Accepted) Siegel, P. E., Jones, J. G., Pearsall, D. M., Dunning, N. P., Farrell, P. M., Duncan, N. A., & Curtis, J. H. <i>Ecosystem Engineering during the Human Occupations of the Lesser Antilles: Early Settlers of the Insular Caribbean</i>. London: Accepted</p>
CLA		Dr. Marie Farrell	Geography	

College	Department	Faculty	Subject	Sustainability Publications
CLA		Dr. Randel Hanson	Geography	Book Chapter (Published) (2016). Cities of Farmers. Food From Scratch for the Zenith of the Unsalted Seas: Creating a Local Food System in Early-Twentieth-Century Duluth, Minnesota
CLA		Dr. Michæl Mageau	ESG	Journal Article (Not Accepted) Mageau, M. T. The Economic Potential of CEA Lettuce Production. Journal of Agriculture and Sustainable Food Systems. [Not Accepted]
				Journal Article (Not Accepted) Mageau, M. T. The Environmental Sustainability of CEA Lettuce Production. Journal of Agriculture and Sustainable Food Systems. [Not Accepted]
				Journal Article (Not Accepted) Mageau, M. T. The Economic Potential of CEA Lettuce Production. Sustainability. [Not Accepted]
				Technical Report (Accepted) Mageau, M. T., Radtke, B., Fazendin, B. *, & Ledin, T. * Expansion of Greenhouse Production (pp. 35). St. Paul, MN: MN State Legislature's Legislative-Citizen Commission on Minnesota's Resources. Accepted.
				Journal Article (In Preparation; Not Yet Submitted) Mageau, M. T. The Economic Viability, Environmental Sustainability and Community Development Potential of SOL Produce. Journal of Agriculture, Food Systems and Community Development/New Leaf Associates Inc.. [In Preparation; Not Yet Submitted]
CLA		Dr. Adam Pine	Geography	Book (Published) Pine, A. (2017). Confronting Hunger in the USA: Searching for Community Empowerment and Food Security in Food Access Programs. New York, New York: Routledge.
CLA		Dr. Tongxin Zhu	Geography	Journal Article (Published) Zeng, M., Ma, C., Zhu, C., Song, Y., Zhu, T., He, K., . . . (2016). Influence of climate change on the evolution of ancient culture from 4500 to 3700 cal. yr BP in the Chengdu Plain, upper reaches of the Yangtze River, China. <i>Catena/ELSEVIER</i> , 147, 742-754.
CLA	HISTORY/POLITICAL SCIENCE/INTERNATIONAL STUDIES (including AAAS, history, Political Science, International Studies, Chinese, Foreign Studies)	Dr. Scott Laderman	History	Book Chapter (Published) Laderman, S. (2017). A World Apart: Pleasure, Rebellion, and the Politics of Surf Tourism. <i>The Critical Surf Studies Reader</i> (pp. 47-61). Durham, North Carolina: Duke University Press.
				Encyclopedia Entry (Published) Laderman, S. (2017). Surfing. <i>The Sea in World History: Exploration, Travel, and Trade</i> (pp. 816-817). Santa Barbara, California: ABC-CLIO.
				Published Laderman, S. (2017). <i>The Complicated History of Surfing</i> . TED-Ed.
CLA		Dr. Joseph Staats	Political Science	Journal Article (Published) Lee, H., Biglaiser, G., & Staats, J. L. (2017). The Effects of Political and Legal Constraints on Expropriation in Natural Resources and Manufacturing Sectors. <i>International Area Studies Review</i> , 20(4), 311-333.
CLA		David Woodward	History	Technical Report (Accepted) Woodward, D. Phase I Archaeological Survey for the 10th Avenue Bridge Replacement Project and the Pedestrian Bridge Rehabilitation Project, Nobles County, Minnesota. Duluth.: Accepted.
				Technical Report (Accepted) Woodward, D. J. Phase I Archaeological Survey for the CSAH 19 Local Road Capacity and Safety Improvement Project, Washington County, Minnesota. Duluth.: Accepted.
				Technical Report (Accepted) Woodward, D. J. Phase I Archaeological Survey for the CSAH 54 Realignment Project Columbus, Anoka County, Minnesota. Accepted.

College	Department	Faculty	Subject	Sustainability Publications
CLA		Dr. Geoffrey Sheagley	Political Science	Journal Article (Published) Sheagley, G., Chen, P., & Farhart, C. (2017). Racial Resentment, Hurricane Sandy, and the Spillover of Racial Attitudes into Evaluations of Government Organizations. <i>Analyses of Social Issues and Public Policy</i> .
LSBE	MANAGEMENT STUDIES (includes Entrepreneurship, management, human resource management, organizational management, management information systems) LSBE	Dr. Raymond Jones	Entrepreneurship	Journal Article (Published) Jones, R., Reilly, T., Cox, M., Cole, B. (2017). Gender makes a difference: Investigating consumer purchasing behavior and attitudes toward corporate social responsibility policies. <i>Corporate Social Responsibility and Environmental Management</i> , 24(2), 133-144.
LSBE		Dr. Geoffrey Bell	Management	Journal Article (Published) Bell, G. G. (2019). Making Sustainability Personal: An experiential semester-long project to enhance students' understanding of sustainability. <i>Management Teaching Review</i> .
LSBE		Dr. Wenging Zhang	Management	Journal Article (Published) Zhang, W., Padmanabhan, P., & Huang, C.-H. (2018). Firm level offshoring activities, pollution regulation, triple bottom line, and market structure: What do they have in common? <i>Journal of Cleaner Production</i> , 195, 618-624.
LSBE	MARKETING (includes marketing, marketing analysis, marketing and graphic design) LSBE	Dr. Ahmed Maamoun	Marketing	Journal Article (Online Publication Ahead of Print) Gu, W., Wei, L., Zhang, W., & Yan, X. (2019). Evolutionary game analysis of cooperation between natural resource- and energy-intensive companies in reverse logistics operations. <i>International Journal of Production Economics</i> , 218, 159-169. [Online Publication Ahead of Print] Journal Article (Published) Vaidyanathan, R., & Maamoun, A. (2018). Locally Laid Egg Company: No Time for Laying Around. <i>Case Research Journal</i> , 2(Spring 2018), Page 33 - 44. Written Case with Instructional Material (Published) Maamoun, A. (2019). Recycled Milk Jugs Become Chairs for Lollygaggers: Loll Designs Walks the Talk (pp. 19). Washington DC: SAGE Business Cases. Written Case with Instructional Material (Accepted) Maamoun, A. Shades of Green: Amazon, Walmart, and Retail Sustainability. Washington DC: SAGE Business Cases. Accepted.
LSBE		Dr. Timothy Reilly	Marketing	Journal Article (Published) Jones, R. J., Reilly, T. M., Cox, M. Z., & Cole, B. M. (2017). Gender makes a difference: Investigating consumer purchasing behavior and attitudes toward corporate social responsibility policies. <i>Corporate Social Responsibility and Environmental Management</i> , 24(2), 133-144.
SCSE	MATH & STATISTICS (includes Mathematics, Statistics and Actuarial Science)	Dr. Tracy Bibelnieks	Math & Statistics	Book Chapter (Accepted) Zobitz, J., Bibelnieks, T., & Lester, M. Sustainability Analysis of a Rural Nicaraguan Coffee Cooperative. <i>Mathematics and Social Justice: Resources for the College Classroom</i> . American Mathematics Society. Accepted.
SCSE		Dr. Marshall Hampton	Math & Statistics	Journal Article (Published) Pratfiska, J. R., Mallinger, R. E., Portliss, Z. M., Hulke, B. S., Fugate, K. K., Paradis, T., . . . Carter, C. J. (2018). Using Nectar-Related Traits to Enhance Crop-Pollinator Interactions. <i>Frontiers in Plant Science</i> .
SCSE		Dr. Yang Li	Math & Statistics	Journal Article (Revising to Resubmit) Keyel, E. R., Efterson, M. A., Niemi, G. J., Evers, D. C., DeSorbo, C. R., Hoffman, J. C., . . . Nicoletti, F. Mercury Accumulation in Fall Migrating Raptors Through Duluth, MN. <i>Condor</i> . [Revising to Resubmit]
SCSE	MECHANICAL AND INDUSTRIAL ENGINEERING	Dr. Tarek Al-Geddawy	Mechanical and Industrial Engineering	Journal Article (Published) Ghanei, S., & AlGeddawy, T. (2016). A New Model for Sustainable Changeability and Production Planning. <i>Procedia CIRP</i> , 57(1), 522-526. Journal Article (Published) Ghanei, S., & AlGeddawy, T. (2016). An Integrated Multi-period Layout Planning and Scheduling Model for Sustainable Reconfigurable Manufacturing Systems. <i>Journal of Manufacturing Systems</i> . SMEJMS-D-16-00429, submitted.

College	Department	Faculty	Subject	Sustainability Publications
SCSE		Dr. Hongyi Chen	Mechanical and Industrial Engineering	Conference Proceeding (Published) Feng, C. *, Chen, H., & Ho, J. C. (2018). Promoting the diffusion of sustainable innovations in the cosmetic industry. Duluth.: (TEMSCON 2018, Evanston, IL, June 27th – July 1st, 2018)
SCSE		Dr. Abigail Clarke-Sather	Mechanical and Industrial Engineering	Journal Article (Submitted) Clarke-Sather, A. R., Davis, C. J. *, & Qu, J. Household energy use for water purification: rural western China. Energy for Sustainable Development. [Submitted]
SCSE		Dr. Onanwa Egbue	Mechanical and Industrial Engineering	Journal Article (Online Publication Ahead of Print) Clarke-Sather, A. R., & Cobb, K. (2018). Onshoring fashion: Worker sustainability impacts of global and local apparel production. Journal of Cleaner Production, 208, 1206-1218. [Online Publication Ahead of Print] Journal Article (Submitted) Egbue, O., & Dib, S. * Optimal Scheduling of Plug-In Electric Vehicles in a Smart Grid. Transportation. [Submitted] Conference Proceeding (Published) Egbue, O., Hemenway, A. *, & Smith, G. * (2016). Integrating Renewable Energy into Street Lights: An Economic Analysis. 2016 International Annual Conference of the American Society for Engineering Management. (International Annual Conference of the American Society for Engineering Management. October 26-29, 2016, Concord, North Carolina) Conference Proceeding (Published) Egbue, O., Naidu, D., & Peterson, P. (2016). The Role of Microgrids in Enhancing Macrogrid Resilience. (Proceedings of the 2016 International Conference on Smart Grid and Clean Energy Technologies, October 19-22, 2016, Chengdu, China) Conference Proceeding (Submitted) Dutta Gupta, A. *, & Egbue, O. Energy Efficiency Using Machine Learning – Targeting Small and Medium- Sized Manufacturers. (Proceedings of the 2017 Industrial and Systems Engineering Annual Conference and Expo May 20-23, 2017, Pittsburgh PA) Conference Proceeding (Submitted) Ochonogor, M. *, & Egbue, O. Renewable Energy Adoption: Analysis of Barriers and Opportunities in Nigeria. (Proceedings of the 2017 Industrial and Systems Engineering Annual Conference and Expo May 20-23, 2017, Pittsburgh PA) Case Study for Textbook Chapter (Submitted) Egbue, O. Pricing Trends in Solar Technologies. Engineering Economic Analysis, 13th Ed., Newman, Lavelle, Eschenbach and Lewis 2017. Oxford University Press.
SCSE		Dr. Emmanuel Eneonu	Mechanical and Industrial Engineering	Journal Article (Submitted) Okyere, S. A. *, Daqing, T., Eneonu, E. U., & Kwofie, S. Life Cycle Assessment of Supercritical Coal Power Plant with Carbon Capture and Sequestration in China. Asian Journal of Environment & Ecology. [Submitted] Conference Proceeding (Accepted) Zhao, P., & Eneonu, E. U. (2017). Energy Harvesting from Polyvinylidene Fluoride (PVDF) Modified by Nanoparticles. (Conference on Behavior and Mechanics of Multifunctional Materials and Composites IX, part of SPIE Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring.) Accepted.
		Dr. Alison Hoxie	Mechanical and Industrial Engineering	Journal Article (Published) Christiansen, M., Hoxie, A., Granley, M., & Slick, J. (2017). Shines! University Engineering Students Advancing Duluth's Sustainable Development. Sustainability: The Journal of Record, 10(6), 359--363. Journal Article (Published) Hoxie, A., & Anderson, M. (2017). Evaluating high volume blends of vegetable oil in micro-gas turbine engines. Renewable Energy, 101, 886-893.
SCSE				Characterization of a Novel Energy Efficient Atomizer Employing Countercurrent Shear. (14th Triennial International Conference on Liquid Atomization and Spray Systems, Chicago, IL, USA, July 22-16, 2018)

College	Department	Faculty	Subject	Sustainability Publications
		Dr. Nesrin Ozalp	Mechanical and Industrial Engineering	<p>Journal Article (Published) Hyman, B., Ozalp, N., Varbanov, P. S., & Van Fan, Y. (2019). Modeling energy flows in industry: General methodology to develop process step models. <i>Energy Conversion and Management</i>, 181, 528--543.</p> <p>Journal Article (Published) Abuseada, M. *, Ozalp, N., & Ophoff, C. * (2019). Numerical and experimental investigation of heat transfer in a solar receiver with a variable aperture. <i>International Journal of Heat and Mass Transfer</i>, 128, 125--135.</p> <p>Journal Article (Published) Ozalp, N., Epstein, M., Davis, R., Ophoff, C., & Vinck, I. (2018). A critical assessment of present hydrogen production techniques: is solar cracking a viable alternative? <i>Current Opinion in Chemical Engineering</i>, 21, 111--115.</p> <p>Journal Article (Published) Uddin, M. H., Ozalp, N., Heylen, J., & Ophoff, C. (2018). A new approach for fuel injection into a solar receiver/ reactor: Numerical and experimental investigation. <i>Front. Chem. Sci. Eng.</i>, 12(4), 683--696.</p> <p>Journal Article (Published) Najafabadi, H. A., & Ozalp, N. (2018). An advanced modeling and experimental study to improve temperature uniformity of a solar receiver. <i>Energy</i>, 165, 984--998.</p> <p>Journal Article (Published) Ophoff, C. *, Najafabadi, H. A., Bogaerts, J. *, Ozalp, N., & Moens, D. (2018). An Overview of Variable Aperture Mechanisms in Attempt to Control Temperature Inside Solar Cavity Receivers. <i>ASTFE</i>.</p> <p>Journal Article (Published) Abedini Najafabadi, H., Ophoff, C. *, & Ozalp, N. (2018). Heat Transfer Analysis of a Cavity Type Solar Receiver- Experimental validation and Design Improvement. (Published)</p> <p>Ozalp, N., & Abedini Najafabadi, H. (2019). Iterative design of solar reactor for hot spot reduction and enhanced temperature uniformity. <i>Science Trends -- Energy & Matter</i> featured research. (Published)</p> <p>Ozalp, N., & Abedini Najafabadi, H. (2018). Predictive controller for temperature regulation of a solar receiver. <i>Advances in Engineering -- Mechanical Engineering</i> featured research.</p>
SCSE		Dr. Robert Palumbo	Mechanical and Industrial Engineering	<p>Journal Article (Published) Nudehi, S., Larson, C., Prusinski, W. *, Koffler, D. *, Otto, J. *, Beyers, E. *, . . . Palumbo, R. Solar thermal decoupled water electrolysis process II: An extended investigation of the anodic electrochemical reaction. <i>Chemical Engineering Science</i>, 181, 159-172.</p>
SCSE				

College	Department	Faculty	Subject	Sustainability Publications
		Dr. Subramanian Rama	Mechanical and Industrial Engineering	<p>Journal Article (In Preparation; Not Yet Submitted) Edlund, C. *, & Ramakrishnan, S. (2018). An analytical study of nonlinear vibration energy harvesting in stairways subject to human traffic. [In Preparation; Not Yet Submitted]</p> <p>Journal Article (Online Publication Ahead of Print) Edlund, C. *, & Ramakrishnan, S. (2018). An analytical study of vibrational energy harvesting using piezoelectric tiles in stairways subjected to human traffic. <i>European Journal of Applied Mathematics</i>, 1-18. [Online Publication Ahead of Print]</p> <p>Conference Proceeding (Published) Ramakrishnan, S., & Edlund, C. * (2018). Stochastic stability of a piezoelectric vibration energy harvester and stabilization using noise. <i>New York: American Society of Mechanical Engineers. (ASME Dynamic Systems and Control Conference, Atlanta GA, Oct 2018.)</i></p> <p>Conference Proceeding (Published) Ramakrishnan, S., Lambrecht, C., & Edlund, C. (2017). Stochastic dynamics of a piezoelectric energy harvester subjected to Levy flight excitations. <i>ASME.</i></p> <p>Conference Proceeding (Published) Edlund, C. *, & Ramakrishnan, S. (2017). Energy harvesting using nonlinear piezoelectric tiles on stairways. (9th European Nonlinear Dynamics Conference, Budapest, Hungary, June 2017)</p>
SCSE		Dr. Ping Zhao	Mechanical and Industrial Engineering	<p>Abstract (Accepted) Zhao, P., Kadlec, A. *, Wang, S. *, Enemuoh, E. Energy Harvesting from Polyvinylidene Fluoride (PVDF) Modified by Nanoparticles. 2017 SPIE Smart Structures/NDE. Accepted.</p>
SCSE		Elizabeth Alexson	NRRI	<p>Journal Article (Published) Alexson, E. E., Reavie, E. D., Axler, R. P., Yemets, S. V., Krasutsky, P. A., Edlund, M. B. . . . Paleolimnology of a freshwater estuary to inform Area of Concern nutrient delisting efforts. <i>Journal of Paleolimnology</i>, 59(3), 373-395.</p>
		Matthew Aro	NRRI	<p>Journal Article (Published) Aro, M. D., Monson Geerts, S., French, S., & Cai, M. (2019). Particle size analysis of airborne wood dust produced from sawing thermally modified wood. <i>European Journal of Wood and Wood Products</i>, 77(2), 211-218.</p> <p>Journal Article (Published) Barnes, M., Aro, M. D., & Rowlen, A. (2018). Thermally Modified Engineered Wood Products Durability. <i>Forest Products Journal/Forest Products Society.</i></p> <p>Journal Article (Published) Gamache, S. L. *, Espinoza, O., & Aro, M. D. * (2017). Professional Consumer Perceptions about Thermally Modified Wood. <i>Bioresources</i>, 4, 9487-9501.</p> <p>Aro, M. D., & Kristen, B. (2017). Minnesota's Balsam Fir Opportunity: Creating chemical-free wood products and jobs while improving forest health. (Spring 2017 ed.). St. Paul, MN: Minnesota Department of Natural Resources.</p> <p>Technical Report (Accepted) Donahue, P. K., & Aro, M. D. (2019). Progress Report: Using Thermal Modification Technology to Add Value to Small-Diameter Logs from Underutilized Species. Accepted.</p> <p>Technical Report (Accepted) Aro, M. D., Monson Geerts, S., French, S., & Cai, M. (2018). Differences in Particulate Matter (Dust) Between Non-modified and Light-modified (170°C) Wood Species. Accepted.</p> <p>Technical Report (Accepted) Severinghaus, S., & Aro, M. D. Preliminary Comparative Life Cycle Assessment of Organosolv Lignin, including siding and butanol comparisons. Accepted.</p>

College	Department	Faculty	Subject	Sustainability Publications
		Annie Bracey	NRRI	<p>Journal Article (Published) Bracey, A. *, Lisovski, S., Moore, D., McKellar, A., Craig, E., Matteson, S., . . . Cuthbert, F. (2018). Migratory routes and wintering locations of declining inland North American Common Terns. <i>The Auk</i>, 135, 16.</p> <p>Technical Report (Published) Liljenquist, A., Bracey, A. *, & Grinde, A. (2019). Avian Surveys for the St. Louis River Natural Areas Project. Minnesota Land Trust.</p> <p>Technical Report (Published) Bracey, A. *, Cuthbert, F., & Niemi, G. Conservation of Common Terns in the Great Lakes. Duluth:..</p> <p>Technical Report (Published) Bracey, A. * (2016). Conservation and Management of Common Terns in the Western Great Lakes. Duluth:..</p> <p>Journal Article (Published) Reavie, E. D., Sgro, G. V., Estep, L. R., Bramburger, A. J., S, V. L., Pi, R. W., . . . Dove, A. (2016). Climate warming and changes in <i>Cyclotella</i> sensu lato in the Laurentian Great Lakes. <i>Limnology and Oceanography</i>.</p> <p>Journal Article (Revising to Resubmit) Bramburger, A. J., Reavie, E. D., Sgro, G. V., Estep, L. R., Shaw Chraibi, V. L., & Pillsbury, R. W. Decreases in diatom cell size during course of the 20th century in the Laurentian Great Lakes: A response to warming waters? <i>Journal of Plankton Research</i>. [Revising to Resubmit]</p> <p>Journal Article (Revising to Resubmit) Bramburger, A. J., Hamilton, P. B., & Haffner, G. D. Effects of the long-term anthropogenic disturbance on the benthic, episammic diatom community of an ancient tropical lake. <i>Bulletin of Environmental Contamination and Toxicology</i>. [Revising to Resubmit]</p> <p>Journal Article (Published) VOLK, T. A., BERGUSON, B., DALY, C., HALBLEIB, M. D., MILLER, R., RIALS, T., . . . (2018). Poplar and Shrub Willow Energy Crops in the United States: Field Trial Results from the Multiyear Regional Feedstock Partnership and Yield Potential Maps Based on the PRISM-ELM Model. <i>GCB Bioenergy</i>, 17.</p> <p>Technical Report (Published) Berguson, W., & Buchman, D. Considerations in the Management of Young Red Pine Stands: Implications to Growth, Yield and Economics.</p> <p>Journal Article (Published) Reavie, E. D., Sgro, G. V., Estep, L. R., Bramburger, A. J., Chraibi, Victoria L. Shaw, Pillsbury, R. W., . . . Dove, A. (2017). Climate warming and changes in <i>Cyclotella</i> sensu lato in the Laurentian Great Lakes. <i>LIMNOLOGY AND OCEANOGRAPHY</i>, 62(2), 768-783.</p> <p>Journal Article (Revising to Resubmit) Wilmoth, E. J., Dumke, J. D., & Hueffmeier, R. M. Could a Harvest-Based Citizen Science Program be an Effective Contribution to Fisheries Research? <i>Citizen Science: Theory and Practice</i>. [Revising to Resubmit]</p> <p>Website (Published) Dumke, J. D., & Nixon, K. E. (2018). St. Louis County AIS Risk Assessment Tool.</p> <p>Technical Report (Published) Dumke, J. D., & Nixon, K. E. (2018). St. Louis County Aquatic Invasive Species Introduction Risk Assessment..</p>
		Andrew Bramburger	NRRI	
		Daniel Buchman	NRRI	
		Meijun Cai	NRRI	
		Josh Dumke	NRRI	

College	Department	Faculty	Subject	Sustainability Publications
		Lisa Estepp	NRRI	Journal Article (Published) Reavie, E. D., Sgro, G. V., Estepp, L. R., Bramburger, A. J., Pillsbury, R. W., Shaw Chraibi, V. L., . . . Dove, A. (2017). Climate warming and changes in <i>Cyclotella</i> sensu lato in the Laurentian Great Lakes. <i>Limnology and Oceanography</i> , 62(2), 768-783.
		Ralph Garono	NRRI	Journal Article (Published) Bramburger, A. J., Reavie, E. D., Sgro, G. V., Estepp, L. R., Shaw Chraibi, V. L., & Pillsbury, R. W. (2017). Decreases in diatom cell size during the 20th century in the Laurentian Great Lakes: a response to warming waters? <i>Journal of Plankton Research</i> , 39(2), 199-210.
				Journal Article (Published) Busse, K. M., & Garono, R. J. A Time to Harvest: Water Quality and Shellfish Management in Tillamook Bay, Oregon.
		Alexis Grinde	NRRI	Journal Article (Published) Herb, W., Blann, K., Garono, R., Jereczek, J., White, M., & Johnson, L. ANALYSIS OF IMPACTS OF CLIMATE AND LAND USE CHANGE ON STREAM FLOW REGIME AND PREDICTED FLOWS UNDER FUTURE LAND USE AND CLIMATE. Journal Article (Published) Grinde, A. R., Niemi, G., Sturtevant, B., Panci, H., Thogmartin, W., & Wolter, P. (2017). Importance of scale, land cover, and weather on the abundance of bird species in a managed forest. <i>Forest Ecology and Management</i> , 405, 295-308. Grinde, A. R., & Niemi, G. J. (2016). Influence of landscape, habitat, and species co-occurrence on occupancy dynamics of Canada Warblers. <i>The Condor</i> , 118(3), 513-531.
		David Henkel-Johnson	NRRI	Magazine/Trade Publication (Published) Grinde, A. R., Niemi, G. J., Adams, C., & Wigley, T. B. (2017). The Importance of Young Forests for Breeding Bird Populations (4th ed., vol. 39, pp. 10-11). <i>Michigan Forests</i> . Technical Report (Published) Henkel-Johnson, D. (2017). North Central Landscape Forest Resources Plan. Minnesota Forest Resources Council.
				Technical Report (Published) Henkel-Johnson, D. (2017). North Central Landscape Timberland Growing Stock Mortality White Paper. Minnesota Forest Resources Council.
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		George Host	NRRI	Technical Report (Published) Henkel-Johnson, D. (2016). North Central Landscape Forest Policy Inventory Report. Minnesota Forest Resources Council. Journal Article (Accepted) Host, G. E., Kovalenko, K. E., Brown, T. N., Ciborowski, J. J.H., Johnson, L. B. Risk-based classification and interactive map of watersheds contributing anthropogenic stress to Laurentian Great Lakes coastal ecosystems. <i>Journal of Great Lakes Research</i> . [Accepted]
		Kurt Johnson	NRRI	Technical Report (Published) Host, G., Kovalenko, K., & Meyseimbourg, P. Assessing forest land conversion risk to maintain water quality in North Central Minnesota (pp. 14). Duluth, MN: NRI Technical Report. Technical Report (Published) Johnson, K. W. (2016). Validation of Wetland Mitigation in Abandoned Borrow Areas – Phase II (pp. 74 pp + appendices). St. Paul, Minnesota: Mn/DOT Research Services & Library, Office of Transportation System Management.

College	Department	Faculty	Subject	Sustainability Publications
		Lucinda Johnson	NRRI	Journal Article (Published) Creed, I. F., Cormier, R., Laurent, K. L., Accatino, F., Igras, J., Henley, P., . . . others (2016). Formal integration of science and management systems needed to achieve thriving and prosperous great lakes. <i>BioScience</i> , <i>biw030</i> .
			NRRI	Journal Article (Published) Olker, J. H., Kovalenko, K. E., Ciborowski, J. J., Brady, V. J., & Johnson, L. B. (2016). Watershed Land Use and Local Habitat: Implications for Habitat Assessment. <i>Wetlands</i> , <i>36</i> (2), 311–321.
			NRRI	Journal Article (Published) Host, G. E., Kovalenko, K. E., Brown, T. N., Ciborowski, J. J.H., & Johnson, L. B. (2019). Risk-based classification and ir
		Ekaterina Kovalenko	NRRI	Journal Article (Accepted) Kovalenko, K. E. Interactions among anthropogenic effects on aquatic food webs. <i>Hydrobiologia</i> . [Accepted]
		Stephen Monson	NRRI	Conference Proceeding (Published) Hudak, G., Monson Geerts, S., Zanko, L., Post, S., & Bandli, B. (2016). The Minnesota Taconite Workers Health Study: Environmental Study of Airborne Particulate Matter - 2016 Update. Duluth, Minnesota: Institute on Lake Superior Geology (ILSG). (In Proceedings of the 62nd Institute on Lake Superior Geology (ILSG) Annual Meeting, Duluth, Minnesota, May 4-8, 2016)
		Gerald Niemi	NRRI	Journal Article (Published) Uzarski, D., Brady, V., Danz, N., Johnson, L., Niemi, G., & Tozer, D. (2019). Leveraging a landscape-level monitoring and assessment program for developing resilient shorelines throughout the Laurentian Great Lakes. <i>Wetlands</i> .
		Kristina Nixon	NRRI	Journal Article (Published) Bracey, A. M., Niemi, G. J., Etterson, M. A., & Green, R. F. (2016). Window related avian mortality at a migration corridor. <i>The Wilson Journal of Ornithology</i> , <i>128</i> , 355-367.
		Euan Reavie	NRRI	Journal Article (Published) Price, J. M., Silberman, J., Nixon, K., Swearingen, A., Swaty, R., & Miller, N. (2016). Collaborative scenario modeling reveals potential advantages of blending strategies to achieve conservation goals in a working forest landscape. <i>Landscape Ecology</i> , <i>31</i> (5), 1093–1115.
			NRRI	Journal Article (Published) Reavie, E., & Cai, M. (2019). Consideration of species-specific diatom indicators of anthropogenic stress in the Great Lakes. <i>PLOS ONE</i> , <i>14</i> (5), e0210927.
			NRRI	Journal Article (Published) Reavie, E. D., Cai, M., & Brown, T. N. (2018). Historical watershed stressors for the Laurentian Great Lakes. <i>Geoscience Data Journal</i> , <i>5</i> , 4-8.
			NRRI	Anderson, J. P., Paterson, A. M., Reavie, E. D., Edlund, M. B., & Rühland, K. M. (2017). An introduction to Lake of the Woods - from science to governance in an international waterbody. <i>Lake and Reservoir Management</i> , <i>33</i> , 325-334.
			NRRI	Journal Article (Published) O'Berne, M. D., Werne, J. P., Hecky, R. E., Johnson, T. C., Katsev, S., & Reavie, E. D. (2017). Anthropogenic climate change has altered primary productivity in Lake Superior. <i>Nature Communications</i> , <i>8</i> , 15713.
			NRRI	Journal Article (Published) Brooks, B. W., Lazorchak, J. M., Howard, M. D., Johnson, M.-V. V., Morton, S. L., Perkins, D. A., . . . Steevens, J. A. (2016). Are harmful algal blooms becoming the greatest inland water quality threat to public health and aquatic ecosystems? <i>Environmental Toxicology and Chemistry</i> , <i>35</i> (1), 6–13.
		Eric Singsass	NRRI	Journal Article (Published) Mohammad, B., Al-Shannag, M., Alnaeef, M., Singh, L., Singasaas, E., & Alkasrawi, M. (2018). Production of Multiple Biofuels from Whole Camelina Material: A Renewable Energy Crop. <i>BioResources</i> , <i>13</i> (3).
		Morgan Swingen	NRRI	Journal Article (Published) Stevenson, E. R., Chitwood, M. C., Lashley, M. C., Pollock, K. H., Swingen, M. B., Mooman, C. E., & DePerno, C. S. (2016). Survival and cause-specific mortality of coyotes on a large military installation. <i>Southeastern Naturalist</i> , <i>15</i> , 459-466.

College	Department	Faculty	Subject	Sustainability Publications
		Christopher Wright	NRRI	Journal Article (Published) Wright, C. K., Larson, B., Lark, T. J., & Gibbs, H. K. (2017). Recent grassland losses are concentrated around US ethanol refineries. <i>Environmental Research Letters</i> , 12(4), 044001. Journal Article (Published) Liu, G., Schwartz, F. W., Wright, C. K., & McIntyre, N. E. (2016). Characterizing the Climate-Driven Collapses and Expansions of Wetland Habitats with a Fully Integrated Surface-Subsurface Hydrologic Model. <i>Wetlands</i> , 36(2), 287–297. Journal Article (Submitted) McIntyre, N. E., Liu, G., Gorzo, J., Wright, C. K., & Schwartz, F. Simulating climate-driven variability of wetlands and wetland-bird relationships in the Prairie Pothole Region. <i>Ecospheres</i> . [Submitted]
SCSE	PHYSICS (includes Physics and Astronomy)	Serguei Katsev	Physics	Journal Article (Published) Schreiner, K. M., Katsev, S., Steinman, B., Sterner, R. W., Williams, J., & Zak, K. (2017). Advancing Graduate Limnology Education Through Active Learning and Community Partnerships: A Pilot Program at the Large Lakes Observatory. <i>Limnology and Oceanography Bulletin</i> , 26(3), 61-66. Journal Article (Published) O'Beirne, M. D., Werne, J. P., Hecky, R. E., Johnson, T. C., Katsev, S., & Reavie, E. D. (2017). Anthropogenic climate change has altered primary productivity in Lake Superior. <i>Nature communications</i> , 8, 15713.
SCSE		James Rock	Astronomy	Journal Article (Published) Gould, R., & Rock, J. W. (2017). Once Upon A Toxic Sanctuary: Partnering To Restore and Reclaim a Dakota Sacred Site. <i>Interdisciplinary Journal of Partnership Studies</i> , 4(3 Fall Article 8).
CEHSP	SOCIAL WORK	Dr. Priscilla Day	Social Work	Journal Article (Published) Gould, R., & Day, P. (2017). "You are here because the land called you"-searching for vivir bien/living well. <i>Journal of Inc</i>
CLA	WORLD LANGUAGES & CULTURES (including Chinese, Cultural Entrepreneurship, French, German, Spanish)	Dr. Aparna Katre	Cultural Entrepreneurship	Journal Article (Submitted) A multi-dimensional, multi-tier and multi-level framework to assess sustainability of rural energy access
	Large Lakes Observatory	Dr. Robert Sterner	LLO	Journal Article (Published) Sterner, R.W., Brovold, S., Hood, J.M., Peres-Neto, P., Yokota, K., & Yuan, F. Contrasting agricultural and urban relationships to water chemistry in a metropolitan area. <i>Science of the Total Environment</i> , To be submitted.. Journal Article (Published) Sherrill, R.M., Brown, E.T., Sterner, R.W., McKay, R.M.L., Field, M.P., & Agnich, J. Contrasting spatial and temporal dynamics of bioactive trace metals in Lake Superior: Implications for availability to plankton. <i>Limnology and Oceanography</i> , in prep. Journal Article (Published) Phillips, J.C., McKinley, G.A., Bennington, V., Bootsma, H.A., Pilcher, D.J., Sterner, R. W., & Urban, N.R. Evaluating the potential for CO2-induced acidification of the Laurentian Great Lakes. <i>Global Biogeochemical Cycles</i> . Journal Article (Published) Schreiner, K. M., Katsev, S., Steinman, B., Sterner, R. W., Williams, J., & Zak, K. (2017). Advancing Graduate Limnology Education Through Active Learning and Community Partnerships: A Pilot Program at the Large Lakes Observatory. <i>Limnology and Oceanography Bulletin</i> , 26(3), 61-66.