Thomas J. Glose

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Kansas Geological Survey
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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

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

2019 **Glose, T.J.**, Lowry, C.S., and Hausner, M.B., Vertically integrated hydraulic conductivity: a new bulk parameter for groundwater-surface water analysis. *Groundwater*, 57: 727-736. https://doi.org/10.1111/gwat.12864

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. *Water Resources Research*, 55. https://doi.org/10.1029/2019WR025643

In Review

Glose, T.J., Lowry, C.S. and Hausner, M.B. The utility of the continuous quantification of Darcy fluxes through time through the use of periodic temperature time series. Under review at *Journal of Hydrology.*

In Preparation

Durant, B., Suk, H., **Glose, T.J.**, Lowry, C.S., Koudelka, G., Sassoubre, L. Applying microbial community analysis to investigate spatial and temporal variability between surface waters, groundwater and beaches with varying water quality.

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

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 Soonthornrangsan, 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*, K. Swensen, 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 Reginal 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

2016 “Distributed Temperature Sensing Workshop”, Center for Transformative Environmental Monitoring Programs

SERVICE AND OUTREACH

Peer review for Water Resources Research
Peer review for Hydrological Processes

PROFESSIONAL AFFILIATIONS

American Geophysical Union
Geological Society of America
National Groundwater Association

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 advisor)*
Groundwater Hydrologist
Kansas Geological Survey
University of Kansas, Lawrence, KS
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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