

KENDRA E. KAISER

PhD Candidate

kendra.kaiser@gmail.com

www.kendrakaiser.com

EDUCATION

- 2017 **Duke University**, Expected graduation May
Nicholas School of the Environment
Earth and Ocean Sciences
- 2011 **Montana State University**
B.S Soil and Water Science (*Honors*)
B.S Environmental Biology (*Honors*)

FELLOWSHIPS, AWARD & HONORS

- 2012-2017 **Graduate Research Fellowship**, NSF
- 2016 **Graduate Research Internship Program**, NSF
- 2016 **Data Expeditions Award**, Duke Information Initiative
- 2016 **Bass Instructional Fellowship**, Duke Graduate School
- 2015 **Let's Talk About Water Grant**, CUASHI
- 2006-2011 **Deans Honor Roll** (GPA 3.5 or higher), Montana State
- 2010-2011 **Undergraduate Scholars Program**, Montana State
- 2011 **Outstanding Student Poster Award**, EGU

RESEARCH POSITIONS

- 2012-2017 Watershed and Biogeochemistry Lab, Duke University
NSF Graduate Research Fellow
Major advisor: Dr. Brian McGlynn
Research: Greenhouse gas fluxes in complex terrain: space-time dynamics of soil CO₂, CH₄, and N₂O.
- 2016 USGS Idaho Water Science Center, Boise
NSF Graduate Research Intern
Supervisors: Dr. Kyle Blasch, Dr. Roy Sando
Research: Vulnerability of Streams and Rivers in the Western United States to Drought Conditions
- 2010- 2011 Watershed Hydrology Lab, Montana State University
Research Assistant
Advisors: Dr. Brian McGlynn, Dr. Ryan Emanuel
Research: 'Ecohydrology of an Outbreak: Impacts of vegetation pattern and landscape structure on mountain pine beetle disturbance'

- 2010 Big Sky Institute, Montana State University
Intern
Supervisor: Todd Kipfer
Research: 'Ecological Informatics: Using Web Technology to Improve Access to Biological Information'
- 2008 Montana State University Seed Lab
Lab Assistant
Supervisor: Lucy Cooke
Research: Tested seed samples to determine percentages of pure seed and germination.

PUBLICATIONS

- Kaiser, K.E.**, McGlynn B.L., Dore, J.E. (*in review*). Landscape analysis of methane flux across complex terrain. *JGR Biogeosciences*.
- Bernhardt, E.S., Blaszcak, J., Ficken, C., Fork, M., **Kaiser, K.E.**, Seybold, E.C. (*in press*). Ecosystem Control Points – Moving beyond the hot spot hot moment concept. *Ecosystems*.
- Kaiser, K.E.**, McGlynn B.L., Emanuel, R.E. 2013. Ecohydrology of an outbreak: Mountain pine beetles impact trees in drier landscape positions first. *Ecohydrology*. 6: 444–454. doi:10.1002/eco.1286
- Bergstrom, A., **Kaiser, K.E.**, Laird, G., Miller, C. Soil Compaction, Section 2 in Evaluating the effect of Road Decommissioning Practices on Soils, Subsurface Water, Insects and Plants. Montana State University Land Resources and Environmental Sciences Capstone Project 2010. pp 9-18.

ORAL CONFERENCE PRESENTATIONS

- Kaiser, K.E.**, From process complexity to communication effectiveness: A challenge to those within and outside of the environmental sciences. Young Hydrologists Future of Hydrology pop-ups. 2014 American Geophysical Union Fall Meeting.
- Kaiser, K.E.**, McGlynn, B.L., Dore, J.E. Landscape analysis of methane efflux across complex terrain. 2014 AGU Fall Meeting.
- Kaiser, K.E.**, McGlynn, B.L., Dore, J.E. Lorenzo, T.M., Liang, L., Riveros-Iregui, D.A., Emanuel, R.E., Seybold, E.C. Watershed scale soil biogeochemistry and greenhouse gas fluxes: Space-time dynamics of CO₂, CH₄, and N₂O. 2013 AGU Fall Meeting.
- Kaiser, K.E.**, McGlynn, B.L., Emanuel, R.E., Nippgen, F., Mallard J.M. Ecohydrology: Disturbance and the intersection of vegetation pattern and landscape structure. Montana Section of the American Water Resources Association. October 2011.

CONFERENCE POSTER PRESENTATIONS

Kaiser, K.E., McGlynn, B.L., Dore, J.E. Landscape analysis of greenhouse gas fluxes across complex terrain. 2015 Gordon Research Conference, Catchment Science: Interaction of Hydrology, Biology & Geochemistry.

Kaiser, K.E., McGlynn, B.L., Dore, J.E. Landscape analysis of methane efflux across complex terrain. 2014 CUAHSI biannual meeting.

Kaiser, K.E., McGlynn, B.L., Emanuel, R.E., Assessing Mountain Pine Beetle infestation patterns in space and time using high resolution QuickBird imagery and LiDAR. 2013 AGU Fall Meeting.

Erin C. Seybold, B.L. McGlynn, Zimmer, M.A., **Kaiser, K.E.** Utilizing high frequency in-situ sensor networks to understand carbon and nitrogen dynamics from reach to watershed scales. 2013 AGU Fall Meeting.

Seybold, E.C., **K.E. Kaiser**, B.L. McGlynn, T.P. Covino, D. Riveros-Iregui, L. Liang, R.E. Emanuel, and J.E. Dore. 2012. Trace gas fluxes in complex terrain: The space-time dynamics of soil methane, carbon dioxide, and nitrous oxide. AGU Fall Meeting.

Dore, J.E., B.L. McGlynn, **Kaiser, K.E.**, and E.C. Seybold. 2012. Constraining Gas Diffusivity-Soil Water Content Relationships in Forest Soils Using Surface Chamber Fluxes and Depth Profiles of Multiple Trace Gases. AGU Fall Meeting.

Kaiser, K.E., McGlynn, B.L., Emanuel, R.E., Nippgen, F., Mallard J.M. 2011 Ecohydrology of an Outbreak: Impacts of vegetation pattern and landscape structure on mountain pine beetle disturbance. AGU Fall Meeting.

Kaiser, K.E., McGlynn, B.L., Emanuel, R.E., Nippgen, F., Mallard J.M. 2011 Ecohydrology: Disturbance and the intersection of vegetation pattern and landscape structure. European Geophysical Union Spring General Assembly.

Kaiser, K.E., McGlynn, B.L., Emanuel, R.E., Nippgen, F., Mallard J.M. Ecohydrology: Disturbance and the intersection of vegetation pattern and landscape structure. Undergraduate Research Celebration, Montana State University. April 2011

Kaiser, K.E., McGlynn, B.L., Emanuel, R.E., Nippgen, F., Mallard J.M. Ecohydrology: Disturbance and the intersection of vegetation pattern and landscape structure. Montana Space Grant Consortium (MSGC) Student Research Symposium. April 2011.

Kaiser, K.E., Bahn, L. 2010. Ecological Informatics: Using Web Technology to Improve Access to Biological Information. Undergraduate Research Celebration, Montana State University.

NEWSPAPER ARTICLES AND PRESS RELEASES

MSU Students present research in Vienna. MSU News Service August, 2011
Undergrads to Present Research in Austria. LRES Newsletter, 2011

PROFESSIONAL SOCIETIES

American Geophysical Union
North Carolina Water Resources Association

PUBLIC SERVICE

2016- 2017 **Duke Water Network**
Networking Liaison

2016- 2017 **Nicholas PhD Advocacy Council**
Earth and Ocean Sciences Program Chair

2014- 2016 **North Carolina Water Resources Association**
Membership and Communications Committee

2015 **Let's Talk About Water**
Film Screening and Panel Discussion
Funding: \$6000
Panelists: Robyn Colosimo, Army Core of Engineers; Erin Espelie, Duke Center for Documentary Studies; Matt Stoecker, DamNation Producer; Dave Wegner, Former Assistant Secretary of the Interior and Researcher
Additional: Free and open to the public, three short films, and images from the Nicholas School group SNAP (Stories for Nature and People).

Duke Forest Outreach and Talks
2014 NC School of Math and Science
2013 Haywood Community College
2013 River Center Outreach Day

Volunteering
2016 NC Science Fair Judge Region 3a
2015 Durham Creek Week
NC SSM Aquatic Ecology field trips
2014 Physical measures
2014, 2016 Chemical measurements
2014 Ek Powe Elementary School Science Night