

Sarah H. Ledford

Georgia State University
Department of Geosciences
38 Peachtree Center Ave.
Langdale Hall, Suite 730
Atlanta, GA 30303

(404) 413-5780
sledford@gsu.edu
sarahhledford.weebly.com

Professional Appointments

08/2018-present *Assistant Professor*, Department of Geosciences, Georgia State University
07/2022-present *Dual Degree Director*, Department of Geosciences, Georgia State University
03/2016-08/2018 *Postdoctoral Fellow Research Associate*, Department of Earth and Environmental Sciences, Temple University

Education

Ph.D., 2016 Earth Science, Syracuse University, Syracuse, NY
B.A., 2010 Earth Science, Vassar College, Poughkeepsie, NY

Awards

2023 Outstanding Junior Faculty Award, College of Arts and Sciences, Georgia State University
2022 Sulzman Award for Scientific Excellence through Education and Mentoring, Biogeochemistry Section, American Geophysical Union
2022 Dean's Early Career Award, College of Arts and Sciences, Georgia State University

External Grants

Awarded

2023-2026 PI: Jackson, WA (Texas Tech); Co-PIs: T Anderson (Texas Tech), J Coates (Berkeley), **SH Ledford** (GSU), B Rao (Texas Tech), N Sturchio (U of Delaware), and K Van Meter (Penn State). Quantification and modeling of perchlorate impacts from fireworks on drinking water sources. United States Environmental Protection Agency, \$2,500,000 (total), \$175,000 (GSU)
2023-2027 PI: Hankins, HK, Co-PIs: C Fuller, NO Jelks, **SH Ledford**, and R Milligan. Implementation Grant: Community-Soil-Air-Water (CSAW): A model community-based learning ecosystem to transform Geosciences. National Science Foundation: Cultural Transformations of Geosciences, \$7,175,111
2022-2024 PI: **Ledford, SH**, Co-PIs: L Pangle, R Milligan, and N Kabengi. Broadening participation in (sub)Urban watershed Science in the Southeast (BUSS). Department of Energy, BER. \$148,524
2021-2023 PI: Kabengi N, Co-PIs: D Gebregiorgis, P Hidalgo, **SH Ledford**, and N Sharratt. Acquisition of LA-ICPMS instrumentation for geochemical, hydrological, and archeological research and education. National Science Foundation, EAR-IF. \$395,948.
2020-2024 PI: **Ledford SH**, Co-PIs: LA Pangle, E Sudduth (GGC), S Clinton (UNCC), and DA Riveros-Iregui (UNC). Collaborative Research: Conceptualizing and quantifying the function of beaver dams and stormwater ponds on the hydrology and biogeochemistry of urban streams. National Science Foundation, EAR-HS. \$598,359 (total), \$324,364 (GSU). Collaborative with University of North Carolina at Chapel Hill and University of North Carolina Charlotte.

COVID-19 Impact Supplemental Funding Award: \$24,802 (total), \$8,104 (GSU)

REPS Supplemental Funding Award: \$48,764 (GSU)

- 2019-2020 PI: **Ledford SH**, Co-PI: LA Pangle, Impact of beaver dams and beaver dam analogues on hydrologic and nitrate retention in Atlanta, GA. United States Geological Survey 104b State Research Program, \$56,604.
- 2017-2018 PI: **Ledford SH**, Co-PI: MJ Kurz, RAPID Collaborative Research: Evaluation ecosystem respiration in urban streams using reactive tracer and dissolved oxygen loggers. National Science Foundation, EAR- Geobiology and Low-Temperature Geochemistry, \$25,000. Collaborative with the Academy of Natural Sciences of Drexel University.

Internal Grants

Awarded

- 2021 Faculty Advisor: **SH Ledford**, Co-PIs: H Shata and I McRae (Sherwood Design Engineers). Kit of parts analysis: Urban Stormwater and Microclimate Resilience, Georgia State University. Georgia State University Sustainability Fee, \$50,200.
- 2019-2020 PI: **Ledford, SH**. Quantifying the impact of beaver dams on nitrate retention in an urban stream, Atlanta, GA. Georgia State University Research Initiation Grant, \$20,000.

External Contract Awards

Awarded

- 2021-2022 Hankins, K, **SH Ledford**, and R Milligan. (Equal PIs). Community-Soil-Air-Water (CSAW): The environmental context for the Quarry Yards Region. Awarded from Microsoft Corporation. \$199,778

Publications (* denotes graduate student mentee)

In Review

- 2023 *Sheppy, J, EB Sudduth, S Clinton, D Riveros-Iregui, and **SH Ledford**. Urban beaver ponds show limited impacts on stream carbon quantity in contrast to stormwater ponds. *Urban Ecosystems*.

Peer Reviewed

- 2023 **Ledford, SH**, *S Miller, L Pangle, and E Sudduth. Hyporheic exchange in an urban beaver pond mediates high nutrient groundwater inflow and pond productivity. *Journal of Hydrology*. doi:10.1016/j.jhydrol.2023.129758
- 2023 *Wheeler C and **SH Ledford**. Stability in headwater chemical signatures across a dynamic flow regime in a highly urbanized Piedmont catchment. *Hydrological Processes* 37(2), e14825. doi:10.1002/hyp.14825
- 2023 Oswald C, C Kelleher, **SH Ledford**, K Hopkins, A Sytsma, D Tezlaff, L Toran, and C Voter. Integrating urban water fluxes and moving beyond impervious surface cover: A review. *Journal of Hydrology* 618, 129188. doi:10.1016/j.jhydrol.2023.129188.
- 2022 **Ledford, SH**, M Briggs, R Glas, and MA Zimmer. Connecting diverse disciplines to improve understanding of surface water-groundwater interactions. *Journal of Hydrology X* 17, doi:10.1016/j.hydroa.2022.100141
- 2022 *Davis, L, R Milligan, C Stauber, N Jelks, L Casanova and **SH Ledford**. Environmental injustice and *Escherichia coli* in urban streams: Potential for community-led response. *Wiley Interdisciplinary Reviews: Water* 9(3), e1583. doi:10.1002/wat2.1583.

- 2021 **Ledford SH**, JS Diamond, and L Toran. Large spatiotemporal variability in metabolic regimes for an urban stream draining four wastewater treatment plants with implications for dissolved oxygen monitoring. *PLoS ONE* 16(8):e0256292. doi:10.1371/journal.pone.0256292.
- 2021 **Ledford SH**, M Kurz, and L Toran. Contrasting Raz-Rru stream metabolism and nutrient uptake downstream of urban wastewater effluent sites. *Freshwater Science* 40(1): 103-119. doi:10.1086/712932.
- 2020 Lautz LK, **SH Ledford**, and J Beltran. Legacy effects of cemeteries on groundwater quality and nitrate loads to a headwater stream. *Environmental Research Letters* 15:125012. doi:10.1088/1748-9326/abc914
- 2020 **Ledford SH**, M Zimmer, and D Payan. Anthropogenic and biophysical controls on low flow hydrology in the southeastern United States. *Water Resources Research* 56, e2020WR027098. doi:10.1029/2020WR027098
- 2020 **Ledford SH** and L Toran. Downstream evolution of wastewater treatment plant nutrient signals using high-temporal monitoring. *Hydrological Processes* 34: 852-864. doi:10.1002/hyp.13640.
- 2018 Price JR, **SH Ledford**, MO Ryan, L Toran, and C Sales. Wastewater treatment plant effluent introduces recoverable shifts in microbial community composition in receiving streams. *Science of the Total Environment* 613-614: 1104-1116. doi:10.1016/j.scitotenv.2017.09.162.
- 2017 **Ledford SH**, LK Lautz, PG Vidon, and JC Stella. Impact of Seasonal Changes in Stream Metabolism on Nitrate Concentrations in an Urban Stream. *Biogeochemistry* 133(3):317-331. doi:10.1007/s10533-017-0336-7.
- 2016 **Ledford SH**, LK Lautz, and JC Stella. Hydrogeologic processes impacting storage, fate, and transport of chloride from road salt in urban riparian aquifers. *Environmental Science & Technology* 50: 4979-4988. doi:10.1021/acs.est.6b00402.
- 2015 **Ledford SH** and LK Lautz. Floodplain connection buffers seasonal changes in urban stream water quality. *Hydrological Processes* 29(6):1002-1016. doi:10.1002/hyp.10210

White Papers

- 2022 Hankins, K, **SH Ledford**, and R Milligan. The socio-environmental context for Quarry Yards. Prepared for Microsoft.
- 2021 **Ledford SH** and Sherwood Design Engineers. Urban Stormwater and Microclimate Resilience: Georgia State University. Available from: https://www.dropbox.com/s/kqol76xg360kl6e/GSU_Stormwater%20and%20Microclimate%20Resilience%20Report_Final%20Draft_Sherwood%202021.pdf?dl=0.

Opinions and Commentaries

- 2023 Mitchell, CPJ, C Oswald, and **SH Ledford**. Editorial: Biogeochemical dynamics in urban systems: interactions, feedbacks, and cumulative effects. *Frontiers in Environmental Science*. doi:10.3389/fenvs.2023.1338537
- 2022 CUAHSI Board & Staff*. COVID-19 impacts highlight the need for holistic evaluation of research and in the hydrologic sciences. *Water Resources Research* 58. doi:10.1029/2021WR030930.
*Attributed authorship to the CUAHSI Board & Staff; my role as co-author is confirmed in the Appendix
- 2020 **Ledford SH**, MM Monteagudo, AN Flores, JB Glass, and KM Cobb. #GeoGRExit: Why geosciences programs are dropping the GRE, *Eos*, 101, doi:10.1029/2020EO145223. Published on 04 June 2020.

Datasets

- 2023 **Ledford, SH**. Tapestry beaver pond geochemistry. HydroShare.
<http://www.hydroshare.org/resource/8bb8e869e2b9442989163fbaa1d616ea>
- 2021 **Ledford SH** and L Toran. Wissahickon dissolved oxygen and metabolism data. HydroShare,
<https://doi.org/10.4211/hs.d7caec9df1f8426690927d9957c3ed7f>
- 2020 **Ledford SH** and LK Lautz. Meadowbrook Creek Water Chemistry, 2012-2013. HydroShare,
<https://www.hydroshare.org/resource/d4bf09615d8940ccbe4bb1eee13abf3d/>.
- 2020 **Ledford SH**, M Kurz, and L Toran. Wissahickon Metabolism Data. HydroShare,
<https://doi.org/10.4211/hs.ce9e86dc4cbc4e71b6d330e32ea01df0>.
- 2019 **Ledford SH** and L Toran. Sandy Run, PA, baseflow data. HydroShare,
<https://doi.org/10.4211/hs.7b81ceca6a5b426dac9905541fe27d95>.

Presentations (* denotes graduate student mentee, ** denote undergraduate student mentee)

Invited University Presentations

- 2024 Princeton University
- 2023 Warnell School of Forestry, University of Georgia
- 2023 Department of Geography and Earth Sciences, University of North Carolina Charlotte
- 2022 Department of Geography, University of North Carolina Chapel Hill
- 2022 Department of Civil and Environmental Engineering, Vanderbilt University
- 2021 Department of Earth and Environmental Science, University of Pennsylvania
- 2021 Center for Urban Environmental Research and Education, University of Maryland Baltimore County
- 2021 Department of Geology, University of Georgia
- 2020 Department of Geology and Environmental Science, James Madison University
- 2020 Department of Earth and Environmental Sciences, University of Illinois at Chicago

Conference Presentations

Invited Presentations and Posters

- 2022 **Ledford SH**, R Fanelli, K Hopkins, C Kelleher, C Oswald, A Sytsma, D Tezlaff, L Toran, and C Voter. The need for integrated critical zone process understanding of water flow in cities. American Geophysical Union Fall Meeting, Chicago, IL
- 2017 **Ledford SH** and L Toran. Spatial and temporal shifts in gross primary productivity, respiration, and nutrient concentrations in urban streams impacted by wastewater treatment plant effluent. American Geophysical Union Fall Meeting, New Orleans, LA
- 2017 **Ledford SH** and L Toran. Evaluating controls on metabolism and nutrient processing in a WWTP-impacted urban stream. 17th Annual Syracuse Center of Excellence Symposium. Syracuse, NY.

Presentations

- 2023 **Ledford, SH**, R Milligan, J Echols, J Sterling, and M Meyer. Longer-term community science *E. coli* monitoring points to widespread chronic sewage contamination in Atlanta, GA. 2023 American Geophysical Union Fall Meeting
- 2023 Milligan, R, K Hankins, and **SH Ledford**. Repairing environmental injustice or redoubling racial harms in *sustainable* redevelopment of Atlanta's Quarry Yards? SEDAAG, Norfolk, VA
- 2023 Pangle, LA, *C Wadler, **SH Ledford**, SM Clinton, and D Riveros-Iregui. Comparative analysis of conservative-solute transit times through beaver-impounded stream channels and stormwater

- retention ponds throughout Metropolitan Atlanta. American Water Resources Association Meeting, Raleigh, NC.
- 2023 *Wadler, C, L Pangle, and **SH Ledford**. Incorporating beaver into the urban stream network: A comparison of water transit time distributions across urban beaver ponds and stormwater ponds. Georgia Water Resources Conference
- 2023 **Ledford, SH** and *C Wheeler. Baseflow spatial stability of major ions is a highly urbanized watershed matches homogeneous stormflow responses. Georgia Water Resources Conference
- 2022 Lautz LK and **SH Ledford**. Impacts of cemeteries on groundwater quality and nitrate loads in an urban watershed. American Geophysical Union Fall Meeting, Chicago, IL
- 2022 **Ledford SH**, R Milligan, LJ Davis*, and J Echols. Environmental injustice and *E. coli* in the Upper South River watershed. SEDAAG, Atlanta, GA
- 2022 *Sheppy, J and **SH Ledford**. Comparing the biodegradability of dissolved organic matter in urban stormwater and beaver ponds in Atlanta, Georgia. Southeastern Biogeochemistry Symposium
- 2021 **Ledford SH**, J Diamond, and L Toran. Spatiotemporal heterogeneities in metabolism around urban wastewater treatment plants are missed with current regulatory assessments. American Geophysical Union Fall Meeting
- 2021 **Ledford SH**, J Diamond, and L Toran. Spatiotemporal variability in stream metabolism downstream of wastewater treatment plants. Society for Freshwater Science Annual Meeting
- 2021 ****Borsos D and SH Ledford**. Impacts of beaver dam analogs on total suspended solids in a highly incised urban stream channel. Georgia State University Undergraduate Research Conference
Winner, Sustainability Award
- 2021 *Wheeler C and **SH Ledford**. Relationship between urban land use variation and base and stormflow water quality in a highly urbanized watershed, Atlanta, GA. Georgia Water Resources Conference
- 2021 **Ledford SH**, E Sudduth, G Behrend, S Peck, and T Smith. Beaver Dam Analog in an urban stream: Lessons learned from one form-based restoration project. Georgia Water Resources Conference
- 2021 *Davis L and **SH Ledford**. Examining mycofiltration efficacy in a first-order urban stream. Georgia Water Resources Conference
- 2020 **Ledford SH**, MM Monteagudo, AN Flores, JB Glass, and K Cobb. GeoGRExit: Strategies for removing the GRE as one barrier of entry to Geoscience graduate programs. Geological Society of America Meeting.
- 2018 **Ledford SH**, MJ Kurz, and L Toran. Comparison of different metabolism measurements methods to evaluate impact of wastewater treatment plant effluent discharge on an urban stream. Society for Freshwater Science Annual Meeting.
- 2017 Price JR, **SH Ledford**, MO Ryan, L Toran, and C Sales. The impact of wastewater treatment plant effluent on the composition of microbial communities within receiving streams. Delaware Watershed Research Conference.
- 2017 *Kanaley CK, L Toran, and **SH Ledford**. In-stream sediment and nutrient response to storm events in an urban stream. Geological Society of America Annual Meeting.
- 2016 **Ledford SH**, LK Lautz, PG Vidon, and JC Stella. Impact of Stream Metabolism on Nitrate Concentrations in an Urban Stream. American Geophysical Union Fall Meeting.
- 2016 **Ledford SH**, JR Price, M Ryan, LB Perez, CM Sales, and L Toran. Using a multi-parameter biogeological approach to track the impact of treated sewage discharge on urban streams. Geological Society of America Annual Meeting.

- 2015 **Ledford SH** and LK Lautz. Modeling the transport and fate of road salt in urban floodplains. Geological Society of America Annual Meeting.
- 2014 **Ledford SH** and LK Lautz. Stream-groundwater interaction mechanisms that promote storage of deicing chemicals in urban floodplains. Geological Society of American Annual Meeting.
- 2013 **Ledford SH** and LK Lautz. Stream-groundwater interaction buffers seasonal changes in urban stream water quality. American Geophysical Union Fall Meeting.

eLightning

- 2022 *Sheppy, J, **SH Ledford**, EB Sudduth, and D Riveros-Iregui. Comparing the effect of urban beaver ponds on dissolved organic matter biodegradability to stormwater ponds in Atlanta, Georgia. Frontiers in Hydrology Meeting
- 2022 *Wadler, C, **SH Ledford**, LA Pangle, and D Riveros-Iregui. Comparing transit time distributions across urban beaver and stormwater ponds. Frontiers in Hydrology Meeting
- 2022 **Ledford, SH**, R Milligan, and J Echols. Building data collection partnerships with community-led watershed advocacy groups. Frontiers in Hydrology Meeting

Posters

- 2023 Hankins, K, **SH Ledford**, R Milligan, C Fuller, N Osborne Jelks, D Gegregiorgis, P Hidalgo, N Kabengi, E Saikawa, D Haddock, and C Lewis. Community-Soil-Air-Water: Building a geoscience learning ecosystem with community partners to address socio-environmental issues in Atlanta, GA. 2023 American Geophysical Union Fall Meeting
- 2023 Jacimovic, N, C Kelleher, **SH Ledford**, and J Knapp. Impact of watershed characteristics on stream temperature response during storm events near Atlanta, GA, USA. 2023 American Geophysical Union Fall Meeting
- 2023 **Ledford, SH**, *J Sheppy, *C Wadler, *A Guglielmi, L Pangle, E Sudduth, S Clinton, and D Riveros-Iregui. Is there a place for urban beaver? Comparing hydrologic and nutrient impacts of urban beaver ponds to stormwater ponds. Catchment Science Gordon Research Conference
- 2023 **Ledford, SH**, *J Sheppy, *C Wadler, *A Guglielmi, L Pangle, E Sudduth, S Clinton, and D Riveros-Iregui. Is there a place for urban beaver? Comparing hydrologic and nutrient impacts of urban beaver ponds to stormwater ponds. CUAHSI Biennial
- 2023 *Guglielmi, A and **SH Ledford**. Habitat suitability assessment for urban beavers in metro Atlanta. Georgia Water Resources Conference
- 2023 *Presswood, D and **SH Ledford**. Summarizing current gaps in knowledge surrounding stream metabolism and its controlling factors. Georgia Water Resources Conference
- 2023 *Lawal, C, L Pangle, **SH Ledford**, and J Sterling. A survey of microplastic concentrations in select tributaries of the Chattahoochee River that flow through the City of Atlanta. Georgia Water Resources Conference
- 2022 Sudduth, EB, A Fowler, **SH Ledford**, and L Pangle. Algal growth in urban beaver and stormwater pond systems. Joint Aquatic Sciences Meeting
- 2021 **Ledford SH**, R Milligan, and J Echols. Building data collection partnerships with community-led watershed advocacy groups to advance education. American Geophysical Union Fall Meeting
- 2021 *Wheeler CH and **SH Ledford**. Baseflow water quality and storm hysteresis variability in urban headwaters. American Geophysical Union Fall Meeting
- 2021 *Sheppy J and **SH Ledford**. Analysis of the efficacy of the distribution of retention ponds in DeKalb County, GA. Georgia Water Resources Conference
- 2020 *Davis L and **SH Ledford**. Examining mycofiltration efficacy in a first-order urban stream: a pilot for future mycelium deployment in Ripplewater Creek, South River Watershed, Atlanta, Georgia. American Geophysical Union Fall Meeting

- 2020 *Wheeler C and **SH Ledford**. Relationship between urban land use variation and base and stormflow water quality in a highly urbanized watershed, Atlanta, GA. American Geophysical Union Fall Meeting.
- 2020 **Morgan S and **SH Ledford**. Stormwater Runoff Quality from Green Roofs in Atlanta, Georgia. Georgia State University Undergraduate Research Conference
 Winner, Sustainability Award
 Honorable mention, Outstanding Climate Project Award
- 2020 **Ledford SH**, L Pangle, *S Miller, E Sudduth, and LM Casanova. Hydrologic retention and nutrient dynamics around urban beaver dams. 5th Symposium on Urbanization and Stream Ecology.
- 2019 *Miller S, **SH Ledford**, E Sudduth, and LM Casanova. Nutrient cycling in surface and hyporheic waters of an urban beaver dam in Southeastern USA. American Geophysical Union Fall Meeting.
- 2019 **Ledford SH** and M Zimmer. Mining geospatial data to quantify biophysical and anthropogenic controls on low flow frequency and magnitude in southeastern USA streams. American Geophysical Union Fall Meeting.
- 2019 Kshatri M, E Sudduth, **SH Ledford**, and LM Casanova. Water quality monitoring in an urban nature preserve undergoing stream restoration. Georgia Water Resources Conference.
- 2018 **Ledford SH** and L Toran. Patterns in diurnal dissolved oxygen signals across an urban stream impacted by wastewater treatment plant effluent. American Geophysical Union Fall Meeting.
- 2018 Kurz MJ, **SH Ledford**, AS Ward, and L Toran. Point source nutrient effects on metabolic activity and reactive solute transport in an urban stream. American Geophysical Union Fall Meeting.
- 2018 Kurz MJ, **SH Ledford**, and L Toran. Evaluating point source nutrient effects on metabolic activity in an urban stream. Delaware Watershed Research Conference.
- 2018 Gutchess KM, L Jin, C Kelleher, **SH Ledford**, LK Lautz, and Z Lu. Modeling future nitrogen dynamics in Chesapeake Bay headwaters. Geological Society of America Northeastern Section Annual Meeting.
- 2018 *Kanaley CK, L Toran, and **SH Ledford**. Turbidity and nutrient response to storm events in the Wissahickon Creek, PA. Philadelphia Water Summit.
- 2018 **Wiskemann L, *CK Kanaley, L Toran, and **SH Ledford**. Variation in light intensity and algae cover in an urban stream with a riparian buffer. Philadelphia Water Summit.
- 2017 Price JR, **SH Ledford**, M Ryan, L Toran, and CM Sales. Wastewater treatment plant effluent introduces recoverable shifts in microbial community composition in urban streams. American Geophysical Union Fall Meeting.
- 2014 **Ledford SH** and LK Lautz. Modeling stream-groundwater interactions and associated groundwater salinization in an urban floodplain. American Geophysical Union Fall Meeting.
- 2013 **Ledford SH** and LK Lautz. Stream-groundwater interaction buffers seasonal changes in urban stream water quality. 13th Annual Syracuse Center of Excellence Symposium.
- 2013 **Ledford SH** and LK Lautz. Seasonal role of surface water-groundwater interaction in regulating stream water chemistry in urban streams. 48th Annual Northeastern Geological Society of America Meeting.
- 2012 **Ledford SH**, LK Lautz, and M Holdsworth. Role of surface water-groundwater interaction in regulating stream water chemistry in urban streams. American Geophysical Union Fall Meeting.
- 2010 **Ledford SH** and DP Gillikin. The influence of mill dam ponds on the biogeochemistry of small streams. Geological Society of American Northeastern Section (45th Annual) and Southeastern Section (59th Annual) Joint Meeting.

Advising

M.S. Thesis: 2 current, 6 graduated

M.S. Capstone: 1 current, 7 graduated

M.S. Thesis Committee Member: 2 current, 7 graduated

Undergraduate Research: 1 current, 3 graduated

Teaching

GEOL 1122, Introductory Geology II: Spring 2019, 2021, 2023

HON 3260, Interdisciplinary Seminar: Fall 2022, Spring 2024

GEOG 4640/GEOS 6640, Geomorphology: Spring 2019, 2021, 2023

GEOG 4650/GEOS 6650, Surface Water Hydrology: Fall 2018-2023

GEOS 8040, Seminar in Hydrology and Biogeochemistry: Fall 2019, 2021, Spring 2024

GEOS 8060, Teaching Practicum: Spring 2020, Summer 2020, Fall 2020

Outreach and Development

2020-present Funding, organizing, and running lab analyses for the South River Watershed Alliance water quality monitoring program

2019-present Host of the #GeoGRExit database, bit.ly/GeoGRExit

2018-2022 Science-A-Thon Twitter participant, scienceathon.org

2023 Quoted in “Fight to stop ‘Cop City’ over water pollution fears has day in court” by T Pratt, The Guardian, <https://www.theguardian.com/us-news/2023/nov/18/cop-city-atlanta-environmental-lawsuit-water-pollution>

2023 Quoted in “Federal agency says it stopped measuring water pollution near ‘Cop City’” by T Pratt, The Guardian, <https://www.theguardian.com/us-news/2023/nov/11/cop-city-environment-sediment-pollution>

2023 Quoted in “U.S. agency quietly shuts down monitoring device key to training center pollution debate, sewage control” by J. Ruch, Saporta Report, <https://saportareport.com/u-s-agency-quietly-shuts-down-monitoring-device-key-to-training-center-pollution-debate-sewage-control/sections/reports/johnruch/>

2023 Presenter on “Urban stream flow and quality across scales: the importance of infrastructure”, with Aditi Bhaskar, <https://www.cee.psu.edu/events/women-advancing-river-research.aspx>

2022 Quoted in “‘GRExit’ gains momentum as Ph.D. programs drop exam requirement”, by K. Langin, *Science* 378(6623). doi:10.1126/science.caredit.adg0534

2022 Panel Member, Search Committee Panel Discussion, professional development panel organized by Dr. Krista Capps (UGA)

2021 Panel Member, Academic Job Applications Cyber Workshop Series, Week 4 – Startup packages and negotiations. Hosted by AGU’s Hydrology Student Section Subcommittee

2020 Quoted in “Waterways change as cities grow nearby”, by K. Kornei, *Eos* 101, [doi:2020EO152751](https://doi.org/10.1029/2020EO152751)

2020 Quoted in “US geoscience programmes drop controversial admissions test”, by Virginia Gewin, *Nature* 584(157), [doi:10.1038/d41586-020-02181-z](https://doi.org/10.1038/d41586-020-02181-z)

2020 Participated in the 5th Symposium on Urbanization and Stream Ecology: Moving the bar on multidisciplinary solutions to wicked urban stream problems, Feb. 12-15, 2020.

2019 Participant in the 2019 National Association for Geoscience Teachers Early Career Workshop, College Park, MD

2017 Contributor to envirobites.org, a science communication blog

- 2017 Participated in the 4th Symposium on Urbanization and Stream Ecology: Making urban stream rehabilitation a co-evolutionary process, May 31-June 3, 2017.

University Service and Professional Activities

Professional Service:

- 2021-present Member, Board of Directors, Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI)
- 2024-present Chair-Elect
- 2022-present Executive Committee
- 2021 Board Liaison to Diversity, Equity, and Inclusion Committee
- 2018-present Georgia State University representative to CUAHSI
- 2023 Co-Convener, American Geophysical Union Fall Meeting, Session on “Urban hydrology and water quality: Toward sustainable urban water management and governance”
- 2023 Guest Lecture, Environmental Instrumentation, GSU
- 2023 Grant review panel member, National Science Foundation
- 2022-2023 Editor for special issue in *Frontiers in Environmental Science on Biogeochemical Dynamics in Urban Systems: Interactions, Feedbacks, and Cumulative Impacts*
- 2023 Guest Lecture, Global Change and Sustainability, Vassar College
- 2023 Co-Convener, Georgia Water Resources Conference, Session on “Ecosystem function, infrastructure, and conservation in urban watersheds”
- 2023 Guest Lecture, Urban Geochemistry, Willamette College
- 2022 Co-Convener, *Frontiers In Hydrology Meeting*, Session on “Student-Centered Research and Pedagogies: Visioning and Building Collaborations at the Frontiers of Hydrology”
- 2022 Guest Lecture, Environmental Anthropology, GSU
- 2021 Co-Convener, American Geophysical Union Fall Meeting, Session on “Advances in Urban Hydrology”
- 2020 Guest Lecture, Capstone, Colorado College
- 2020 Grant review panel member, National Science Foundation
- 2019 Grant review panel member, Department of Energy

Peer and Ad Hoc Reviewer (since 2018 only):

- 2023 *Freshwater Science, Biogeochemistry, Journal of Geophysical Research-Biogeosciences, Southeastern Geographer, Hydrological Processes*
- 2022 *Water Resources Research (3), Hydrological Processes, Limnology & Oceanography Letters, Geophysical Research Letters, Freshwater Science, M.J. Murdock Foundation*
- 2021 *Hydrogeology Journal, Journal of Hydrology, Hydrological Processes (3), Freshwater Science*
- 2020 California Sea Grant, *Water Resources Research, Ecosystems, Limnology and Oceanography*
- 2019 National Science Foundation, Maryland Sea Grant, Ohio State Internal Grant Competition, *PLOS One, Environmental Science & Technology, Aquatic Ecology, Hydrological Processes, Water Resources Research*
- 2018 *Environmental Science & Technology*

Member of: Southeastern Division of the American Association of Geographers (since 2022), American Geophysical Union (since 2012), Society for Freshwater Science (since 2017), Geological Society of America (2010-2020)

Department Service (All Department of Geosciences, Georgia State University):

2024 Member, Launch Committee for New Faculty
2018-2021/2022-present Member, Graduate Committee
2021-present Member, Communications and Social Media Committee
2022-present Member, Diversity, Equity, and Inclusion Committee
2021-2022 Member, Recruitment Committee
2021-2022 Member, Safety Committee
2021-2022 Member, Undergraduate Committee
2019-2022 Faculty advisor, Sigma Gamma Epsilon
2019-2022 Faculty advisor, Geoscience Club
2021-2022 Search committee member, Assistant Professor with a focus on race and environment
2021, 2024 Member, Triennial chair review committee
2021 Search committee member, Lecturer in environmental science
2020-2022 Member, Field Camp task force
2020-2022 Chair, GEOL 1122 Master Class development committee
2020-2021 Member, Appeals Committee
2019-2020 Search committee member, Lecturer in physical geography (2 searches)
2018-2020 Chair, Library Committee