

Thomas J. Glose

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Kansas Geological Survey
University of Kansas
Lawrence, KS 66047

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EDUCATION

- | | |
|-------------|---|
| 2014 - 2019 | University at Buffalo, Buffalo, NY
Ph.D. in Geology |
| 2010-2014 | State University of New York at Geneseo, Geneseo, NY
B.A. in Geophysics |

PROFESSIONAL APPOINTMENTS

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| 2019 – present | Kansas Geological Survey, University of Kansas, Lawrence, KS
Postdoctoral Researcher |
| 2014-2019 | University at Buffalo, Buffalo, NY
Graduate Research Assistant |
| 2012-2014 | State University of New York at Geneseo, Geneseo, NY
Undergraduate Research Assistant |

PUBLICATIONS

Additional details are available on my [Google Scholar](#) profile.

Published

- | | |
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| 2021 | Glose, T.J. , Lowry, C.S., and Hausner, M.B., Examining the utility of continuously quantify Darcy fluxes through the use of periodic temperature time series. <i>Journal of Hydrology</i> , 595: 125675. http://dx.doi.org/10.1016/j.jhydrol.2020.125675 |
| 2019 | Glose, T.J. , Lowry, C.S., and Hausner, M.B., Limits on groundwater-surface water fluxes derived from temperature time series: Defining resolution-based thresholds. <i>Water Resources Research</i> , 55(12): 10678-10689. http://dx.doi.org/10.1029/2019WR025643 |
| 2019 | Glose, T.J. , Lowry, C.S., and Hausner, M.B., Vertically integrated hydraulic conductivity: a new bulk parameter for groundwater-surface water analysis. <i>Groundwater</i> , 57: 727-736. http://dx.doi.org/10.1111/gwat.12864 |

In Review

Glose, T.J., Zipper, S.C., Hyndman, D.W., Kendall, A.D., Deines, J.M., Butler, J.J., Jr. Quantifying the impact of lagged hydrological responses on the effectiveness of groundwater conservation. Under review at *Water Resources Research*.

FUNDING

Total awarded to date: \$26,346

2018	Pegrum Professional Development Fund, University at Buffalo (\$400)
2018	Distributed Temperature Sensing Pilot Study Recipient, Center for Transformative Environmental Monitoring Programs (Equipment Grant; \$2,100 in-kind contribution)
2017	Pegrum Professional Development Fund, University at Buffalo (\$325)
2016	Instrumentation Discovery Travel Grant, Consortium of Universities for the Advancement of Hydrologic Science, Incorporated (\$1,000)
2016	Mark Diamond Research Fund, University at Buffalo (\$1,646)
2016	Graduate Research Travel Grant, University at Buffalo (\$550)
2016	Pegrum Professional Development Fund, University at Buffalo (\$325)
2014	Water Resources Research Grant, New York State Water Resources Institute (\$20,000)

SELECTED PRESENTATIONS

* indicates an undergraduate student mentee

2021	Glose, T.J. , Zipper, S.C., Deines, J.M., Kendall, A.D., Hyndman, D.W., Butler, J.J., Jr, Time lags between pumping reductions and recharge response under groundwater conservation. Presented at: 2021 Geological Society of America North-Central/South-Central Joint Online Section Meeting, Virtual. [Poster]
2020	Glose, T.J. , Zipper, S.C., Deines, J.M., Kendall, A.D., Hyndman, D.W., Projecting the long-term effectiveness of groundwater conservation initiatives: A western Kansas case study. Presented at: 2020 American Geophysical Union Fall Meeting, Virtual. [Poster]
2019	Glose, T.J. , Lowry, C.S., Hausner, M.B., Examining the utility of

- continuously quantified Darcy fluxes through the use of periodic temperature time series. Presented at: 2019 American Geophysical Union Fall Meeting, San Francisco, CA. [Oral]
- 2019 **Glose, T.J.**, Zipper, S.C., Lowry, C.S., Hausner, M.B., Simplifying streambed heterogeneity representation for the investigation of streamflow depletion. Presented at: American Geophysical Union Chapman Conference on the Quest for Sustainability of Heavily Stressed Aquifers at Regional to Global Scales, Valencia, Spain. [Poster]
- 2019 Fennelly, P.*, Lowry, C.S., **Glose, T.J.**, Improving estimates of streambed wetted perimeter from UAV: a system for the remote quantification of stream discharge. Presented at: 2019 Geological Society of America Northeastern Section Meeting, Portland, ME. [Poster]
- 2018 **Glose, T.J.**, Lowry, C.S., Cole, J., Galbraith, H., Briggs, M.A., Hausner, M.B., Combining multiple sampling methods to quantify groundwater-surface water exchange at a previously characterized field site. Presented at: 2018 American Geophysical Union Fall Meeting, Washington D.C. [Oral]
- 2018 **Glose, T.J.**, Lowry, C.S., Hausner, M.B., Low flux limitations on the use of heat as a tracer in groundwater-surface water interactions. Presented at: 2018 Geological Society of America Annual Meeting, Indianapolis, IN. [Oral]
- 2018 **Glose, T.J.**, Lowry, C.S., Hausner, M.B., These are not the fluxes you are looking for: impacts of low fluxes on the temperature amplitude ratio method. Presented at: 2018 CUAHSI Biennial Meeting, Shepherdstown, WV. [Poster]
- 2017 Soonthornrangsang, J.*, Lowry, C.S., Allen-King, R.M., **Glose, T.J.**, Da Silva, A., Dishman, R., Beck, M., Tracking nutrient fluxes in Groundwater and surface water on the Eastern shore of Lake Erie. Presented at: 2017 Geological Society of America Annual Meeting, Seattle, WA. [Poster]
- 2017 **Glose, T.J.**, Lowry, C.S., Hausner, M.B., What are we missing? Insights from quantifying effective hydraulic conductivity at the groundwater-surface water interface using point and synoptic measurement techniques. Presented at: 2017 American Geophysical Union Fall Meeting, New Orleans, LA. [Poster]

- 2016 **Glose, T.J.**, Hausner, M.B., Lowry, C.S., Numerical modeling of artificial recharge: determining spatial/temporal sampling resolution to quantify infiltration rates and effective hydraulic conductivity. Presented at: 2016 American Geophysical Union Fall Meeting, San Francisco, CA. [Oral]
- 2015 Coburn, J.E.* , Vitali, J.M.* , **Glose, T.J.**, Lowry, C.S., Analyzing water quality over variable flow conditions in rural and suburban streams. Presented at: 2015 Geological Society of America Annual Meeting, Baltimore, MD. [Poster]
- 2015 Crumlish, J.R.* , Pereira Dos Santos, L.R.* , **Glose, T.J.**, Lowry, C.S., Evaluating the impact of hydrology and combined-sewer overflows on urban beach closures. Presented at: 2015 Geological Society of America Annual Meeting, Baltimore, MD. [Poster]
- 2015 **Glose, T.J.**, Malzone, M.J., Lowry, C.S., Using Numerical Modeling to Quantify the Error Associated with Violating Three Common Assumptions of Using Heat as a Tracer. Presented at: Geological Society of America Annual Meeting, Baltimore, MD. [Oral]
- 2015 Kanaley, C.* , Gonzalez, S., Flanagan, C.* , **Glose, T.J.**, Allen-King, R.M., Lowry, C.S., Comparing urban and agricultural nutrient mass flux into the lower Great Lakes. Presented at: 2015 Geological Society of America Annual Meeting, Baltimore, MD. [Poster]
- 2015 Luh, N.M.* , J. Ewanic* , Pereira Dos Santos, L.R.* , **Glose, T.J.**, Lowry, C.S., Relationship between stream stage and discharge on major tributaries that enter Lake Erie. Presented at: Geological Society of America Annual Meeting, Baltimore, MD. [Poster]
- 2015 Stearns, C., **Glose, T.J.**, J. Crumlish* , Swensen, K., Lowry, C.S., 2015, Developing Real World Examples of Earth Science Reference Tables for Urban Schools. Presented at: 2015 Geological Society of America Annual Meeting, Baltimore, MD. [Poster]
- 2015 Tuttle, C.T.* , Crumlish, J.R.* , Canty, M.T.* , **Glose, T.J.**, Lowry, C.S., Analyzing daily variability in *E. Coli* concentrations in an urban stream. Presented at: 2015 Geological Society of America Annual Meeting, Baltimore, MD. [Poster]

- 2013 **Glose, T.J**, Ward., M, Horsman, E., Giorgis, S.D.,
Paleomagnetic insight into the emplacement history of the
northeastern flank of Mount Pennell, Henry Mountains, Utah.
Presented at: 2013 Geological Society of America Denver, CO. [Poster]

TEACHING AND MENTORING

- 2018 Teaching assistant for Hydrogeology lab, University at Buffalo, Buffalo, NY
- 2017 Reginald H. Pegrum Graduate Teaching Award, University at Buffalo
- 2017 Teaching assistant for Surfaces Processes lab, University at Buffalo, Buffalo, NY
- 2016 Teaching assistant for Surface Processes lab, University at Buffalo, Buffalo, NY
- 2015 Research mentor for the Western New York Watershed Network, University at Buffalo, Buffalo, NY
- 2015 Graduate assistant for the NSF Interdisciplinary Science and Engineering Partnership, classroom liaison and mentor, South Park High School, Buffalo, NY
- 2014 Teaching assistant for Global Environmental Science lab, University at Buffalo, Buffalo, NY
- 2013 Teaching assistant for Environmental Geophysics, SUNY Geneseo, Geneseo, NY
- 2012 Teaching assistant for Physical Geology, SUNY Geneseo, Geneseo, NY

PROFESSIONAL DEVELOPMENT

- 2020 "Socio-Environmental Approaches to Watershed Management and Governance", Early-Career Workshop at the Socio-Environmental Synthesis Center
- 2016 "Distributed Temperature Sensing Workshop", Center for Transformative Environmental Monitoring Programs

SERVICE AND OUTREACH

Committees

American Geophysical Union's Hydrology Section Student Subcommittee

Justice, Equity, Diversity, and Inclusion

Effective Strategies for Student Organizing Workshop - Part of the *Cultivating Leadership for Change in the Geosciences: A Virtual Workshop Series Sponsored by Geoscientists of Color and Allies*

Justice, Equity, Diversity, and Inclusion in the AGU Hydrology Community – [White paper](#) that details short and long term goals that the AGU Hydrology Section can meet to ensure that the section increases and embraces a more diverse group of members. Led to the formation of a standing diversity and inclusion committee

Community Resources

Navigating Academic Waters: Essential Skills to Thrive as a Student and Early Career Scientist - [Webinar series](#) developed in cooperation with the Consortium of Universities for the Advancement of Hydrologic Science, Inc.

Peer Review

Water Resources Research

Hydrological Processes

Journal of Hydrologic Engineering

PROFESSIONAL AFFILIATIONS

American Geophysical Union
Geological Society of America

REFERENCES

Dr. Christopher Lowry (*Primary Ph.D. advisor*)

Associate Professor
Department of Geology
University at Buffalo, Buffalo, NY
cslowry@buffalo.edu

Dr. Samuel Zipper (*Primary postdoc mentor*)

Groundwater Hydrologist
Kansas Geological Survey
University of Kansas, Lawrence, KS
samzipper@ku.edu

Dr. Elizabeth Thomas (*Teaching reference*)

Assistant Professor

Department of Geology

University at Buffalo, Buffalo, NY

ekthomas@buffalo.edu

Dr. Mark Hausner (*Ph.D. committee member*)

Assistant Research Professor Hydrology

Division of Hydrologic Sciences

Desert Research Institute, Reno, NV

Mark.Hausner@dri.edu