Ravindra Dwivedi

Address: Office # 101, Southwest Watershed Research Center, 2000 E Allen Rd, Tucson, AZ
Phone: 520-591-1731 **Fax**: 520-670-5550 **Email**: ravindra.dwivedi@usda.gov
Professional Website: https://sites.google.com/a/email.arizona.edu/ravindra-dwivedi/

EDUCATION

Doctor of Philosophy, Hydrology & Water Resources 2013 – January 2019
The University of Arizona, Tucson, AZ Cum. GPA 4.00/4.00
Primary mentor: Dr. Thomas Meixner
Dissertation: An improved understanding of ecohydrological and geochemical functioning of a mountainous site using multiple methods and multiple tracers

Master of Science, Hydrology 2007 - 2009
New Mexico Tech, Socorro, NM Cum. GPA 3.89/4.00
Primary mentor: Dr. John Wilson
Thesis: Modeling and field study of cave micrometeorology: Role of natural convection

Bachelor of Technology, Mining Engineering 2000 - 2004
Institute of Technology- B.H.U. (now I.I.T.-B.H.U.) Cum. GPA 7.88/10.00
Mentor: (Late) Dr. J. G. Singh

NATIONALITY

U.S. citizen

TEACHING PHILOSOPHY

I believe to be an effective teacher, the contents for my courses need to be interesting, relevant, intellectually challenging, and involve hands-on experience (they should include some laboratory or field experiments to test what has been taught during lecture hours).

RESEARCH INTERESTS

As a mountain eco-hydrogeologist, my research focuses on the partitioning and flowpaths of water in mountainous sites from a critical zone perspective, using observations of water quality, residence times, and stable isotope signatures, as well as numerical hydrologic modeling.

SELECTED RESEARCH WORK EXPERIENCE

Research Hydrologist Southwest Watershed Research Center
US Department of Agriculture- Agricultural Research Services October 11, 2020 - Present
Primary Supervisor: Dr. Joel Biederman

Responsibilities:

- meeting the following USDA goals:
    - USDA Strategic (Goal #5): Strengthen the Stewardship of Private Lands through Technology and Research Objective 1 - Enhance Conservation Planning With Science-Based Tools and Information.

- USDA Strategic (Goal #6): Ensure Productive and Sustainable Use of our National Forest System Lands Objective 2 - Ensure Lands and Watersheds Are Sustainable, Healthy, and Productive

- studying interactions of vegetation structure, weather and topography on snowpack and water balance in headwater catchments
- testing and developing an ultra high-resolution forest hydrology model
- developing vegetation management recommendations
- supporting field work for manual measurement and sensor network maintenance throughout the Southwest US
- professional relationships and positive interactions with team members, supervisors, cooperators, cooperating institutions, stakeholders, technical and administrative personnel

Designated Campus Colleague (DCC) School of Natural Resources and the Environment
The University of Arizona November 19, 2020 - Present
Responsibilities:

- collaborate with leading snow hydrologists and ecohydrologists for improving our understanding of interactions of vegetation structure, weather and topography on snowpack and water balance in headwater catchments located throughout the Southwest US
- collaborating on scientific papers and reports with the SNRE faculty and research members

Post-Doctoral Associate VT EPSCoR Basin Resilience to Extreme Events (BREE) project
The University of Vermont September 03, 2019-October 04, 2020
Primary Supervisors: Drs. Carol Adair and Andrew Schroth
Responsibilities:

- interdisciplinary collaboration on the BREE project
- mentor undergraduates, high school students and graduate students
- education outreach activities supporting the VT EPSCoR project
- contribution of data for the annual progress reports, surveys and other reports as requested by the VT EPSCoR office
- Participation in VT EPSCoR annual state meetings

Assistant Research Scientist Department of Hydrology and Atmospheric Sciences
The University of Arizona January 28, 2019-April 28, 2019
Responsibilities: analysis and modeling of hydrologic and hydrochemical time series data sets from the Catalina- Jemez Critical Zone Observatory, and preparation/submission of manuscripts for publication.

Research Assistant Santa Catalina Mountain-Jemez River Basin Critical Zone Observatory
The University of Arizona 2015-2018

Responsibilities: performing doctoral research to improve our understanding of ecohydrological and geochemical functioning of a mountainous site located within the Santa Catalina Mountains-Critical Zone Observatory, Tucson, Arizona

Research Assistant Dept. of Hydrology & Atmospheric Sciences,
The University of Arizona Fall 2013
Responsibilities: learning the hydraulic tomography method to evaluate its suitability for mapping secondary porosity network of karst aquifers

SELECTED WATER RESOURCES INDUSTRY WORK EXPERIENCE

Water Resources Engineer, AMEC Earth & Infrastructure, Inc. March 2010-August 2013
Socorro, New Mexico
Responsibilities: providing:

(i) water resources-related consulting services to federal, state, private institutions and Native American tribes and
(ii) litigation support to confidential clients in water resources and groundwater contamination related cases

SELECTED SKILL SETS

- Application of environmental tracers in hydrologic systems
- Application of hydrologic modeling concepts and practices to support developing model-simulated hydrometeorological processes
- Contribution of hydrologic data and findings for use in technical reports, designs, documents, oral, or written presentations
- Performing computer programming assignments on hydrologic modeling applications/systems and data processing
- Application of numerical modeling tools (e.g., MODFLOW, MODFLOW-SURFACT^{TM}, MATLAB®) for litigation support
- Application of Leapfrog® software for geological modeling
- Application of ArcGIS software for spatial data analysis
- Maintenance of sensor network for monitoring watershed-scale hydrogeochemical processes
- Installation of weighing rain gauges (e.g., OTT Pluvio2 weighing rain gauge from OTT HydroMet GmbH) in mountainous settings

SELECTED RESEARCH GRANTS

- Horton Research Grant, American Geophysical Union Summer 2017
- Graduate Student Research Grant, Geological Society of America 2016
- Section 104(b) Research Grant, WRRC, The University of Arizona 2017
  with Drs. T. Meixner, J. McIntosh, and P. A. “Ty” Ferre

SELECTED HONORS (SCHOLARSHIP AND FELLOWSHIP AWARDS)

- Top downloaded and read paper (DOI: 10.1029/2018JD029159) 2018-2019

as per John Wiley & Sons, Inc.

- Travel grant award, AGU Fall Meeting — Fall 2017
- 1st Place in poster competition in the WRRC conference 2017 — Spring 2017
- GPSC Travel Grant, The University of Arizona — Fall 2016 & Spring 2015
- Student CAP registration grant — Fall 2016
- Best research proposal in the Hydrogeology section and Hydrogeology Division award, GSA — 2016
- Hydrology Tuition Scholarship & Fellowship award — 2016
- Arizona Hydrological Society scholar — 2015
- Nominated for the College of Science Scholarship award — 2015
- Department of Hydrology and Water Resources award for being nominated for the College of Science Scholarship award — 2015
- Galileo Circle Scholar, The University of Arizona — Spring 2015
- Graduate College Merit Fellowship, The University of Arizona — Spring 2015
- GPSC Research Grant, The University of Arizona — Spring 2015
- John and Margaret Harshbarger Fellowship, The University of Arizona — Spring 2015
- Fee Scholarship Award, The University of Arizona — Fall 2014-Spring 2015
- Graduate College Merit Fellowship, The University of Arizona — Spring 2014
- Graduate College Merit Fellowship, The University of Arizona — Fall 2013
- Matusezuski Research Grant, New Mexico Tech — 2008
- Hantush Fellowship, New Mexico Tech — Fall 2007-Summer 2008

PUBLICATIONS

- ***Dwivedi, R.***, J. F. Knowles, C. Eastoe, R. Minor, N. Abramson, B. Mitra, W. E. Wright, J. McIntosh, T. Meixner, P. A. "Ty" Ferre, C. Castro, G.-Y. Niu, G. A. Barron-Gafford, M. Stanley, and J. Chorover, 2020, Ubiquitous fractal scaling and filtering behavior of hydrologic fluxes and storages from a mountain headwater catchment, **Water** - Special Issue: Advances in Catchment Science through Integrated Hydrological Modelling and Monitoring, **12** (*613*), p. 1-19, DOI: 10.3390/w12020613.
- ***R. Dwivedi***, T. Meixner, J. McIntosh, P. A. "Ty" Ferré, C. J. Eastoe, G.-Y. Niu, R. L. Minor, G. Barron-Gafford, and J. Chorover, 2019a, Hydrologic functioning of the deep Critical Zone and contributions to streamflow in a high elevation catchment: testing of multiple conceptual models, **Hydrological Processes** - Special issue: Water in the Critical Zone, **33** (*4*), p. 476-494, DOI: 10.1002/hyp.13363**.**
- ***R. Dwivedi***, C. Eastoe, J. F. Knowles, W. E. Wright, L. Hamann, R. Minor, B. Mitra, T. Meixner, J. McIntosh, P. A. "Ty" Ferre, C. Castro, G. -Y. Niu, G. A. Barron-Gafford, N. Abramson, S. A. Papuga, M. Stanley, J. Hu, and J. Chorover, 2019b, Vegetation source water identification using isotopic and hydrometric observations from a subhumid mountain catchment, **Ecohydrology**, **13** (*1*), p. 1-17, DOI: 10.1002/eco.2167.

- L. Chang, ***R. Dwivedi***, G. -Y. Niu, J. Pelletier, C. Rasmussen, M. Durcik, G. Barron-Gafford, T. Meixner, and J. Knowles, 2018, Why Do Large-Scale Land Surface Models Produce a Low Ratio of Transpiration to Evapotranspiration?, **Journal of Geophysical Research: Atmospheres**, **123** (*17*), p. 9109-9130, DOI: 10.1029/2018JD029159.
- Blöschl, G., M. F. P. Bierkens, A. Chambel, C. Cudennec, G. Destouni, A. Fiori, J. W. Kirchner, J. J. McDonnell, H. H. G. Savenije, M. Sivapalan, …, ***R. Dwivedi***, …, 2019, Twenty-three Unsolved Problems in Hydrology (UPH) – a community perspective, **Hydrological Sciences Journal**, **64** (*10*), p. 1141-1158, DOI: 10.1080/02626667.2019.1620507.

Papers in review

- ***R. Dwivedi***, C. Eastoe, J. F. Knowles, L. Hamann, T. Meixner, P. A. "Ty" Ferre, C. Castro, W. E. Wright, G.-Y. Niu, R. Minor, G. A. Barron-Gafford, N. Abramson, B. Mitra, S. A. Papuga, M. Stanley, and J. Chorover, in review, An improved practical approach for estimating catchment-scale response functions through wavelet analysis, **Hydrological Processes**, Manuscript # HYP-20-1022.

Papers in revision

- ***R. Dwivedi***, C. Eastoe, J. Knowles, J. McIntosh, T. Meixner, P. A. "Ty" Ferre, R. Minor, G. A. Barron-Gafford, N. Abramson, M. Stanley, and J. Chorover, in revision (target submission date: July, 2020), A comparison of transit time distribution vs. fraction of young water to characterize storage in a mountain headwater catchment, recently reviewed in **Water Resources Research**, Manuscript ID # 2019WR025567.

Papers in preparation

- R. Dwivedi et al., Understanding hydrologic behavior of landscapes with different land use and land cover types, Intended journal: **Water Resources Research**.
- Erin C. Seybold, Ravindra Dwivedi, Keith N. Musselman, Dustin W. Kincaid, Andrew W. Schroth, Julia N. Perdrial, Aimee T. Classen, E. Carol Adair, Changing winter dynamics pose threat to water quality, Intended journal: **Science (Reports)**.

Dataset generated:

- Troch, P., **R. Dwivedi**, A. A. M. Neto, T. Liu, T. Roy, R. Valdés-Pineda, M. Durcik, S. Arciniega-Esparza, J. A. Breña-Naranjo, 2017, Data for the catchment-scale groundwater recharge and vegetation water use efficiency estimation, **HydroShare**, http://www.hydroshare.org/resource/99d5c1a238134ea6b8b767a65f440cb7.
- Seybold, E.C., ***R. Dwivedi***, K.N. Musselman, D.W. Kincaid, A.W. Schroth, J.N. Perdrial, A.T. Classen, and E.C. Adair. 2020. Spatial occurrence of large rain-on-snow events and soil nitrogen and phosphorus pools in the conterminous United States from 2003 to 2017 ver 1. Environmental Data Initiative. https://doi.org/DOI_PLACE_HOLDER (Accessed 2020-11-27).

SELECTED JOURNAL REVIEW SERVICES

- Journal of Hydrology: Regional Studies
- Scientific Reports

SELECTED COMMUNITY SERVICES

- Public speaker on *Climate change effects on regional spring flows*, 6th annual Heritage Day, Rodeo, NM, September 5-7, 2014
- Volunteer in the Science City Fare – Tucson Festival of Books 2015 & 2016
- Volunteer judge for the Science Fair event at the Davis Bilingual Elementary Magnate School, Tucson, AZ
- Interacted with the first-graders in the Flynn Elementary School, Burlington, Vermont, to help them understand *life of a scientist* and to motivate them to choose a STEM path

SELECTED TRAININGS

- Techniques for stream-groundwater investigations workshop — Summer 2016
- Theory and application of time-variable transit times in hydrologic systems — Summer 2015
- Isotopes in Spatial Ecology and Biogeochemistry short course (Offered by the University of Utah, Salt Lake City, Utah) — Summer 2015
- Alan Alda Science Communication workshop, Burlington, Vermont — January 2020

SELECTED MEMBERSHIP IN HONORARY SOCIETIES AND ORGANIZATIONS

- American Association for the Advancement of Science (AAAS)
- New Mexico Society of Professional Engineers (License # 21472)
- Geological Society of America (GSA)
- American Geophysical Union (AGU)
- International Association of Hydrological Sciences (IAHS)

SELECTED EXTRACURRICULAR ACTIVITIES

- Former Vice-president of the Hydrology and Atmospheric Sciences' Student Association, HASSA (2015-2016)
- Former vice-president of the New Mexico Tech Grotto, a student caving club
- Organizer of invited talks for the Hydrogeology laboratory (2015)
- Volunteer in the HWR 50th Anniversary Alumni Reunion event at the University of Arizona (2017)
- Semifinalist in the Grad Slam-2016 (a university-wide event at the University of Arizona)
- Student attendee of the Global challenges: Science Diplomacy and Policy with focus on the Americas conference held at the University of Arizona from February 22-24, Tucson, Arizona (2017)

SELECTED PRESENTATIONS IN SCIENTIFIC MEETINGS

Invited talks:

- ***Ravindra Dwivedi***, Paul A. "Ty" Ferre, Thomas Meixner, Jennifer McIntosh, G. -Y. Niu, and Jon Chorover, 2017, Multi-tracer approach coupled with numerical models to characterize water sources and flowpaths contributing to streamflow in a high elevation mountain catchment, UA Gov/Academic Science RectTable, Tucson, Arizona, April 26.
- ***Ravindra Dwivedi***, Thomas Meixner, Jennifer McIntosh, Paul A. "Ty" Ferré, Christopher J. Eastoe, Guo-Yue Niu, Rebecca L. Minor, Greg Barron-Gafford, and Jon Chorover, 2017, Hydrologic functioning of the deep Critical Zone and contributions to streamflow in a high elevation catchment: testing of multiple conceptual models, CZO Grad Research Group seminar, October 12**.**

Other talks:

- ***Ravindra Dwivedi***, C. Eastoe, J. F. Knowles, J. McIntosh, T. Meixner, P. A. T. Ferre, R. Minor, G. Barron-Gafford, N. Abramson, M. Stanley, and J. Chorover, 2019, A comparison of transit time distribution vs. fraction of young water to characterize storage in a mountain headwater catchment: does the tail matter?, AGU Fall Meeting 2019, San Francisco, December 12 (Poster ID: H43G-2088).
- ***Ravindra Dwivedi***, Tom Meixner, Jennifer C McIntosh, Ty P A Ferre, Christopher J Eastoe, Christopher L Castro, William E. Wright, Guo-Yue Niu, Rebecca L. Minor, John F Knowles, Greg Barron-Gafford, Nate Abramson, Bhaskar Mitra, M. Stanley and Jon Chorover, 2018, An improved and practical approach for estimating catchment-scale response functions through power spectral analysis, AGU Fall Meeting 2018, Washington D. C., December 10 (Poster ID: H13J-2089).
- ***Ravindra Dwivedi***, Thomas Meixner, Jennifer McIntosh, Paul A. "Ty" Ferré, Christopher J. Eastoe, Rebecca L. Minor, Greg Barron-Gafford, and Jon Chorover, 2017, Hydrologic functioning of the deep Critical Zone and contributions to streamflow in a high elevation catchment: testing of multiple conceptual models, AGU Fall Meeting 2017, New Orleans, December 14 (Poster ID: H41C-1449).
- Peter Troch***, Ravindra Dwivedi***, Tao Liu, Antonio Meira, Tirthankar Roy, Rodrigo Valdés-Pineda, Matej Durcik, Saul Arciniega, and Jose Agustin Brena-Naranjo, 2017, Catchment-scale groundwater recharge and vegetation water use efficiency, AGU Fall Meeting 2017, New Orleans, December 15 (Poster # H51B-1260).
- ***Ravindra Dwivedi***, Thomas Meixner, Jennifer McIntosh, Paul A. "Ty" Ferré, G.-Y. Niu, and Jon Chorover, 2017, Characterization of water sources and flowpaths and their influence on groundwater geochemical evolution and mineral weathering rates in a high elevation mountain catchment, Critical Zone Science: Current advances and future opportunities, Arlington, Virginia, June 4-6.
- ***Ravindra Dwivedi***, Paul A. "Ty" Ferré, Thomas Meixner, Jennifer McIntosh, Jon Chorover, G. -Y. Niu, Marisa M. Earll, Chloe Fandel, Alissa M. White and Nicole

Weber, 2017, Multi-tracer approach coupled with numerical models to characterize water sources and flowpaths contributing to streamflow in a high elevation mountain catchment El Día del Agua y La Atmósfera, Tucson, Arizona, March 27.

- Peter Troch, ***Ravindra Dwivedi***, Rodrigo Valdés-Pineda, Antonio Alves Meira-Neto, Tirthankar Roy, Tao Liu, Matej Durcik, Saúl Arciniega-Esparza and José Agustín Breña-Naranjo, 2017, Linkages between vegetation water use efficiency and groundwater recharge at a catchment-scale, WRRC conference 2017- Irrigated Agriculture in Arizona: A Fresh Perspective, Tucson, Arizona, March 28.
- ***Ravindra Dwivedi***, Thomas Meixner, Jennifer McIntosh, Paul A. "Ty" Ferré, and Jon Chorover, 2016, A multi-tracer approach coupled to numerical models to improve understanding of mountain block processes in a high elevation, semi-humid catchment, GSA annual meeting, Denver, Colorado, September 25-28, and AGU Fall meeting, San Francisco, California, December 12-16.
- ***Ravindra Dwivedi*** and M. Zreda, 2016, "Fortune favors the prepared": ensuring through training to future hydrogeologists, 29th Annual symposium of the Arizona Hydrological Society, Tucson, Arizona, September 14-17.
- ***Ravindra Dwivedi***, Thomas Meixner, Paul A. "Ty" Ferré, Jennifer McIntosh, and Jon Chorover, 2016, The hydrologic functioning of a semi-humid mountain catchments: Marshall Gulch Catchment, Tucson, Arizona, 29th Annual symposium of the Arizona Hydrological Society, Tucson, Arizona, September 14-17.
- ***Ravindra Dwivedi***, Elizabeth Kahler, Jack Anderson, Oleksiy Chernoloz, Arianne DePauli, Xiaobo Hou, Mandla Kunnie, Edwin Norlin, Mekha Pereira, Rey Reys, Joseph Valachovic, and Marek Zreda, 2016, Importance of the Hydrogeology laboratory in making well-trained hydrogeologists for tomorrow, El Día del Agua y La Atmósfera, Tucson, Arizona, April 1.
- ***Ravindra Dwivedi***, Thomas Meixner, Paul A. "Ty" Ferré, Jennifer McIntosh, and Jon Chorover, 2016, Impact of the projected climate change on the hydrologic functioning of mountain catchments with application to the Marshall Gulch Catchment, Tucson, Arizona, El Día del Agua y La Atmósfera, Tucson, Arizona, April 1.
- ***Ravindra Dwivedi,*** Thomas Meixner and Paul A. "Ty" Ferré, 2015, Changing role of mountain systems towards water sustainability and ecosystem services: the climate change factor, Environmental Grad Blitz, Institute of the Environment, The University of Arizona, Tucson, Arizona, November 3.
- ***Ravindra Dwivedi***, Thomas Meixner and Paul A. "Ty" Ferré, 2015, Effects of hydraulic conductivity and porosity on the groundwater age distribution in composite systems, AHS Annual Symposium, Where did the water go?, Phoenix, Arizona, September 16-19.
- ***Ravindra Dwivedi,*** Thomas Meixner and Paul A. "Ty" Ferré, 2015, Similarities and differences between transport of a solute and water age mass: why the picture is so blurry?, 25th El Dia del Agua, The University of Arizona, Tucson, Arizona, April 8.

- ***Ravindra Dwivedi*** and T. Meixner, 2015, Lava lamp to flow in fracture-water to fracture-porous media systems: unity in physics but diversity in implications, 25th El Dia del Agua, The University of Arizona, Tucson, Arizona, April 8.
- ***Ravindra Dwivedi*** and T. Meixner, 2014, Effect of aquifer heterogeneities on the Water Residence Time (WRT) and their significance, AIPG/AHS National Conference, Water and Rocks, the Foundations of Life, Prescott, Arizona, September 13-16.
- Guerra, P., M. Dowd, S. Panday, ***R. Dwivedi***, P. Kurzanski, 2014, GIS-based Method for High-resolution Mapping of LNAPL Plume Transmissivity and Recoverability: Case Study at CSXT Stadium Project, Railroad Environmental Conference, Urbana, Illinois, October 28-29.
- McCord, J., C. Roman, M. F. Hernandez, S. Panday, and ***R. Dwivedi***, 2013, Sensitivity analysis of variably saturated flow and transport in a heap leaching operation, Heap Leach conference, Vancouver, Canada, September 22-12.
- Guerra, P. A., S. Panday, ***R. Dwivedi***, M. Peterson, S. Williams, L. M. Sturgis, E. M. Engle, S. C. Sigstedt, and D. McDonald, 2012, Predicting the Fate of Chemical and Radiological Groundwater Contamination on the Ambient Receiving Waters of the San Francisco Bay in Support of a Focused Feasibility Study, AMEC Technical Summit, New York City, New York, October 19-20.
- McCord, J. T., ***R. Dwivedi***, K. F. Morrison, and S. Panday, 2012, Variably saturated flow and transport in a heap leaching operation, 3rd International Congress on Water Management in the Mining Industry, Water in Mining, Chile, June 6-8.
- ***Ravindra Dwivedi***, J. T. McCord, and J. A. Clark, 2010, Landscape consumptive water use estimation Which method to use and Why?, New Mexico Water Research Symposium, Socorro, New Mexico, August 3.
- Wilson, J. L. and ***R. Dwivedi***, 2009, Geothermal Forcing of Micrometeorological Conditions in Caves, GSA Annual Meeting, Portland, Oregon, October 18-21.
- ***Ravindra Dwivedi*** and J. L. Wilson, 2009, Coupled Heat and Mass Transfer Processes in Enclosed Environments, COMSOL Conference, Boston, Massachusetts, October 8-10.
- ***Ravindra Dwivedi*** and J. L. Wilson, 2008, Convective Non-laminar and Turbulent Flow in Hydrogeologic Systems, AGU Fall Meeting, San Francisco, California, Dec.15-19.
- J. L. Wilson, S.C. Tyler, A. M. Jorgensen, ***R. Dwivedi***, P. J. Boston, and P. Burger, 2008, Sensing turbulent flow and heat transport in a cave conduit, AGU Fall Meeting, San Francisco, California, December 15-19.
- ***Ravindra Dwivedi*** and J. L. Wilson, 2008, Effect of slope on subsurface free-convection processes, Computational Methods in Water Resources XVII International Conference, San Francisco, California, July 6-10.
- ***Ravindra Dwivedi***, J. L. Wilson, Penelope J. Boston, Scott W. Tyler, and A. M. Jorgensen, 2008, Role of Free Convection in Cave Micrometeorology, CUAHSI/NSF

workshop on Fiber Optic Distributed Temperature Sensing for Ecological Characterization", HJ Andrews Experimental Forest, Oregon, from June 2-7.

REFERENCES

Dr. Joel Biederman
Email: joel.biederman@usda.gov
Southwest Watershed Research Center
USDA Agricultural Research Service, Tucson, AZ-85719, Phone: (520) 647-9236

Dr. E. Carol Adair
Email: Carol.Adair@uvm.edu
303B Aiken Center, 81 Carrigan Drive
Rubenstein School of Environment and Natural Resources
University of Vermont, Burlington, VT-05405, Phone: (802) 656-2907

Dr. Andrew W. Schroth
Email: Andrew.Schroth@uvm.edu
Room # 110, Delehanty Hall
Department of Geology
University of Vermont, Burlington, VT-05405, Phone: (802) 656-3481

Dr. James Shanley
Email: jshanley@usgs.gov
New England Water Science Center
United States Geological Survey, 87 State Street, Montpelier, VT 05602, Phone: (802) 828-4466

Dr. Thomas Meixner
Email: tmeixner@email.arizona.edu
Harshbarger 202, Department of Hydrology and Atmospheric Sciences
College of Science - School of Earth and Environmental Sciences
The University of Arizona, Tucson, AZ-85721, Phone: (520) 626-1532

Dr. Paul A. "Ty" Ferré
Email: ty@hwr.arizona.edu
Harshbarger 304D, Department of Hydrology and Atmospheric Sciences
College of Science - School of Earth and Environmental Sciences
The University of Arizona, Tucson, AZ-85721, Phone: (520) 621-2952

Dr. Jennifer C. McIntosh
Email: mcintosh@hwr.arizona.edu
Harshbarger 322B, Department of Hydrology and Atmospheric Sciences
College of Science - School of Earth and Environmental Sciences
The University of Arizona, Tucson, AZ-85721, Phone: (520) 626-2282