

Adam M. Milewski

Professor – University of Georgia
Department Head – Department of Geology
Director: Earth Systems & Resources Laboratory (ESR: <http://esr.uga.edu>)
Co-Director: Advancing Research and Capacity in Hydrologic Education and Science (ARCHES: <http://arches.wrrs.uga.edu>)
President: Perennial Rock Environmental, LLC

Other Affiliations/Titles: Institute for Resilient Infrastructure Systems, River Basin Center Advisory Board Member, UGA Water Resources Faculty, IAH Treasurer and Board of Directors, Consortium of Universities for the Advancement of Hydrologic Sciences University Liaison

EDUCATION

2005-2008 Doctor of Philosophy in Hydrogeology, Western Michigan University, Kalamazoo, Michigan, Dissertation: Remote sensing solutions for estimating runoff and recharge in arid environments
2000-2004 Bachelor of Science in Geology, State University of New York at Buffalo, Buffalo, New York

PROFESSIONAL EXPERIENCE

2023 – Present Professor & Department Head, Hydrogeology & Remote Sensing, Department of Geology, University of Georgia, Athens, Georgia
2021 – 2023 Professor & Associate Department Head, Hydrogeology and Remote Sensing, Department of Geology, University of Georgia, Athens, Georgia
2020 Interim Graduate Coordinator, Department of Geology, University of Georgia, Athens, Georgia
2016 – 2021 Associate Professor & Associate Department Head, Hydrogeology and Remote Sensing, Department of Geology, University of Georgia, Athens, Georgia
2011 – 2016 Assistant Professor, Hydrogeology & Remote Sensing; Department of Geology, University of Georgia, Athens, Georgia
2011 – Present Director, Water Resources & Remote Sensing Facility, University of Georgia
2008 – 2011 Principal Research Associate; Earth Sciences Remote Sensing Facility, Western Michigan University, Kalamazoo, Michigan
2006 – 2007 Adjunct Professor; Department of Geology, Grand Valley State University, Allendale, Michigan

ADDITIONAL EDUCATION & EXPERIENCE

2025-Present UGA Office of Business Engagement – Faculty & Industry Liason
2025-Present UGA Innovation District – Faculty Innovation Fellow
2020 USG Chancellor Learning Scholar, University System of Georgia
2018 Advanced Teaching Symposium, University of Georgia
2012 Faculty Development Workshop: Integrating Sustainability across the Curriculum, Office of Sustainability, University of Georgia
2009 Geological Society of America Short Course: Estimating Rates of Groundwater Recharge
2006 Hydrogeology Field Course, Western Michigan University: Applied Hydrogeology Field Methods
2004 Argonne National Laboratory Short-Term Scholar: Aquatic Remote Sensing
2004 University at Buffalo, Buffalo, New York, Field Camp in central Rocky Mountains (Colorado, Utah, and Wyoming), 6 week mapping and sedimentary geology course

AWARDS & HONORS

2026	Top 50 Under 50 Scientist, GSA/SGM/GSAC (International Award)
2026	GSA Fellow, Geological Society of America (National Award)
2025	Scientific Research Honor Society, Sigma Xi
2025	John & Barbara Dowd Endowed Professor in Hydrogeology, University of Georgia
2025-2026	Faculty Innovation Fellow, University of Georgia
2023	Klepser Lecturer, University of Tennessee
2020	<u>USG Chancellor Learning Scholar</u> , University System of Georgia
2019	<u>FYOS Outstanding Instruction Award</u> , University of Georgia
2013, 2021	Professor of the Year; Department of Geology, University of Georgia
2008-2011	ESRS Postdoctoral Fellowship, Western Michigan University
2008	All-University Research Scholar, Western Michigan University
2007	Future Faculty Award, Academic Keys
2007	Gwen Frostic Fellowship, Western Michigan University
2006	Geosciences Department Teaching Effectiveness Award, Western Michigan University
2005-2008	David W. Kuenzi Award, Department of Geosciences, Western Michigan University; North-Central GSA Grant, Geological Society of America; Graduate Student Research and International Travel Award, Department of Geosciences, Western Michigan University; Advisory Council & W. Richard Laton Scholarships, Department of Geosciences, Western Michigan University
2004	Reginald Pegrum Travel Award, Department of Geology, University at Buffalo

INVITED PRESENTATIONS

2025	Georgia Mining Association – Environmental Leadership Academy
2025	SHEA – Geologic Hydrogen
2025	Alabama State Licensure Board
2024	Super South Summit, Atlanta
2024	School of Chemical and Biomolecular Engineering, Georgia Tech
2022-Present	20+ presentations
2021	NASA, University of Alabama-Huntsville
2021	University of Brawijaya, Indonesia
2020	College of Earth, Environment, and Ocean, University of Delaware
2020	Department of Earth & Geological Sciences, Western Michigan University
2020	NASA, University of Alabama-Huntsville
2019	College of Science, University of Alabama
2018	Department of Geosciences, Kuwait University
2016	Department of Geography & Geology, West Virginia University
2015	College of Arts & Sciences, Year of the Middle East, University of Kentucky
2015	Department of Geology & Geography, Georgia State University
2015	Winter Enrichment Program, King Abdullah University of Science & Technology, Saudi Arabia
2014	Department of Earth and Environmental Sciences, University of Michigan
2013	Department of Crop & Soil Sciences, University of Georgia
2013	Department of Agricultural Engineering, Bogor Agricultural University (IPB), Bogor, Indonesia
2013	Department of Engineering, University of Brawijaya, Malang, Indonesia
2013	Department of Geological Engineering, Middle East Technical University, Ankara, Turkey
2012	Department of Geography, University of Georgia

2011 Department of Geology, University of Kansas
2011 Department of Geology, University of Georgia
2011 Department of Geology and Environmental Geosciences, Northern Illinois University
2011 Department of Earth and Environmental Science, University of Kentucky

TEACHING EXPERIENCE

University of Georgia

GEOL 1120: Environmental Geoscience, 2011-2015 (~90 students/class)
GEOL 1120E: Environmental Geosciences Online, Summer 2016-Present (~30 students/class)
GEOL 3020: Surficial & Near Surficial Processes, 2012-Present (~35 students/class, co-taught with Charlotte Garing)
GEOL 4220/6220: Hydrogeology, 2017-Present, (~50 students/class)
GEOL 4530/6530: Principles and Applications of GIS for Geologists, 2015-Present (~25 students/class)
GEOL 8710: Watershed-Scale Modeling, 2014-Present (~15 students/class, co-taught with David Radcliffe)
GEOL 8720: Geologic & Hydrologic Remote Sensing, 2013-Present (~10 students/class)
GEOL 8730: Principles & Environmental Applications of GIS, 2013 (~15 students/class)
GEOL 8790: Hydrologic Programming, 2016 (~10 students)
FYOS: Water – The Most Interesting Resource in the World, 2014-Present (~15 students/class)
GradFIRST: Successful Research Proposals, 2022-Present (15 students/class)

Western Michigan University – Teaching Assistant

GEOS 5270: Principles of Well Drilling and Installation Field Course
GEOS 5280: Principles and Practices of Ground-water Sampling and Monitoring Field Course
GEOS 5260: Principles and Practices of Aquifer Testing Field Course
GEOS 5250: Environmental Surface Geophysics Field Course
GEOS 1000: Introduction to Physical Geology
GEOS 5210: Environmental Remote Sensing
GEOS 5350: Numerical and Spatial Data Analysis

Grand Valley State University – Adjunct Professor

GLY 102: Introduction to Environmental Geology, 2006-2007 (~30 students)

Short Courses

Carbon Dioxide Underground Storage: Technologies, Uncertainties, and Risks, Georgia Tech, 2024
Remote Sensing Applications in Hydrology, University of Tennessee, 2023
Field and Computational Techniques in Hydrogeology, KAUST, Jeddah, Saudi Arabia, 2015
GIS & Remote Sensing Applications in Water Resources, IAH Conference, Marrakech, Morocco, 2014
Remote Sensing & GIS Applications in Hydrogeology, University of Georgia, Athens, Georgia, 2012-13
Remote Sensing & GIS Applications in Hydrogeology, ICWRE Conf., Marrakesh, Morocco, 2011
Hydrologic Applications in Kuwait, Western Michigan University, 2008
Advanced Calibration Techniques Using SWAT, Cairo University, Cairo, Egypt, 2006
Developing a Web-based GIS Using ArcIMS, Cairo University, Cairo, Egypt, 2006
Hydrologic Modeling Using SWAT, Cairo University, Cairo, Egypt, 2005
Introduction to Remote Sensing Principles, Cairo University, Cairo, Egypt, 2005
Web-based GIS Applications, Cairo University, Cairo, Egypt, 2005

FIELD EXPERIENCE & COURSES

Interdisciplinary Field Program, UGA: A six-week traveling field program on the geology, hydrology, anthropology, and ecology of the continental USA (www.ipf.uga.edu).

Field School, UGA: A six-week capstone geology field course focused on geology, hydrogeology, and surficial mapping.

ARCHES Program: I've developed and lead over 10 multi-week field trips and courses in Morocco, Egypt, Saudi Arabia, Kuwait, Turkey, and Indonesia as part of this program.

USA: I've performed and lead field work in Georgia, Florida, Michigan, New York, Blue Ridge Mountains, and Mojave Desert

International: I've led research excursions in the Middle East, Turkey, and Indonesia, and I've also participated in research trips in the Simpson Desert of Australia.

GRADUATE STUDENTS

Franklin Ijigade, Ph.D., expected Spring 2029, Dissertation: Hydrologic Modeling Approach Towards Sustainable Mining.

Kwaku Asiedu, Ph.D., expected Spring 2029, Dissertation: Reservoir and Hydrologic Modeling the Energy Transition.

Hays Slaughter, M.S., expected Fall 2026, Thesis: Assessment of Mining Impacts on the Local Hydrology in Georgia.

Christine Majeni, M.S., expected Fall 2026, Thesis: Assessing Compound Flood Impacts on Groundwater Levels in Coastal Urban Communities.

Haley Hubert, M.S., Spring 2026, Thesis: Hydrogeological Analysis of the Aquifer Systems of Southwest Georgia

Michael Stefanou, M.S., Spring 2025, Thesis: Carolina Bays and their Connection to Natural Hydrogen Gas Seepage in the Southeastern United States.

Amy Laubenstein, M.S., Spring 2025, Thesis: Characterization of the Geology and Hydrogeology of the Claiborne Aquifer System.

Yannie Donaldson, Ph.D., Spring 2025, Dissertation: Geophysical Analysis of Lateral Flow Contributions to Inland Freshwater Lens

Fabian Zoham, Ph.D., Fall 2024, Dissertation: The Speeding of the Hydrologic Cycle.

Lea Davidson, Ph.D., Fall 2024, Dissertation: Evaluation of Stream Intermittency in Arid Environments.

David Richards, Ph.D., 2024, Dissertation: Coastal System Responses to Climate Change.

Steffan Becker, M.S., Spring 2021, The Influence of Lateral Flow on Inland Freshwater Lens Development.

Cleveland Tarp, M.S. expected Spring 2021, Multi-regression Analysis of Transmission Losses in Arid Environments.

Sarah Asher, M.S. expected Spring 2021, Impacts of Extreme Events on Groundwater Resources within the Southeast.

Yannie Donaldson, M.S., 2020, Thesis: Identification of Inland Freshwater Lens in Central Florida Using Remote Sensing and Geostatistics.

Rachel Rotz, Ph.D., expected Summer 2020, Dissertation: Geomorphic-Geologic Indicators and Controls of Groundwater Accumulation and Flux in Drylands on Earth and Mars.

Melissa Creviston, M.S., Thesis: Hydrologic and Climate Investigation of National Wildlife Refuges in Florida Using Water Resource Inventories and Assessments.

Matthew Thomas, M.S., 2019, Thesis: Spatial Downscaling of GRACE TWSA Data to Identify Spatiotemporal Groundwater Level Trends in the Dougherty Plain, South Georgia

Holly Hutcheson, M.S., 2019 Thesis: Trends in Water Resources within USFWS National Wildlife Refuges in the Southeast

Abigail Knapp, M.S. 2018. Thesis: Spatiotemporal Dynamics of the Hydrologic Drivers of Harmful Algal Blooms in Two Piedmont Reservoirs, Georgia.

Khalil Lezzaik, Ph.D., 2016. Dissertation: An Integrated Approach to Water Scarcity Assessment and Adaptation Options in the Middle East and North Africa Region.

Wondwosen Seyoum, Ph.D., 2016. Dissertation: Spatial Disaggregation of GRACE Water Storage Change: An Application for Understanding Water Cycle Dynamics at Local Scales.

Rachel Rotz, M.S., 2016. Thesis: Understanding the Role of Precipitation Dynamics on the Formation and Sustainability of Freshwater Lenses.

Matthew Cahalan, M.S., 2015. Thesis: An Integrated Approach for Sinkhole Identification and Triggering Mechanisms.

Racha El Kadiri, Ph.D., 2015. (Co-Advised). Dissertation: GIS and Remote Sensing Applications for Assessing, Modeling, and Mitigating Environmental Hazards in Mountainous Areas: A Case Study from Jazan, Saudi Arabia.

UNDERGRADUATE STUDENTS

Danni Hendrix, Spring 2026, Geologic Hydrogen Potential in Georgia
Baylen Carter, Spring 2024, Creating a state-wide lithologic database for Georgia.
Roman Dzikowski, Spring 2024, Detailed grain-size analysis of southwest Georgia.
Quentin Cambell, Spring 2023, Hydrologic Environmental Justice Indicators in Georgia
Jay Mrazek, expected Spring 2022, Senior Thesis: Assessment of Climate Change Impacts on Groundwater Resources in Georgia
Liza Garber, expected Spring 2022, Agent Analyst-based Investigation of Groundwater Risk
Katelyn LaPine, expected Spring 2021, Senior Thesis: Building a GIS-based Model for Water Resource Assessment
Frank Holmes, expected Spring 2021, Senior Thesis: Temperature-based Analysis of Transmission Losses
Raquel Olivia, expected Spring 2021, Senior Thesis: Thermal Analysis of Henbury Meteorite Impact Crater
Morgan Lewis, Spring 2020, Senior Thesis: Hydrogeomorphic Indicators on Mars and Earth
Kelsey Luke, Spring 2020, Senior Thesis: Using Hydroseismicity to Understand Aquifer Connections
Claire Webster, Spring 2017. Senior Thesis: Climatic Changes across the National Wildlife Refuges
Sage Maher, Fall 2016. CURO Thesis: Comparative Analysis of Runoff and Erosion in Varying Conditions.
Elizabeth Dwyer, Spring 2015. CURO Thesis: Understanding the Role of Streamflow and Lake Temperature in Forming Harmful Algal Blooms in Lake Lanier, GA.
Caroline Potterf, Spring 2015. CURO Thesis: Overview of the Water Quality on the UGA Campus
Rachel Rotz, Spring 2014. Senior Thesis: Verification of Rapid Focused Recharge in Depressions Located in Kuwait and the Arabian Peninsula Using Thermal and VNIR Remote Sensing.

COMMITTEE MEMBER

Clay Counts, expected Spring 2026, Thesis: Quantifying Hydrologic Changes in the Southeast
Kwaku Asiedu, 2025, Thesis: Geophysical Analysis of Faults in Georgia
Rajesh Khatakho, expected Spring 2027, Dissertation: Evaluation of Upper Floridan aquifer (UFA) interaction with Claiborne aquifer under historical drought in South West Georgia.
Kanchana Balasubramanian, expected Spring 2026, Dissertation: Prioritization of areas for forest-based ecosystem services, with a focus on water, biodiversity, and carbon in the Upper Oconee watershed.
Gavin Guest, Spring 2024, Thesis: The Vadotron, A Physical Model for Exploring Vadose Zone Dynamics
Tracy Chukwuma, Spring 2026, Dissertation: Multimodal characterization of hydro-geochemical alterations in Torrey Buff sandstone exposed to CO₂-rich brine.
Scott Raulerson, Spring 2024, Dissertation: Understanding Solute Transport in a Porous Low Relief Landscape, Ph.D.
Parker Whitley, Fall 2022, Barrier Island's Shallow Coastal Aquifer response to Storms and Tidal Fluctuations: Case of Sapelo Island, M.S.
Abdullah Al Nahian, expected Spring 2021, Thesis: Dynamics of Entrapped Air in the Vadose Zone in Relation to Flooding Events: Pore-Scale Experiments and Modeling.
Peter Steiner, expected Spring 2021. Dissertation: Nutrient Cycling of Potassium in Temperate Environs over Periods of Changing Land Use.
Lucas Favero, 2020, Thesis: Biochemical Immobilization of Oxyanionic Species in Coal Combustion Residuals.
David Flynn, 2019. Thesis: Flow-Impact Offer Evaluation for Incorporating Groundwater Permits into Future Irrigation Reduction Auctions in the Flint River Basin
James Deemy, Spring 2017. Dissertation: Isolated Wetland Mapping, Connectivity Assessment and Water Quality in the Dougherty Plain of Georgia.
Ike Astuti, Fall 2017. Dissertation: Characterizing the Long Term Impacts of Watershed Level Land Use Changes on the Ecosystem Dynamics of Tropical Reservoirs in Java, Indonesia.
Corbin Kling, 2016, Thesis: Topographic Expressions of Large Thrust Faults on Mars
Adam Forsberg, Fall 2015. Thesis: Comparison of Model-based (SWAT) against field-based (TBET) Phosphorus Index Predictions
Ryan Jubran, Spring 2015. Thesis: Electrical Resistivity Methods for Detecting Sinkholes in Georgia
Don Lundy, Fall 2014. Dissertation: An Investigation of the Relationship Between Lateral Spreading and Mass Depletion of an LNAPL Plume in Contact with Groundwater

Kirk Fraley, Fall 2014. Thesis: A Variable-Density Model to Determine Possible Sources of Elevated Total Dissolved Solids in Suwannee River Basin Springs, North-Central, Florida.
 Bill Wylie, Spring 2014. Thesis: Drainage Patterns and Characterization of the Mobile Body of the Allison Creek Landslide in Macon County, North Carolina.
 Kimberly Coke, Spring 2013. Thesis: DNA Tracers in Hydrology.

SERVICE

2023 – present	Franklin College IDC Committee
2023 – present	Franklin College Data Science +X Committee
2022 - present	Treasurer, International Association of Hydrogeologists
2023 - present	Service Equity Pilot Committee, Franklin College of Arts & Sciences, University of Georgia
2021 - 2024	Promotion & Tenure Committee, Franklin College of Arts & Sciences, University of Georgia
2021-2022	NSF Panelist, IRES Track I
2019-present	Associate Editor; <i>Remote Sensing</i>
2019	NASA Panelist, Precipitation Measurement Mission
2019-present	Associate Editor; <i>Water</i>
2016-2019	Chair, Early Career Hydrogeologist Network, US Chapter of the International Association of Hydrogeologists
2013-2016	Environmental Literacy Committee; University Curriculum Committee Sub-committee, University of Georgia
2013-Present	Search Committees: Structural Geology; Hydrogeology; Petrology; Department of Geology, University of Georgia
2012-present	Associate Editor; Environmental Earth Sciences
2012-present	Conference Sessions Chaired: Geological Society of America, American Geophysical Union, International Association of Hydrogeologists, CUAHSI Webinar
2012-present	Faculty Affiliate, Center for Integrative Conservation Research, University of Georgia
2012	Search Committee: Remote Sensing; Department of Geography, University of Georgia
2012	Space Committee, Department of Geology, University of Georgia
2014-present	Watts-Wheeler Committee, Department of Geology, University of Georgia
2011-2012	Admissions & Awards Committee, Department of Geology, University of Georgia
2011-2014	Computer Committee, Department of Geology, University of Georgia
2011	Employment Committee, Department of Geology, University of Georgia
2011-present	CUAHSI, University of Georgia representative
2011-present	American Geophysical Union, Student Poster Judge
2009-present	Proposal reviewer for National Science Foundation, National Institute for Water Resources, National Aeronautics and Space Administration, Illinois Geological Survey, Georgia Water Resources, numerous international governments/universities.
2007-present	Manuscript reviewer for Journal of Hydrology, Environmental Earth Sciences, Computers & Geosciences, Hydrologic Processes, Groundwater, Environmental Science & Technology, Journal of Remote Sensing, Computers and Electronics in Agriculture, Journal of Applied Remote Sensing, Journal of Spatial Hydrology, Earth Interactions, International Journal of Water, Water Resources Research, Advances in Water Resources, Water

ADMINISTRATIVE/LEADERSHIP ACTIVITIES

2023-present	Department Head, Department of Geology, University of Georgia
2023-present	IDC Committee, Franklin College of Arts & Sciences, University of Georgia
2023-present	Data Science Committee, Franklin College of Arts and Sciences, University of Georgia
2021-present	Treasurer, Board of Directors, International Association of Hydrogeologists

2018-2020	Lead Research Facilitator, Summer Leadership Institute, University of Georgia
2017-present	Associate Department Head, Department of Geology, University of Georgia
2017-2019	Co-Facilitator, Faculty Learning Community, University of Georgia
2017-2020	Franklin College International Studies Committee, University of Georgia
2016-present	Board of Directors, US Chapter, International Association of Hydrogeologists
2016-2019	Chair, Early Career Hydrogeologist Network, US Chapter of the International Association of Hydrogeologists
2016-2019	Office of the Vice Provost of Instruction (OVPI), Faculty Advisory Board, University of Georgia
2015-present	Department of Geosciences Advisory Board, Western Michigan University

PROFESSIONAL SOCIETIES

CUAHSI, Representative for UGA, 2011-Present
Geological Society of America, member, 2003-Present
American Geophysical Union, member, 2003-Present
International Association of Hydrogeologists, 2011-Present

GRANTS

2025-2027	Milewski, A., Co-I, Multi-Tracer Investigation of Hydraulic Connectivity between the Okefenokee Swamp and the Upper Florida Aquifer, Chemours (2025-2027; Total: \$218,000).
2024-2027	Milewski, A., PI, Project Antheia: Developing Decarbonization Solutions for Georgia, Department of Energy CarbonSAFE, (2024-2027; Total: \$62,000,000; UGA: \$2,075,000).
2024-2026	Milewski, A., Co-PI, Assessing Compound Flood Impacts on Groundwater Levels in Coastal Urban Communities, US Coastal Research Program, (2024-2026; Total: \$477,448).
2024-2026	Milewski, A., P.I., Surficial Aquifer Response at Mission Mine Site in Georgia, Chemours, (2024-2026; Total: \$179,000).
2024-2028	Milewski, A., Co-P.I., Risk-Informed, Performance-Based Evaluation of Local and Regional Surface and Groundwater Hydrology using Alternative Conceptual Models, Chemours, (2024-2028; Total: \$552,000).
2022-2027	Milewski, A., P.I., Resilient and Sustainable Water-Resources Development Using Deep Groundwater in the Lower Flint River Basin, (2022-2027; Total: \$1,400,000).
2021-2024	Milewski, A., Co-P.I. - Risk-Informed, Performance-Based Evaluation of Local and Regional Surface and Groundwater Hydrology using Alternative Conceptual Models, Chemours, (2021-2024; Total: \$355,400)
2020-2024	Milewski, A., P.I. - Collaborative Research (IRES Track I): A Multi-Faceted Approach for Understanding Hydrologic Controls on Transmission Losses in Dryland Environments, National Science Foundation, (2020-2024; Total: \$299,500)
2020-2022	Milewski, A., P.I. – UAV-based Analysis of Coastal Salt Marshes, National Park Service, (2020-2021; Total: \$45,400).
2020-2022	Milewski, A., P.I. - Building a Bridge to Planetary Science Research – Investigating Fluvial & Aeolian Interactions in Hyper-Arid Deserts, UGA Franklin College, (2020-2022: Total: \$22,500)
2018-2021	Milewski, A., P.I. – Hydrologic and Landscape Analysis within the Southeast, National Fish and Wildlife Service (NFWS), (2018-2022; Total: \$81,000)
2019-2020	Milewski, A., Co-P.I. – (PI – Ellen McCullough) – Understanding the Dynamics of Agropastoral Decision-Making in Response to Changing Water Infrastructure and Climate Change, (2019-2020: Total: \$14,200)

2018-2019	Milewski, A., P.I. – Design, Integrate, and Apply: Using Unmanned Aerial Vehicles for Enhanced Student Learning, Learning Technologies Grants, (2018-2019; Total: \$21,900)
2018-2019	Milewski, A., P.I. – Ground Validation of Remote Sensing-based Precipitation Products in Kuwait, Kuwait University, (2018-2019; Total: \$13,500)
2017-2019	Milewski, A., P.I. – Impacts of Hydrologic Extremes on Natural Resources, National Parks Service (NPS), (2017-2019; Total: \$61,000)
2017-2018	Milewski, A., Co-P.I. – (PI – Liz Kramer; University of Georgia) - Capacity Building for Research and Training for Food System Sustainability and Security, University of Georgia, (2017-2018; Total: \$15,000)
2016-2021	Milewski, A., P.I. – Water Resource Inventories and Assessments for National Wildlife Refuges within the Southeast Region, National Fish and Wildlife Service (NFWS), (2016-2019; Total: \$188,000)
2016-2017	Milewski, A., Co-P.I., (PI – David Leigh; University of Georgia) – Investigating the Paleohydrology and Flood Risk in the Southeastern US, Electric Power Research Institute (EPRI), (2016-2018; Total: \$35,000)
2016-2017	Milewski, A., P.I. – Multi-Touch Open Education Resources (OER): A New Pedagogy for Geoscience Education and Research, Learning Technologies Grants, (2015-2016; Total: \$24,768)
2016-2021	Milewski, A., P.I., ERASMUS+ Higher Education Student and Staff Mobility, European Union ERASMUS program, (2016-2021; Total: \$1,800,000; UGA: ~\$150,000)
2015-2016	Milewski, A., P.I. - Utilizing NASA Earth Observations to Monitor Sinkhole Development and Identify Risk Areas, NASA DEVELOP, (2015-2016; Total: \$15,000)
2014-2015	Milewski, A., P.I. – ARCHES: An Innovative Workshop Combining Hydrogeology, Satellite Remote Sensing/GIS, and Modeling to Better Understand Water Resources, KAUST Winter Enrichment Program, (2014-2015; Total: \$25,000)
2013-2014	Milewski, A., P.I., Assessment and Characterization of TRMM Satellite Precipitation Products in Varying Climatic, Topographic, and Hydrologic Regimes, University of Georgia Provost Summer Fund, (2013-2014; Total: \$5,000)
2012-2014	Milewski, A., Co-P.I., (PI – Alan Fryar; University of Kentucky) – Building Opportunity Out of Science and Technology (BOOST): Helping Hydrologic Research (H2O) in Indonesia and Turkey, US State Department – Bureau of Oceans and International Environmental and Scientific Affairs, (2012-2014; Total: \$198,000 ; UGA: \$85,000)
2012-2013	Milewski, A., P.I., Using Radar Interferometry (InSAR) to Evaluate Land Subsidence Caused by Excessive Groundwater Withdrawal in Morocco, University of Georgia Provost Summer Fund, (2012-2013; Total: \$5,000)
2011-2013	Milewski, A., Co-P.I., (PI – Alan Fryar (University of Kentucky) – Building Opportunity Out of Science and Technology (BOOST): Energizing Young Middle Eastern and North African Scientists – Enhancing Capacity for Water Resource Studies in Egypt and Morocco, US State Department, (2011-2013; Total: \$250,000 , UGA: \$80,000)
2011-2015	Milewski, A., Co-I., (PI - Mohamed Sultan) - Use of GRACE, Remote Sensing, and Traditional Datasets for Modeling Time-Dependent Water Partitioning on Continental Scales: A Case Study from Africa, Funded by NASA. (2011-2015; Total: \$453,000)
2010-2013	Milewski, A., Co-P.I., (PI – Mohamed Sultan) - Detailed Studies on Landslides in Jazan Area (Saudi Arabia), Saudi Geological Survey, (2010-2013; Total: \$300,000)
2010-2011	Milewski, A., Co-P.I., (PI - Ahmad Al-Dousari) - Groundwater Potentiality Studies in Kuwait, Kuwait Institute for Scientific Research, (2010; Total: \$5,000)

- 2009-2011 Milewski, A., Co-P.I., (PI – Richard Laton), Identifying Areas for Artificial Recharge in the Mojave Desert, Mojave Water Agency & University of California State at Fullerton, (2009-2012; Total: **\$200,000**, WMU: \$75,000)
- 2009-2010 Milewski, A., P.I., Hydroinformatics: Bridging the Gap Between Technology and Hydrology, Funded by Western Michigan University, (2009-2010; Total: **\$20,000**)
- 2008-2010 Milewski, A., P.I., Developing Cost-effective Methodologies for Groundwater Assessment and Exploration in Sinai, Funded by National Institute of Standards and Technology (NIST) in cooperation with USDA, (2008-2010; Total: **\$8,500**)

In-Kind Data Grants

- 2014-2015 Milewski, A., P.I. – Analysis of Geologic and Hydrologic Controls for Subsidence Monitoring and Sinkhole Hazard Assessment in Dougherty Plain, Georgia, USA, European Space Agency (ESA), (2014-2015; Total In-Kind: **\$15,000**)
- 2013-2014 Milewski, A., P.I. – Verification of Rapid Focused Recharge in Depressions Located in Kuwait and the Arabian Peninsula Using Thermal and VNIR Remote Sensing, European Space Agency (ESA), (2013-2014; Total In-Kind: **\$20,000**)
- 2012-2013 Milewski, A., P.I. – Using Radar Interferometry (InSAR) to Evaluate the Land Subsidence Caused by Excessive Groundwater Withdrawal in Morocco, European Space Agency (ESA), (2013-2014; Total In-Kind: **\$25,000**)

PUBLICATIONS

Peer-Reviewed Journals and Volumes

* Denotes student-authored manuscript

Published Manuscripts:

- Abdi, E., Sattari, M., Pal, M., **Milewski, A.**, and Apaydin, H., 2026, Uncertainty Estimation in Predicting River Discharge Using Probabilistic Machine Learning and Conformal Prediction, *Sensors*, In Press.
- *Stefanou, M., and **Milewski, A.**, 2026, Examination of Natural Hydrogen Seepage in Carolina Bays, *GSA Bulletin*, In Press.
- Zowam, F., and **Milewski, A.**, Climate Variability and Groundwater Levels: A Correlation and Causation Analysis, 2026, *Remote Sensing*, 18(6), 932.
- *Davidson, L., and **Milewski, A.**, 2025, Ephemeral Channel Expansion: Predicting Shifts Towards Intermittency in Vulnerable Streams Across Semi-arid CONUS, *Water*, 17(23), 3445.
- Abderrahmane, B., Chahid, M., Aqnouy, M., **Milewski, A.**, and Benaabidate, L., 2025, Evaluating Time Series Models for Monthly Rainfall Forecasting in Arid Regions: Insights from Tamanghasset (1953-2021), Southern Algeria, *Geosciences*, 15(273).
- Abdi, A., Sattari, M., **Milewski, A.**, and Ibrahim, O., 2025, Advancements in Hydrological Modeling: The Role of bRNN-CNN-GRU in Predicting Dam Reservoir Inflow Patterns, *Water*, 17(11), 1660.
- Rostami, A., Sattari, M., Apaydin, H., and **Milewski, A.**, 2025, Modeling Flood Susceptibility Utilizing Advanced Ensemble Machine Learning Techniques in the Marand Plain, *Geosciences*, 15(3), 110.
- Feizi, H., Sattari, M., and **Milewski, A.**, 2025, Improving Stage-Discharge Relationship Modeling Accuracy using a Hybrid ViT-CNN Framework, *Nature Scientific Reports*, 15: 38031.
- Badawy, A., Sultan, M., Abdelmohsen, K., Yan, E., Elhaddad Hesham, **Milewski, A.**, and Torres-Urbe, H., 2024, Egypt's Floods and Droughts in the 21st Century, *Scientific Reports* 14, 27031.
- *Zowam, F., and **Milewski, A.**, 2024, Groundwater Level Prediction Using Machine Learning and Geostatistical Interpolation Models, *Water*, 16(19), 2771.
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In The News:

<https://www.livescience.com/62504-enormous-sinkhole-new-zealand-farm.html>

SOFTWARE EXPERIENCE

Hydrologic Modeling Packages: GMS, SWAT, WMS, HEC-HMS, Visual MODFLOW, MIKE-SHE

GIS Packages: ARC/INFO, ArcGIS, ArcIMS, MapInfo

Image Processing Packages: ERDAS, PCI, ENVI, DORIS, SARscape

Programming Languages: IDL, Python, JAVA, ArcXML, RESDEM

Database & Webpage Experience: Oracle, Access, HTML design and administration